SUPPLEMENT TO
PRELIMINARY OFFICIAL STATEMENT
DATED DECEMBER 14, 2023

respecting

JEFFERSON COUNTY, ALABAMA

$2,545,415,000*
Sewer Revenue Warrants
Series 2024

This Supplement (this "Supplement") to the Preliminary Official Statement dated December 14, 2023 (the "Preliminary Official Statement") of Jefferson County, Alabama (the "County") provides supplemental and updated information in connection with the proposed warrants of the County described above (the "Series 2024 Warrants").

This Supplement supplements and amends the Preliminary Official Statement by updating certain sections of the Preliminary Official Statement due to certain events that occurred, and certain financial information regarding the System (defined below) that became available, since the date of the Preliminary Official Statement, including (i) a change in the syndicate of underwriters as shown on the cover page of the Preliminary Official Statement and certain information related to such syndicate described in the section entitled "UNDERWRITING" in the Preliminary Official Statement, and (ii) the availability of unaudited financial information respecting operations of the sanitary sewer system of the County (defined as the "System" in the Preliminary Official Statement) for the fiscal year ended September 30, 2023, along with other changes to the section entitled "CERTAIN RELATIONSHIPS" in the Preliminary Official Statement. Capitalized terms used and not otherwise defined in this Supplement shall have the meanings given to them in the Preliminary Official Statement.

Interested investors in the proposed Series 2024 Warrants should read the Preliminary Official Statement together with this Supplement.

This Supplement is dated December 27, 2023.

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* Preliminary; subject to change.

A. The front page of the Preliminary Official Statement is hereby amended by substituting the following for the list of broker-dealers within the syndicate of underwriters for the Series 2024 Warrants shown towards the bottom of such cover page:

RAYMOND JAMES & ASSOCIATES, INC.			**STIFEL**
BofA Securities			**Morgan Stanley**
Piper Sandler	**Siebert Williams Shank & Co., LLC**	**Loop Capital Markets**	**Jefferies**

B. The section entitled "UNDERWRITING" shall be deleted in its entirety and the following substituted in place thereof:

UNDERWRITING

The Series 2024 Warrants are being purchased from the County by Raymond James & Associates, Inc. (the "Representative"), on its behalf and as representative of the other underwriters identified on the cover page of this Official Statement (collectively with the Representative, the "Underwriters"), at and for a price of $[________________] (which price reflects a par amount of $[____________], less an underwriting discount of $[___________], [plus/less] [net] original issue [premium/discount] of $[___________]). The Series 2024 Warrants may be sold and offered to certain dealers (including dealers depositing such bonds into investment trusts) at prices lower than such public offering prices, and such public offering prices may be changed from time to time by the Underwriters.

BofA Securities, Inc., one of the Underwriters of the Series 2024 Warrants, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S"). As part of this arrangement, BofA Securities, Inc. may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA Securities, Inc. may compensate MLPF&S as a dealer for their selling efforts with respect to the Series 2024 Warrants.

Morgan Stanley & Co. LLC, one of the Underwriters of the Series 2024 Warrants, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of the distribution arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the Series 2024 Warrants.

Piper Sandler & Co., one of the Underwriters of the Series 2024 Warrants, has entered into a distribution agreement (the "Piper Distribution Agreement") with Charles Schwab & Co., Inc. ("CS&Co.") for the retail distribution of certain securities offerings at the original issue prices. Pursuant to the Piper Distribution Agreement, CS&Co. will purchase Series 2024 Warrants from Piper Sandler & Co. at the original issue price less a negotiated portion of the selling concession applicable to any Series 2024 Warrants that CS&Co. sells.

The Underwriters have provided the following statement for inclusion in this Official Statement. Certain of the Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. In the ordinary course of business, certain of the Underwriters and their respective affiliates may actively trade in debt and, if applicable, equity securities (or related derivative securities) and provide financial instruments (which may include bank loans, credit support or interest rate swaps) and may engage in transactions for their own accounts involving securities and instruments made the subject of offerings of the County. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

C. There shall be attached as Appendix J to the Preliminary Official Statement the unaudited financial statements for the System for the fiscal year ended September 30, 2023, which such financial statements are attached hereto as Exhibit A, and the cover page for Appendix J to the Preliminary Official Statement is hereby amended by deleting the phrase "[TO BE ATTACHED WHEN AVAILABLE]".

D. The sentence within the subsection entitled "Unaudited Financial Statements Respecting the System" within "FINANCIAL STATEMENTS" in the Preliminary Official Statement shall be deleted in its entirety and the following inserted therefor:

The unaudited financial statements for the System for the fiscal year ended September 30, 2023, are attached as APPENDIX J to this Official Statement.

E. Within the section entitled "Certain Financial Information Concerning the System" within Appendix C (entitled "JEFFERSON COUNTY SEWER SYSTEM") to the Preliminary Official Statement, the subsection entitled "*Summary of Revenues and Expenditures – Unaudited Nine Month Period Ended June 30*", including all information contained therein, shall be deleted in its entirety and replaced with the following:

The unaudited consolidated revenues, expenditures, and changes in fund balance with respect to the System for the fiscal year ended September 30, 2023, is provided in APPENDIX J to this Official Statement and should be read in conjunction herewith.

F. Within the section entitled "Certain Financial Information Concerning the System" within Appendix C (entitled "JEFFERSON COUNTY SEWER SYSTEM") to the Preliminary Official Statement, the subsection entitled "*Summary of Balance Sheet – Unaudited Nine Month Period Ended June 30*", including all information contained therein, shall be deleted in its entirety and replaced with the following:

The unaudited summary of balance sheet with respect to the System for the fiscal year ended September 30, 2023, is provided in APPENDIX J to this Official Statement and should be read in conjunction herewith.

G. Within the section entitled "Certain Financial Information Concerning the System" within Appendix C (entitled "JEFFERSON COUNTY SEWER SYSTEM") to the Preliminary Official Statement, the subsection entitled "*Summary of Cash Flows – Unaudited Nine Month Period Ended June 30*", including all information contained therein, shall be deleted in its entirety and replaced with the following:

The unaudited summary of cash flows with respect to the System for the fiscal year ended September 30, 2023, is provided in APPENDIX J to this Official Statement and should be read in conjunction herewith.

H. The following shall be added to the end of the section entitled "CERTAIN RELATIONSHIPS":

In addition, Bradley Arant currently represents various affiliates of BofA Securities, Inc. on financial services matters and in other types of matters and transactions unrelated to the Series 2024 Warrants.

Exhibit A

Summary of Revenues and Expenditures - Unaudited. The following table sets forth the unaudited consolidated revenues, expenditures, and changes in fund balance with respect to the System for the fiscal year ended September 30, 2023. The following should be read in conjunction with the summary of such information for the fiscal years ended September 30, 2018, through and including September 30, 2022, as provided in the section entitled "Certain Financial Information Concerning the System" within Appendix C to the Official Statement, and the financial statements of the County (including the associated notes thereto) for the fiscal year ended September 30, 2022, attached as Appendix H to this Official Statement.

	Amounts in Thousands
Operating Revenues	
Charges for services:	
Sewer Sales	$ 252,549
Other	9,313
Total operating revenues	261,862
Operating Expenses	
Salaries and benefits	40,566
Maintenance and operating expenses	22,696
Office expenses	1,277
Materials and supplies	9,646
Utilities	11,743
Other operating expenses	21,559
Depreciation	144,231
Total operating expenses	251,718
Operating Income	10,144
Nonoperating Revenues (Expenses)	
Property tax revenue	8,291
Investment earnings	20,452
Miscellaneous revenue	590
Loss on disposal of capital assets	(141)
Debt Interest and amortization expense	(154,531)
Total nonoperating revenues (expenses)	(125,339)
Loss Before Capital Contributions and Transfers	(115,195)
Capital contributions	17,488
Transfers in	7,163
Total capital contributions and transfers	24,651
Change in Net Position	(90,544)
Net Position, beginning of year	124,183
Net Position, end of year	$ 33,639

Summary of Balance Sheet - Unaudited. The following table sets forth the unaudited summary of balance sheet with respect to the System for the fiscal year ended September 30, 2023. The following should be read in conjunction with the five year summary of such information for the fiscal years ended September 30, 2018, through and including September 30, 2022, as provided in the section entitled "Certain Financial Information Concerning the System" within Appendix C to the Official Statement, and the financial statements of the County (including the associated notes thereto) for the fiscal year ended September 30, 2022, attached as Appendix H to this Official Statement.

	Amounts in Thousands
Current Assets	
Cash and cash equivalents	$ 11,248
Receivable, net	40,273
Taxes receivable	7,745
Intergovernmental receivables	2,328
Prepaid expenses	250
Restricted assets:	
Cash	169,116
Investments	292,017
Total Current Assets	522,977
Noncurrent Assets	
Net pension asset	1,959
Prepaid bond insurance costs, net	27,043
Capital assets:	
Capital assets, not being depreciated	175,181
Capital assets, being depreciated	4,990,562
Less accumulated depreciation	(3,297,085)
Total capital assets net of accumulated depreciation	1,868,658
Total noncurrent assets	1,897,660
Total Assets	2,420,637
Deferred Outflows of Resources	
Pension related items	29,415
OPEB related items	2,936
Total deferred outflows of resources	32,351
Current Liabilities	
Accounts payable	24,581
Accrued interest	34,693
Retainage payable	4,522
Accrued payroll	663
Unearned revenue	8,119
Claims payable	526
Compensated absences - current	2,027
Warrants payable - current	14,780
Total Current Liabilities	89,911
Long-term Liabilities	
Lease payable	153
Litigation payable	4,183
Claims payable	1,369
Compensated absences	2,605
Warrants payable	2,288,591

Total OPEB Liability	25,372
Total Long-term Liabilities	2,322,273
Total Liabilities	2,412,184
Deferred Inflows of Resources	
Pension related items	552
OPEB related items	6,613
Net Position	
Net investment in capital assets	142,838
Restricted for capital improvements and debt service	461,134
Unrestricted	(570,333)
Total Net Position	$ 33,639

Summary of Cash Flows - Unaudited. The following table sets forth the unaudited summary of cash flows with respect to the System for the fiscal year ended September 30, 2023. The following should be read in conjunction with the five year summary of such information for the fiscal years ended September 30, 2018, through and including September 30, 2022, as provided in the section entitled "Certain Financial Information Concerning the System" within Appendix C to the Official Statement, and the financial statements of the County (including the associated notes thereto) for the fiscal year ended September 30, 2022, attached as Appendix H to this Official Statement.

	Amounts in Thousands
Cash Flows from Operating Activities	
Receipts from customers	$ 257,754
Payments to suppliers and service providers	(56,761)
Payments to employees	(39,971)
Net Cash Provided by Operating Activities	161,022
Cash Flows from Noncapital Financing Activities	
Property Taxes	8,291
Net Cash Provided by Noncapital Financing Activities	8,291
Cash Flows from Capital and Related Financing Activities	
Purchases of capital assets	(119,726)
Principal payments on warrants	(10,980)
Interest and fiscal charges paid	(69,781)
Operating Transfers In	7,163
Net Cash used in Capital and Related Financing Activities	(193,324)
Cash Flows from Investing Activities	
Proceeds from sales and maturities of investments	57,469
Interest received	17,291
Net Cash Provided by Investing Activities	74,760
Net Change in Cash and Cash Equivalents	50,749
Cash and cash equivalents - beginning of year	129,615
Cash and cash equivalents - end of year	180,364
Displayed As	
Cash and cash equivalents	11,248
Restricted cash and cash equivalents	169,116
Total cash and cash equivalents	$ 180,364

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PRELIMINARY OFFICIAL STATEMENT DATED DECEMBER 14, 2023

NEW ISSUE - Book-Entry Only (DTC) **See "RATINGS" herein**

In the opinion of Bond Counsel, under existing law, interest on the Series 2024 Warrants (i) will be excluded from gross income for federal income tax purposes if the County complies with all requirements of the Internal Revenue Code that must be satisfied subsequent to the issuance of the Series 2024 Warrants in order that interest thereon be and remain excluded from gross income, and (ii) will not be an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations. Bond Counsel is also of the opinion that, under existing law, interest on the Series 2024 Warrants will be exempt from State of Alabama income taxation. See "TAX STATUS" herein for further information.

JEFFERSON COUNTY, ALABAMA

$2,545,415,000*
Sewer Revenue Warrants
Series 2024

See Inside Cover for Maturity Schedule, Interest Rates, Prices or Yields, and CUSIP Numbers

Dated: Date of Delivery **Due: October 1, as shown on the inside cover**

Defined Terms All capitalized terms, which are not otherwise defined on this cover page, shall have the meanings provided to such terms in this Official Statement.

The Series 2024 Warrants Jefferson County, Alabama (the "County") is offering hereunder the securities captioned above, which are referred to herein as the "Series 2024 Warrants."

Purpose The proceeds of the Series 2024 Warrants, together with other funds of the County, will be used to (i) redeem and retire the 2013 Sewer Warrants (hereinafter defined), and (ii) pay the costs of issuing the Series 2024 Warrants.

Security The Series 2024 Warrants are limited obligations of the County payable from and secured by a lien on the Trust Estate (hereinafter defined) established under the Trust Indenture under which the Series 2024 Warrants are issued (the "Indenture"), on parity of lien with any Additional Warrants (hereinafter defined) hereafter issued under the Indenture. See "THE INDENTURE; SECURITY FOR PAYMENT OF THE SERIES 2024 WARRANTS AND RELATED INFORMATION" and "ADDITIONAL WARRANTS" herein.

Redemption Certain of the Series 2024 Warrants are subject to redemption prior to maturity as described herein.

Additional Warrants The County has reserved the right to issue additional obligations secured by and payable from the Trust Estate under the Indenture on parity of lien with the Series 2024 Warrants. See "ADDITIONAL WARRANTS" herein.

Tax Status For information concerning the tax status of the Series 2024 Warrants, see "TAX STATUS" herein.

Risk Factors **This cover page contains information for quick reference only. It is not a summary of this issue. Potential investors must read the entire Official Statement to obtain information essential to making an informed investment decision. There are numerous risk factors that prospective investors should carefully consider before making an investment decision regarding the Series 2024 Warrants. See "RISK FACTORS" herein.**

The Series 2024 Warrants are offered when, as and if issued by the County and received by the Underwriters, subject to prior sale, to withdrawal or modification of the offer without notice, and to the approval of the validity thereof by Balch & Bingham LLP, Bond Counsel to the County, and certain other conditions. Certain legal matters will be passed upon for the County by Bradley Arant Boult Cummings LLP, Disclosure Counsel to the County, and for the Underwriters by Nixon Peabody LLP, counsel to the Underwriters. It is expected that the Series 2024 Warrants will be available for delivery on _______, 2024, which such delivery shall be made through DTC.

CITIGROUP	**RAYMOND JAMES & ASSOCIATES, INC.**	**STIFEL**
BofA Securities	**Piper Sandler**	**Loop Capital Markets**
Morgan Stanley	**Siebert Williams Shank & Co., LLC**	**Jefferies**

Dated: _________, 2024

* Preliminary; subject to change.

JEFFERSON COUNTY, ALABAMA

$2,545,415,000*
Sewer Revenue Warrants
Series 2024

Maturity (October 1)	Principal Amount	Interest Rate	Price	CUSIP[(1)]

[*] Preliminary; subject to change.
[(1)] The CUSIP numbers shown above have been assigned by Standard & Poor's CUSIP Service Bureau, a Division of The McGraw Hill Companies, Inc., and are included solely for the convenience of the holders of the Series 2024 Warrants. Neither the Underwriters nor the County is responsible for the selection or use of CUSIP numbers, nor is any representation made as to the correctness of the numbers on the Series 2024 Warrants or as indicated herein.

JEFFERSON COUNTY, ALABAMA

716 Richard Arrington Jr. Blvd. North
Birmingham, Alabama 35203
(205) 325-5300

Jefferson County Commission

James A. "Jimmie" Stephens
President

Joe Knight
President Pro Tempore

Sheila Tyson *Commissioner*	Lashaunda Scales *Commissioner*	Michael F. "Mike" Bolin *Commissioner*

County Manager

Cal Markert

Chief Financial Officer

Angela M. Dixon

County Attorney

Theodore Lawson

Financial Advisor

Public Resources Advisory Group, Inc.
New York, New York

Terminus Municipal Advisors, LLC
Atlanta, Georgia

Feasibility Consultant

Galardi Rothstein Group
Montreal, Canada

Bond Counsel

Balch & Bingham LLP
Birmingham, Alabama

Disclosure Counsel

Bradley Arant Boult Cummings LLP
Birmingham, Alabama

Independent Certified Public Accountants

Mauldin & Jenkins, LLC
Birmingham, Alabama

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Certain information contained in or incorporated by reference in this Official Statement has been obtained by the County from DTC and other sources that are deemed reliable. No representation or warranty is made, however, as to the accuracy or completeness of such information by the Underwriters, the Trustee or the County. The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with and as part of their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information and nothing contained in this Official Statement is or shall be relied upon as a promise or representation by the Underwriters. This Official Statement is being used in connection with the sale of securities as referred to herein and may not be used, in whole or in part, for any other purpose. The delivery of this Official Statement at any time does not imply that information herein is correct as of any time subsequent to its date.

No dealer, broker, salesperson or any other person has been authorized by the County, the Trustee or the Underwriters to give any information or to make any representation other than as contained in this Official Statement in connection with the offering described herein and, if given or made, such other information or representation must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy any securities other than those described on the inside cover page, nor shall there be any offer to sell, solicitation of an offer to buy or sale of such securities in any jurisdiction in which it is unlawful to make such offer, solicitation or sale. Neither this Official Statement nor any statement that may have been made verbally or in writing is to be construed as a contract with the registered or beneficial owners of Series 2024 Warrants.

Any statements made in this Official Statement, including the Appendices hereto, involving matters of opinion or estimates, whether or not so expressly stated, are set forth as such and not as representations of fact, and no representation is made that any of such estimates will be realized. This Official Statement contains certain forward-looking statements and information that are based on the County's beliefs as well as assumptions made by and information currently available to the County.

Certain statements included or incorporated by reference in this Official Statement constitute "forward-looking statements." Such statements are generally identifiable by the terminology used such as "plan," "estimate," "budget," "projected," "forecast" or other similar words. The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Although such expectations reflected in such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct in whole or in part. The County is not obligated to issue any updates or revisions to the forward-looking statements if or when expectations do not materialize, or events, conditions or circumstances on which such statements are based do or do not occur.

Furthermore, any statements made in this Official Statement involving estimates or matters of opinion, whether or not expressly so stated, are intended merely as estimates or opinions and not as representations of fact. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale of the Series 2024 Warrants shall under any circumstances create any implication that there has been no change in the affairs of the County or the System since the respective dates as of which such information is given.

No representation is made that past experience, results of operations or financial condition, as it might be shown by financial and other information reported in this Official Statement (including any appendix hereto) will continue or be repeated in the future.

SUMMARY OF THE OFFERING

This summary is subject in all respects to more complete information contained in this Official Statement and should not be considered a complete statement of the facts material to making an investment decision. The offering of the Series 2024 Warrants to potential investors is made only by means of the entire Official Statement, including all appendices hereto and other documents available for review and to which reference is herein made. Capitalized terms used in this summary and not otherwise defined shall have the meanings given to such terms in the Indenture. See the form of Indenture attached as APPENDIX A hereto.

Issuer	Jefferson County, Alabama (the "County")
Securities Offered	$2,545,415,000* Sewer Revenue Warrants, Series 2024 (the "Series 2024 Warrants").
Interest Payment	Interest on the Series 2024 Warrants will be paid semi-annually on October 1, 2024, and on each April 1 and October 1 thereafter. See "THE SERIES 2024 WARRANTS" herein.
Limited Obligations	The Series 2024 Warrants are not general obligations of the County and are not secured by any tax revenues of the County.
Security and Source of Payment	The Series 2024 Warrants shall be issued under a Trust Indenture between the County and Regions Bank, an Alabama banking corporation, as trustee, the form of which is attached as APPENDIX A – "FORM OF INDENTURE" hereto (the "Indenture"), and secured solely by, and payable solely from, a pledge under the Indenture of the revenues (other than tax revenues) collected from the sanitary sewer system owned and operated by the County (the "System") remaining after payment of Operating Expenses (as hereinafter defined) of the System (defined in greater detail below as "Annual Net Income"), and, further, (i) money and investments from time to time on deposit in, or forming a part of, the Revenue Account, the Debt Service Fund, the Operating Reserve Fund and the Capital Improvement Fund, each as hereinafter described, and (ii) any other property which may, from time to time hereafter, be specifically subjected to the lien of the Indenture as additional security for obligations issued thereunder (collectively, together with Annual Net Income, the "Trust Estate"). See "THE INDENTURE; SECURITY FOR PAYMENT OF THE SERIES 2024 WARRANTS AND RELATED INFORMATION" herein.
Risk Factors	Payment of principal of and interest on the Series 2024 Warrants in full and when due is subject to numerous risk factors that should be carefully considered by prospective purchasers prior to making an investment decision regarding the Series 2024 Warrants. See "RISK FACTORS" herein.
Additional Warrants	In the Indenture, the County has reserved the right to issue additional obligations payable from and secured by the Trust Estate, on parity with the Series 2024 Warrants. See "ADDITIONAL WARRANTS" herein.
Use of Proceeds	The Series 2024 Warrants, together with other funds of the County, are being issued to (i) redeem and retire outstanding obligations of the County secured by and payable from revenues from the System hereinafter defined as the "2013 Sewer Warrants," and (ii) pay the costs of issuing the Series 2024 Warrants. See "ESTIMATED SOURCES AND USES" herein.
Redemption	Certain of the Series 2024 Warrants are subject to redemption prior to maturity. See "THE SERIES 2024 WARRANTS – Redemption Prior to Maturity" for a description of the respective redemption provisions for the Series 2024 Warrants.
Form and Depository	The Series 2024 Warrants will be delivered solely in registered form under a global book-entry system through the facilities of DTC. See "BOOK-ENTRY ONLY SYSTEM" herein.
Ratings	Standard & Poor's "BBB+" (positive outlook) Fitch "BBB" (stable outlook) Moody's "Baa1" (stable outlook)

* Preliminary; subject to change

THE SERIES 2024 WARRANTS HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION ("SEC") UNDER THE SECURITIES ACT OF 1933, AS AMENDED, IN RELIANCE UPON THE EXEMPTION CONTAINED IN SECTION 3(a)(2) OF SUCH ACT; AND THE INDENTURE HAS NOT BEEN QUALIFIED UNDER THE TRUST INDENTURE ACT OF 1939, AS AMENDED, IN RELIANCE UPON CERTAIN EXEMPTIONS CONTAINED IN SUCH ACT.

THE SERIES 2024 WARRANTS HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SEC OR BY THE SECURITIES COMMISSION OR ANY REGULATORY AUTHORITY OF ANY STATE, NOR HAS THE SEC OR ANY STATE SECURITIES COMMISSION OR REGULATORY AUTHORITY PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

OFFICIAL STATEMENT

Pertaining to

JEFFERSON COUNTY, ALABAMA

$2,545,415,000*
Sewer Revenue Warrants
Series 2024

INTRODUCTION

The above-referenced Sewer Revenue Warrants, Series 2024 (the "Series 2024 Warrants") are offered hereby and are being issued in order to (i) redeem and retire outstanding obligations of the County secured by and payable from revenues of the sanitary sewer system of the County (the "System") hereinafter defined as the "2013 Sewer Warrants," and (ii) pay a portion of the costs of issuing the Series 2024 Warrants. See "ESTIMATED SOURCES AND USES" herein. As used in this Official Statement, "2013 Sewer Warrants" means those warrants of the County heretofore issued under that certain Trust Indenture dated December 1, 2013, as supplemented and amended by a First Supplemental Indenture dated December 1, 2013, between the County and Wells Fargo Bank, National Association, as trustee (the said Trust Indenture, as so supplemented, the "2013 Indenture"). The 2013 Sewer Warrants are listed in APPENDIX B – "OUTSTANDING 2013 SEWER WARRANTS" hereto.

The Series 2024 Warrants will be issued pursuant to a Trust Indenture dated the date of the Series 2024 Warrants (the "Indenture"), between the County and Regions Bank, an Alabama banking corporation, as trustee (the "Trustee"). See APPENDIX A – "FORM OF INDENTURE" hereto, for the form of the Indenture. Capitalized terms used in this Official Statement and not otherwise defined shall have the meanings given to such terms in the Indenture. Upon issuance of the Series 2024 Warrants, the 2013 Sewer Warrants shall be defeased and the 2013 Indenture shall be terminated and of no further force or effect.

The Series 2024 Warrants shall be payable solely out of, and secured solely by a pledge of, the Trust Estate (hereinafter defined) established under the Indenture, which Trust Estate consists of revenues (other than tax revenues) collected from the System remaining after payment of the costs of operating and maintaining the System as more particularly set forth in the Indenture, and amounts held in certain funds and accounts required to be maintained or established pursuant to the Indenture, on parity of lien with any Additional Warrants hereafter issued under the Indenture. See "THE INDENTURE; SECURITY FOR PAYMENT OF THE SERIES 2024 WARRANTS AND RELATED INFORMATION" and "ADDITIONAL WARRANTS" herein.

Reference is hereby made to the Appendices of this Official Statement, including but not limited to those Appendices setting forth the form of Indenture; the outstanding 2013 Sewer Warrants; a summary of certain information respecting the System; a summary of certain information respecting the County; the Municipal Advisor's Feasibility Study prepared by Galardi Rothstein Group (the "Feasibility Study"); the proposed form of approving opinion respecting the Series 2024 Warrants of Balch & Bingham LLP, Bond Counsel to the County; the form of Continuing Disclosure Agreement; the County's audited financial statements for the fiscal year ended September 30, 2022; the Rate Resolution adopted by the County on October 12, 2023 (the "2023 Rate Resolution"); and the unaudited financial statements for the System for the fiscal year ended September 30, 2023. The mailing address of the County is 716 Richard Arrington Jr. Blvd. North, Birmingham, Alabama 35203, and the telephone number is (205) 325-5300.

* Preliminary; subject to change.

THE SERIES 2024 WARRANTS

Maturities and Interest Rates

The Series 2024 Warrants will be dated their date of issuance and delivery and will mature on October 1 in the years and principal amounts, and bear interest at the per annum rates, set forth on the inside cover page of this Official Statement. The Series 2024 Warrants shall be issued only as fully registered warrants in Authorized Denominations.

Estimated Debt Service Requirements of Series 2024 Warrants; Other Debt Payable from Sewer Revenues

Estimated Debt Service Requirements of Series 2024 Warrants. The following table presents the estimated annual debt service requirements of the County on the proposed Series 2024 Warrants:

Year Ending	Series 2024 Warrants		
October 1,	Principal*	Interest*	Total*
2024	$18,720,000	$117,428,433	$136,148,433
2025	9,445,000	129,943,988	139,388,988
2026	13,235,000	129,471,738	142,706,738
2027	17,285,000	128,809,988	146,094,988
2028	21,635,000	127,945,738	149,580,738
2029	26,275,000	126,863,988	153,138,988
2030	31,230,000	125,550,238	156,780,238
2031	36,525,000	123,988,738	160,513,738
2032	42,170,000	122,162,488	164,332,488
2033	48,195,000	120,053,988	168,248,988
2034	54,600,000	117,644,238	172,244,238
2035	61,435,000	114,914,238	176,349,238
2036	68,705,000	111,842,488	180,547,488
2037	76,435,000	108,407,238	184,842,238
2038	84,655,000	104,585,488	189,240,488
2039	88,895,000	100,352,738	189,247,738
2040	93,330,000	95,907,988	189,237,988
2041	98,000,000	91,241,488	189,241,488
2042	102,900,000	86,341,488	189,241,488
2043	108,050,000	81,196,488	189,246,488
2044	113,445,000	75,793,988	189,238,988
2045	119,405,000	69,838,125	189,243,125
2046	125,675,000	63,569,363	189,244,363
2047	132,270,000	56,971,425	189,241,425
2048	139,210,000	50,027,250	189,237,250
2049	146,525,000	42,718,725	189,243,725
2050	154,220,000	35,026,163	189,246,163
2051	162,310,000	26,929,613	189,239,613
2052	170,830,000	18,408,338	189,238,338
2053	179,805,000	9,439,763	189,244,763

*Preliminary; subject to change.

Other Debt Payable from Sewer Revenues. The Series 2024 Warrants, upon their issuance, will be the only obligations of the County secured by and payable from System Revenues. The County is not planning to issue or incur, and presently does not anticipate issuing or incurring, other indebtedness secured by or payable from System Revenues to finance capital improvements for the System. As set forth in the Feasibility Study, the County is projected to fund existing reserves and its projected capital improvement program over the ten-year forecast period solely from System Revenues and, to a limited extent, grant funding. See Section 7.5 ("Projected Capital Project Expenditures, FY 2023-FY 2032") of APPENDIX E – "FEASIBILITY STUDY" hereto.

Should anticipated future conditions or demands change or other unanticipated factors arise that necessitate or merit County borrowings payable from or secured by System Revenues, under the Indenture the County has the option of issuing Additional Warrants payable and secured by System Revenues on parity of lien with the Series 2024 Warrants, as well as the option of issuing indebtedness secured by and payable from System Revenues with a lien on System Revenues subordinate to that securing the Series 2024 Warrants. See "ADDITIONAL WARRANTS" and "THE INDENTURE; SECURITY FOR PAYMENT OF THE SERIES 2024 WARRANTS AND RELATED INFORMATION – Application of System Revenues" herein for a description of the application of System Revenues for payment of Subordinate Debt hereafter issued by the County.

Payment of Principal and Interest

The Series 2024 Warrants will be issued in book-entry only form, as described herein under "BOOK-ENTRY ONLY SYSTEM," and the method and place of payment of Debt Service on the Series 2024 Warrants will be as provided in the book-entry only system for so long as such system is in effect with respect to the Series 2024 Warrants. Interest on the Series 2024 Warrants (computed on the basis of a 360-day year of 12 consecutive 30-day months) is payable semiannually on each October 1 and April 1, commencing October 1, 2024.

Redemption Prior to Maturity

Optional Redemption. Those of the Series 2024 Warrants having a stated maturity on and after [___________], shall be subject to redemption and payment, at the option of the County, on [_________], and on any date thereafter, as a whole or in part (but if redeemed in part, only in installments of $5,000 or any integral multiple thereof with the maturities to be redeemed to be selected by the County, and if less than all the Series 2024 Warrants of a single maturity are to be redeemed, those (or portions thereof) of that maturity to be redeemed to be selected by the Trustee by lot), at and for a redemption price with respect to each such Series 2024 Warrants (or portion thereof) redeemed equal to the principal amount redeemed, plus accrued interest to the date set for redemption.

Mandatory Redemption. The Series 2024 Warrants maturing in [___] (the "2024 Term Warrants") shall be redeemed, at a redemption price equal to 100% of the principal amount to be redeemed plus accrued interest thereon to the redemption date, on the dates and in the principal amounts (after credit as provided in the Indenture) as follows:

2024 Term Warrants Maturing in [___]

Redemption Date (October 1)	**Principal Amount to be Redeemed**

Notice of Redemption and Partial Redemption

Manner, Notice and Effect of Redemption. Notice of any redemption (other than mandatory redemption) of the Series 2024 Warrants shall be given to the affected holder thereof not more than sixty (60) nor fewer than twenty (20) days prior to the date fixed for redemption. If the book-entry system is in effect, such notice of redemption shall be given to DTC (as defined below) and shall be forwarded by DTC to the affected beneficial owners of Series 2024 Warrants through methods established by the rules and operational arrangements of DTC. If the book-entry system is not in effect, notice of redemption shall be given to the holders of Series 2024 Warrants being redeemed by United States First-Class Mail. A notice of optional redemption may be conditioned upon the receipt of funds sufficient for payment of the redemption price due on the date set for redemption or upon other specified events or conditions.

Partial Redemption of Series 2024 Warrants. Except as otherwise may be provided in the Indenture, if less than all Series 2024 Warrants outstanding are to be optionally redeemed, the principal amount of Series 2024 Warrants of each tenor to be redeemed may be specified by the County by notice delivered to the Trustee not less than three (3) Business Days prior to the date when the Trustee must give notice of the redemption to Holders (unless a shorter notice is acceptable to the Trustee). Except as otherwise may be provided above, if less than all Series 2024 Warrants with the same tenor are to be redeemed, the particular Series 2024 Warrants of such tenor to be redeemed shall be selected from the outstanding Series 2024 Warrants of such tenor then eligible for redemption in accordance with the book-entry system or if the book-entry system is no longer in effect, by lot.

Purpose

The Series 2024 Warrants are being issued for the purpose of refunding and retiring the 2013 Sewer Warrants and to pay the costs of issuing the Series 2024 Warrants. Upon issuance of the Series 2024 Warrants, the 2013 Sewer Warrants shall be defeased and the 2013 Indenture shall be terminated and of no further force or effect.

Plan of Refunding

2013 Sewer Warrants Optional Redemption Dates and Terms. Under and pursuant to the terms of the 2013 Indenture, the 2013 Sewer Warrants are subject to redemption and payment, at the option of the County, on any business day (as defined in the 2013 Indenture) from October 1, 2023, through and including September 30, 2024, at a redemption price for each series of 2013 Sewer Warrants (expressed as a percentage of the principal amount to be redeemed, or in the case of the Series 2013-B and Series 2013-E Warrants, a percentage of the current accreted value as of the time of redemption) as set forth below across from such series, plus accrued interest to the date set for redemption for the current interest paying Series 2013-A Warrants, Series 2013-C Warrants, Series 2013-D Warrants and Series 2013-F Warrants:

Series of 2013 Sewer Warrants	Redemption Percentage
Series 2013-A	102%
Series 2013-B	105%
Series 2013-C	105%
Series 2013-D	105%
Series 2013-E	105%
Series 2013-F	105%

Refunding of the 2013 Sewer Warrants. Upon issuance of the Series 2024 Warrants, proceeds from the Series 2024 Warrants and other funds of the County held under the 2013 Indenture will be used to pay, redeem and retire the 2013 Sewer Warrants on the date set by the County for such payment and redemption (which such date is expected to be the date of issuance of the Series 2024 Warrants). Upon issuance of the Series 2024 Warrants, the 2013 Sewer Warrants shall be defeased and the 2013 Indenture shall be terminated and of no further force or effect. The adequacy of the cash to be used for the payment and redemption of the 2013 Sewer Warrants on the said redemption date will be verified by The Arbitrage Group, Inc.

ESTIMATED SOURCES AND USES

The proceeds to be derived from the sale of the Series 2024 Warrants are expected to be used by the County as set forth below:

Sources
Principal Amount
[Plus/Less] [Net] Original Issue [Premium/Discount]
Total

Uses
Refunding the 2013 Sewer Warrants
Issuance Expenses (including underwriting, rating fees, legal, printing and other costs of issuance)
Total

BOOK-ENTRY ONLY SYSTEM

General

The information concerning DTC and the book entry system has been obtained from sources believed to be reliable, but the County takes no responsibility for the accuracy thereof.

Initially, The Depository Trust Company, New York, New York ("DTC") will act as Securities Depository for the Series 2024 Warrants. The Series 2024 Warrants initially will be issued solely in book-entry form to be held under DTC's book-entry system, registered in the name of Cede & Co. (DTC's partnership nominee). Initially, one fully-registered Series 2024 Warrant certificate will be issued for each maturity of the Series 2024 Warrants, in the aggregate principal amount of Series 2024 Warrants of such maturity, and will be deposited with DTC.

DTC is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended. DTC holds securities that its participants (the "Direct Participants") deposit with DTC. DTC also facilitates post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC, in turn, is owned by a number of Direct Participants of DTC and members of the National Securities Clearing Corporation, Fixed Income Clearing Corporation, and Emerging Markets Clearing Corporation (NSCC, FICC, and EMCC, also subsidiaries of DTCC), as well as by the New York Stock Exchange, Inc., the American Stock Exchange, LLC, and the National Association of Securities Dealers, Inc. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants" and, together with Direct Participants, "Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Direct Participants and Indirect Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com and www.dtc.org.

Purchases of the Series 2024 Warrants under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2024 Warrants on DTC's records. The ownership interest of each actual purchaser of each Series 2024 Warrant ("Beneficial Owner") is in turn to be recorded on the Direct Participants and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct Participants or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2024 Warrants are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Series 2024 Warrants, except in the event that use of the book-entry system for the Series 2024 Warrants is discontinued.

To facilitate subsequent transfers, all Series 2024 Warrants deposited by Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 2024 Warrants with DTC and their registration in the name of Cede & Co. or such other nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2024 Warrants; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2024 Warrants are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

As long as the book-entry system is used for the Series 2024 Warrants, redemption notices will be sent to DTC. If less than all the Series 2024 Warrants within an issue are being redeemed, DTC's practice is to determine by lot the amount of interest of each Direct Participant in such issue to be redeemed.

As long as the book-entry system is used for the Series 2024 Warrants, principal, premium, if any, and interest payments on the Series 2024 Warrants will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon receipt of funds and corresponding detail information from the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee or the County, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, premium, if any, and interest to Cede & Co. is the responsibility of the County or the Trustee, and disbursement of such payments to the Participants or the Beneficial Owners will be the responsibility of Direct Participants and Indirect Participants.

Neither DTC nor Cede & Co. will consent or vote with respect to the Series 2024 Warrants. Under its usual procedures, DTC mails an Omnibus Proxy to the Trustee as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series 2024 Warrants are credited on the record date (identified in a listing attached to the Omnibus Proxy).

DTC may discontinue providing its services as securities depository with respect to the Series 2024 Warrants at any time by giving reasonable notice to the County and the Trustee. In the event that a successor securities depository is not obtained, Series 2024 Warrant certificates are required to be printed and delivered.

The County and the Trustee will have no responsibility or obligation to any securities depository, any Participants in the book-entry system, or the Beneficial Owners with respect to (i) the accuracy of any records maintained by the securities depository or any Participant; (ii) the payment by the securities depository or by any Participant of any amount due to any Participant or Beneficial Owner, respectively, in respect of the principal amount or redemption or purchase price of, or interest on, any Series 2024 Warrants; (iii) the delivery of any notice by the securities depository or any Participant; (iv) the selection of the Beneficial Owners to receive payment in the event of any partial redemption of the Series 2024 Warrants; or (v) any other action taken by the securities depository or any Participant.

In the event of the discontinuance of the book-entry system for the Series 2024 Warrants, Series 2024 Warrant certificates will be delivered as described under "Discontinuation of Book-Entry Only System" below and the following provisions will apply: (i) principal of the Series 2024 Warrants will be payable upon surrender of the Series 2024 Warrants at the designated office of the Trustee; (ii) Series 2024 Warrants may be transferred or exchanged for other Series 2024 Warrants in Authorized Denominations as set forth in the next succeeding paragraph; and (iii) the Series 2024 Warrants will be issued in denominations as described herein.

Discontinuation of Book-Entry Only System

The following provisions shall apply only upon discontinuance of the book-entry only system described above: (i) a physical certificate or certificates shall be executed, authenticated and delivered to each beneficial owner under the book-entry system in accordance with such beneficial owner's ownership of Series 2024 Warrants; and (ii) such certificates shall be registered in the warrant register maintained by the Trustee. The Series 2024 Warrants shall be registered and may be transferred only on the warrant register maintained by the Trustee. No transfer of the Series 2024 Warrants shall be permitted except upon presentation and surrender of such Series 2024 Warrants at the office of the Trustee. The holder of one or more of the Series 2024 Warrants may, upon request, and upon the surrender to the Trustee of such Series 2024 Warrants, exchange such Series 2024 Warrant for Series 2024 Warrants of other Authorized Denominations of the same tenor and of a like aggregate principal amount.

Reference is made to the Indenture in full for its provisions pertaining to the registration, transfer and exchange of the Series 2024 Warrants and the method of payment of the principal thereof and interest thereon.

THE INDENTURE; SECURITY FOR PAYMENT OF THE SERIES 2024 WARRANTS AND RELATED INFORMATION

The following describes the security under the Indenture for payment of the Series 2024 Warrants, the funds and accounts under the Indenture, the rate covenant under the Indenture, and other related information respecting the Series 2024 Warrants. Capitalized terms used and not otherwise defined in this section entitled "THE INDENTURE; SECURITY FOR PAYMENT OF THE SERIES 2024 WARRANTS AND RELATED INFORMATION" shall have the meaning given to them in the Indenture. See APPENDIX A – "FORM OF INDENTURE" hereto.

The Indenture

The form of Indenture is attached as APPENDIX A – "FORM OF INDENTURE" hereto. Prospective investors should carefully review the form of Indenture for all terms and provisions thereof prior to making an investment decision in any of the Series 2024 Warrants.

Trust Estate

The Series 2024 Warrants (and all Additional Warrants hereafter issued under the Indenture) are limited obligations of the County payable from and secured by a pledge of the following (collectively, the "Trust Estate"):

(i) Annual Net Income (defined below),

(ii) money and investments from time to time on deposit in, or forming a part of, the Revenue Account (hereinafter described) required by the Indenture to be maintained by the County,

(iii) money and investments from time to time on deposit in, or forming a part of, the Debt Service Fund (hereinafter described) established under the Indenture,

(iv) moneys and investments from time to time on deposit in, or forming a part of, the Operating Reserve Fund (hereinafter described) established under the Indenture,

(v) moneys and investments from time to time on deposit in, or forming a part of, the Capital Improvement Fund (hereinafter described) required by the Indenture to be maintained by the County, and

(vi) any other property which may, from time to time hereafter, be specifically subjected to the lien of the Indenture as additional security for the Warrants by the County or anyone on its part or with its consent.

As used in this Official Statement and in the Indenture:

(i) "Annual Net Income" means (a) the total System Revenues (i) when such term is used in reference to a Fiscal Year, during such Fiscal Year (including, without limitation, interest earned on investments of funds referable to the System if the deposit of such interest in the Revenue Account is not inconsistent with contractual or legal restrictions applicable to the County) less the total of the Operating Expenses during such Fiscal Year (less the amount of Sewer Tax Proceeds applied to the payment of Operating Expenses during such Fiscal Year or, for purposes of Section 8.2(c) of the Indenture, projected to be applied to Operating Expenses during such Fiscal Year by the applicable Independent Consultant), or (ii) when such term is used in reference to an Applicable Twelve-Month Period, for any Applicable Twelve-Month Period (including, without limitation, interest earned on investments of funds referable to the System if the deposit of such interest in the Revenue Account is not inconsistent with contractual or legal restrictions applicable to the County) less the total of the Operating Expenses (including Operating Expenses to the extent in excess of Sewer Tax Proceeds) during such Applicable Twelve-Month Period and (b) in the definition of "Trust Estate," all right, title and interest of the County in and to the revenues from the operation of the System remaining after payment of all Operating Expenses.

(ii) "System Revenues" means all revenues derived from the operation of the System.

(iii) "Operating Expenses" means, for the applicable period or periods, (a) direct or indirect expenses of operating and maintaining the System determined in accordance with generally accepted accounting principles, including, without limiting the generality of the foregoing, the cost of all items of labor, materials, supplies and equipment (other than equipment which, under generally accepted accounting principles, constitutes a capital expenditure), premiums on insurance and fidelity bonds, fees for engineers, attorneys and accountants for services rendered (except in cases where such fees, under generally accepted accounting principles, constitute capital expenditures), and reasonable compensation to the Trustee for its expenses incurred and services performed under the Indenture, all items specifically stated in the Indenture to constitute an operating expense, and all other items except depreciation and interest that by generally accepted accounting principles constitute operating expenses, (b) the expenses of maintaining the System in good repair and in good operating condition, but not including any items that are capital expenditures under generally accepted accounting principles, (c) premiums for insurance policies relating to the System, (d) expenses related to the implementation and maintenance of a customer assistance program, and (e) any other charges expressly stated in the Indenture to constitute an Operating Expense.

Holders of the Series 2024 Warrants and any Additional Warrants hereafter issued have a lien with respect to payment from the Trust Estate. See "Application of System Revenues" below for the priority of application of System Revenues under the Indenture.

Sewer Tax Proceeds shall not be part of System Revenues or Annual Net Income or be subject to the lien of, or in any way pledged to, the Trust Estate. Nevertheless, the County may use Sewer Tax Proceeds to pay Operating Expenses.

Special Funds and Accounts

Article 10 of the Indenture sets forth and describes the various funds and accounts required to be maintained or established pursuant to the Indenture, along with the application of System Revenues by the County. The following summarizes certain provisions of the Indenture respecting those certain funds and accounts, including certain funds and accounts established under the Indenture and held by the Trustee. See APPENDIX A – "FORM OF INDENTURE" hereto.

Revenue Account. Pursuant to the Indenture, the County will maintain a special account known as the "Sewer System Revenue Account" (the "Revenue Account"). The Revenue Account shall be held by such bank or financial institution as from time to time shall be selected by the County. Initially, the County will maintain the Revenue Account at the County and Regions Bank, which is the same bank that is serving as Trustee with respect to the Series 2024 Warrants. The Indenture will permit the County to establish the Revenue Account at any bank or financial institution and, thus, the County can establish the Revenue Account at a different bank or financial institution in the future. The County will deposit into the Revenue Account, or cause to be deposited therein, daily as received by the County, all of the System Revenues and will pay, out of System Revenues on deposit in the Revenue Account, all Operating Expenses, as payment for the said expenses becomes due. Under the Indenture, the County is required to maintain an amount equal to the Required Revenue Reserve in the Revenue Account. As used in the Indenture, "Required Revenue Reserve," when used with respect to any Fiscal Year, means an amount equal to thirty (30) days of the total Budgeted System Costs projected by the County's operating budget for the System for such Fiscal Year prepared pursuant to Section 11.15 of the Indenture.

Debt Service Fund. The Indenture establishes a special fund known as the "Debt Service Fund" (the "Debt Service Fund"). The Trustee is the depository, custodian and sole disbursing agent for the Debt Service Fund, and amounts on deposit therein shall be used for payment of the principal of and interest on, and redemption premium (if any) respecting the Series 2024 Warrants and any Additional Warrants hereafter issued.

Operating Reserve Fund. The Indenture establishes a special fund known as the "Operating Reserve Fund" (the "Operating Reserve Fund"). The Trustee is the depository, custodian and sole disbursing agent for the Operating Reserve Fund. Money in the Operating Reserve Fund shall be used solely for payment of Operating Expenses as more particularly described in the Indenture.

Capital Improvement Fund. Pursuant to the Indenture, the County has established a special fund or account known as the "Capital Improvement Fund" (the "Capital Improvement Fund"). The Capital Improvement Fund shall be held by such bank or financial institution as from time to time shall be selected by the County. Money in the Capital Improvement Fund may be used for the purpose of paying: (A) costs of Capital Improvements to the System, (B) amounts necessary to defease, redeem or purchase all or any portion of the Warrants, (C) Operating Expenses, (D) amounts payable on Subordinate Debt or on Unsecured Obligations, or (E) amounts necessary to pay Rebate Liability. The Indenture defines "Subordinate Debt" as warrants or other forms of debt obligations of the County issued to pay the cost of financing or refinancing capital improvements or equipment for the System and secured by a pledge of System Revenues subject and subordinate to the pledge of System Revenues for Warrants issued under the Indenture. The Indenture defines "Unsecured Obligations" as any (a) debt, (b) contract entered into with respect to interest rate exchange agreements with respect to debt, or (c) other contractual obligations of the County (other than Operating Expenses) that are undertaken for the benefit of the System and are payable from System Revenues but are not secured by a pledge of the System Revenues.

If money on deposit in the Debt Service Fund is not sufficient for timely payment of Debt Service due on Warrants, the County shall transfer money from the Capital Improvement Fund to the Trustee for deposit in the Debt Service Fund to the extent necessary for payment of such Debt Service, and if money on deposit in the Operating Reserve Fund is not sufficient for the timely payment of Operating Expenses, the County may transfer money from the Capital Improvement Fund to the Operating Reserve Fund for the payment of Operating Expenses.

Debt Service Reserve Fund. Under the Indenture, the County has reserved the right to establish, in any Supplemental Indenture under which Additional Warrants may be issued, a debt service reserve fund (a "Debt Service Reserve Fund") for the benefit of and to serve as a reserve or cushion for the payment of principal and interest on such Additional Warrants. For the avoidance of doubt, any such Debt Service Reserve Fund, if established, will not secure or otherwise provide for payment of the Series 2024 Warrants. **No Debt Service Reserve Fund has been established for the Series 2024 Warrants.**

Application of System Revenues

Article 10 of the Indenture establishes the required application of System Revenues on deposit in the Revenue Account. The following summarizes certain provisions of the Indenture respecting the application of System Revenues of the County. See APPENDIX A – "FORM OF INDENTURE" hereto.

Pursuant to the Indenture, during each calendar month, the County shall apply System Revenues on deposit in the Revenue Account remaining after application of amounts for payment of Operating Expenses, less the amounts on deposit therein constituting the Required Revenue Reserve (the "Net Monthly Revenue Account Balance"), as follows, in the order of priority indicated:

First, the County shall transfer to the Trustee, for deposit in the Debt Service Fund, the amount required under the Indenture respecting the payment of Debt Service then coming due on all Warrants. With respect to the Series 2024 Warrants, the Indenture requires that the County deposit into the Debt Service Fund, each month, from funds then on deposit in the Revenue Account, an amount equal to one sixth (1/6) of the interest scheduled to be due on the next succeeding Interest Payment Date, and one twelfth (1/12) of the principal scheduled to be due on the next succeeding Principal Payment Date; provided, as respects the interest and principal due on October 1, 2024, the amount so required to be deposited into the Debt Service Fund shall be [one-eighth (1/8)] of the interest scheduled to be due on such Interest Payment Date, and [one-eighth (1/8)] of the principal scheduled to be due on such Principal Payment Date.

Second, the County shall, on or before the twenty-fifth (25th) day of each month, (i) pay fees and expenses of the Trustee, (ii) pay Credit Facility Fees and other amounts due during such month with respect to Credit Facilities for Warrants, and (iii) pay fees and other amounts due during such month to remarketing agents or entities performing similar functions with respect to any Warrants.

Third, the County shall transfer to the Trustee, for deposit into the Operating Reserve Fund pursuant to Section 10.4 of the Indenture, the amount required to make the balance in the Operating Reserve Fund equal to the Required Operating Reserve. As used in the Indenture, "Required Operating Reserve," when used with respect to any Fiscal Year, means an amount equal to one-third (1/3) of the total Budgeted System Costs projected by the County's operating budget for the System for such Fiscal Year prepared pursuant to Section 11.15 of the Indenture.

Fourth, the County shall, on or before the twenty-fifth (25th) day of each month, transfer to the Trustee, for deposit into each Debt Service Reserve Fund (if any) created following issuance of the Series 2024 Warrants, the amount required by the applicable Supplemental Indenture to accumulate, maintain or restore the required balance in such Debt Service Reserve Fund.

Fifth, on or before the twenty-fifth (25th) day of each month, the County may set aside amounts due for Rebate Liability.

Sixth, on or before the twenty-fifth (25th) day of each month, to the payment of Subordinate Debt then outstanding.

Seventh, the County shall transfer any of the Net Monthly Revenue Account Balance remaining in the Revenue Account to the Capital Improvement Fund pursuant to Section 10.5 of the Indenture.

The Indenture requires that each month the County shall provide a written statement to the Trustee describing the amounts (if any) applied from the Net Monthly Revenue Account Balance as summarized above. See Section 10.2 of APPENDIX A – "FORM OF INDENTURE" hereto.

Rate Covenant; Alabama Law Limitation on Rate Increases

Rate Covenant. In the Indenture, the County has established a covenant respecting the establishment of rates and charges for the sanitary sewer services supplied from the System in connection with maturing installments of debt service on the Series 2024 Warrants and on any Additional Warrants issued under the Indenture. Specifically, the County has agreed in the Indenture, to the extent permitted by Alabama law, to make and maintain such rates and charges for the sanitary sewer services supplied from the System, and to make collections from the users thereof, in such manner as shall produce amounts sufficient to produce Annual Net Income during each Fiscal Year at least equal to 130% of the maximum amount of principal and interest scheduled to mature on the Series 2024 Warrants, and on any Additional Warrants hereafter issued, in such Fiscal Year (the "Rate Covenant Requirement"), and, further, from time to time make such increases and other changes in such rates and charges as may be necessary to produce said amounts (the "Rate Covenant").

The Indenture further provides that if the Annual Net Income for any Fiscal Year fails to at least equal the Rate Covenant Requirement, the County shall within thirty (30) days request an Independent Consultant (as defined in the Indenture) to submit a written report and recommendations with respect to a revised schedule of rates and charges for System services and other actions to increase Annual Net Income from the System to at least equal to the Rate Covenant Requirement; which such report and recommendations shall be filed with the Trustee and the County within ninety (90) days of the County's request to the Independent Consultant. Under the Indenture, the County is required to adopt the Independent Consultant's recommended schedule of rates and charges not later than thirty (30) days after the delivery of such report to the Trustee, and the County and shall follow the other recommendations of the Independent Consultant to the extent feasible and lawful. If the County undertakes the remedial action required by the foregoing, then any failure to achieve Annual Net Income equal to the Rate Covenant Requirement in such Fiscal Year shall not constitute an Indenture Default (as defined in the Indenture) so long as no other Indenture Default has occurred and is continuing.

Limitations of Alabama Law. Notwithstanding the covenants and agreements of the County in the Indenture, including specifically but without limitation, the Rate Covenant, under Alabama law sewer rates established by the County must be reasonable and nondiscriminatory and, if challenged, are subject to review by Alabama courts in that regard. In establishing rates and charges from the System, the actions of the County are presumed by the courts to be reasonable, but sewer rates and charges must not be arbitrary, discriminatory or excessive. Consequently, any rates and charges established pursuant to the Rate Covenant could be challenged as being arbitrary, discriminatory or excessive. See "RISK FACTORS – Rate Covenant and Limits on Future Rate Increases" and "RISK FACTORS – Challenges to, or Revisions of, the Rate Structure" herein.

Other Covenants of the County

In addition to the Rate Covenant, the County has committed to various other covenants under the Indenture, including without limitation those covenants set forth in Article 11 of the Indenture. See APPENDIX A – "FORM OF INDENTURE" hereto. As set forth in the Indenture, although the County has covenanted and agreed not to furnish free service from the System, it may establish or cause to be established a customer assistance program (the "CAP"), which shall not be considered to be the provision of free service from the System for purposes of the Indenture.

The County has not established terms or policies for the CAP, but anticipates doing so following issuance of the Series 2024 Warrants.

Events of Default and Remedies

Events of Default. Any of the following constitutes a default by the County under the Indenture (each, an "Indenture Default"):

(a) The failure by the County to pay the principal of, the interest on or the premium (if any) on any Warrant as and when the same become due as provided therein and in the Indenture (whether such shall become due by maturity or otherwise);

(b) The failure by the County to commence the repair or replacement of any property forming a part of the System that may be damaged or destroyed and that is necessary to the continued and efficient operation of the System, within one hundred twenty (120) days after the occurrence of such damage or destruction;

(c) The sale, lease or other disposition by the County of the System or any integral part thereof in violation of any provisions of the Indenture;

(d) The failure by the County to perform and observe any of the agreements and covenants on its part contained in the Indenture (other than in the manner described in (a), (b) and (c) above) which such failure continues for a period of not less than sixty (60) days after written notice of such failure has been given to the County by the Trustee or by the Holders of not less than 25% in Outstanding Amount of the Warrants then outstanding and secured by the Indenture, unless during such period or any extension thereof the County has commenced and is diligently pursuing appropriate corrective action; or

(e) an Act of Bankruptcy by the County.

Remedies Upon an Indenture Default. Upon any Indenture Default, the Trustee shall have the following rights and remedies:

(a) *Acceleration*. The Trustee may, by written notice to the County, declare the Outstanding Amount of and the interest accrued on all the Warrants forthwith due and payable, and such Outstanding Amount and interest shall thereupon become and be immediately due and payable, anything in the Indenture or in the Warrants to the contrary notwithstanding; provided, however, that a Supplemental Indenture authorizing a series of Additional Warrants secured in whole or in part by a Credit Facility may provide that the right of the Trustee to accelerate the maturity of the Warrants of that series (or the portion thereof secured by such Credit Facility) is subject to the consent of the Credit Facility Obligor issuing such Credit Facility. If, however, the County cures that Indenture Default and every other Indenture Default (except for those installments of Outstanding Amount and interest declared due and payable that would, absent such declaration, not be due and payable), with interest on all overdue payments of Outstanding Amount and interest, and makes reimbursement of all the reasonable expenses of the Trustee, then the Trustee may (and, if requested in writing by the Holders of a majority in Outstanding Amount of the then outstanding Warrants, shall), by written notice to the County, waive such default and its consequences, but no such waiver shall affect any subsequent default or right relative thereto.

(b) *Suits at Law or in Equity*. The Trustee is empowered (i) to sue on the Warrants, (ii) by mandamus, suit or other proceeding, to enforce all agreements of the County herein contained, including the fixing of rates, the collection and proper segregation of the revenues from the System and the proper application thereof, (iii) by action or suit in equity, to require the County to account as if it were the trustee of an express trust for the Holders of the Warrants, and (iv) by action or suit in equity, to enjoin any action or things which may be unlawful or a violation of the rights of the Holders of the Warrants.

Control by Holders. The Holders of a majority in principal amount of the outstanding Warrants shall have the right, during the continuance of an Indenture Default,

(a) to require the Trustee to proceed to enforce the Indenture, either by judicial proceedings for the enforcement of the payment of the Warrants or otherwise, and

(b) to direct the choice of remedies and the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee under the Indenture, including the power to direct or withhold directions with respect to any remedy available under the Indenture as described above; provided that (i) such direction shall not be in conflict with any rule of law or the Indenture, (ii) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction, and (iii) the Trustee shall not determine that the action so directed would be unjustly prejudicial to the Holders not taking part in such direction.

No Sale or Mortgage on System. The Indenture does not give any authority to the Trustee or the Holders of any of the Warrants to compel a sale of the System or any part thereof, and no foreclosure proceedings or sale shall ever be had under the authority of the Indenture with respect to the System or any part thereof.

ADDITIONAL WARRANTS

In the Indenture, the County has reserved the right to issue from time to time after delivery of the Series 2024 Warrants additional debt obligations secured by a pledge of the Trust Estate on parity of lien with the Series 2024 Warrants ("Additional Warrants"). Additional Warrants may be issued under the Indenture if the County shall have complied with delivery of the items described immediately below. Capitalized terms hereafter used in this section entitled "ADDITIONAL WARRANTS" and not otherwise defined shall have the meaning given to them in the Indenture. See APPENDIX A – "FORM OF INDENTURE" hereto.

Purpose of Additional Warrants

Subject to the conditions hereinafter described and so long as, to the actual knowledge of a Responsible Officer of the Trustee there is not then the existence of an Indenture Default under the Indenture, the County may issue Additional Warrants in order to:

(a) refund or retire all or any portion of any one or more series of Warrants then outstanding under the Indenture;

(b) acquire, by construction or otherwise, Capital Improvements (including the providing of funds with which to reimburse the County for costs incurred by it in the construction or acquisition of Capital Improvements, or to refund any securities of the County issued for such purposes); or

(c) provide for any other lawful expenditure of the System under the laws of the State;

provided, the County may not issue any Variable Rate Warrants if, after such issuance, the principal amount of such Variable Rate Warrants is in excess of 10% of the principal amount of all Warrants outstanding after such issuance.

Conditions Precedent to Issuance of Additional Warrants

Prior to the issuance of any Additional Warrants the County must deliver to the Trustee the following:

(a) A Supplemental Indenture, duly executed by the County and containing the following: (i) a description of the Additional Warrants proposed to be issued, including the date, the aggregate principal amount or maximum aggregate principal amount, the series designation (if any), the interest rate or rates, the maturity or maturities and the form of such Additional Warrants, and any provisions for redemption thereof prior to their respective maturities; and (ii) a statement of the purpose or purposes for which the Additional Warrants are proposed to be issued;

(b) A certified copy of the proceedings taken by the Jefferson County Commission authorizing the sale and issuance of the Additional Warrants proposed to be issued and the execution and delivery of the Supplemental Indenture providing therefor, which such proceedings shall recite the following: (i) that at the time no Indenture Default exists under the Indenture and that no Indenture Default is imminent; (ii) the series designation (if any) of the Additional Warrants proposed to be issued; (iii) the person or persons to whom such Additional Warrants shall be delivered; (iv) a statement as to which (if any) of such Additional Warrants are to be issued by sale and which (if any) are to be issued by exchange; (v) the sale price of those (if any) of such Additional Warrants to be issued by sale and the terms upon which those (if any) to be issued by exchange are to be issued; (vi) a list of all Additional Warrants previously issued by the County under the Indenture and at the time outstanding and of the Supplemental Indentures under which they were issued; (vii) if any of such Additional Warrants are to be issued for the purpose of refunding any Warrants theretofore issued under the Indenture or other securities of the County, a brief description of such Warrants or other securities to be so refunded; and (viii) if any of such Additional Warrants are to be issued for the purpose of acquiring, by construction or otherwise, Capital Improvements, or to reimburse the County for costs incurred by the County in the acquisition, by construction or otherwise, of Capital Improvements, a brief description of such Capital Improvements;

(c) The item or items required by any one of the following paragraphs (i), (ii) or (iii):

(i) A certificate by an Independent Consultant certifying that the Annual Net Income during the current Fiscal Year and projected Annual Net Income for all future Fiscal Years through the final maturity of the then-outstanding Warrants is not less than 130% of the Annual Debt Service Requirements for each such future Fiscal Year following the issuance of the then proposed Additional Warrants. For the purpose of these calculations and with respect to each Fiscal Year for which a calculation is made under the preceding sentence, (A) Annual Net Income includes the schedule of rates then mandated by Resolution for such Fiscal Years and, if a Fiscal Year occurs beyond the designated term of the then approved schedule of rates, the reasonably projected rate adjustments beyond the term of the then mandated schedule of rates and (B) Annual Debt Service Requirements includes debt service through the final maturity of the Warrants, inclusive of the Additional Warrants; or

(ii) A Resolution or Resolutions adopted after the commencement of not more than two Fiscal Years next preceding the issuance of the then proposed Additional Warrants, establishing a revised schedule of rates for service furnished from the System, accompanied by a certificate of an Independent Engineer or an Independent Consultant stating that if the revised schedule or schedules of rates set forth in the said Resolution or Resolutions had been in effect throughout the period of twelve (12) consecutive calendar months specified within said certificate (the "Applicable Twelve-Month Period"), so long as the same occur within eighteen (18) months immediately preceding the date the Additional Warrants are proposed to be issued, the Annual Net Income during the Applicable Twelve-Month Period would have been not less than 130% of the Maximum Annual Debt Service Requirement immediately following the issuance of the then proposed Additional Warrants; provided that each such certificate by an Independent Engineer or an Independent Consultant shall be accompanied by and shall recite that it is based, inter alia, upon an examination by the said Independent Engineer or Independent Consultant of a certificate by an Independent Auditor certifying the amount of the Annual Net Income for such Applicable Twelve-Month Period (as the case may be); or

(iii) If the Additional Warrants are being issued for the purpose of refunding all or a portion of one or more series of Warrants, a certificate from any Authorized County Representative certifying that the Annual Debt Service Requirement for all Fiscal Years immediately after issuance of such Additional Warrants (excluding debt service on the Warrants then proposed to be refunded) will not be greater than the Annual Debt Service Requirement for all Fiscal Years during which Warrants are outstanding before giving effect to such issuance. The final maturity of any Additional Warrants issued pursuant to this paragraph (iii) may not exceed the final maturity of the Warrants outstanding prior to such issuance;

(d) An opinion dated on the date of issuance of such Additional Warrants, signed by Independent Counsel (which may be Bond Counsel) acceptable to the Trustee, approving the forms of all documents required to be delivered to the Trustee and reciting that they comply with the applicable requirements of the Indenture; and

(e) An opinion dated on the date of issuance of such Additional Warrants, signed by Bond Counsel and approving the validity and legality of such Additional Warrants.

FEASIBILITY STUDY

General

The County has caused to be prepared a Municipal Advisor's Feasibility Study (the "Feasibility Study") respecting certain matters affecting the financial feasibility of the Series 2024 Warrants. The Feasibility Study was prepared by Galardi Rothstein Group (the "Feasibility Consultant") in collaboration with Hazen and Sawyer, P.C., as consulting engineer to the County ("Hazen"), and relying on detailed information from the County's Environmental Services Department. The Feasibility Study refers to the County's "Sewer Revenue Warrants, Series 2023" and the "2023 Sewer Warrants"; all such references are to the Series 2024 Warrants offered by this Official Statement.

The Feasibility Consultant, in reaching its conclusions in Section 9.0 of the Feasibility Study that the County's projected operating expenses and capital expenditures are reasonable, is relying on information produced by Hazen and the County (though, for the avoidance of doubt, the Feasibility Consultant is not relying on projections provided by the County).

PROSPECTIVE INVESTORS ARE ENCOURAGED TO REVIEW THE FEASIBILITY STUDY IN ITS ENTIRETY PRIOR TO MAKING AN INVESTMENT DECISION RESPECTING THE SERIES 2024 WARRANTS. The Feasibility Study is attached as APPENDIX E – "FEASIBILITY STUDY" hereto.

Certain Projections, Forecasts and Assumptions; No Reliance on Forecasts

The Feasibility Study contains, among other things, forecasts and projections (the "Feasibility Study Forecasts") respecting revenues, operating expenses and capital expenditure requirements of the System for the fiscal years ending September 30, 2023, through and including September 30, 2032 (the "Feasibility Study Forecasts Period"). The major findings and conclusions of the Feasibility Study are set forth in Section 9.0 thereof.

In making the Feasibility Study Forecasts, and in making the findings and conclusions contained in the Feasibility Study, the Feasibility Consultant has assumed that rates and charges for service from the System will increase at the rate of 3.49% per year for each year of the Feasibility Study Forecasts Period. See Section 8.10.1.1 of APPENDIX E – "FEASIBILITY STUDY" hereto. See also "Rate Structure" in APPENDIX C – "JEFFERSON COUNTY SEWER SYSTEM" hereto. In addition, in projecting debt service on the Series 2024 Warrants, the Feasibility Consultant has assumed an interest rate for the Series 2024 Warrants based on market conditions as of August 11, 2023, plus additional basis points yield increments over said market rates. See Section 8.10.3 of APPENDIX E – "FEASIBILITY STUDY" hereto.

The Feasibility Study addresses the County's projected capital expenditure requirements only through the term of the Feasibility Study Forecasts Period. Funds to finance capital expenditures for the System during and following the Feasibility Study Forecasts Period, to the extent not covered by System Revenues, may require additional borrowings by the County, increases in System rates beyond those contemplated in the 2023 Rate Resolution or a combination of both. The County can provide no assurance with respect to such rate increases or that it will be able to affect such additional borrowings. See "RISK FACTORS – Rate Covenant and Limits on Future Rate Increases" and "RISK FACTORS – Challenges to, or Revision of, the Rate Structure" herein.

Historical Five-Year Annual Revenues, Expenses and Debt Service

The following table shows, for each of the fiscal years shown below, the total operating revenues and operating expenses, and the degree by which such revenues in excess of such expenses covered debt service on the 2013 Sewer Warrants maturing in that year. Prospective investors in the Series 2024 Warrants should note that certain of the 2013 Sewer Warrants were issued as capital appreciation warrants or convertible capital appreciation warrants (collectively, the "2013 Capital Appreciation Warrants"). SEE APPENDIX B – "OUTSTANDING 2013 SEWER WARRANTS". The outstanding amount of the 2013 Capital Appreciation Warrants, consisting of accreted and compounded interest amounts that had accrued as of the end of each fiscal year shown, is not included within the row below entitled "Series 2013 Warrants Debt Service" or otherwise reflected in the row entitled "Coverage."

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Although presented in this section entitled "FEASIBILITY STUDY," the following table is not part of the Feasibility Study and is presented here only to show historical coverage. All dollar amounts shown below are in thousands (except with respect to the line titled "2013 Capital Appreciation Warrants").

	Fiscal Year Ended September 30,				
	2018	**2019**	**2020**	**2021**	**2022**
Revenues					
Service Revenues	$223,789	$229,929	$227,376	$222,674	$243,639
Intergovernmental[1]	109	109	110	111	--
Other Operating	694	753	628	13,652	15,599
Subtotal[2]	$224,592	$230,791	$228,114	$236,437	$259,238
Expenses					
Operating Expenses[3]	$73,906	$81,301	$91,226	$91,243	$94,149
Revenues Over Expenses	$150,686	$149,490	$136,888	$145,194	$165,089
Series 2013 Warrants Debt Service[4]	$85,292	$70,366	$70,366	$79,111	$80,909
Coverage	1.77x	2.12x	1.95x	1.84x	2.04x
2013 Capital Appreciation Warrants[5]	$821,756,812	$883,474,644	$949,861,750	$1,021,276,123	$1,098,088,422

[1] Taxes and Intergovernmental were reclassified in 2022 to Nonoperating Revenue and Miscellaneous Revenue, respectively.
[2] Proceeds from the Sewer Tax are legally restricted, and were used, for payment of operating expenses and capital improvements to the System. Even though use of such tax for System operating expenses reduces the amount of operating expenses otherwise required to be covered by System revenues, Sewer Tax revenues are not reflected in this chart because the Sewer Tax is not legally permitted to be used or pledged for payment of debt service.
[3] Excludes depreciation.
[4] Debt service is shown for the year ending October 1.
[5] Reflects the amount of 2013 Capital Appreciation Warrants outstanding, consisting of accreted and compounded interest accreted, through October 1 of each year. Such amounts were not due and payable during the fiscal year shown, but are due and payable after the fiscal year ended September 30, 2022, as set forth in the 2013 Indenture.

Projected Coverage

Based upon the findings, conclusions and other information hereinabove described and as described further therein, the Feasibility Study contains the following table (see Table 8-9 of APPENDIX E – "FEASIBILITY STUDY" hereto), which presents the projected annual debt service coverage on the Series 2024 Warrants from estimated Annual Net Income for the Feasibility Study Forecasts Period (*i.e.*, the fiscal years of the County ending September 30, 2023, through and including September 30, 2032). For purposes of the following table, the Feasibility Study has assumed certain increases in System rates and has assumed debt service with respect to the Series 2024 Warrants as described immediately above and in more detail in the Feasibility Study. See Section 8.10 of APPENDIX E – "FEASIBILITY STUDY" hereto. All dollar amounts shown below are in millions.

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	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Total Service Revenue[1]	$ 249.4	$ 256.6	$ 263.9	$ 271.4	$ 280.7	$ 290.0	$ 299.8	$ 309.9	$ 320.3	$ 331.1
Other Operating Revenue	18.8	18.0	16.6	15.5	14.8	14.0	13.5	13.4	13.2	13.2
Total Operating Revenue[2]	$ 268.2	$ 274.5	$ 280.6	$ 287.0	$ 295.5	$ 304.0	$ 313.3	$ 323.3	$ 333.5	$ 344.3
Operating Expenses	95.8	95.6	99.1	101.4	105.0	107.9	111.7	114.4	116.8	120.5
- Tax Revenue[3]	(7.3)	(7.5)	(7.6)	(7.8)	(7.9)	(8.1)	(8.3)	(8.4)	(8.6)	(8.8)
Total Operating Expense	$ 88.5	$ 88.1	$ 91.5	$ 93.6	$ 97.1	$ 99.8	$ 103.4	$ 105.9	$ 108.2	$ 111.7
Net Revenue Available for DS	**$ 179.7**	**$ 186.4**	**$ 189.1**	**$ 193.4**	**$ 198.4**	**$ 204.2**	**$ 209.9**	**$ 217.3**	**$ 225.3**	**$ 232.6**
Total Debt Service[4]	84.2	136.1	139.4	142.7	146.1	149.6	153.1	156.8	160.5	164.3
Projected Debt Service Coverage[5]	**2.13**	**1.36**	**1.35**	**1.35**	**1.35**	**1.36**	**1.37**	**1.38**	**1.40**	**1.41**

1 - All numbers in millions of dollars; slight calculation discrepancies may exist due to rounding

2 - Tax Revenue and Intergovernmental Revenue are excluded from pledged revenues

3 - Tax Revenue may not be included as pledged revenues to establish debt service coverage but may be shown as an offset to System operating expenses

4 - Debt service coverage presented in bond year dollars, reflects the impact of refunding the Series 2013 Sewer Warrants

5 - Debt service coverage metrics rounded down to the second significant digit

JEFFERSON COUNTY SEWER SYSTEM

Certain information concerning the System and elements of the County related thereto is attached as APPENDIX C – "JEFFERSON COUNTY SEWER SYSTEM" hereto.

THE COUNTY, ITS GOVERNMENT AND ITS FINANCIAL SYSTEM

Certain information concerning the County is attached as APPENDIX D – "THE COUNTY; GOVERNMENT; FINANCIAL SYSTEM" hereto.

JEFFERSON COUNTY BANKRUPTCY

General

As has been widely published, on November 9, 2011, the County filed a Chapter 9 bankruptcy petition in the United States Bankruptcy Court for the Northern District of Alabama (the "Bankruptcy Court"), thereby commencing case number 11-05736 (the "Bankruptcy Case"). During the Bankruptcy Case, the County proposed the *Chapter 9 Plan of Adjustment for Jefferson County, Alabama (Dated November 6, 2013)* (the "Plan of Adjustment"), in which the County, among other things, made certain modifications to, and eliminated certain events of default under, the indentures and related instruments regarding various warrants of the County. On November 22, 2013, the Plan of Adjustment was confirmed by order of the Bankruptcy Court (the "2013 Confirmation Order"). In the 2013 Confirmation Order, the Bankruptcy Court validated the 2013 Sewer Warrants and the resolution adopted by the County in connection with the 2013 Sewer Warrants which established a revised structure for fees and charges for use of the System (the "2013 Rate Resolution") and determined that the approved rate structure established under the 2013 Rate Resolution was valid and was reasonable, nondiscriminatory and legally binding. On December 3, 2013, the County proceeded to consummate substantially all the transactions contemplated by the Plan of Adjustment, and all other conditions to the effectiveness of the Plan of Adjustment were either satisfied or waived.

Inapplicability of 2013 Confirmation Order; No Validation of Series 2024 Warrants or 2023 Rate Resolution

Prospective investors in the Series 2024 Warrants should assume that the 2013 Confirmation Order, including the validation of County warrants and obligations issued under the 2013 Indenture and the validation of the 2013 Rate Resolution, will not benefit or apply to the Series 2024 Warrants or the holders thereof or to the 2023 Rate Resolution. This means that though the 2013 Confirmation Order helped discourage challenges to the 2013 Rate Resolution and the 2013 Sewer Warrants, the 2023 Rate Resolution and the Series 2024 Warrants will not have these protections and will be subject to review and challenge under Alabama law. See "RISK FACTORS – Rate Covenant and Limits on Future Rate Increases" and "RISK FACTORS – Challenges to, or Revision of, the Rate Structure" herein.

There has not been, and there will not be, a validation of the Series 2024 Warrants, the 2023 Rate Resolution, the Indenture or any of the other documents or instruments executed and delivered in connection with any of the foregoing.

FUTURE BANKRUPTCY CONSIDERATIONS

Under certain conditions, Title 11 of the United States Code, 11 U.S.C. 101 *et seq*. (the "Bankruptcy Code"), permits a municipality to file a petition for relief in federal bankruptcy court to adjust debts under Chapter 9 of the Bankruptcy Code. For purposes of Chapter 9, the County is considered a "municipality" and is permitted to file a petition for relief under Chapter 9. Debt adjustment may include restructuring, reduction or other impairment of debt, subject to various conditions and limitations set forth in the Bankruptcy Code. Section 101 of the Bankruptcy Code defines "municipality" to mean a political subdivision, public agency or instrumentality of a State. To be eligible to file a Chapter 9 bankruptcy petition under Section 109 of the Bankruptcy Code, a municipality must be "specifically authorized, in its capacity as a municipality or by name, to be a debtor under [Chapter 9], or by a governmental officer or organization empowered by State law to authorize such entity to be a debtor under [Chapter 9]." Section 109 of the Bankruptcy Code imposes additional requirements for a municipality to be eligible to file bankruptcy. Without limitation, the municipality must (a) be insolvent (either unable to pay debts as they come due or generally not paying debts as they come due); (b) desire to effect a debt adjustment plan; and (c) meet certain requirements regarding negotiations with creditors (or certain exceptions to such requirements). Alabama law authorizes counties (including the County), cities and certain public authorities to file petitions under the Bankruptcy Code. The other conditions to eligibility are fact-specific to the time of filing the petition.

Section 922(d) of Chapter 9 of the Bankruptcy Code provides that a bankruptcy petition does not operate as a stay of "application of pledged special revenues" to the payment of indebtedness secured by such revenues in a manner consistent with other provisions of the Bankruptcy Code. Without limitation, Section 928 of the Bankruptcy Code provides that special revenues acquired by the debtor after commencement of a Chapter 9 case remain subject to any lien resulting from any security agreement entered into by the debtor before commencement of the case, but further provides that any such lien on special revenues (other than municipal betterment assessments) derived from a project or system shall be subject to "the necessary operating expenses of such project or system." It is not clear whether the pledge of Annual Net Income made by the County for the benefit of the Series 2024 Warrants would constitute "special revenues" as that term is defined in Section 902(2) of the Bankruptcy Code. Moreover, the phrase "application of pledged special revenues" has given rise to arguments that the provisions of Section 922(d) apply only to funds in possession and control of the debtholders, or their trustee. Therefore, it is uncertain whether or not the filing of a Chapter 9 petition would affect application of Annual Net Income for the payment of principal and interest on the Series 2024 Warrants. Similarly, it is uncertain whether Section 928 of the Bankruptcy Code would control the claims of holders of the Series 2024 Warrants with respect to Annual Net Income.

The approving legal opinion of Bond Counsel will contain the customary reservation that the rights of the holders of the Series 2024 Warrants and the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights and the exercise of judicial discretion in appropriate cases. See the proposed form of approving legal opinion of bond counsel to the County respecting the Series 2024 Warrants set forth in APPENDIX F – "FORM OF APPROVAL OPINION OF BOND COUNSEL TO THE COUNTY" hereto.

RISK FACTORS

Introduction

In making a decision whether to purchase the Series 2024 Warrants, potential investors should consider certain risks and investment considerations which could affect the ability of the County to pay debt service on the Series 2024 Warrants in a timely manner and which could affect the marketability of or the market price for the Series 2024 Warrants. These risks and investment considerations are discussed throughout this Official Statement. Certain of these risks and investment considerations are set forth in this section for convenience, but this discussion is not intended to be a comprehensive or exhaustive compilation of all possible risks and investment considerations nor a substitute for an independent evaluation of the information presented in this Official Statement. Each prospective investor of Series 2024 Warrants should read this Official Statement in its entirety, including the appendices hereto, and should consult such prospective investor's own investment and/or legal advisor for a more complete explanation of the matters that should be considered when evaluating an investment such as the Series 2024 Warrants. Each prospective investor should carefully examine his, her or its own financial condition in order to make a judgment as to his, her or its ability to bear the risk of an investment in the Series 2024 Warrants.

Limited Source of Payment

The Series 2024 Warrants are limited obligations of the County payable solely from the Trust Estate. The Series 2024 Warrants do not constitute or give rise to a personal or pecuniary liability or a charge against the general credit of the County, and the Series 2024 Warrants do not constitute a debt or liability of the County for which there is a right to compel the exercise of any taxing power the County may have. Further, neither the State of Alabama nor any political subdivision thereof, other than the County (and, as to the County, subject to the limitations described herein), is liable in any way for payment of the Series 2024 Warrants. Accordingly, payment of the Series 2024 Warrants is dependent upon the financial performance of the System. See "THE INDENTURE; SECURITY FOR PAYMENT OF THE SERIES 2024 WARRANTS AND RELATED INFORMATION" herein.

Inapplicability of Confirmation Order; No Validation of Series 2024 Warrants or 2023 Rate Resolution

As stated above, in the 2013 Confirmation Order, the 2013 Rate Resolution and the rate covenant contained in the 2013 Indenture were validated and deemed reasonable by the Bankruptcy Court. Upon issuance of the Series 2024 Warrants, the 2013 Indenture shall be terminated and of no further force or effect. Investors in the Series 2024 Warrants should assume that such judicial validation does not and will not apply to debt issued under or secured by the Indenture, which includes Series 2024 Warrants, or to the 2023 Rate Resolution.

There has not been, and there will not be, a validation of the Series 2024 Warrants, the 2023 Rate Resolution, the Indenture or any of the other documents or instruments executed and delivered in connection with any of the foregoing. See "JEFFERSON COUNTY BANKRUPTCY – Inapplicability of Confirmation Order; No Validation of Series 2024 Warrants or 2023 Rate Resolution" herein.

General Economic and Political Risks

The financial performance of the System will be affected by, and will be subject to, general economic and political events and conditions that will change in the future to an extent and with effects that cannot be determined at this time. These general economic and political events and conditions include, among other things, population, demographic and employment changes and trends; periods of inflation or deflation; variable patterns of national and regional economic growth, whether cyclical or structural in nature; disruptions in credit and financial markets; political gridlock concerning, among other matters, national tax and spending policies; political developments in the County, the municipalities within the jurisdiction of the County and the State; budget and debt limit controversies, both nationally, at the State level and locally; and unusually large numbers of business failures and business and consumer bankruptcies and policy responses, or lack thereof, to the foregoing.

Climate Change

Changes in rainfall – including increased overall rainfall as well as increased intensity of rain events – have been attributed to overall climate change. Historically, the County experienced roughly 54 inches of rainfall annually. During four (4) of the last five (5) years, however, annual rainfall has exceeded the said average by between 7 to 19 inches. Additionally, the intensity of rain during major storms has increased in recent years based on general observations of the County (although the County has not conducted an analysis to confirm this belief).

The amount and intensity of rainfall increases the overall wear and use of portions of a sanitary sewer system such as the System. Rain volume also impacts the overall system infrastructure needs, including increased size of pipes, offline storage facilities and similar infrastructure, resulting in increased demand for capital improvements and capacity. If the trends in increased rainfall experienced during the past five (5) years continue or increase, the County will likely be required to undergo substantial capital improvements to the System not presently included in its ten (10) year capital improvement plan.

Historically, billed water consumption increases during warmer months from outdoor watering and other factors. Increased rainfall, particularly during spring and summer months, could reduce billed water consumption and reduce revenues.

No Foreclosable Lien on the System

The Series 2024 Warrants are not secured by a lien on the physical assets comprising the System. Accordingly, no physical assets of the County may be foreclosed on to produce amounts to pay the Series 2024 Warrants in the event revenues from the System held pursuant to the Indenture are insufficient to pay timely debt service on the Series 2024 Warrants.

Enforceability of Remedies

The remedies available under the Indenture upon the occurrence of a default or an event of default under the Indenture or are in many respects dependent upon judicial actions, which are often subject to substantial discretion and delay. Additionally, under Alabama constitutional and statutory law and judicial decisions concerning remedies, certain of these remedies may be limited, or may not be readily available or enforceable. The enforceability of remedies or rights with respect to the Series 2024 Warrants also is limited by state and federal bankruptcy, reorganization, insolvency, sovereign immunity, moratorium and other similar laws affecting creditors' rights or remedies currently in effect and may be limited by such laws hereafter enacted. See "FUTURE BANKRUPTCY CONSIDERATIONS" above.

Future Bankruptcy

In 2011, the County declared bankruptcy under Chapter 9 of the Bankruptcy Code. There can be no assurance that the County will not file another bankruptcy petition under Chapter 9 in the future. The County does not possess "home rule." This means the County cannot impose or raise taxes without authorization from the Alabama Legislature. The County, therefore, remains reliant upon the Alabama Legislature for authorization to impose new taxing powers if existing tax revenues are not sufficient to timely cover the County's expenses and obligations. Poor performance from enterprise operations of the County, such as the System, could result in the County filing another Chapter 9 case. In addition, County financial issues outside the operations of the Sewer System could also result in the County filing another Chapter 9 case. See "FUTURE BANKRUPTCY CONSIDERATIONS" above.

Reliance on Assumptions, Forecasts and Projections

In preparing the Feasibility Study, the Feasibility Consultant has relied upon certain assumptions and projections regarding future System Revenues, operating expenses, capital expenditures and debt service on the Series 2024 Warrants, some of which are those of the County or its consulting engineer, Hazen and Sawyer, P.C. See "FEASIBILITY STUDY" herein. The Feasibility Consultant has also made certain other assumptions, including assumptions regarding usage of the System's services, weather patterns and the response customers of the System will have to continued rate increases necessary to timely pay debt service on the Series 2024 Warrants. Projected operating and financial performance of the System may not be indicative of future performance; actual results will differ from those included in the Feasibility Study, and such differences may be material. The County cannot give any assurance that the events assumed will materialize or that actual results will match those projected, and any such differences may be material. In addition, the future policies, operations and financing decisions of the County may not be the same as those assumed in the Feasibility Study. No representation is made or intended, nor should any representation be inferred, with respect to the likely existence of any particular future set of facts or circumstances, and prospective purchasers of the Series 2024 Warrants are cautioned not to place undue reliance upon the Feasibility Study or the revenue forecasts or other projections contained therein. In particular, it should be noted that the nature and extent of the impact of increases in rates charged for service from the System are not currently determinable. If actual results are less favorable than the results projected or if the assumptions used in preparing such projections prove to be incorrect, the County's ability to make timely payment in respect of the Series 2024 Warrants may be materially and adversely affected.

Sewer Tax Proceeds

There can be no assurance that ad valorem taxes collected by the County, including the portion thereof earmarked for the System (*i.e.*, the Sewer Tax Proceeds), will remain at current levels since the current level of ad valorem tax collection is dependent on many factors, including taxpayer appeals from increased property assessments. Although Sewer Tax Proceeds are not pledged to secure the Series 2024 Warrants and the County does not make any covenant to maintain Sewer Tax Proceeds, they are used to pay Operating Expenses, so any significant reduction in Sewer Tax Proceeds could materially reduce the amount of Annual Net Income available to pay debt service on the Series 2024 Warrants and/or to make capital expenditures and, thus, could have a material adverse impact on the financial position of the System. It is also possible that Alabama law could be amended to repeal the Sewer Tax. In order to amend Alabama statutory law, a bill must be introduced and passed by a majority of members who are present and voting in each of the Alabama House of Representatives and the Alabama Senate. The bill is then submitted to the Governor of the State, and the same may be approved by signature of the Governor or by failure of the Governor to return the unsigned bill back to the house in which the bill originated within six (6) days (Sundays excepted) after it was presented to the Governor. If the Governor disapproves the bill, the Governor may veto it, in which event the Governor must return the bill to the house in which it originated, and if the same bill is thereafter approved by a majority of the members elected to both houses it becomes law notwithstanding the Governor's veto.

Rate Covenant and Limits on Future Rate Increases

Notwithstanding the Rate Covenant, under Alabama law, sewer rates established by the County must be reasonable and nondiscriminatory and are subject to review by courts in that regard. In establishing rates, the actions of the County are presumed by the courts to be reasonable, but sewer rates must not be arbitrary, discriminatory or excessive. Thus, there is a possibility that, if challenged, any rates and charges established pursuant to the Rate Covenant could be challenged as being arbitrary, discriminatory or excessive.

Prior to the County's filing of the Bankruptcy Case proceedings in November 2011, the County had been requested by holders of its then-outstanding sewer revenue warrants (*i.e.*, the sewer revenue warrants adjusted under the Bankruptcy Case and ultimately refinanced by the 2013 Sewer Warrants) to raise rates from the System pursuant to the rate covenant then in effect, which at the time would have resulted in an approximately 427% rate increase. The County did not raise rates for services from the System, and took the position that implementing the said rate covenant would not be permitted due to the foregoing provisions of Alabama law.

Challenges to, or Revision of, the Rate Structure

On October 12, 2023, the County adopted the 2023 Rate Resolution, which established the rate structure for fees and charges for use of the System, effective October 1, 2024 (provided that delivery of the Series 2024 Warrants has occurred on or before September 1, 2024), and which endeavors to mirror annual rate increases consistent with the 2013 Rate Resolution. See APPENDIX I – "2023 RATE RESOLUTION" hereto and APPENDIX C – "JEFFERSON COUNTY SEWER SYSTEM – Rate Structure". Included with the 2023 Rate Resolution is the current rate structure, also adopted on October 12, 2023, which has attached to it the sewer use and charge ordinance of the County, first adopted in 2012 and subsequently amended and restated in 2013, containing (among other things) the manner for calculating user charges for services from the System and which is updated annually by the Environmental Services Department to reflect then-current rates for service from the System. The 2023 Rate Resolution, and the rate structure established thereby, are not covered or otherwise protected by the 2013 Confirmation Order, including, without limitation, the Bankruptcy Court's validation of, and determinations regarding, the 2013 Rate Resolution pursuant to the 2013 Confirmation Order. See "JEFFERSON COUNTY BANKRUPTCY – Inapplicability of Confirmation Order; No Validation of Series 2024 Warrants or 2023 Rate Resolution" herein.

As described in the Feasibility Study, the County's rates for service from the System are among the highest in the United States among major metropolitan communities. See Section 8.6 of APPENDIX E – "FEASIBILITY STUDY" hereto. As stated in the Feasibility Study, the County has imposed rate increases on services from the System, consistent with the 2013 Rate Resolution and the 2013 Confirmation Order, resulting in a cumulative rate increase of 76.4% over the ten-year period from fiscal year ending September 30, 2013, to fiscal year ending September 30, 2022. See Section 5.4 of APPENDIX E – "FEASIBILITY STUDY" hereto. Since the institution of the Bankruptcy Case to the present time, concern has been expressed within the Jefferson County community and at the level of the County Commission regarding the County's sewer system rates and their impact on the System's customers, particularly with regard to low-income customers of the System. Such factors and concerns have presented, and likely will continue to present, challenges and pressures on the County Commission regarding continued annual System rate increases, including the annual 3.49% increases assumed in the Feasibility Study over the Feasibility Study Forecasts Period. See "FEASIBILITY STUDY" herein. Moreover, the 2013 Confirmation Order helped discourage challenges to the 2013 Rate Resolution, and even though the 2023 Rate Resolution endeavors to mirror annual rate increases consistent with the 2013 Rate Resolution, the 2013 Confirmation Order will cease to offer such protections following issuance of the Series 2024 Warrants and upon the effectiveness of the 2023 Rate Resolution.

In light of challenges and opposition to previous rate increases, concern regarding the level of current System rates and charges and the inapplicability of the 2013 Confirmation Order to the 2023 Rate Resolution, it is possible that, prior to payment in full of the County's obligations with respect to the Series 2024 Warrants, the County Commission could raise rates less than the annual 3.49% increase assumed by the Feasibility Study, reduce rates, amend the 2023 Rate Resolution to revise the timing and amount of rate increases, or forego annual rate increases altogether. It is also possible that the 2023 Rate Resolution and the rates established thereby could be legally challenged. A successful legal challenge to the System's rate structure or the inability of the County to implement annual rate increases as assumed in the Feasibility Study could have a material adverse financial impact on the System and the County's ability to timely pay the Series 2024 Warrants and/or the County's ability make the capital expenditure improvements described in the Feasibility Study during the Feasibility Study Forecasts Period.

Rates Charged by Other Billing Partners

As discussed in more particular detail herein, the System has two billing partners in addition to its own billing operation, consisting of The Water Works Board of the City of Birmingham ("BWWB") and the City of Bessemer ("Bessemer"), which together provide billing services to approximately 90% (by volume) of the System's customers. See "Billing, Collection and Rate Making Authority" in APPENDIX C – "JEFFERSON COUNTY SEWER SYSTEM" hereto. The rates charged by BWWB and Bessemer impact affordability and the ability of customers to pay for use of the System. Increased water rates charged by BWWB and by Bessemer could impact the ability of customers of the System to afford rate increases charged by the County for System service.

Operating Risks

As with any sewer system of its size and complexity, operation of the System could be affected by many factors, the nature and extent of which are not currently determinable, including the breakdown or failure of equipment or processes, inability to achieve expected levels of efficiency, failure to operate at design specifications, failure by third parties to perform their obligations under agreements with the County (whether or not excused by force majeure), costs of supplies or services not under contract, changes in law or regulatory protocols, delays in receipt of or failure to obtain or maintain necessary permits or similar events.

Collections Risks

General. As stated elsewhere herein, the County directly bills a very small amount of its customers, with the remaining customers being billed either by BWWB, which remits sewer collections to the County weekly, or by Bessemer, which remits sewer collections to the County monthly. The normal practice of these billing partners is to apply customer payments first to the water portion of the bill, then to utility taxes and finally to the sewer portion of the bill. Payments on delinquent accounts are applied in the same order of priority. The result of this billing arrangement is that the County must wait longer than a normal utility to receive payment for services provided. While manageable under normal conditions, this billing arrangement could cause material financial hardship for the System during periods when System customers are experiencing extreme economic and financial distress or during a prolonged dispute between the County and a billing partner. See "Billing, Collection and Rate Making Authority" in APPENDIX C – "JEFFERSON COUNTY SEWER SYSTEM" hereto.

Charges for sewer service are based largely on a percentage of the customer's water usage. As such, the County has no system in place to directly bill the majority of its customers outside of the current arrangements with BWWB and Bessemer. See "Billing, Collection and Rate Making Authority" in APPENDIX C – "JEFFERSON COUNTY SEWER SYSTEM" hereto. See also Section 6.3.5 of the Feasibility Study in APPENDIX E – "FEASIBILITY STUDY" hereto.

No Existing System for the County to Directly Bill and Collect from System Users. As more particularly described in this Official Statement, the County relies upon BWWB to bill and collect for the vast majority of System users and charges. This arrangement was most recently memorialized in a contract between BWWB and the County dated April 12, 2023 (the "2023 Collection Agreement"). See "Billing, Collection and Rate Making Authority" in APPENDIX C – "JEFFERSON COUNTY SEWER SYSTEM" hereto for more information about the 2023 Collection Agreement and the County's reliance on BWWB for charges and collections from System customers.

The County does not have a system in place for direct billing and collections of users of the System presently receiving water service from BWWB. Nor does the County have funds budgeted at the present time for development of an independent billing and collection system. Due to the substantial time and resources necessary to create and implement a billing and collection system or to transition to a third-party billing and collection system, there likely would be a substantial lag in customer bills and collections, along with associated reductions in System revenues, during the initial years following expiration of the 2023 Collection Agreement. Also, due to the size and scope of the System, it is possible that issues inherent in any new system of billings and collections could arise that further impede and materially and negatively impact the amount and timing of System revenues.

Reliance on BWWB for Customer Data Necessary for Billing; Additional Legal Authority For Production of Customer Data. Even if the County used a third-party contractor and/or implemented internal billing and collection systems, the County would be reliant upon BWWB for customer data and water usage information for System charges and collections. While current Alabama law requires BWWB to report, upon request of the County, information regarding water consumption at specific parcels within the County, the law does not require the provision of details and information necessary for the County to establish an independent billing and collection system. For example, current Alabama law does not directly address the provision of customer names, addresses, social security numbers and similar customer information. Nor does Alabama law directly address the provision of such information in a manner that could be efficiently utilized by the County in an ongoing billing and collection system (*e.g.,* provision of data in electronic format).

County Cannot Terminate Sewer Service for Delinquent Customers. The County relies on the arrangements with BWWB and Bessemer to provide an effective mechanism to collect System bills because, in the case of BWWB, BWWB assumes the liability for collections and, in the case of Bessemer, Bessemer itself shuts off water service for delinquent water and sewer bills after some point of delinquency. But if the arrangements with BWWB or Bessemer were to be terminated, the County does not itself have an equally effective collection mechanism. The County lacks a mechanism to terminate sewer System service to its customers. Therefore, the County's primary recourse for delinquent or unpaid System bills is to rely on uncertain water shut-offs by BWWB or having liens imposed on the property of System users, which is a lengthy and inefficient mechanism to collect delinquent or unpaid System bills. This, too, could have a material adverse impact upon the amount and timing of System revenues.

Future Governmental Actions

Federal, state and local statutory and regulatory requirements (including requirements to obtain permits or other governmental approvals) applicable to the operation of the System are subject to change, and no assurance can be given that the County will be able to comply with such changes. The timing and impact of such future legislative or regulatory action cannot be predicted with certainty, and the impact of such action on the financial position of the System currently cannot be determined. Delay in obtaining or failure to obtain and maintain in full force and effect any required permits or other governmental approvals may result in additional costs or reduced revenues, including fines, a moratorium on sewer extensions and/or connections and, in extreme circumstances, the complete shutdown of the System or a substantial portion thereof. Such a change in legal requirements could occur because (i) existing laws or regulations are revised or reinterpreted; (ii) new laws or regulations are adopted or become applicable to the System; or (iii) a combination thereof. Further, there can be no assurance that the technology and equipment selected by the County to comply with such revised or reinterpreted or new laws will be implemented in a timely fashion or will meet such changed requirements upon implementation. Consequently, any future revision or reinterpretation of existing laws or regulations or adoption of new laws or regulations could materially increase the cost of operating the System, which could have a negative and material impact on the County's ability to make timely payment of debt service on the Series 2024 Warrants.

In September 2022, the United States Environmental Protection Agency (the "EPA") released a proposed rule designating certain polyfluoroalkyl substances ("PFAS") as hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"). This rule is current planned to be finalized in February 2024. The County has not assessed its influent, effluent or biosolids against any potential PFAS limits nor have any wastewater effluent or biosolids concentration limits been proposed by the Alabama Department of Environmental Management or the EPA. The County's current wastewater processes are not designed to remove PFAS and related compounds and are not assumed to be effective. Additionally, PFAS designation under CERCLA may have cleanup, land restriction or monitoring implications for previously land applied biosolids. Given the highly speculative nature of potential PFAS limits for wastewater dischargers, no provision to meet limits has been included in the County's current capital improvement program or otherwise contemplated in the Feasibility Study. The County is not able to predict if or when any final rule regarding PFAS may be implemented. Any final rule regarding PFAS limits could materially increase the cost of operating the System and could have a negative and material impact on the County's ability to make timely payment of debt service on the Series 2024 Warrants. See Section 4.4.3 of APPENDIX E – "FEASIBILITY STUDY" hereto.

Any future revision or reinterpretation of existing laws or regulations or adoption of new laws or regulations could also impose significant additional capital costs on the System.

Additional Capital Improvements

In order to maintain the operations of the System over the term of the Series 2024 Warrants, the County will have to pay the costs of capital improvements to the System. As detailed in the Feasibility Study, as part of its capital improvement program for the System for the fiscal years ending September 30, 2023, through September 30, 2032, the County anticipates spending approximately $1,033,000,000 (in nominal dollars) for capital improvements to the System. The Feasibility Study does not address the period after September 30, 2032. Based on the assumptions set forth in the Feasibility Study attached as APPENDIX E hereto, the County expects to pay for these capital projects primarily with existing capital reserves and from ongoing System revenues, and the County does not anticipate the issuance of any additional debt to finance these capital projects. See "RISK FACTORS – Rate Covenant and Limits on Future Rate Increases" above. See also Section 7.0 of the Feasibility Study attached as APPENDIX E hereto.

See, also, "Climate Change" above for a discussion of potential capital improvements that may be required as a result of increased rain volume and intensity within with County.

Technology and Other Service Providers

It is possible that other public and private sewer service providers ("Other Service Providers") may operate treatment and disposal systems in close proximity to the System's existing service area. Indeed, there are several Other Service Providers currently operating within the County, including Phoenix Water Resources, Southwest Water Company, the Town of Lake View, the City of Hoover, Enviro Services (Liberty Park) and several other privately owned and managed treatment works.

The potential exists for these or additional Other Service Providers, whether new or existing, to capture potential growth areas within or near the System's service area, thus limiting the System's ability to add users and associated additional future revenues. In the recent past, some municipalities in the County, the Jefferson County Health Department, and the Alabama Department of Environmental Management have permitted operation of facilities owned by these service providers, despite objections by the County, and it is unknown whether that trend will continue. The County cannot predict the effect Other Service Providers may have on the financial health of the System. Moreover, Alabama law permits the County to require owners of property to connect to the System other than (i) owners of property served by another sewer system as of the date the System has operational lines adjacent to such property, (ii) property served by a septic tank as of the time of the prospective connection date, or (iii) any building served by the System is located on property of such owner at a distance greater than 200 feet from the collector line of the System. On November 6, 2012, the County adopted an administrative ordinance prohibiting any person, firm or entity owning or occupying any home, mobile home, commercial building or industry currently connected to the System from disconnecting from the System for the purposes of connection to an alternate waste treatment system.

Exacerbating this risk is the possibility that advances in technology, including alternate methods for the treatment or disposition of sewage and increases in efficiency of appliances over the long-term scheduled maturity of the Series 2024 Warrants, could result in decreased demand or usage of, and/or charges from, the System. It is also possible that technological advances or the result of further directives by the EPA to upgrade System technology could increase competition by other competing public or private sewage disposal systems. The result of such technological advances could be to reduce revenues of the System, and such reduction could materially and adversely impact the financial operations of the System and the ability of the County to pay debt service on the Series 2024 Warrants in a timely manner.

Ratings

There is no assurance that the ratings assigned to the Series 2024 Warrants at the time of issuance (see "RATINGS" herein) will not be lowered or withdrawn at any time, the effect of which could adversely affect the market price for and marketability of the Series 2024 Warrants.

Tax-Exempt Status of Series 2024 Warrants

It is expected that the Series 2024 Warrants will qualify as tax-exempt obligations for federal income tax purposes as of the date of issuance. See "TAX STATUS" herein. Bond counsel is delivering its opinion with respect to certain aspects of the tax status of the Series 2024 Warrants, the form of which is attached to this Official Statement as APPENDIX F – "FORM OF APPROVAL OPINION OF BOND COUNSEL TO THE COUNTY" and should be read in its entirety for a complete understanding of the scope of the opinion and the conclusions expressed. A legal opinion is only the expression of professional judgment and does not constitute a guaranty with respect to the matters covered. In addition, the opinion of bond counsel speaks only as of its date, and bond counsel does not undertake to advise bondholders about subsequent developments.

The tax status of the Series 2024 Warrants could be affected by post-issuance events. Various requirements of the Internal Revenue Code of 1986 (the "Internal Revenue Code") must be observed or satisfied after the issuance of the Series 2024 Warrants in order for such interest to remain excludable from gross income of the holders thereof. These requirements include restrictions on use of the proceeds of the Series 2024 Warrants, use of the facilities financed by the Series 2024 Warrants, investment of proceeds of the Series 2024 Warrants, and the rebate of so-called excess arbitrage earnings. Compliance with these requirements is the responsibility of the County. Failure to comply could result in the inclusion of interest on the Series 2024 Warrants in gross income retroactive to the date of issuance of the Series 2024 Warrants.

The Internal Revenue Service conducts an audit program to examine compliance with the requirements applicable to tax-exempt obligations. If the Series 2024 Warrants become the subject of an audit, under current IRS procedures, the County would be treated as the taxpayer in the initial stages of an audit, and the owners of the Series 2024 Warrants would have limited rights to participate in the audit process. The initiation of an audit with respect to the Series 2024 Warrants could adversely affect the market value and liquidity of the Series 2024 Warrants, even though no final determination about the tax-exempt status would have been made. If an audit were to result in a final determination that the Series 2024 Warrants do not qualify as tax-exempt obligations, such a determination could be retroactive in effect to the date of issuance of the Series 2024 Warrants.

In addition to post-issuance compliance, a change in law after the date of issuance of the Series 2024 Warrants could affect the tax-exempt status of the Series 2024 Warrants or the economic benefit of investing in the Series 2024 Warrants. For example, Congress could eliminate the exemption for interest on the Series 2024 Warrants, or it could reduce or eliminate the federal income tax, or it could adopt a so-called "flat tax." See "RISK FACTORS – Future Legislation Could Affect Tax-Exempt Obligations" below.

The Indenture does not provide for mandatory redemption of the Series 2024 Warrants or payment of any additional interest or penalty if a determination is made that the Series 2024 Warrants do not comply with the existing requirements of the Internal Revenue Code or if a subsequent change in law adversely affects the tax-exempt status of the Series 2024 Warrants or the economic benefit of investing in the Series 2024 Warrants.

Future Legislation Could Affect Tax-Exempt Obligations

From time to time the federal government considers proposals to reduce federal budget deficits and the amount of federal debt, including proposals that would eliminate or reduce indirect expenditures made through various deductions and exemptions currently allowed by the income tax laws.

The exemption for interest on tax-exempt obligations is one of the indirect expenditures that could be affected by a deficit reduction initiative. Some deficit-reduction proposals would completely eliminate the exemption for interest on all tax-exempt obligations. Other proposals would place an aggregate cap on the total amount of exemptions and deductions that may be claimed by a taxpayer, or a cap on the exemption for interest on all tax-exempt obligations. Changes in the rate of the federal income tax, including so-called "flat tax" proposals, could also reduce the value of the exemption.

Changes affecting the exemption for interest on tax-exempt bonds, if enacted, could apply to tax-exempt obligations already outstanding, including the Series 2024 Warrants offered pursuant to this Official Statement, as well as obligations issued after the effective date of such legislation. It is not possible to predict whether Congress will adopt legislation affecting the exemption for tax-exempt bonds, what the provisions of such legislation may be, whether any such legislation will be retroactive in effect, or what effect any such legislation may have on investors in the Series 2024 Warrants. Investors should consult their own tax advisers about the prospects and possible results of future legislation that could affect the exemption for interest on tax-exempt obligations.

LITIGATION

There is no litigation pending or, to the knowledge of the County, threatened, attacking or questioning the validity of the Series 2024 Warrants or the issuance and sale thereof, and there is no litigation pending or, to the knowledge of the County, threatened, relating to the organization or boundaries of the County or the incumbency of any of its officers or officials. Simultaneously with the delivery of the Series 2024 Warrants, the County will deliver a certificate to the effect that no such litigation is pending or, to the knowledge of the County, threatened.

The County is a defendant in various lawsuits, and there are various other claims pending or threatened against the County with respect to which lawsuits may be filed, including several under Section 1983 of Title 42 of the United States Code. The County does not, on account of availability, costs and coverages offered, carry any general or professional liability insurance except as an additional insured party for construction and professional services contracts. Except as stated below, the maximum probable liability of the County with respect to all the lawsuits and claims that are pending or threatened against the County, taken together, will not have a material adverse effect on the financial condition of the County.

Court decisions have substantially eroded the immunity from tort liability formerly enjoyed by local governmental units in Alabama. However, Chapter 93 of Title 11 of the Alabama Code now prescribes certain maximum limits on the liability of local governmental units (such as the County) for bodily injury, sickness, disease or death sustained by a person and for injury or destruction of tangible property. These limits are presently $100,000 in the case of bodily injury or death of one person in any single occurrence, $300,000 in aggregate where more than two persons have claims or judgments on account of bodily injury or death arising out of any single occurrence, and $100,000 in the case of property damage arising out of a single occurrence. Applicable decisions of the Supreme Court of Alabama have upheld the constitutionality of Chapter 93 (although indicating that there is no statutory "aggregate limit" with respect to property damage arising out of a single occurrence comparable to that specified for personal injury or death claims) and have limited the applicability of Chapter 93 to causes of action arising after its effective date, May 23, 1977. While the matter may not be free from doubt, it should be assumed that the liability limitations of Chapter 93 are not applicable to causes of action under Section 1983 of Title 42 of the United States Code.

For a description of material litigation of the County, see APPENDIX C – "THE COUNTY; GOVERNMENT; FINANCIAL SYSTEM – Material Litigation – Diesel Fuel Tax Refund Claims" hereto.

TAX STATUS

Under existing law, the tax status of the Series 2024 Warrants will include the following characteristics:

Federal Tax-Exempt Status. Interest on the Series 2024 Warrants will be excluded from gross income for federal income tax purposes if the County complies with all requirements of the Internal Revenue Code that must be satisfied subsequent to the issuance of the Series 2024 Warrants in order that interest thereon be and remain excluded from gross income. Failure to comply with such requirements could cause the interest on the Series 2024 Warrants to be included in gross income, retroactive to the date of issuance of the Series 2024 Warrants. The County has covenanted to comply with all such requirements.

Federal Tax Preference Treatment. Interest on the Series 2024 Warrants will not be an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations; however, as a result of amendments to the Internal Revenue Code enacted pursuant to the Inflation Reduction Act of 2022, interest on the Series 2024 Warrants may be taken into account for purposes of the alternative minimum tax imposed by Section 55(b)(2) of the Internal Revenue Code on "applicable corporations," as defined in Section 59(k) of the Internal Revenue Code.

State Tax-Exempt Status. Interest on the Series 2024 Warrants will be exempt from State of Alabama income taxation.

Certain Collateral Federal Tax Consequences. Prospective purchasers of the Series 2024 Warrants should be aware that the ownership of the Series 2024 Warrants may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions, property and casualty and life insurance companies, individual recipients of Social Security or railroad retirement benefits, certain S corporations with "excessive net passive income," foreign corporations subject to a branch profits tax, other foreign persons and organizations, life insurance companies, and taxpayers deemed to have incurred or continued indebtedness to purchase or carry the Series 2024 Warrants. Prospective purchasers of the Series 2024 Warrants should consult their tax advisors as to whether the collateral tax consequences described in this paragraph or other tax consequences may be applicable to their financial situation.

Original Issue Discount. The original issue discount in the selling price of a Series 2024 Warrant, to the extent properly allocable to each owner of such Series 2024 Warrant, is excluded from gross income for federal income tax purposes with respect to such owner. The original issue discount is the excess of the stated redemption price at maturity of such Series 2024 Warrant over the initial offering price to the public, excluding underwriters and other intermediaries, at which price a substantial amount of the Series 2024 Warrants of such maturity were sold.

Under Section 1288 of the Internal Revenue Code, original issue discount on tax-exempt obligations accrues on a compound basis. The amount of original issue discount that accrues to an owner of a tax-exempt obligation during any accrual period generally equals (i) the issue price of such obligation plus the amount of original issue discount accrued in all prior accrual periods, *multiplied by* (ii) the yield to maturity of such obligation (determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of the accrual period), *minus* (iii) any interest payable on such obligation during such accrual period. The amount of original issue discount so accrued in a particular accrual period will be considered to be received ratably on each day of the accrual period, will be excluded from gross income for federal income tax purposes, and will increase the owner's tax basis in such obligation. Purchasers of any Series 2024 Warrant at an original issue discount should consult their tax advisers regarding the determination and treatment of original issue discount for federal income tax purposes, and with respect to state and local tax consequences of owning a Series 2024 Warrant.

Premium. An amount equal to the excess of the purchase price of a tax-exempt obligation over its stated redemption price at maturity constitutes premium on such obligation. A purchaser of a tax-exempt obligation must amortize any premium over such obligation's term using constant yield principles, based on the obligation's yield to maturity. As premium is amortized, the purchaser's basis in such obligation and the amount of tax-exempt interest received will be reduced by the amount of amortizable premium properly allocable to such purchaser. This will result in an increase in the gain (or decrease in the loss) to be recognized for federal income tax purposes on sale or disposition of such obligation prior to its maturity. Even though the purchaser's basis is reduced, no federal income tax deduction is allowed. Purchasers of any Series 2024 Warrant at a premium, whether at the time of initial issuance or subsequent thereto, should consult with their own tax advisors with respect to the determination and treatment of premium for federal income tax purposes, and with respect to state and local tax consequences of owning a Series 2024 Warrant.

Information Reporting and Backup. In addition to other types of income, information reporting requirements apply to interest on tax-exempt obligations, including the Series 2024 Warrants. In general, such requirements are satisfied if the recipient of payments of interest provides the payor with a completed IRS Form W-9, "Request for Taxpayer Identification Number and Certification," or if such recipient is one of a limited class of persons exempt from information reporting. Foreign persons and organizations and other non-U.S holders may be asked or required to provide an appropriate completed IRS Form W-8 in lieu of Form W-9 in order to establish their U.S. tax status. A recipient not otherwise exempt from information reporting who fails to satisfy the information reporting requirements will be subject to "backup withholding," which means that the payor is required to deduct and withhold a tax from each interest payment received, calculated in the manner set forth in the Internal Revenue Code. For the foregoing purpose, a "payor" generally refers to the person or entity from whom a recipient receives its payments of interest or who collects such payments on behalf of the recipient, such as a broker-dealer or bank.

If a prospective purchaser considering buying a Series 2024 Warrant through a brokerage account has executed a Form W-9 (or Form W-8 where appropriate) in connection with the establishment of such account, as generally can be expected, no backup withholding should occur, unless such prospective purchaser is for another reason, subject to backup withholding. Whether or not a prospective purchaser is subject to backup withholding does not affect the exclusion of interest on the Series 2024 Warrants from gross income for federal income tax purposes. Any amounts withheld pursuant to backup withholding would be allowed as a refund or a credit against the owner's Federal income tax once the required information is furnished to the Internal Revenue Service. Prospective purchasers of the Series 2024 Warrants should consult their tax advisors as to whether backup withholding may be applicable to their financial situation.

The foregoing discussion does not address the effects of any applicable federal income, state, local or foreign tax laws other than those specifically discussed above. Prospective purchasers are urged to consult their own tax adviser concerning the federal income tax consequences of owning and disposing of the Series 2024 Warrants, as well as any consequences under the laws of any state, local or foreign taxing jurisdiction.

See "RISK FACTORS – Tax-Exempt Status of the Series 2024 Warrants" and "RISK FACTORS – Future Legislation Could Affect Tax-Exempt Obligations" herein for a discussion of certain risk factors relating to investment in the Series 2024 Warrants.

CONTINUING DISCLOSURE

General

Upon issuance of the Series 2024 Warrants, the County will enter into a Disclosure Dissemination Agent Agreement (the "Continuing Disclosure Agreement") with Digital Assurance Certification, L.L.C. ("DAC"), pursuant to which the County is covenanting for the benefit of the beneficial owners of the Series 2024 Warrants to provide, on an annual and quarterly basis, certain financial information and operating data relating to the County, and to provide notices of certain enumerated events, through the Electronic Municipal Market Access ("EMMA") system established by the Municipal Securities Rulemaking Board (the "MSRB") (or such other system as may be subsequently authorized by the MSRB). The form of Continuing Disclosure Agreement is attached as APPENDIX G – "FORM OF CONTINUING DISCLOSURE AGREEMENT" hereto. A failure by the County to comply with the Continuing Disclosure Agreement must be reported in accordance with the Rule 15c2-12 (the "Rule") promulgated by the Securities and Exchange Commission of the United States of America and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Series 2024 Warrants in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Series 2024 Warrants and their market price.

Prior Compliance

The County failed to timely report entering into a funding agreement (the "2022 Cooper Green Funding Agreement") to provide for security and payment of a series of bonds issued by the Cooper Green Mercy Health Services Authority, An Affiliate of UAB Health System. The County failed to provide timely notice of its entry into the 2022 Cooper Green Funding Agreement as required by a continuing disclosure undertaking entered by the County.

RATINGS

Standard and Poor's Ratings Services ("S&P"), Fitch Ratings ("Fitch") and Moody's Investors Service, Inc. ("Moody's"), have assigned ratings of "BBB+" (positive outlook), "BBB" (stable outlook) and "Baa1" (stable outlook), respectively, to the Series 2024 Warrants. In its report, Fitch conditioned its rating upon the provision of certain documentation and evidence related to the defeasance of the 2013 Sewer Warrants. Such credit ratings reflect only the view of such credit rating agencies, and an explanation of the significance of such credit ratings may be obtained only from the credit rating agencies furnishing the same. There is no assurance that such credit ratings will remain in effect for any given period of time or may not be lowered or withdrawn entirely if, in the judgment of the credit rating agency in question, circumstances should warrant such action. Any such downward revision or withdrawal of any credit rating assigned to any of the Series 2024 Warrants may have an adverse effect on the market price of such Series 2024 Warrants or any other Series 2024 Warrants. Neither the County nor the Underwriters are undertaking any responsibility after the issuance of the Series 2024 Warrants to assure maintenance of the ratings or to oppose any such revision or withdrawal.

The County applied for and received an indicative rating from Kroll Bond Rating Agency, Inc. ("Kroll"), but the County elected not to proceed with the assignment of the Kroll rating.

APPROVAL OF LEGAL PROCEEDINGS

Legal matters incident to the authorization and issuance of the Series 2024 Warrants by the County are subject to the approval of Balch & Bingham LLP, Birmingham, Alabama, Bond Counsel to the County, whose approving opinions will be in substantially the forms attached as APPENDIX F – "FORM OF APPROVAL OPINION OF BOND COUNSEL TO THE COUNTY" hereto.

CERTAIN RELATIONSHIPS

Balch & Bingham LLP ("Balch & Bingham") is serving as Bond Counsel to the County in connection with the Series 2024 Warrants, and from time to time is engaged by various members of the underwriting syndicate to serve as their counsel for transactions and matters unrelated to the Series 2024 Warrants. Balch & Bingham currently serves as underwriter's counsel to Stifel, Nicolaus & Company, Incorporated on transactions unrelated to the Series 2024 Warrants.

Bradley Arant Boult Cummings LLP ("Bradley Arant") is serving as Disclosure Counsel to the County in connection with the Series 2024 Warrants, and from time to time is engaged by various members of the underwriting syndicate to serve as their counsel for transactions and matters unrelated to the Series 2024 Warrants. Bradley Arant currently serves as underwriter's counsel to Stifel, Nicolaus & Company, Incorporated and to Raymond James & Associates, Inc. on transactions unrelated to the Series 2024 Warrants.

FINANCIAL STATEMENTS

Audited Financial Statements

The audited financial statements of the County as of and for the fiscal year ended September 30, 2022, attached as APPENDIX H – "AUDITED FINANCIAL STATEMENTS OF THE COUNTY FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022" hereto, have been audited by Mauldin & Jenkins, CPAs and Advisors ("Mauldin & Jenkins"), as set forth in their report dated March 31, 2023.

Before the County's audited financial statements for the fiscal year ended September 30, 2021, and since at least 2013, the County's financial statements were audited by Warren Averett, LLC, Independent Accountants. This change occurred as a result of a County general request for proposals respecting auditing services for the County. As a result of that process, the County determined to engage Mauldin & Jenkins to audit the financial statements of the County commencing with the fiscal year ended September 30, 2021.

Certain Classifications and Reclassifications

General. Certain information for the Sanitary Operation Fund and Business-type Activities in the audited financial statements of the County for the fiscal year ended September 30, 2021 (the "FY 2021 Financial Statements") contained classifications not present in previous fiscal years. The following explains this classification, as well as related reclassifications respecting audited financial information for the System.

Classifications in FY 2021 Financial Statements. Under the category of "Current Assets" in the FY 2021 Financial Statements, the County separated restricted cash from restricted investments in showing restricted assets, resulting in the presentation of $78,577,630 of restricted cash and $392,795,006 of restricted investments. The County then classified, within the "Net Position" category, the $78,577,630 of restricted cash as being a restricted operating reserve. See "Certain Financial Information Concerning the System – Summary of Balance Sheet" and "Certain Financial Information Concerning the System – Summary of Cash Flows" in APPENDIX C – "JEFFERSON COUNTY SEWER SYSTEM" hereto.

The $78,577,630, however, is not restricted just for System operating expenses. Per the 2013 Indenture, this $78,577,630 is restricted for capital improvements to the System and to retire sewer revenue warrants. The 2013 Indenture does permit use of such funds for payment of System operating expenses or sewer warrant debt service, but only when funds sufficient for such purposes are not available within the operating reserve fund and debt service fund, respectively, of the 2013 Indenture.

Classification in FY 2022 Financial Statements. In order to more accurately reflect amounts restricted for System capital improvements and payment of debt service on sewer revenue warrants, the audited financial statements for the fiscal year ended September 30, 2022, shown attached as APPENDIX H hereto, the County changed the line-item caption from "restricted for operating reserve" to "restricted for capital improvements and debt service."

Unaudited Financial Statements Respecting the System

The unaudited financial statements for the System for the fiscal year ended September 30, 2023, shall be attached as APPENDIX J to this Official Statement as and when available.

UNDERWRITING

The Series 2024 Warrants are being purchased from the County by Citigroup Global Markets Inc. ("Citigroup" or the "Representative"), on its behalf and as representative of the other underwriters identified on the cover page of this Official Statement (collectively with the Representative, the "Underwriters"), at and for a price of $[_______________] (which price reflects a par amount of $[___________], less an underwriting discount of $[__________], [plus/less] [net] original issue [premium/discount] of $[__________]). The Series 2024 Warrants may be sold and offered to certain dealers (including dealers depositing such bonds into investment trusts) at prices lower than such public offering prices, and such public offering prices may be changed from time to time by the Underwriters.

Citigroup has entered into a retail distribution agreement with Fidelity Capital Markets, a division of National Financial Services LLC (together with its affiliates, "Fidelity"). Under this distribution Agreement, Citigroup may distribute municipal securities to retail investors at the original issue price through Fidelity. As part of this arrangement, Citigroup will compensate Fidelity for its selling efforts with respect to the Series 2024 Warrants.

BofA Securities, Inc., one of the Underwriters of the Series 2024 Warrants, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S"). As part of this arrangement, BofA Securities, Inc. may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA Securities, Inc. may compensate MLPF&S as a dealer for their selling efforts with respect to the Series 2024 Warrants.

Morgan Stanley & Co. LLC, one of the Underwriters of the Series 2024 Warrants, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of the distribution arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the Series 2024 Warrants.

Piper Sandler & Co., one of the Underwriters of the Series 2024 Warrants, has entered into a distribution agreement (the "Piper Distribution Agreement") with Charles Schwab & Co., Inc. ("CS&Co.") for the retail distribution of certain securities offerings at the original issue prices. Pursuant to the Piper Distribution Agreement, CS&Co. will purchase Series 2024 Warrants from Piper Sandler & Co. at the original issue price less a negotiated portion of the selling concession applicable to any Series 2024 Warrants that CS&Co. sells.

The Underwriters have provided the following statement for inclusion in this Official Statement. Certain of the Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. In the ordinary course of business, certain of the Underwriters and their respective affiliates may actively trade in debt and, if applicable, equity securities (or related derivative securities) and provide financial instruments (which may include bank loans, credit support or interest rate swaps) and may engage in transactions for their own accounts involving securities and instruments made the subject of offerings of the County. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

FINANCIAL ADVISOR

Each of Public Resources Advisory Group, Inc. of New York, New York ("PRAG"), and Terminus Municipal Advisors LLC, Atlanta, Georgia ("Terminus"), has served as financial advisor to the County in connection with the issuance of the Series 2024 Warrants. PRAG and Terminus have not independently verified the information contained in this Official Statement and do not assume responsibility for the accuracy, completeness or fairness of such information.

MISCELLANEOUS

This Official Statement has been authorized and approved by the County. The summaries and descriptions of provisions of the Indenture and all references to other materials not purporting to be quoted in full are qualified in their entirety by reference to the complete provisions of the documents and other materials summarized or described.

So far as any statements made in this Official Statement involve matters of opinion, forecasts or estimates, whether or not expressly stated, they are set forth as such and not as representations of fact.

The Appendices are integral parts of this Official Statement and must be read together with all other parts of this Official Statement.

JEFFERSON COUNTY, ALABAMA

By *___/s/ James A. "Jimmie" Stephens___*
Jefferson County Commission President

Dated: [________], 2024

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APPENDIX A
FORM OF INDENTURE

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TRUST INDENTURE

Dated January __, 2024

Between

JEFFERSON COUNTY, ALABAMA

and

REGIONS BANK

Relating to the authorization and issuance of

$____________________ Sewer Revenue Warrants, Series 2024

by

Jefferson County, Alabama

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TRUST INDENTURE

THIS TRUST INDENTURE dated January __, 2024 is entered into by **JEFFERSON COUNTY, ALABAMA**, a political subdivision of the State of Alabama (the "County"), and **REGIONS BANK**, an Alabama state banking corporation with its principal corporate trust office located in Birmingham, Alabama, as trustee (the "Trustee").

R E C I T A L S

The County has duly authorized the issuance of its $_____________ aggregate principal amount of Sewer Revenue Warrants, Series 2024 (the "Series 2024 Warrants") pursuant to this Indenture.

The County owns and operates a sanitary sewer system (the "System") that currently serves customers in Jefferson County, Alabama and small portions of two adjacent counties. Certain sewer revenue warrants of the County are currently outstanding under that certain Trust Indenture dated as of December 1, 2013, as supplemented and amended (the "2013 Indenture"), between the County and Wells Fargo Bank, National Association, in its capacity as trustee (the "2013 Indenture Trustee"). The six series of warrants outstanding as of the date hereof under the 2013 Indenture are as follows: (1) Senior Lien Sewer Revenue Current Interest Warrants, Series 2013 A, (2) Senior Lien Sewer Revenue Capital Appreciation Warrants, Series 2013 B, (3) Senior Lien Sewer Revenue Convertible Capital Appreciation Warrants, Series 2013-C, (4) Subordinate Lien Sewer Revenue Current Interest Warrants, Series 2013 D, (5) Subordinate Lien Sewer Revenue Capital Appreciation Warrants, Series 2013 E, and (6) Subordinate Lien Sewer Revenue Convertible Capital Appreciation Warrants, Series 2013 F (collectively, the "Series 2013 Warrants").

The Series 2024 Warrants are being issued for the purpose of (i) refunding, on a current basis, the County's outstanding 2013 Sewer Warrants and (ii) paying a portion of the costs of issuing the Series 2024 Warrants.

The Series 2024 Warrants are limited obligations of the County payable solely out of the Trust Estate established under this Indenture, which includes the Annual Net Income described herein.

All things have been done which are necessary to make the Series 2024 Warrants, when executed by the County and authenticated and delivered by the Trustee hereunder, the valid obligations of the County, and to constitute this Indenture a valid trust indenture for the security of the Warrants issued hereunder, in accordance with the terms of this Indenture.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

It is hereby covenanted and declared that all the Series 2024 Warrants are to be authenticated and delivered and the property subject to this Indenture is to be held and applied by the Trustee, subject to the covenants, conditions and trusts hereinafter set forth, and the County does hereby covenant and agree to and with the Trustee, for the equal and proportionate benefit of all Warrants, under the terms and conditions and relative priorities set forth herein, as follows:

ARTICLE 1
DEFINITIONS AND USE OF PHRASES

Section 1.1 Definitions. The following words and phrases and others evidently intended as the equivalent thereof shall, in the absence of clear implication herein otherwise, be given the following respective interpretations herein:

"**Act**" means Act No. 716 adopted at the 1900-01 Session of the Alabama Legislature, pursuant to which the County is authorized to levy an ad valorem tax for the benefit of the System.

"**Act of Bankruptcy**" means the filing of a petition in bankruptcy (or the other commencement of a bankruptcy or similar proceeding) by the County after the effective date of this Indenture under any applicable bankruptcy, insolvency, reorganization, or similar law, now or hereafter in effect.

"**Additional Warrants**" means those authorized to be issued under the Indenture in Article VIII hereof.

"**Annual Debt Service Requirement**" means, as of any date of determination with respect to a Fiscal Year, the amount of principal and interest maturing with respect to the then outstanding Warrants in such Fiscal Year (for purposes of this definition of Annual Debt Service Requirement, any principal and interest due on October 1 of any year shall be deemed to be due and payable in the Fiscal Year ending on the immediately preceding September 30) less any amount payable or to be payable by the United States of America to the County or the Trustee during such Fiscal Year as an interest subsidy or rebate with respect to interest on any outstanding Warrants or any Additional Warrants to be issued (but only to the extent that such subsidy or rebate has not been offset or terminated and there is no inquiry, pending or threatened, pursuant to which the United States of America, or any agency thereof, has challenged the right of the County or the Trustee to receive such subsidy or rebate including, without limitation, to the reduction of any such subsidy through federal budgetary sequestration); provided, however,

(a) that the principal amount of any Warrants subject to a Mandatory Redemption Requirement during such Fiscal Year shall, for purposes of this definition, be considered as maturing in the Fiscal Year during which such redemption is required and not in the Fiscal Year in which their stated maturity occurs;

(b) that for purposes of the definition, Warrants that are deemed paid under the provisions of Section 16.1 hereof shall not be deemed to be outstanding;

(c) that, except as hereinafter provided in this subparagraph, the rate of interest on Variable Rate Warrants outstanding at the time of such calculation or proposed to be issued shall be the maximum rate of interest under such Variable Rate Warrants;

(d) that the principal of Balloon Warrants shall be deemed to mature in annual installments over a period equal to the greater of (i) twenty years or (ii) the number of years (rounded to the next lowest number in the case of a part of a year) between the date with respect to which such calculation is made and the date of maturity of such Balloon Warrants, so as to result, in either case, in approximately equal payments of principal and interest (and if such Balloon Warrants are Variable Rate Warrants, the interest rate applicable thereto shall be calculated as provided in clause (c) of this definition); and

(e) that any on-going fees related to Variable Rate Warrants (such as fees for a Credit Facility, fees for liquidity providers, remarketing agent's fees and the like) shall be included as interest on such Variable Rate Warrants; and

(f) that principal and interest coming due on October 1 of any Fiscal Year will be deemed to be payable in the prior Fiscal Year.

"**Annual Net Income**" means (a) the total System Revenues (i) when such term is used in reference to a Fiscal Year, during such Fiscal Year (including, without limitation, interest earned on investments of funds referable to the System if the deposit of such interest in the Revenue Account is not inconsistent with contractual or legal restrictions applicable to the County) less the total of the Operating Expenses during such Fiscal Year (less the amount of Sewer Tax Proceeds applied to the payment of Operating Expenses during such Fiscal Year or, for purposes of Section 8.2(c), projected to be applied to Operating Expenses during such Fiscal Year by the applicable Independent Consultant), or (ii) when such term is used in reference to an Applicable Twelve-Month Period, for any Applicable Twelve-Month Period (including, without limitation, interest earned on investments of funds referable to the System if the deposit of such interest in the Revenue Account is not inconsistent with contractual or legal restrictions applicable to the County) less the total of the Operating Expenses (including Operating Expenses to the extent in excess of Sewer Tax Proceeds) during such Applicable Twelve-Month Period and (b) when used in the definition and meaning of "Trust Estate," all right, title and interest of the County in and to the revenues from the operation of the System remaining after payment of all Operating Expenses.

"**Applicable Twelve-Month Period**" has the meaning given such term is Section 8.2(c).

"**Authorized County Representative**" means the President of the Commission, the County Manager, the Chief Financial Officer of the County, or any other officer or agent of the County authorized by resolution of the Commission to act as "Authorized County Representative" under this Indenture.

"**Authorized Denominations**" means the principal sum of $5,000 or any integral multiple thereof.

"**Balloon Warrants**" means Warrants of a series, twenty-five percent (25%) or more of the original principal of which matures during any one Fiscal Year, if such maturing principal amount is not required to be amortized below such percentage by (a) a Mandatory Redemption Requirement prior to such Fiscal Year, or (b) deposits into the Warrant Fund which are required to be applied to the payment of such principal. Tender Option Warrants shall not be treated as Balloon Warrants solely by virtue of the option on the part of the Holders thereof to have such Warrants purchased prior to their respective maturities.

"**Bond Counsel**" means Independent Counsel (or firm thereof) whose opinions respecting the legality or validity of securities issued by or on behalf of states or political subdivisions thereof are nationally recognized.

"**Bond Insurance Policy**" means a policy of municipal bond insurance with respect to the payment of principal and interest on any series of Warrants.

"**Book-Entry System**" means the electronic system maintained by DTC for the ownership, transfer, exchange and payment of debt obligations.

"**Budgeted System Costs**" means all reasonable and necessary direct or indirect expenses of operating and maintaining the System projected to be payable from System Revenues for a Fiscal Year other than (i) Debt Service required to be paid in such Fiscal Year, (ii) all amounts payable on Subordinate Debt or Unsecured Obligations, (iii) Capital Improvements, (iv) depreciation, (v) amortization, (vi) other non-cash expenses, and (vii) customer security deposits.

"**Business Day**" means any day other than a Saturday, a Sunday, a day on which the offices of the Trustee are closed or a day on which the wire transfer system of the Federal Reserve System is not operational.

"**Callable Warrants**" means those of the Warrants which under the terms thereof may be redeemed prior to their respective maturities.

"**Capital Improvements**" means improvements, extensions, additions and equipment, as the case may be, to or for the System that are properly chargeable to fixed capital account by generally accepted accounting practice and includes real estate (and easements and other interests therein) on, under or over which any such improvements, extensions, additions or equipment are, or are proposed to be, located.

"**Capital Improvement Fund**" means the fund referred to in Section 10.5 hereof.

"**County**" means the party of the first part hereto and, subject to the provisions of Section 11.8 hereof, includes its successors and assigns and any corporation resulting from or surviving any consolidation or merger to which it or its successors may be a party.

"**Code**" means the Internal Revenue Code of 1986, as amended, and the regulations promulgated thereunder by the United States Treasury Department.

"**Commission**" means the Jefferson County Commission, the governing body of the County.

"**Credit Facility**" means a Letter of Credit or Bond Insurance Policy guaranteeing or providing for (a) the payment of all or any portion of the principal of or the interest on any Warrants, (b) the payment of all or any portion of the Redemption Price of any Warrants or (c) the purchase price of any Warrants or a portion thereof.

"**Credit Facility Fees**" means the initial, annual, semi-annual or quarterly fees and expenses charged to the County by a Credit Facility Obligor for issuing and maintaining in effect a Credit Facility; provided, however, that the term "Credit Facility Fees" shall not include any fees or expenses paid out of the proceeds from the issuance of any of the Warrants.

"**Credit Facility Obligor**" means the issuer of a Credit Facility.

"**Credit Rating Agency**" means (a) Moody's, (b) S&P, (c) Fitch and (d) any successor to any of the foregoing by merger, consolidation or otherwise.

"**Debt Service**" means the principal, redemption premium (if any), and interest, whether accrued or accreted, payable on any Warrants.

"**Debt Service Fund**" means the fund created in Section 10.3 hereof.

"**DTC**" means the Depository Trust Company and its successors and assigns.

"**Eligible Investments**" means:

(a) Federal Securities;

(b) obligations of the State, or obligations of any county or municipal corporation of the State, provided such obligations are rated by a Credit Rating Agency in the any one of the three highest rating categories (without regard to variations within a category);

(c) Direct obligations of (including obligations issued or held in book-entry form on the books of) the Department of the Treasury of the United States;

(d) Obligations of any of the following federal agencies, which obligations represent the full faith and credit of the United States:

(1) Farmers Home Administration,

(2) General Services Administration,

(3) U. S. Maritime Administration,

(4) Small Business Administration,

(5) Government National Mortgage Association (GNMA),

(6) U. S. Department of Housing and Urban Development (HUD), or

(7) Federal Housing Administration (FHA);

(e) U. S. dollar denominated deposit accounts and certificates of deposit with banks or savings associations which are qualified public depositories under Chapter 14A of Title 41 of the Code of Alabama 1975;

(f) Pre-refunded public obligations, defined as follows: Any bonds or other obligations of any state of the United States or of any agency, instrumentality or local governmental unit of any such state (i) which are not callable at the option of the obligor prior to maturity or as to which irrevocable notice has been given by the obligor to call on the date specified in the notice, and (ii) which are fully secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or obligations described in subdivision (b) above, which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate, and (iii) which fund is sufficient, as verified by an Independent Certified Public Accountant, to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this paragraph on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (i) of this paragraph, as appropriate, and (iv) which are rated, based on the escrow, in the highest rating category of S&P and Moody's, or any successors thereto;

(g) Interests, however evidenced, in any common trust fund or other collective investment fund maintained by any national or state chartered bank, trust company or savings association having trust powers (including the Trustee or an affiliate of the Trustee), or securities of or other interests in any open-end or closed-end management type investment company or investment trust registered under the Investment Company Act of 1940, as from time to time amended, so long as all of the following requirements are met at the time of purchase and during the term of investment: (i) At least 65% of the portfolio of such common trust fund, collective investment fund or investment company or investment trust must consist of investments authorized in subdivisions (b), (c), (d), or (e) above, and (ii) the remainder of the portfolio (if any, but not more than 35%) may consist only of the following investments: (y) obligations issued or guaranteed by the following agencies (stripped securities are only permitted if such security is created by the agency itself): Federal National Mortgage Association (FNMA), Federal Home Loan Mortgage Corporation (FHLMC), including FNMA, and FHLMC participation certificates, Federal Land Banks, Central Bank for Cooperatives, Federal Intermediate Credit Banks, Student Loan Marketing Association, and Federal Home Loan Banks, or (z) repurchase agreements fully collateralized by obligations, securities or investments otherwise authorized under subclauses (i) and (ii) of this paragraph (g), so long as the common trust fund, collective investment fund, investment company or investment trust takes possession and delivery of the collateral for any repurchase agreement either directly or through an authorized custodian. The fact that any financial institution making such investment on behalf of the County, or any affiliate of such financial institution, is providing services to the investment company or investment trust as an investment advisor, sponsor, distributor, custodian, transfer agent, registrar, or otherwise, and is receiving reasonable remuneration for such services, shall not preclude such institution from making the investment in the securities of such investment company or investment trust; provided, however, that with respect to any account for which fees are charged for such services, the said financial institution shall disclose (by prospectus, account statement or otherwise) to the County or to any third party directing investments the basis (expressed as a percentage of asset value or otherwise) upon which the fee is calculated; or

(h) to the extent not included in the foregoing, any investment permitted for municipal or county funds pursuant to Section 11-81-21 of the Code of Alabama 1975, as at any time amended or supplemented, or as otherwise permitted under Alabama law.

"**Federal Securities**" means (a) any securities that are direct obligations of the United States of America, and (b) any securities with respect to which payment of the principal thereof and the interest thereon is unconditionally guaranteed by the United States of America.

"**Fiscal Year**" means, as respects the System, the period beginning on October 1 of a calendar year and ending on September 30 of the next succeeding calendar year, unless the fiscal year for the System is changed by the County, in which case it means the period beginning on the first day of the first month of such year and ending on the last day of the month immediately preceding such first month.

"**Fitch**" means Fitch Ratings, Inc.

"**Holder**" means the person in whose name a Warrant is registered on the books of the Trustee pertaining to the Warrants.

"**Indenture**" means this present and every supplemental agreement with the Trustee in pursuance hereof.

"**Indenture Default**" means any default described in Section 13.1. An Indenture Default shall "exist" if an Indenture Default shall have occurred and be continuing.

"**Independent Auditor**" means a certified public accountant, or firm thereof, not employed full time by the County and regularly engaged in the auditing of financial records.

"**Independent Certified Public Accountant**" means a person or firm who (i) has a favorable regional or national reputation for skill and experience in governmental accounting, (ii) shall be appointed by the County, (iii) does not have any direct financial interest or any material indirect financial interest in the County, (iv) does not serve as a member of the governing body of the County, and (v) is not employed by the County; provided that an Independent Certified Public Accountant may be the same person or firm which prepares the County's audited financial statements.

"**Independent Consultant**" means a person or firm who (i) has a favorable regional or national reputation for skill and experience in the operations and financial affairs of sewer systems, (ii) shall be appointed by the County, (iii) does not have any direct financial interest or any material indirect financial interest in the County, (iv) does not serve as a member of the governing body of the County, and (v) is not employed by the County.

"**Independent Counsel**" means an attorney who is duly licensed to practice before the Supreme Court of Alabama and who is not employed full time by the County.

"**Independent Engineer**" means an engineer who is duly registered and qualified to practice the profession of engineering under the laws of Alabama and who is not a full time employee of the County.

"**Independent Financial Advisor**" means an investment banking or financial advisory firm, commercial bank, or any other person not employed by the County and appointed by the County for the purpose of passing on questions relating to the availability and terms of specified types of securities and is actively engaged in and, in the good faith opinion of the County, has a favorable reputation for skill and experience in underwriting or providing financial advisory services in respect of similar types of securities.

"**Interest Payment Date**" means (a) with respect to the Series 2024 Warrants, each April 1 and October 1, commencing October 1, 2024, and (b) with respect to any series of Additional Warrants, any date specified in the Supplemental Indenture pursuant to which such series of Additional Warrants is issued as a date on which interest is to be paid on such series of Additional Warrants.

"**Letter of Credit**" means an irrevocable letter of credit issued with respect to the payment of principal, interest or premium on any series of Warrants.

"**Mandatory Redemption Requirement**" means (a) with respect to the Series 2024 Warrants, the provisions of Section 7.2(b) hereof, and (b) with respect to any series of Additional Warrants, any provisions that may be set forth in the Supplemental Indenture authorizing the issuance of such Additional Warrants, for mandatory redemption of any Additional Warrants at a Redemption Price equal to the principal amount thereof.

"**Maturity Date**" means the date on which principal on any Warrant is due and payable.

"**Maximum Annual Debt Service Requirement**" means, as of any date of determination, the maximum Annual Debt Service Requirement during the then current or any then succeeding Fiscal Year.

"**Moody's**" means Moody's Investors Service, Inc.

"**Operating Expenses**" means, for the applicable period or periods, (a) direct or indirect expenses of operating and maintaining the System determined in accordance with generally accepted accounting principles, including, without limiting the generality of the foregoing, the cost of all items of labor, materials, supplies and equipment (other than equipment which, under generally accepted accounting principles, constitutes a capital expenditure), premiums on insurance and fidelity bonds, fees for engineers, attorneys and accountants for services rendered (except in cases where such fees, under generally accepted accounting principles, constitute capital expenditures), and reasonable compensation to the Trustee for its expenses incurred and services performed hereunder, all items herein specifically stated to constitute an operating expense, and all other items except depreciation and interest that by generally accepted accounting principles constitute operating expenses, (b) the expenses of maintaining the System in good repair and in good operating condition, but not including any items that are capital expenditures under generally accepted accounting principles, (c) premiums for insurance policies relating to the System, (d) expenses related to the implementation and maintenance of a customer assistance program and (e) any other charges expressly stated in this Indenture to constitute an Operating Expense.

"**Operating Reserve Fund**" means the fund created in Section 10.4 hereof.

"**outstanding**" or "**outstanding hereunder**" or "**outstanding under this Indenture**", when used with reference to any Warrants, shall mean, as of any particular time, all Warrants authenticated and delivered under this Indenture, except (a) Warrants cancelled at or prior to the particular time; (b) Warrants deemed paid as provided in Section 16.1 hereof; and (c) Warrants in lieu of, or in substitution for, which other Warrants shall have been authenticated and delivered pursuant to the provisions of Section 4.4 hereof.

"**Outstanding Amount**" means, as of any date of determination, the sum of the outstanding principal amount of Warrants.

"**Overdue Interest**" means interest due but not paid on the Interest Payment Date on which such interest is required to be paid.

"**Overdue Interest Payment Date**" means the date fixed by the Trustee, pursuant to the provisions of Section 5.2 hereof, for the payment of Overdue Interest.

"**Permitted Encumbrances**" means as of any particular time (a) liens for ad valorem taxes not then due, (b) easements, restrictions and exceptions which do not, in the opinion of the County, materially impair the use of such property in the operation of the System or the value of such property for purposes of the System and (c) minor clouds, encumbrances, defects and restrictions of the type that customarily exist with respect to properties of a size and character similar to those constituting the System and that do not, in the opinion of Counsel, in the aggregate materially impair the use of such properties in the operation of the System.

"**Principal Payment Date**" means (a) with respect to the Series 2024 Warrants, any date specified in Section 7.1 hereof for the payment of principal on such Warrants, and (b) with respect to any series of Additional Warrants, any date specified in the Supplemental Indenture pertaining to such Additional Warrants as a date for payment of principal of such Additional Warrants.

"**Rate Covenant Requirement**" means Annual Net Income for the Fiscal Year in question must be not less than 130% of the maximum amount of principal and interest scheduled to mature on the Warrants in such Fiscal Year.

"**Rebate Liability**" means the amount of any rebate due to the United States Treasury with respect to any series of Warrants pursuant to Section 148(f) of the Internal Revenue Code.

"**Record Date**" means (a) with respect to the Series 2024 Warrants, the March 15 or September 15, as the case may be, next preceding an Interest Payment Date, and (b) with respect to any series of Additional Warrants, the dates specified or determined in accordance with the Supplemental Indenture pursuant to which such Additional Warrants are issued.

"**Redemption Date**" means the date fixed for redemption of Callable Warrants in any notice of redemption.

"**Redemption Price**" means the price at which the Callable Warrants called for redemption may be redeemed on the Redemption Date.

"**Reimbursement Obligation**" means an obligation on the part of the County to reimburse a Credit Facility Obligor for amounts paid by such Credit Facility Obligor with respect to the principal of or the interest or premium, if any, on the Warrants under the terms of a Credit Facility, together with interest thereon; provided, however, that Credit Facility Fees shall not be included in calculating the amount of a Reimbursement Obligation.

"**Required Operating Reserve**", when used with respect to any Fiscal Year, means an amount equal to 1/3 of the total Budgeted System Costs projected by the County's operating budget for the System for such Fiscal Year prepared pursuant to Section 11.15.

"**Required Revenue Reserve**", when used with respect to any Fiscal Year, means an amount equal to 30 days of the total Budgeted System Costs projected by the County's operating budget for the System for such Fiscal Year prepared pursuant to Section 11.15.

"**Reserve Fund**" means one or more separate reserve funds created in Supplemental Indentures for the benefit of one or more series of Additional Warrants; provided, however, that no Reserve Fund has been established for the Series 2024 Warrants.

"**Resolution**" means a resolution or order duly adopted by the Commission.

"**Responsible Officer**" means, when used with respect to the Trustee, any vice president, assistant vice president, senior associate or other officer of the Trustee having direct responsibility for the administration of this Indenture.

"**Revenue Account**" means the Sewer Revenue Account referred to in Section 10.1 hereof.

"**S&P**" means S&P Global Ratings, Inc.

"**Secured Deposits**" means U.S. dollar-denominated deposit accounts, federal funds and banker's acceptances with domestic commercial banks (including, without limitation, the Trustee), provided that such deposits are collaterally secured by the issuing bank by pledging securities having a market value (exclusive of accrued interest) not less than the face amount of such deposits less the amount of such deposit which is insured by the Federal Deposit Insurance Corporation.

"**Series 2013 Warrants**" means the following obligations of the County presently outstanding under the 2013 Indenture: (1) Senior Lien Sewer Revenue Current Interest Warrants, Series 2013 A, (2) Senior Lien Sewer Revenue Capital Appreciation Warrants, Series 2013 B, (3) Senior Lien Sewer Revenue Convertible Capital Appreciation Warrants, Series 2013-C, (4) Subordinate Lien Sewer Revenue Current Interest Warrants, Series 2013 D, (5) Subordinate Lien Sewer Revenue Capital Appreciation Warrants, Series 2013 E, and (6) Subordinate Lien Sewer Revenue Convertible Capital Appreciation Warrants, Series 2013 F.

["**Series 2024 Term Warrants**" means those of the Series 2024 Warrants maturing in [________] and [____________].]

"**Series 2024 Warrants**" means the $______________ aggregate principal amount Sewer Revenue Warrants, Series 2024, issued under this Indenture.

"**Sewer Tax Proceeds**" means the proceeds from the ad valorem tax levied by the County pursuant to authority granted by the Act.

"**State**" means the State of Alabama.

"**Subordinate Debt**" means warrants or other forms of debt obligations of the County issued to pay the cost of financing or refinancing capital improvements or equipment for the System and secured by a pledge of System Revenues subject and subordinate to the pledge of System Revenues for Warrants issued hereunder.

"**Supplemental Indenture**" means an agreement supplemental hereto.

"**System**" means the sanitary sewer system of the County, as said system now exists and as it may hereafter be extended, modified, and improved.

"**System Revenues**" means all of the revenues derived from the operation of the System.

"**Tender Option Warrants**" means Warrants that are required to be purchased on behalf of the County, at the option of the Holders thereof, prior to their respective maturities; provided, however, that if no such option is thereafter exercisable, such Warrant shall no longer be considered a "Tender Option Warrant."

"**Trust Estate**" has the meaning assigned in Section 2.3 hereof.

"**Trustee**" means the party of the second part hereto and its successors and any corporation resulting from or surviving any consolidation or merger to which it or its successors may be a party.

"**Unsecured Obligations**" means any (a) debt, (b) contract entered into with respect to interest rate exchange agreements with respect to debt, or (c) other contractual obligations of the County (other than Operating Expenses) that are undertaken for the benefit of the System and are payable from System Revenues but are not secured by a pledge of the System Revenues.

"**Variable Rate Warrant**" means Warrants that bear interest at a rate per annum which is subject to adjustment so that the actual rate of interest is not ascertainable at the time such Warrants are issued; provided, however, that upon the conversion of the rate of interest on a Variable Rate Warrant to a fixed rate of interest (whether or not the interest rate on such Warrant is subject to conversion back to a variable rate of interest), such Warrant shall be considered a "Fixed Rate Warrant" for so long as such Warrant bears interest at a fixed rate.

"**Warrantholder**" means the Holder of a Warrant.

"**Warrants**" means the Series 2024 Warrants and any Additional Warrants hereafter issued pursuant to the provisions of Article VIII hereof.

"**2013 Indenture**" means that certain Trust Indenture dated December 1, 2013, as supplemented and amended, between the County and the 2013 Indenture Trustee.

"**2013 Indenture Trustee**" means Wells Fargo Bank, National Association, as trustee under the 2013 Indenture.

Section 1.2 General Rules of Construction.

(a) Defined terms in the singular shall include the plural as well as the singular, and vice versa.

(b) The definitions in the recitals to this instrument are for convenience only and shall not affect the construction of this instrument.

(c) All accounting terms not otherwise defined herein have the meaning assigned to them, and all computations herein provided for shall be made, in accordance with generally accepted accounting principles applicable to the County. All references herein to "generally accepted accounting principles" refer to such principles as they exist as of the date of application thereof and as consistently applied.

(d) All references in this instrument to designated "Articles", "Sections" and other subdivisions are to the designated Articles, Sections and subdivisions of this instrument as originally executed.

(e) The terms "herein", "hereof" and "hereunder" and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.

(f) All references in this instrument to a separate instrument are to such separate instrument as the same may be amended or supplemented from time to time pursuant to the applicable provisions thereof.

(g) The term "person" shall include any individual, corporation, partnership, limited liability company, joint venture, association, trust, unincorporated organization and any government or any agency or political subdivision thereof.

(h) The term "including" means "including without limitation" and "including, but not limited to".

Section 1.3 Effect of Action by Holders of Warrants. Any request, demand, authorization, direction, notice, consent, waiver or other action by the Holder of any Warrant shall bind every future Holder of the same Warrant and the Holder of every Warrant issued upon the transfer thereof or in exchange therefor or in lieu thereof, in respect of anything done or suffered to be done by the Trustee or the County in reliance thereon, whether or not notation of such action is made upon such Warrant.

Section 1.4 Effect of Headings and Table of Contents. The Article and Section headings herein and in the Table of Contents are for convenience only and shall not affect the construction hereof.

Section 1.5 Date of Indenture. The date of this Indenture is intended as and for a date for the convenient identification of this Indenture and is not intended to indicate that this Indenture was executed and delivered on said date.

Section 1.6 Separability Clause. If any provision in this Indenture or in the Warrants shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

Section 1.7 Governing Law. This Indenture shall be construed in accordance with and governed by the laws of the State. The provisions of this Indenture, all covenants contained herein, and all actions to be taken hereunder shall be subject to the laws of the State.

Section 1.8 Counterparts. This instrument may be executed in any number of counterparts, each of which so executed shall be deemed an original, but all such counterparts shall together constitute but one and the same instrument.

Section 1.9 Designation of Time for Performance. Except as otherwise expressly provided herein, any reference in this Indenture to the time of day means (i) if the Book-Entry System is in effect, the time of day in the city where DTC maintains its place of business for the performance of its obligations under the Book-Entry System or (ii) if the Book-Entry System is no longer in effect, the time of day in the city where the Trustee maintains its place of business for the performance of its obligations under this Indenture.

ARTICLE 2
SOURCE OF PAYMENT OF AND SECURITY OF PAYMENT FOR WARRANTS

Section 2.1 Limited Source of Payment of Warrants. The Series 2024 Warrants and any other payment obligations under this Indenture are limited obligations of the County payable solely out of the Trust Estate. The Warrants and any other payment obligations under this Indenture shall not constitute or give rise to a general indebtedness or liability of, and shall not constitute a charge against the general credit or taxing powers of, the County. The State shall have no liability whatsoever to make any payment under this Indenture.

Section 2.2 Officials, Officers and Employees of the County Exempt from Individual Liability. No recourse under or upon any covenant or agreement of this Indenture, or of any Warrants, or for any claim based thereon or otherwise in respect thereof, shall be had against any past, present or future public official, officer or employee of the County, or of any successor, either directly or through the County, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise; it being expressly understood that this Indenture and the Warrants issued hereunder are solely the limited obligations of the County, and that no personal or pecuniary liability whatsoever shall attach to, or is or shall be incurred by, any public official, officer or employee of the County or any successor, or any of them, because of the issuance of the Warrants, or under or by reason of the covenants or agreements contained in this Indenture or in any Warrants or implied therefrom. The provisions of this Section 2.2 are not intended to preclude the enforcement of remedies provided for in Article 13 against the Trust Estate secured by this Indenture.

Section 2.3 Trust Estate. To secure the payment of the principal of, interest, on and premium, if any, on the Warrants, and the performance of the covenants contained in this Indenture that are for the benefit of all Warrants, and in consideration of the premises and of the purchase of

Warrants by the Holders thereof, the County hereby pledges and assigns to the Trustee, and grants to the Trustee a security interest in, the following property:

(a) **Annual Net Income**. Annual Net Income.

(b) **General Indenture Funds**. Money and investments from time to time on deposit in, or forming a part of, the following funds and accounts: the Revenue Account, the Debt Service Fund, the Operating Reserve Fund and the Capital Improvement Fund (collectively, the "General Funds").

(c) **Other Property**. Any and all property of every kind or description which may, from time to time hereafter, by delivery or by writing of any kind, be specifically subjected to the lien of this Indenture as additional security for the Warrants by the County or anyone on its part or with its consent, or which pursuant to any of the provisions hereof may come into the possession or control of the Trustee. The Trustee is hereby authorized to receive any and all such property as and for additional security for the obligations secured hereby and to hold and apply all such property subject to the terms hereof.

To Have and to Hold all such property, rights and privileges (collectively referred to as the "Trust Estate") unto the Trustee and its successors and assigns.

But in Trust Nevertheless, for the benefit and security of the Holders from time to time of all Warrants without any priority of any Warrant over any other Warrant.

Section 2.4 Sewer Tax Proceeds. For the avoidance of doubt, Sewer Tax Proceeds shall not be part of System Revenues or Annual Net Income or be subject to the lien of, or in any way pledged to the Trust Estate, or be otherwise subject to the terms of this Indenture.

ARTICLE 3
ISSUANCE OF WARRANTS IN SERIES

Section 3.1 Issuance of Warrants in Series. The Warrants may be issued in different series, and each Warrant shall have an appropriate series designation. All the Warrants shall be equally and ratably secured by the Indenture and by the pledges herein contained, it being expressly understood and agreed that no Warrants issued hereunder shall be prior to any other Warrants thereafter issued hereunder, but shall be on a parity therewith, with respect both to the provisions of the Indenture and to said pledges; provided, however, that nothing herein contained shall be construed to prevent the County from providing for the sole benefit of any series of Additional Warrants or a portion of such series, separate or special security in the form of a Credit Facility, a Reserve Fund or other credit or liquidity enhancement without providing the same or similar security for other Warrants therefore or thereafter issued under the Indenture.

Section 3.2 General Provisions Respecting Warrants. Each of the series of the Warrants shall bear such date or dates and shall mature on such dates and in such amounts as shall be specified in the Indenture or Supplemental Indenture providing therefor. Interest on the Warrants of each series shall be payable, at such per annum rate or rates as shall be fixed therefor prior to their issuance on the dates set forth in the Indenture or Supplemental Indenture under which they are issued. The principal of and the premium, if any, on the Warrants shall be payable in lawful money of the United States of America at the corporate trust office of the Trustee upon presentation and surrender of the Warrants as they become due and payable. With respect to each series of Warrants, interest on the Warrants shall, except as otherwise provided in Section 5.2 hereof, be paid by check or draft mailed by the Trustee on the Interest Payment Date referable to such series to the respective Holders thereof at their addresses as they appear on the registry books of the Trustee pertaining to the registration of the Warrants as of the close of business on the Record Date; provided, however, (a) that any Holder of not less than $500,000 in principal amount of the Series 2024 Warrants then outstanding may make arrangements with the Trustee for the payment of interest thereon and the principal and premium, if any, payable upon any partial redemption thereof, by wire transfer, and (b) that the Supplemental Indenture authorizing the issuance of any series of Additional Warrants may contain similar provisions for the payment of interest, principal or premium on such series of Additional Warrants. Any principal, interest or premium with respect to any Warrant that becomes due on a day other than a Business Day shall be payable on the next succeeding Business Day and no interest shall accrue in the interim.

Section 3.3 Form of Warrants, Etc. The Series 2024 Warrants and various certificates applicable thereto shall be in substantially the forms respectively provided therefor in Section 7.3 hereof. The Warrants of each series of Additional Warrants and various certificates and endorsements applicable thereto shall be in substantially the forms respectively provided therefor in the Supplemental Indenture providing therefor, which shall in general be similar to the corresponding forms applicable to the Series 2024 Warrants, with such insertions, omissions and other variations as may be necessary to conform to the provisions hereof and such Supplemental Indenture.

ARTICLE 4
EXECUTION AND AUTHENTICATION OF THE WARRANTS

Section 4.1 Execution of Warrants. The Warrants shall be executed on behalf of the County with a manual or facsimile signature of the President of the Commission and attested by a manual or facsimile signature of the Minute Clerk of the County. The seal of the County shall be imprinted or reproduced in facsimile on each of the Warrants. Signatures on the Warrants by persons who were officers of the County at the time such signatures were written or printed shall continue effective although such persons cease to be such officers prior to the authentication of the Warrants or the delivery of the Warrants.

Section 4.2 Authentication Certificate of Trustee. A duly and manually executed authentication certificate by the Trustee in substantially the applicable form hereinafter recited shall be endorsed on each of the Warrants and shall be essential to its validity. Such certificate shall be conclusive of the due issue of such Warrant hereunder.

Section 4.3 Accrual of Interest on Warrants. With respect to each series of Warrants, each Warrant issued hereunder (including, without limitation, those issued pursuant to the provisions of Section 4.4, 5.1, 5.4 or 6.2 hereof) shall bear interest from the Interest Payment Date referable to such series next preceding the date of its authentication by the Trustee unless (1) such date of authentication is an Interest Payment Date for such series, in which event such Warrant shall bear interest from the date of its authentication, (2) at the time of such authentication the County is in default in the payment of interest on the Warrant in lieu of which such new Warrant is issued, in which event such new Warrant shall bear interest from the last Interest Payment Date referable to such series to which interest has previously been paid or made available for payment on the Warrant in lieu of which such new Warrant is issued, or (3) such Warrant is issued prior to the first Interest Payment Date with respect to the series of Warrants evidenced in whole or in part thereby, in which event such Warrant shall bear interest from the date of the Warrants of that series. The preceding provisions shall be construed to the end that the issuance of a Warrant shall not effect any gain or loss of interest to the Holder thereof.

Section 4.4 Replacement of Mutilated, Lost, Stolen or Destroyed Warrants. In the event any Warrant is mutilated, lost, stolen or destroyed, the County may execute, and the Trustee shall thereupon authenticate and deliver, a new Warrant of like tenor as that mutilated, lost, stolen or destroyed; provided that (a) in the case of any such mutilated Warrant, such Warrant is first surrendered to the County and the Trustee, and (b) in the case of any such lost, stolen or destroyed Warrant, there is first furnished to the County and the Trustee evidence of such loss, theft or destruction satisfactory to the Trustee, together with indemnity satisfactory to each of them. The County may charge the Holder with the expense of issuing any such new Warrant.

ARTICLE 5
REGISTRATION AND TRANSFERS OF THE WARRANTS

Section 5.1 Registration and Transfer of Warrants. The Trustee shall be the registrar and transfer agent of the County and shall keep at its office proper registry and transfer books in which it will note the registration and transfer of such Warrants, all in the manner and to the extent hereinafter specified.

All Warrants shall be registered as to both principal and interest by the Trustee as registrar and transfer agent for the County and shall be transferable only on the transfer books of the Trustee. No transfer of a Warrant shall be valid hereunder unless such Warrant is presented at the office of the Trustee with written power to transfer signed by the registered owner thereof in person or by duly authorized attorney, properly stamped if required, in form and with guaranty of signature satisfactory to the Trustee, whereupon the County shall execute, and the Trustee shall authenticate and deliver to the transferee, a new Warrant, registered in the name of such transferee and of like tenor as that presented for transfer. The person in whose name a Warrant is registered on the books of the Trustee shall be the sole person to whom or on whose order payments on account of the principal thereof and of the interest (and premium, if any) thereon may be made.

Section 5.2 Persons to Whom Payment of Interest on Warrants is to be Made. With respect to each series of Warrants, interest thereon shall, except as provided in Section 3.2 hereof and in the next succeeding paragraph of this Section 5.2, and except as may be provided otherwise by Supplemental Indenture with respect to any series of Additional Warrants, be payable in lawful money of the United States of America by check or draft mailed by the Trustee to the registered Holders of the Warrants of such series as of the close of business on the Record Date next preceding the Interest Payment Date referable to such series at the address shown on the registry books of the Trustee pertaining to the Warrants. Each Holder of any of the Warrants takes it subject to all payments of interest in fact made with respect thereto.

Any provision hereof to the contrary notwithstanding, Overdue Interest shall not be payable to the Holder of any particular series of Warrants solely by reason of such Holder having been the Holder on the Record Date next preceding the Interest Payment Date on which such interest became due and payable, but shall be payable by the Trustee as follows:

(a) Not less than ten (10) days following receipt by the Trustee of immediately available funds in an amount sufficient to enable the Trustee to pay all Overdue Interest, the Trustee shall fix an Overdue Interest Payment Date for payment of such Overdue Interest.

(b) Such Overdue Interest Payment Date fixed by the Trustee shall be a date not more than twenty (20) days following the expiration of the period described in the foregoing subparagraph (a).

(c) Overdue Interest shall be paid by check or draft mailed by the Trustee to the persons in whose names the Warrants of the particular series in question were registered on the Overdue Interest Payment Date. Payment of Overdue Interest in the manner prescribed in this paragraph to the persons in whose names the Warrants of the particular series in question were registered on the Overdue Interest Payment Date shall fully discharge and satisfy all liability for the same.

Section 5.3 Persons Deemed Owners of Warrants. The County and the Trustee may deem and treat the person in whose name a Warrant is registered as the absolute owner thereof for all purposes; they shall not be affected by notice to the contrary; and all payments by any of them to the person in whose name a Warrant is registered shall to the extent thereof fully discharge and satisfy all liability for the same.

Section 5.4 Exchange of Warrants. Upon the request of the Holder of one or more Warrants, the County shall execute, and the Trustee shall thereupon authenticate and deliver, upon surrender to the Trustee of such Warrant or Warrants and in exchange therefor, other Warrants in different Authorized Denominations of like tenor, having the same stated maturity and together aggregating the same principal amount as the then unpaid principal amount of the Warrant or Warrants so surrendered, as may be requested by the person surrendering such Warrant or Warrants. Any Warrants surrendered for exchange pursuant to the provisions of this Section 5.4 shall be accompanied by a written power to transfer signed by the registered owner thereof in person or by duly authorized attorney, properly stamped if required, in form and with guaranty of signature satisfactory to the Trustee.

Section 5.5 Expenses of Registration and Transfer. Any transfer, registration or exchange of any of the Warrants provided for in this Indenture shall be made without charge to the Holders; provided, however, that in every case involving any transfer, registration or exchange or any of the Warrants that is requested by the Holder thereof, such Holder shall pay all taxes and other governmental charges required to be paid in connection with such transfer, registration or exchange.

Section 5.6 Time Limits on Registration, Transfer or Exchange. If any Warrant is duly called for redemption (in whole or in part), the Trustee shall not be required to register, transfer or exchange such Warrant during the period of forty-five (45) days next preceding the Redemption Date.

Section 5.7 Provisions Respecting Registration of Warrants to Comply with Provisions of Code. The County and the Trustee recognize that the provisions of the Code now require that the Warrants be in "registered form", and that, in general, each Warrant must be registered as to both principal and interest and any transfer of any Warrant must be effected only by the surrender of the old Warrant and either by the reissuance of the old Warrant to a new Holder or the issuance of a new Warrant to a new Holder. The Trustee may conclusively rely upon an opinion of Bond Counsel with respect to any question which may arise pertaining to the transfer, exchange or reissuance of Warrants. The provisions of this Indenture pertaining to transfer, exchange or reissuance of Warrants need not or shall not be followed if the Trustee receives an opinion of Bond Counsel that compliance with requirements in addition to or in lieu of the requirements of this Indenture pertaining to such transfer, exchange or reissuance is required or permitted under the provisions of the Code, or under other applicable laws and regulations.

Section 5.8 Denominations and Registration of Warrants as Initially Issued. The Warrants of each maturity shall be initially issued in Authorized Denominations as requested by the purchaser and registered in the names of the persons specified by the initial purchaser of the Warrants from the County. If, for any reason, the Trustee is unable to prepare or cause to be prepared Warrants in the Authorized Denominations requested by the purchaser and registered in the names of the persons specified by the purchaser, the County may deliver one Warrant for each maturity in the principal amount of such maturity, each registered in the name of the initial purchaser of the Warrants from the County.

Section 5.9 Notations on Warrants by Trustee. The Trustee is hereby authorized to cause numbers or other notations to be printed or otherwise placed on the Warrants for the convenience of the Trustee in performing the registration and other duties imposed on it hereunder. Any such numbers or other notations that may appear on the Warrants and that are not specifically herein provided for shall be for the sole convenience of the Trustee and, insofar as the County is concerned, shall not be construed as conferring any rights on the Holders of the Warrants.

ARTICLE 6
GENERAL PROVISIONS RESPECTING REDEMPTION OF CALLABLE WARRANTS

Section 6.1 Manner of Effecting Redemption of Callable Warrants. Any redemption of any Callable Warrants of any series shall be effected in the following manner:

(a) **Call**. The election of the County to exercise any right of optional redemption of the Warrants shall be authorized by resolution of the Commission and shall be evidenced by notice from an Authorized County Representative to the Trustee at least three Business Days prior to the date when notice of the redemption must be given to Warrantholders (unless a shorter notice is acceptable to the Trustee). An election to redeem shall specify (i) the series of Warrants and the maturities of such series and maturity of Warrants to be redeemed, (ii) the principal amount of such series of Warrants to be redeemed, (iii) the redemption date and (iv) any conditions to such redemption specified in accordance with the provisions of Section 6.1(b).

(b) **Notice to Holders of Redemption**. The Trustee (on behalf of the County) shall cause to be forwarded by United States First-Class Mail to the Holder, at the address of such Holder as such address appears on the registry books of the Trustee pertaining to the registration of the Warrants, a notice stating the following: that Callable Warrants bearing a stated series designation or designations have been called for redemption and will become due and payable at the Redemption Price or Redemption Prices on a specified Redemption Date, and that all interest thereon will cease after the Redemption Date. Such notice shall be so mailed not more than sixty (60) nor less than twenty (20) days prior to the Redemption Date, but Holders of any Warrants may waive the requirements of this subsection with respect to the Warrants held by them without affecting the validity of the call for redemption of any other Callable Warrants. Such notice may be conditioned upon the receipt of funds sufficient for payment of the Callable Warrants on the Redemption Date or upon other specified events or conditions. Anything in the foregoing to the contrary notwithstanding, with respect to any Warrants called for redemption, if the Book-Entry System is in effect for such Warrants, notice of redemption shall be given to DTC and shall be forwarded by DTC to beneficial owners through methods established by the rules and operational arrangements of DTC.

Section 6.2 Presentation of Callable Warrants for Redemption. Warrants Called for Redemption to Cease to Bear Interest. Upon compliance by the County and the Trustee with the requirements contained in subsections (a) and (b) of the preceding Section 6.1 hereof (and, unless all the Warrants then outstanding are to be redeemed or unless a portion of such outstanding Warrants are to be redeemed and the remainder are, simultaneously with or prior to such redemption, to be otherwise retired), and if monies in an amount equal to the Redemption Price of the Callable Warrants so called for redemption are held by the Trustee for such purpose, the Callable Warrants so called for redemption (or, in the case of any Warrants called for redemption in part, the portions thereof called for redemption) shall become due and payable at the place or places at which the same shall be payable at the Redemption Price or Prices and on the Redemption Date specified in such notice, anything herein or in the Callable Warrants to the contrary notwithstanding, and the Holders thereof shall then and there surrender them for redemption; provided, however, that with respect to any Warrant called for partial redemption, the Holder thereof shall surrender such Warrant to the Trustee in exchange for one or more Warrants in Authorized Denominations, in an aggregate principal amount equal to the unredeemed portion of the Warrant surrendered, all as shall be requested by the Holder of such Warrant so called for partial redemption. All future interest on the Callable Warrants so called for redemption (or, in the case of any Warrants called for redemption in part, the portions thereof called for redemption) shall cease to accrue after the Redemption Date; and the Callable Warrants so called (or, in the case of any Warrants called for redemption in part, the portions thereof called for redemption) shall no longer be entitled to the benefit of the security provided by the Indenture but shall look solely to the moneys deposited with the Trustee under the provisions of this article; and out of the moneys so deposited with it, the Trustee shall make provision for payment of the Callable Warrants so called for redemption (or, in the case of any Warrants called for redemption in part, the portions thereof called for redemption) at the Redemption Price and on the Redemption Date. From and after the Redemption Date, such moneys deposited with the Trustee for the redemption of Callable Warrants in part or in full shall not be deemed to be a part of the Trust Estate.

ARTICLE 7
THE SERIES 2024 WARRANTS

Section 7.1 Authorization and Description of Series 2024 Warrants.

(a) There is hereby authorized to be issued under the Indenture an issue or series of Warrants designated Sewer Revenue Warrants, Series 2024, limited in aggregate principal amount to $[________________]. The Series 2024 Warrants shall be dated the date of their delivery and shall mature and become payable on October 1 in the years and in the amounts set forth below, and shall bear interest from their respective dates, computed on the basis of a 360-day year of twelve consecutive 30-day months, payable on October 1, 2024, and on each Interest Payment Date thereafter:

Maturity Date (October 1)	Amount Maturing	Interest Rate

(b) The Series 2024 Warrants shall be initially issued in the Authorized Denominations and registered in the names of the Holders as shall, pursuant to the provisions of Section 5.8 hereof, be designated by the purchaser of the Series 2024 Warrants from the County. All installments of principal of and interest (and premium, if any) on each Series 2024 Warrants shall bear interest after the respective maturities of such principal and interest (and premium, if any) until paid or until moneys sufficient for payment thereof shall have been deposited for that purpose with the Trustee, whichever first occurs, at the rate of interest borne by such Series 2024 Warrants.

Section 7.2 Redemption Provisions.

(a) **Optional Redemption**. Those of the Series 2024 Warrants having a stated maturity on and after [___________], shall be subject to redemption and payment, at the option of the County, on [_________], and on any date thereafter, as a whole or in part (but if redeemed in part, only in installments of $5,000 or any integral multiple thereof with the maturities to be redeemed to be selected by the County, and if less than all the Series 2024 Warrants of a single maturity are to be redeemed, those (or portions thereof) of that maturity to be redeemed to be selected by the Trustee by lot), at and for a Redemption Price with respect to each such Series 2024 Warrants (or portion thereof) redeemed equal to the principal amount redeemed, plus accrued interest to the Redemption Date.

(b) **Mandatory Redemption**. Those of the Series 2024 Warrants maturing in [________] and [________] (collectively, the "Series 2024 Term Warrants") shall be redeemed, at a redemption price equal to 100% of the principal amount to be redeemed plus accrued interest thereon to the redemption date, on the dates and in the principal amounts (after credit as provided below) as follows:

Series 2024 Term Warrants Maturing in [Year 1]

Redemption Date (________ 1)	**Principal Amount to be Redeemed**
	(maturity)

Series 2024 Term Warrants Maturing in [Year 2]

Redemption Date (________ 1)	**Principal Amount to be Redeemed**
	(maturity)

Not later than the date on which notice of scheduled mandatory redemption is to be given, the Trustee shall select affected Series 2024 Term Warrants for redemption by lot; provided, however, that the County may, at its discretion by timely notice delivered to the Trustee, direct that any or all of the following amounts be credited against the principal amount of Series 2024 Term Warrants scheduled for redemption on such date: (i) the principal amount of Series 2024 Term Warrants of such tenor delivered by the County to the Trustee for cancellation and not previously claimed as a credit; (ii) the principal amount of Series 2024 Term Warrants of such tenor previously redeemed (other than Series 2024 Term Warrants of such tenor redeemed pursuant to the scheduled mandatory redemption requirement) and not previously claimed as a credit; and (iii) the principal amount of Series 2024 Term Warrants of such tenor otherwise fully paid and not previously claimed as a credit.

Section 7.3 Form of Series 2024 Warrants. The Series 2024 Warrants and the Certificate of Registration and the Trustee's Authentication Certificate applicable thereto shall be in substantially the following forms, respectively, with such insertions, omissions and other variations as may be necessary to conform to the provisions hereof:

(Form of Series 2024 Warrants)

Unless this Series 2024 Warrant is presented by an authorized representative of The Depository Trust Company, a New York corporation ("DTC"), to the County or its agent for registration of transfer, exchange, or payment, and any Series 2024 Warrant issued is registered in the name of Cede & Co. or in such other name as is requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other entity as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE, OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

UNITED STATES OF AMERICA

STATE OF ALABAMA

JEFFERSON COUNTY, ALABAMA

Sewer Revenue Warrant,
Series 2024

No.	Interest Rate	Maturity Date	Amount	CUSIP
	%		$	

Subject to prior payment and other provisions as herein stated

JEFFERSON COUNTY, ALABAMA, a political subdivision of the State of Alabama (herein called the "County"), hereby acknowledges that it is indebted to the limited extent hereinafter referred to, and hereby directs the Trustee (as hereinafter defined) to pay, solely out of the revenues hereinafter referred to, to **CEDE & CO**., or registered assigns, the principal sum of

______________ DOLLARS

on the date specified above, with interest thereon from the date hereof until the maturity hereof at the per annum rate of interest specified above, payable on October 1, 2024, and semiannually thereafter on each April 1 and October1 until and at the maturity hereof. The principal of this Series 2024 Warrant is payable only upon presentation and surrender of this Series 2024 Warrant at the corporate trust office in the City of Birmingham, Alabama, of Regions Bank, "the "Trustee"), or its successor as trustee under the Indenture hereinafter referred to. Interest on this Series 2024 Warrant is payable by check or draft mailed by the Trustee on the interest payment date to the registered holder hereof at the address shown on the registry books of the Trustee pertaining to the Series 2024 Warrants as of the close of business on the March 15 or September 15, as the case may be, next preceding the date of payment of such interest; provided, however, that the registered holder of not less than $500,000 in principal amount of the Series 2024 Warrants may make arrangements with the Trustee for the payment of such interest by wire transfer. Principal and interest on this Series 2024 Warrant which becomes due on a day other than a Business Day (as defined in the Indenture hereinafter referred to) shall be due on the next succeeding Business Day and no interest shall accrue in the interim. Both the principal of and the interest on this Series 2024 Warrant shall bear interest after their respective maturities until paid or until moneys sufficient for payment thereof have been deposited with the Trustee at the per annum rate stated above. The Indenture provides that all payments by the County or the Trustee to the person in whose name a Series 2024 Warrant is registered shall to the extent thereof fully discharge and satisfy all liability for the same. Any transferee of this Series 2024 Warrant takes it subject to all payments of principal and interest in fact made with respect hereto. Anything herein to the contrary notwithstanding, for so long as the Book-Entry System of The Depository Trust Company ("DTC") is in effect with respect to the Series 2024 Warrants, payments of principal of and interest on the Series 2024 Warrants shall be made in accordance with the operational arrangements and other procedures of DTC.

This Series 2024 Warrant is one of a duly authorized issue of Warrants designated "Sewer Revenue Warrants, Series 2024" (herein called the "Series 2024 Warrants") and aggregating $[________________] in principal amount under a Trust Indenture dated the date of the Series 2024 Warrants (herein called the "Indenture"), between the County and Regions Bank (herein called the "Trustee"). The principal of and the interest on the Series 2024 Warrants are payable solely out of the revenues derived from the operation of the County's sanitary sewer system (which, as presently or hereafter constituted, is herein called the "System") remaining after payment of the costs of Operating Expenses (as defined in the Indenture) of the System. Payment of the principal of and the interest on the Series 2024 Warrants is secured, pro rata and without preference or priority of one Series 2024 Warrant over another or of the Warrants of any one series over the Warrants of any other, by a valid pledge of the revenues out of which they are payable.

Reference is hereby made to the Indenture for a description of the nature and extent of the security afforded thereby, the rights and duties of the County and the Trustee with respect thereto, the rights of the holders of the Series 2024 Warrants and the terms and conditions on which additional series of Warrants may be issued. The Indenture provides, inter alia, (a) that in the event of default by the County in the manner and for the time therein provided, the Trustee may declare the principal of and the interest accrued on this Series 2024 Warrant immediately due and payable, whereupon the same shall thereupon become immediately due and payable and the Trustee shall be entitled to pursue the remedies provided in the Indenture, (b) that the holder of this Series 2024 Warrant shall have no right to enforce the provisions of the Indenture except as provided therein and then only for the equal and pro rata benefit of the holders of all the Warrants, and (c) that if this Series 2024 Warrant shall not be presented for payment when due (whether by maturity or otherwise) and if funds sufficient for such payment shall have been made available to the Trustee therefor, all liability of the County to the holder of this Series 2024 Warrant and all rights of such holder against the County under this Series 2024 Warrant or under the Indenture shall cease and terminate and that the sole right of the holder hereof shall thereafter be against the said funds so made available, which the Trustee is required to set aside and hold, subject to any applicable escheat or other similar law, for the benefit of such holder. The Indenture also provides that the County and the Trustee, with the written consent of the holders of not less than 66 2/3% in Outstanding Amount (as defined in the Indenture) of the Warrants then outstanding under the Indenture, may at any time and from time to time amend the Indenture or any indenture supplemental thereto, provided that no such amendment shall (1) without the consent of the holder of each Warrant affected, reduce the principal of, the rate of interest on, or the premium (if any) payable on redemption of, any Warrant, or (2) without the consent of the holders of all the Warrants then outstanding under the Indenture, extend the maturity of any installment of principal or interest on any of the Warrants, make any change in the schedule of required redemptions with respect to any series of the Warrants, create a lien or charge on the revenues from the System ranking prior to or (except in connection with the issuance of additional parity Warrants under the Indenture) on a parity with the lien or charge thereon contained in the Indenture, effect a preference or priority of any Warrant over any other Warrant or reduce the aggregate principal amount of Warrants the holders of which are required to consent to any such amendment.

Those of the Series 2024 Warrants having a stated maturity on and after [_______________], shall be subject to redemption and payment, at the option of the County, on [___________], and on any date thereafter, as a whole or in part (but if redeemed in part, only in installments of $5,000 or any integral multiple thereof with those of the maturities to be redeemed to be selected by the County, and if less than all the Series 2024 Warrants of a single maturity are to be redeemed, those (or portions thereof) of that maturity to be redeemed to be selected by the Trustee by lot), at and for redemption price with respect to each such Series 2024 Warrants (or portion thereof) redeemed equal to the principal amount redeemed, plus accrued interest to the redemption date.

[Those of the Series 2024 Warrants having a stated maturity in _____ and ____ are subject to mandatory redemption by the County at the times and in the amounts and on such terms as are set forth in the Indenture.]

In the event that less than all the outstanding principal of a Series 2024 Warrants is to be redeemed, there shall be issued to the registered holder thereof, upon the surrender of such Series 2024 Warrants to the Trustee, a new Series 2024 Warrants of even tenor therewith except in a principal amount equal to the unredeemed portion of the Series 2024 Warrants so surrendered, all as shall be requested by the registered holder of the Series 2024 Warrants to be partially redeemed.

THE INDENTURE UNDER WHICH THE SERIES 2024 WARRANTS ARE ISSUED CONTAINS NO PROVISIONS REQUIRING PUBLICATION OF NOTICE OF REDEMPTION OF ANY SERIES 2024 WARRANT, AND HOLDERS OF THE SERIES 2024 WARRANTS MUST MAINTAIN A CURRENT ADDRESS ON FILE WITH THE TRUSTEE IN ORDER TO RECEIVE NOTICE OF ANY SUCH REDEMPTION. FROM AND AFTER THE REDEMPTION DATE (PROVIDED THE TRUSTEE HAS SUFFICIENT FUNDS ON HAND TO EFFECT SUCH REDEMPTION), INTEREST SHALL CEASE TO ACCRUE ON ANY SERIES 2024 WARRANTS CALLED FOR REDEMPTION.

The Series 2024 Warrants are not general obligations of the County, and the covenants and representations herein contained or contained in the Indenture do not and shall never constitute a personal or pecuniary liability or charge against the general credit of the County. Neither the faith and credit of the County nor any of its taxing powers are pledged or shall be used for payment of the principal of or interest (or premium, if any) on the Series 2024 Warrants.

It is hereby certified and recited that the indebtedness evidenced and ordered paid by this Series 2024 Warrant is lawfully due without condition, abatement or offset of any description; that this Series 2024 Warrant has been registered in the manner provided by law; and that all conditions, actions and things required by the constitution and laws of Alabama to exist, be performed and happen precedent to or in the issuance of this Series 2024 Warrant exist, have been performed and have happened in due and legal form.

The Series 2024 Warrants are issuable only as fully registered Warrants in the denomination of $5,000 or any integral multiple thereof. Provision is made in the Indenture for the exchange of Warrants for a like aggregate principal amount of Warrants of the same series, maturity and interest rate and in an authorized denomination, all as may be requested by the holder surrendering the Warrant or Warrants to be so exchanged and upon the terms and conditions specified in the Indenture.

This Series 2024 Warrant is transferable by the registered holder hereof in person, or by duly authorized attorney, only on the registry books of the Trustee pertaining to the Series 2024 Warrants and only upon surrender of this Series 2024 Warrant to the Trustee for cancellation, and upon any such transfer a new Series 2024 Warrant of like tenor hereof will be issued to the transferee in exchange therefor, all as more particularly provided in the Indenture. Each holder, by receiving and accepting this Series 2024 Warrant, shall consent and agree and shall be estopped to deny that, insofar as the County and the Trustee are concerned, this Series 2024 Warrant may be transferred only in accordance with the provisions of the Indenture.

In the event this Series 2024 Warrant (or any portion of the principal hereof) is duly called for redemption, the Trustee shall not be required so to register, transfer or exchange it during the period of forty-five (45) days next preceding the date fixed for such redemption.

Execution by the Trustee of its authentication certificate hereon is essential to the validity hereof and is conclusive of the due issue hereof under the Indenture.

IN WITNESS WHEREOF, the County has caused this Series 2024 Warrant to be lawfully executed in its name and behalf, has caused its corporate seal to be hereunto imprinted or reproduced in facsimile, has caused this Series 2024 Warrant to be lawfully attested, and has caused this Series 2024 Warrant to be dated January __, 2024.

JEFFERSON COUNTY, ALABAMA

By ________________________________
President
Jefferson County Commission

Attest:

____
Its Minute Clerk

(Form of Trustee's Authentication Certificate)

Date of Authentication and Registration: January __, 2024.

The within Series 2024 Warrant is one of those described in the within mentioned Trust Indenture.

REGIONS BANK, as Trustee

By ________________________________

Its ________________________________

(Form of Assignment)

For value received, the undersigned hereby sell(s), assign(s) and transfer(s) unto ____ the within Warrant and hereby irrevocably constitute(s) and appoint(s) ____ attorney, with full power of substitution in the premises, to transfer this Warrant on the books of the within mentioned Trustee.

DATED this ____ day of ____________, ____.

____

NOTE: The signature on this assignment must correspond with the name of the registered owner as it appears on the face of the within Warrant in every particular, without alteration, enlargement or change whatsoever.

Signature guaranteed:

____
(Bank, Trust Company or Firm)*

By __________________________________
(Authorized Officer)

Medallion Number: ____________________

*Signature(s) must be guaranteed by an eligible guarantor institution which is a member of a recognized signature guarantee program, i.e., Securities Transfer Agents Medallion Program (STAMP), Stock Exchanges Medallion Program (SEMP), or New York Stock Exchange Medallion Signature Program (MSP).

Section 7.4 Execution and Delivery of the Series 2024 Warrants. The Series 2024 Warrants shall be forthwith executed and delivered to the Trustee and shall be authenticated and delivered by the Trustee from time to time upon receipt by the Trustee of an order signed on behalf of the County by the President of the Commission or such other Authorized County Representative as shall be lawfully designated by the Commission for such purpose, requesting such authentication and delivery and designating the person or persons to receive the same or any part thereof.

Section 7.5 Application of Sale Proceeds of Series 2024 Warrants. (a) The entire proceeds derived by the County from the sale of the Series 2024 Warrants, less and except the underwriter's discount of $[___________], shall be paid to the Trustee and shall be promptly thereafter applied by the Trustee as follows:

(a) Remit and pay to the 2013 Indenture Trustee the sum of $_____________ for payment and redemption of the Series 2013 Warrants; and

(b) the balance ($____________) shall be deposited by the Trustee into a special clearing account herein authorized for the Trustee to create and establish, and applied by the Trustee for payment of those costs of issuing the Series 2024 Warrants identified in a written directive from an Authorized County Representative to the Trustee on the date of issuance of the Series 2024 Warrants, with any funds remaining in said clearing account following the disbursements indicated in the written directive to be remitted as directed by an Authorized County Representative.

Section 7.6 Registration of Series 2024 Warrants in the Book-Entry Only System.

(a) The Series 2024 Warrants shall be initially issued in book-entry only form (one fully-registered certificate for each maturity of the Series 2024 Warrants in the aggregate principal amount of such maturity), registered in the name of Cede & Co., the nominee of the Depository Trust Company. So long as the said book-entry only system remains in effect, the provisions of this Trust Indenture, including the provisions governing the registration and exchange of Series 2024 Warrants, places and manner of payment of Series 2024 Warrants, requirements for presentment of Series 2024 Warrants and manner and effect of redemption of Series 2024 Warrants shall be subject to the standard procedures of the Depository Trust Company. The County and the Trustee will have no responsibility or obligation to any securities depository, any participant in the book-entry only system, or the beneficial owners of the Series 2024 Warrants with respect to (i) the accuracy of any records maintained by any such securities depository or participant; (ii) the payment by any such securities depository or participant in the book-entry only system of any amount due to any participant or beneficial owner, respectively, in respect of the principal amount or redemption or purchase price of, or interest on, any of the Series 2024 Warrants; (iii) the delivery of any notice by any such securities depository or participant in the book-entry only system; (iv) the selection of the beneficial owners to receive payment in the event of any partial redemption of the Series 2024 Warrants; or (v) any other action taken by any such securities depository or participant in the book-entry only system.

(b) In the event that the book-entry only system for the Series 2024 Warrants is discontinued: (i) principal of the Series 2024 Warrants will be payable upon surrender of the Series 2024 Warrants at the designated office of the Trustee and (ii) Series 2024 Warrants may be transferred or exchanged for other Series 2024 Warrants in Authorized Denominations. The following provisions shall apply only upon discontinuation of the book-entry only system described above: (A) a physical certificate or certificates shall be executed, authenticated and delivered to each beneficial owner under the book-entry only system in accordance with such beneficial owner's ownership interest; and (B) such certificates shall be registered in the warrant register maintained by the Trustee. The Series 2024 Warrants shall be registered and may be transferred only on the warrant register maintained by the Trustee with respect to the Series 2024 Warrants. No transfer of the Series 2024 Warrants shall be permitted except upon presentation and surrender of such Series 2024 Warrants at the office of the Trustee. The holder of one or more of the Series 2024 Warrants may, upon request, and upon the surrender to the Trustee of such Series 2024 Warrants, exchange such Series 2024 Warrants for Series 2024 Warrants of other Authorized Denominations of the same tenor and of a like aggregate principal amount as the Series 2024 Warrants so surrendered. Any registration, transfer and exchange of Series 2024 Warrants shall be without expense to the holder thereof, except that the holder shall pay any expenses incurred in connection with the replacement of a mutilated, lost, stolen, or destroyed Series 2024 Warrant.

(c) The County and the Trustee shall not have any responsibility or obligation to any participant, beneficial owner or entitlement holder with respect to (i) the accuracy of any records maintained by DTC or any participant in the book-entry only system; (ii) the payment by DTC or any participant of any amount due to any beneficial owner or entitlement holder in respect of the principal of, purchase price of, premium (if any) and interest on the Series 2024 Warrants; (iii) the delivery or timeliness of delivery by DTC or any participant of any notice due to any beneficial owner or entitlement holder which is required or permitted under the terms of this ordinance to be given to beneficial owners or entitlement holders; or (iv) any consent given or other action taken by DTC or its nominee, as owner.

ARTICLE 8
ADDITIONAL WARRANTS

Section 8.1 Additional Warrants - In General. In the event the County desires

(a) to refund or retire all or any portion of any one or more series of Warrants then outstanding hereunder, or

(b) to acquire, by construction or otherwise, Capital Improvements (including the providing of funds with which to reimburse the County for costs incurred by it in the construction or acquisition of Capital Improvements, or to refund any securities of the County issued for such purposes), or

(c) to provide for any other lawful expenditure of the System under the laws of the State, it may at any time and from time to time, if there is not to the actual knowledge of a Responsible Officer of the Trustee, then in existence an Indenture Default, issue Additional Warrants secured by the Trust Estate for such purpose or purposes, within the limitations of and upon compliance with the provisions of this Article VIII; provided, however, that the County shall not issue any Variable Rate Warrants if, after such issuance, the principal amount of such Variable Rate Warrants is in excess of 10% of the principal amount of all Warrants outstanding after such issuance.

The Additional Warrants may be in such denomination or denominations, shall bear interest at such rate or rates, shall bear such dates not inconsistent with the provisions hereof, shall mature in such amounts and at such times as are not in conflict with the provisions hereof, shall be in such form and may contain such provisions for redemption prior to maturity and for the providing of special security as described in the final sentence of Section 3.1 hereof, all as may be provided in the Supplemental Indenture under which they are issued; provided that any redemption of Additional Warrants prior to maturity shall be effected in the manner set forth in and shall be subject to the provisions of Article VI hereof.

Section 8.2 Conditions Precedent to Issuance of Additional Warrants. Prior to the issuance of any of the Additional Warrants, the County shall deliver to the Trustee those of the Additional Warrants proposed to be issued, duly executed and sealed, accompanied by the following:

(a) **Supplemental Indenture**. A Supplemental Indenture, duly executed by the County and containing the following: (i) a description of the Additional Warrants proposed to be issued, including the date, the aggregate principal amount or maximum aggregate principal amount, the series designation (if any), the interest rate or rates, the maturity or maturities and the form of such Additional Warrants, and any provisions for redemption thereof prior to their respective maturities; and (ii) a statement of the purpose or purposes for which the Additional Warrants are proposed to be issued;

(b) **Proceedings**. A certified copy of the proceedings taken by the Commission authorizing the sale and issuance of the Additional Warrants proposed to be issued and the execution and delivery of the Supplemental Indenture providing therefor, which such proceedings shall recite the following: (i) that at the time no Indenture Default exists hereunder and that no Indenture Default is imminent; (ii) the series designation (if any) of the Additional Warrants proposed to be issued; (iii) the person or persons to whom such Additional Warrants shall be delivered; (iv) a statement as to which (if any) of such Additional Warrants are to be issued by sale and which (if any) are to be issued by exchange; (v) the sale price of those (if any) of such Additional Warrants to be issued by sale and the terms upon which those (if any) to be issued by exchange are to be issued; (vi) a list of all Additional Warrants previously issued by the County hereunder and at the time outstanding and of the Supplemental Indentures under which they were issued; (vii) if any of such Additional Warrants are to be issued for the purpose of refunding any Warrants theretofore issued hereunder or other securities of the County, a brief description of such Warrants or other securities to be so refunded; and (viii) if any of such Additional Warrants are to be issued for the purpose of acquiring, by construction or otherwise, Capital Improvements, or to reimburse the County for costs incurred by the County in the acquisition, by construction or otherwise, of Capital Improvements, a brief description of such Capital Improvements;

(c) **Certificate as to Revenues**. The item or items required by any one of the following paragraphs (i), (ii) or (iii):

(i) A certificate by an Independent Consultant certifying that the Annual Net Income during the current Fiscal Year and projected Annual Net Income for all future Fiscal Years through the final maturity of the then-outstanding Warrants is not less than 130% of the Annual Debt Service Requirements for each such future Fiscal Year following the issuance of the then proposed Additional Warrants. For the purpose of these calculations and with respect to each Fiscal Year for which a calculation is made under the preceding sentence, (A) Annual Net Income includes the schedule of rates then mandated by Resolution for such Fiscal Years and, if a Fiscal Year occurs beyond the designated term of the then approved schedule of rates, the reasonably projected rate adjustments beyond the term of the then mandated schedule of rates and (B) Annual Debt Service Requirements includes debt service through the final maturity of the Warrants, inclusive of the Additional Warrants;

(ii) A Resolution or Resolutions adopted after the commencement of not more than two Fiscal Years next preceding the issuance of the then proposed Additional Warrants, establishing a revised schedule of rates for services furnished by the System, accompanied by a certificate of an Independent Engineer or an Independent Consultant stating that if the revised schedule or schedules of rates set forth in the said Resolution or Resolutions had been in effect throughout the period of twelve (12) consecutive calendar months specified within said certificate (the "Applicable Twelve-Month Period"), so long as the same occur within eighteen (18) months immediately preceding the date the Additional Warrants are proposed to be issued, the Annual Net Income during the Applicable Twelve-Month Period would have been not less than 130% of the Maximum Annual Debt Service Requirement immediately following the issuance of the then proposed Additional Warrants; provided that each such certificate by an Independent Engineer or an Independent Consultant shall be accompanied by and shall recite that it is based, inter alia, upon an examination by the said Independent Engineer or Independent Consultant of a certificate by an Independent Auditor certifying the amount of the Annual Net Income for such Applicable Twelve-Month Period (as the case may be); or

(iii) If the Additional Warrants are being issued for the purpose of refunding all or a portion of one or more series of Warrants, a certificate from any Authorized County Representative certifying that the Annual Debt Service Requirement for all Fiscal Years immediately after issuance of such Additional Warrants (excluding debt service on the Warrants then proposed to be refunded) will not be greater than the Annual Debt Service Requirement for all Fiscal Years during which Warrants are outstanding before giving effect to such issuance. The final maturity of any Additional Warrants issued pursuant to this paragraph may not exceed the final maturity of the Warrants outstanding prior to such issuance.

(d) Opinion of Independent Counsel. An opinion dated on the date of issuance of such Additional Warrants, signed by Independent Counsel (which may be Bond Counsel) acceptable to the Trustee, approving the forms of all documents required in the preceding portions of this section to be delivered to the Trustee and reciting that they comply with the applicable requirements of this article; and

(e) **Opinion of Bond Counsel**. An opinion dated on the date of issuance of such Additional Warrants, signed by Bond Counsel and approving the validity and legality of such Additional Warrants.

Upon receipt of the documents required by the provisions of this section to be furnished to it, the Trustee shall, unless it has cause to believe any of the statements set out in said documents to be incorrect, thereupon execute the Supplemental Indenture so presented and cause the same to be filed for record at the expense of the County in such public office or offices, in which such document is then required by law to be filed in order to afford constructive notice thereof, and it shall further authenticate the Additional Warrants with respect to which the said documents shall have been made and shall, upon receipt of evidence satisfactory to it that the County has received the purchase price or other consideration therefor, deliver the Additional Warrants so authenticated to the person or persons to whom the Resolution provided for in subsection (b) of this section directed such Additional Warrants to be delivered.

Section 8.3 Credit Facility for Additional Warrants. The County may, in connection with the issuance of any series of Additional Warrants (and in addition to all other rights of the County in connection with issuance of Additional Warrants, including, without limitation, the right of the County pursuant to Section 3.1 hereof to establish a Reserve Fund for any or all such Additional Warrants),

(a) provide a Credit Facility therefor,

(b) enter into such agreements as are necessary and appropriate with a Credit Facility Obligor providing, inter alia, for (i) the payment of the fees and expenses of such Credit Facility Obligor, which fees and expenses shall be payable out of the proceeds from the sale of such Additional Warrants or as an Operating Expense, as appropriate and (ii) the terms and conditions of such Credit Facility and any security to be provided for such Credit Facility and for the payment of the obligations of the County with respect thereto,

(c) secure any of its obligations with respect to such Credit Facility by an agreement providing for the purchase of any Warrants secured thereby, with such adjustments as to interest rates, methods of determination of interest, maturities or redemption provisions as shall be specified by the County in the applicable Supplemental Indenture,

(d) incur a Reimbursement Obligation which may be secured by a lien or charge on the Trust Estate subordinate to the lien or charge thereon created hereby for the benefit of the Warrants,

(e) provide, in any such agreement and in the appropriate Supplemental Indenture, that for the purpose of giving consents, receiving notices and certain specified other purposes, such Credit Facility Obligor shall be deemed to be the Holder of all Warrants secured by such Credit Facility, and

(f) provide in any such agreement and in the appropriate Supplemental Indenture that the maturity of the Warrants secured by such Credit Facility may not be accelerated without the consent of the Credit Facility Obligor issuing such Credit Facility.

ARTICLE 9
RESERVED

ARTICLE 10
DISPOSITION OF REVENUES FROM THE SYSTEM AND CREATION OF SPECIAL FUNDS

Section 10.1 Revenue Account. The County shall maintain an account, the full name of which shall be the "Sewer System Revenue Account", in its own name with a bank or financial institution selected by the County (which may include the Trustee's commercial banking department) for the deposit and disbursement of System Revenues. The County will deposit into the Revenue Account, or cause to be deposited therein, daily as received by the County, all of the System Revenues. The County will first pay, out of the System Revenues on deposit in the Revenue Account, all Operating Expenses, as payment for the said expenses becomes due. The County shall at all times maintain a balance in the Revenue Account equal to the Required Revenue Reserve. Each calendar month, after the County has replenished the Required Revenue Reserve as needed, the County will withdraw from the Revenue Account and make deposits to such funds and accounts as provided by Section 10.2.

Section 10.2 Application of System Revenues.

(a) During each calendar month the County shall apply System Revenues on deposit in the Revenue Account, after application of any amounts for Operating Expenses (it being understood that the application of amounts from the Revenue Account for the Operating Expenses and the Required Revenue Reserve shall have a higher priority than any application in this Section 10.2), as follows, in the order of priority indicated:

(i) Debt Service. First, the County shall transfer to the Trustee, for deposit in the Debt Service Fund pursuant to Section 10.3 herein, the amount required for the payment of Debt Service due on Warrants. The related provisions of this Indenture (including any Supplemental Indenture with respect to Additional Warrants) may require such deposits on or before the due date of such Debt Service, or in the month prior to the due date of such Debt Service, or may require monthly deposits for the accumulation of funds to pay Debt Service on such Warrants; provided, however, that such monthly deposits may not exceed the sum of (i) the pro rata amount of interest payable on the next Interest Payment Date and (ii) if principal matures or is subject to scheduled mandatory redemption within one year from the deposit date, the pro rata amount of principal payable on the next Maturity

Date or scheduled mandatory redemption date, as the case may be. Investment earnings on deposit in, or transferred to, the Debt Service Fund shall be credited against the required deposits.

(ii) Trustee Fees, Credit Facility Fees and Related Fees. Second, the County shall, on or before the twenty-fifth day of each month, (i) pay fees and expenses of the Trustee, (ii) pay Credit Facility Fees and other amounts due during such month with respect to Credit Facilities for Warrants, and (iii) pay fees and other amounts due during such month to remarketing agents or entities performing similar functions with respect to Warrants. If money available in the Revenue Account (after making deposits with priority) is not sufficient to make all payments required by this paragraph (ii), such payments shall be made on a proportionate basis.

(iii) Deposits to Operating Reserve Fund. Third, the County shall transfer to the Trustee, for deposit in the Operating Reserve Fund pursuant to Section 10.4 herein, the amount required to make the balance in the Operating Reserve Fund equal to the Required Operating Reserve, as specified in writing by the County.

(iv) Reserve Funds. Fourth, the County shall, on or before the twenty-fifth day of each month, transfer to the Trustee, for deposit in each Reserve Fund, the amount required by the Supplemental Indenture establishing such Reserve Fund to accumulate, maintain or restore the required balance in such Reserve Fund. If money available in the Revenue Account (after making deposits with higher priority) is not sufficient to make all deposits required by this paragraph (iv), deposits to each Reserve Fund shall be made on a proportionate basis.

(v) Rebate Liability. Fifth, on or before the twenty-fifth day of each month, the County may set aside amounts due for Rebate Liability.

(vi) Subordinate Debt. Sixth, on or before the twenty-fifth day of each month, to the payment of Subordinate Debt then outstanding.

(vii) Capital Improvement Fund. Seventh, the County shall transfer the entire amount remaining in the Revenue Account after giving effect to paragraphs (i) – (vi) above to the Capital Improvement Fund pursuant to Section 10.5 herein.

(b) Each month, after application of amounts on deposit in the Revenue Account, the County shall provide a written statement to the Trustee describing the amounts, if any, applied in conformity with paragraphs (i) – (vii) of subsection (a) of this Section 10.2 and a description thereof.

Section 10.3 Debt Service Fund. There is hereby established a special trust fund which shall be designated the "Debt Service Fund". The Trustee shall be the depository, custodian and sole disbursing agent for the Debt Service Fund. The Debt Service Fund shall be part of the Trust Estate and shall be held by the Trustee for the sole benefit of the Holders of the Warrants.

Deposits shall be made to the Debt Service Fund as follows:

(a) On or before the twenty-fifth day of each month, the County shall transfer to the Trustee for deposit in the Debt Service Fund an amount equal to 1/6 of the interest payable on the Warrants on the next Interest Payment Date (plus any prior deficiencies); provided, however, that if the period from the date of issuance of the Warrants until the first Interest Payment Date is more or less than six months, such transfers during such initial period shall be sufficient on a monthly pro rata basis to provide for payment of interest on the first Interest Payment Date.

(b) On or before the twenty-fifth day of each month, if the principal of Warrants is payable within the next 12 months (whether at maturity or pursuant to scheduled mandatory redemption requirements), the County shall transfer to the Trustee for deposit in the Debt Service Fund an amount equal to 1/12 of such principal amount (plus any prior deficiencies); provided, however, that if the period from the date of issuance of the Warrants until such principal is payable is less than 12 months, such transfers during such initial period shall be sufficient on a monthly pro rata basis to provide for payment of principal on such first principal payment date.

The Trustee may claim a credit against such deposits for the amount of investment earnings realized in, or transferred to, or other funds transferred to, the Debt Service Fund that have not been credited against prior deposits.

(c) On each Interest Payment Date, money in the Debt Service Fund shall be applied by the Trustee to pay Debt Service due on the Warrants.

(d) If money on deposit in the Debt Service Fund on any Interest Payment Date is sufficient to pay Debt Service on the Warrants due and payable on any Interest Payment Date, but the Holder of any Warrant that matures on such date or that is subject to redemption on such date fails to surrender such Warrant to the Trustee for payment of Debt Service due and payable on such date, the Trustee shall segregate and hold in trust for the benefit of the person entitled thereto money sufficient to pay the Debt Service due and payable on such Warrant on such date. Money so segregated and held in trust shall not be a part of the Trust Estate and shall not be invested, but shall constitute a separate trust fund for the benefit of the persons entitled to such Debt Service.

(e) The Trustee may transfer funds on deposit in the Debt Service Fund for the payment of particular Warrants to a trust created pursuant to Article 16 for the benefit of such Warrants.

Section 10.4 Operating Reserve Fund.

(a) There is hereby established a special trust fund which shall be designated the "Operating Reserve Fund". The Trustee shall be the depository, custodian and sole disbursing agent for the Operating Reserve Fund. The Operating Reserve Fund shall be part of the Trust Estate and shall be held by the Trustee.

(b) On or before the twenty-fifth day of each month, the County shall transfer money to the Operating Reserve Fund from the Revenue Account as required by Section 10.2(a)(iii).

(c) Based on the County's estimated Operating Expenses, if the County is reasonably sure that the amount on deposit in the Revenue Account will not be sufficient to pay the amount of Operating Expenses estimated for the next 30 days, the County may direct the Trustee in writing to transfer money from the Operating Reserve Fund to the Revenue Account for the payment of Operating Expenses. Such written direction delivered to the Trustee shall be executed by an Authorized County Representative with a certification by such Authorized County Representative that the money to be transferred to the Revenue Account (i) is needed to pay estimated Operating Expenses and (ii) will only be used to pay Operating Expenses.

(d) Upon the issuance of the Series 2024 Warrants, the Trustee shall deposit into the Operating Reserve Fund any amount delivered by the 2013 Indenture Trustee at the direction of the County for deposit into such fund.

Section 10.5 Capital Improvement Fund.

(a) The County shall maintain an account (a "Capital Improvement Fund") in its own name with a bank or financial institution selected by the County (which may include the Trustee's commercial banking department) for the payment and disbursement of funds as provided in this Section 10.5.

(b) On or before the twenty-fifth day of each month, if all payments and deposits required during such month by Section 10.2(a)(i) through (vi) have been made, the County shall deposit all money in the Revenue Account in excess of the Required Revenue Reserve in the Capital Improvement Fund pursuant to Section 10.2(a)(vii).

(c) Money in the Capital Improvement Fund may be used for the following purposes:

(i) If no Indenture Default exists, the County may withdraw money from the Capital Improvement Fund from time to time for the purpose of paying (A) costs of Capital Improvements to the System, (B) amounts necessary to defease, redeem or purchase all or any portion of the Warrants, (C) Operating Expenses, (D) amounts payable on Subordinate Debt or on Unsecured Obligations or (E) amounts necessary to pay Rebate Liability.

(ii) If money on deposit with the Trustee in the Debt Service Fund is not sufficient for the timely payment of Debt Service due on Warrants, the County shall transfer money from the Capital Improvement Fund to the Trustee for deposit in the Debt Service Fund to the extent necessary for payment of such Debt Service.

(iii) If money on deposit in the Operating Reserve Fund is not sufficient for the timely payment of Operating Expenses, the County may transfer money from the Capital Improvement Fund to the Operating Reserve Fund for the payment of Operating Expenses.

(d) Upon the issuance of the Series 2024 Warrants, the Trustee shall deposit into the Capital Improvement Fund any amount delivered by the 2013 Indenture Trustee at the direction of the County for deposit into such fund.

(e) No later than five Business Days following the end of each Fiscal Year, the County shall provide the Trustee with a written statement that (i) provides the nominal balance of the Capital Improvement Fund at the beginning of such Fiscal Year, (ii) the aggregate amount of executed withdrawals from the Capital Improvement Fund during such Fiscal Year, (iii) the aggregate amount of executed deposits to the Capital Improvement Fund during such Fiscal Year and (iv) the nominal balance of the Capital Improvement Fund on the last day of such Fiscal Year.

Section 10.6 Security for Special Funds. The revenues derived from the operation of the System at any time on deposit in the Revenue Account and the funds on deposit in the Capital Improvement Fund shall be and at all times remain public funds impressed with a trust for the purposes for which said account and funds are respectively created. The depository for each such account and fund shall at all times keep the moneys on deposit in the account, fund or funds for which it is depository continuously secured, for the benefit of the County and the Holders of the Warrants, either:

(a) by holding on deposit, as collateral security, Federal Securities, or other marketable securities eligible as security for the deposit of trust funds under regulation of the Comptroller of the Currency, having a market value (exclusive of accrued interest) not less than the amount of moneys on deposit in the account or fund being secured, or

(b) if the furnishing of security in the manner provided by the foregoing clause (a) of this section is not permitted by the then applicable laws and regulations, then in such other manner as may be required or permitted by the then applicable state and federal laws and regulations respecting the security for, or granting a preference in the case of, the deposit of trust funds;

provided, however, that it shall not be necessary for any such depository so to secure any portion of the moneys on deposit in any such account or fund that is insured by the Federal Deposit Insurance Corporation or by any agency of the United States of America that may succeed to its functions or that is invested in Eligible Investments pursuant to the provisions of Section 10.7 hereof.

Section 10.7 Investment of Indenture Funds.

(a) The Trustee shall, to the extent practicable, cause all moneys on deposit in any fund or account held by the Trustee under this Indenture to be kept continuously invested in Eligible Investments, or money market funds whose investments are restricted to Eligible Investments, having stated maturities, or being redeemable at the option of the holder at a stated price and time, not later than the date that such moneys shall, under the terms hereof, be needed to pay the principal and interest maturing with respect to the

Warrants or the Redemption Price of any herein required to be redeemed on such date. Such securities, together with all income therefrom, shall become a part of the fund which moneys were used to make such investment to the same extent as if they were moneys on deposit therein. The Trustee may at any time and from time to time, as in its sole discretion it deems desirable, cause any such securities to be sold or otherwise converted into cash and shall cause such securities to be sold or converted into cash if and to the extent that such sale or conversion is necessary to obtain moneys to prevent a default in payment of the principal of and the interest on the Warrants. The net proceeds from the sale or other conversion into cash of any securities forming a part of the Debt Service Fund shall be paid into and become a part of the Debt Service Fund. In making any investment provided for in this paragraph, the Trustee shall, to the extent practicable, follow the written instructions of an Authorized County Representative as to the selection and terms of such investment. The Trustee shall have no liability for any loss resulting from investments made under the Indenture except liability for its own gross negligence or willful misconduct.

(b) The County may, at any time and from time to time while there is no Indenture Default hereunder, withdraw all or any part of the moneys on deposit in the Revenue Account or the Capital Improvement Fund for the purpose of causing such moneys to be invested in any securities in which the County is authorized to invest its funds and having stated maturities, or being redeemable at the option of the holder at a stated price and time, prior to the date when it is anticipated by the County that such funds will be needed. Any such securities, together with all income therefrom, shall become a part of the Revenue Account or the Capital Improvement Account, as applicable, and shall be held by the depository for such account or fund to the same extent as if they were moneys on deposit in such account or fund.

The Trustee and the County shall be fully protected in making any investment, sale or conversion in accordance with the provisions of this section, and in the event any moneys in the Revenue Account or the Capital Improvement Fund, in the case of the County, or the Debt Service Fund or Operating Reserve Fund in the case of the Trustee, shall be invested as authorized in this section, it shall not be necessary for the depository therefor to secure any such investment (in any case where security for such moneys might otherwise be required) so long as such moneys shall remain so invested. In any determination of the amount of moneys at any time forming a part of the Debt Service Fund, all such securities in which any portion thereof is at the time so invested shall be included in the fund from which moneys were used to make such investment at market value.

Section 10.8 Depository for Revenue Account and the Capital Improvement Fund. The Commission may at any time and from time to time designate any one or more banking institutions as a depository for the Revenue Account and the Capital Improvement Fund, provided that such depository so designated shall at all times while acting as such be and remain a member of the Federal Deposit Insurance Corporation or of any agency of the United States of America that may succeed to its functions, if there be any such, and shall be and remain duly qualified and doing business in the State of Alabama. Each such depository shall be fully protected in paying out moneys from the Revenue Account and the Capital Improvement Fund, as applicable, on checks, vouchers or drafts signed by any duly authorized officer or employee of the County, and no such depository shall be liable for the misapplication by the County of any moneys so withdrawn if such moneys shall be so withdrawn without knowledge or reason on the part of such depository to believe that such disbursement constitutes a misapplication of funds.

Section 10.9 Continuance of Special Funds. The special accounts and funds created in this Article X shall be continued until all of the Warrants shall have been paid or surrendered for cancellation or until provision for such payment has been made in the manner contemplated by Section 16.1 hereof.

ARTICLE 11
PARTICULAR COVENANTS OF THE COUNTY

Section 11.1 To Pay Warrants. The County will pay, out of the revenues derived from the operation of the System, the principal of and the interest (and premium, if any) on the Warrants as specified therein, and it will otherwise perform all obligations which, either expressly or by reasonable implication, are imposed on it in the Indenture and it will not default hereunder.

Section 11.2 To Maintain Proper Books and Records. The County will maintain complete books and records pertaining to the System and all receipts and disbursements with respect thereto, which shall be kept separate and apart from all other records of the County. The County will at any and all times, upon the request of the Trustee, afford and procure a reasonable opportunity for the Trustee by its representatives to inspect any books, records, reports and other papers of the County relating to the performance by the County of its covenants in this Indenture, and the County will furnish to the Trustee any and all information as the Trustee may reasonably request with respect to the performance by the County of its covenants in this Indenture.

Section 11.3 To Furnish Annual Audits. The County will operate the System on a Fiscal Year basis. The County will, within two hundred seventy (270) days following the close of each such Fiscal Year, cause an audit of its books respecting the System for such Fiscal Year to be made by an Independent Auditor. All expenses incurred in the making of such audits shall constitute and be paid as an Operating Expense. Within ten Business Days following receipt of each such audit report, the County will furnish a copy thereof to the Trustee; which such obligation shall be deemed satisfied if the County timely publishes the audit then due on the Electronic Municipal Markets Access ("EMMA") system established by the Municipal Securities Rulemaking Board ("MSRB") or on such other public information repository that becomes a substitute for EMMA or is otherwise identified by the MSRB as a designated repository for the publication of information such as the audit by state and local governmental entities.

Section 11.4 To Furnish No Free Service. The County shall not furnish any free utility service to any person, including the State or any other political subdivision, provided that the County may waive impact fees for municipal facilities that will be used directly by a municipal governing body for carrying out their governmental functions; provided however that the establishment and administration by the County, or any designated agent of the County, of a customer assistance program shall not be considered provision of free utility service for purposes of this Section 11.4.

Section 11.5 To Maintain Adequate Rates. To the extent permitted by Alabama law, the County shall make and maintain such rates and charges for the sanitary sewer services supplied from the System and shall make collections from the users thereof in such manner as shall produce amounts sufficient to produce Annual Net Income during each Fiscal Year at least equal to the Rate Covenant Requirement for each such Fiscal Year. The County will from time to time make such increases and other changes in such rates and charges as may be necessary to produce said amounts. If the Annual Net Income for any Fiscal Year fails to at least equal the Rate Covenant Requirement, the County shall within thirty (30) days request an Independent Consultant to submit a written report and recommendations with respect to a revised schedule of rates and charges for System services and other actions to increase Annual Net Income from the System to at least equal to the Rate Covenant Requirement. The report and recommendations shall be filed with the Trustee and the County within ninety (90) days of the County's request to the Independent Consultant. The County shall adopt the Independent Consultant's recommended schedule of rates and charges not later than thirty (30) days after the delivery of such report to the Trustee and the County and shall follow the other recommendations of the Independent Consultant to the extent feasible and lawful. If the County undertakes the remedial action required by this Section 11.5, then any failure to achieve Annual Net Income equal to the Rate Covenant Requirement in such Fiscal Year shall not constitute an Indenture Default so long as no other Indenture Default has occurred and is continuing.

Section 11.6 Imposition of Liens for Failure to Pay. To the extent permitted by law, if the account of any customer of utility service supplied by the System shall remain unpaid after such account shall become due (or such longer period, if any, as may be required for compliance with applicable federal and state law) after exhausting reasonable collection efforts, the County shall promptly impose a lien upon the real property of such customer; provided, however, that if the County has entered into an agreement with another utility provider for billing of System accounts and that agreement imposes the financial liability for collection of unpaid System accounts upon such other utility provider, then the County shall not be permitted to impose a lien upon the real property of such customer. The County may release the lien imposed upon the real property of a customer upon payment of the account, including any penalties which may be provided for in the applicable schedule of rates and charges, together with all costs associated with imposition of such lien.

Section 11.7 To Respect Priority of Pledge of Revenues. The pledge of Annual Net Income herein made shall be prior and superior to any pledge thereof hereafter made for the benefit of any securities or obligation for borrowed money hereafter issued or any contract hereafter made by the County, other than Additional Warrants issued under the provisions of Article VIII hereof, and the County agrees that in the event it should hereafter issue any securities, incur an obligation for borrowed money or make any contract payable out of the revenues from the operation of the System, other than such Additional Warrants, or for which any part of said revenues may be pledged or any part of the System may be mortgaged, the County will recognize in the proceedings under which any such securities, indebtedness or contract are hereafter authorized the priority of the pledge of said revenues herein made for the benefit of the Warrants.

Section 11.8 Sale or Lease of System Under Certain Conditions; Repair of System. The County will not hereafter sell or lease the whole or any integral part of the System until all of the Warrants have been paid in full or unless and until provision for such payment has been made; provided, however, that the County may sell or lease portions of the System if there is delivered to the Trustee a certificate of an Authorized County Representative to the effect that such sale or lease will not have a material adverse effect on the production of revenues from the System. The County will continuously operate the System or cause the same to be operated so long as any of the Warrants remain unpaid, and it will keep the same in good repair and in efficient operating condition, making from time to time all needful repairs and replacements thereto and thereof. If the laws of Alabama at the time shall permit such action to be taken, nothing contained in this section shall prevent the consolidation of the County with, or merger of the County into, any other county, municipal corporation or public corporation having corporate authority to carry on the business of operating the System, or the transfer by the County of the System as an entirety to another county, municipal corporation or public corporation whose properties and income are not subject to taxation; provided, that upon any such consolidation, merger or transfer, the due and punctual payment of the principal of and the interest on the Warrants according to their tenor and the due and punctual performance and observance of all the agreements and conditions of the Indenture to be kept and performed by the County shall be expressly assumed in writing by the county, municipal corporation or public corporation resulting from such consolidation or surviving such merger or to which the System shall be transferred as an entirety, and provided, further, that such consolidation, merger or transfer shall not cause or result in any lien being affixed to or imposed on or becoming a lien on the revenues from the System that will be prior to the lien of the pledge herein made for the benefit of the Warrants or in any foreclosable mortgage becoming a lien on the System or in the interest income on the Warrants, as a result of such action, becoming subject to federal or Alabama income taxation. The County will not itself subject the System to the lien of a foreclosable mortgage until the principal of and the interest on all the Warrants are paid in full or unless and until provision for such payment shall have been made. Nothing herein contained shall be construed to prevent the County from disposing of any properties that are obsolete, worn out or no longer needed or useful in the operation of the System.

Section 11.9 To Keep System Free from Prior Liens. The County will keep the System free from all liens and encumbrances prior to the pledge hereof (other than Permitted Encumbrances) but it may defer payment pending the bona fide contest of any claim unless the Trustee shall be of the opinion (which may be based on the advice of its counsel) that by such action any part of the System shall be subject to loss or forfeiture, in which event any such payment then due shall not be deferred. Nothing herein contained shall be construed to prevent the County from hereafter purchasing additional property on conditional or lease sale contract or subject to vendor's lien or purchase money mortgage, and, as to all property so purchased, the pledge herein made shall be subject and subordinate to such conditional or lease sale contract, vendor's lien or purchase money mortgage.

Section 11.10 To Repay Advances, Etc., by Trustee. The County will discharge, pay or satisfactorily provide to the Trustee all liabilities, expenses and advances reasonably incurred, disbursed or made by the Trustee in the execution of the trusts hereby created, and it will from time to time pay to the Trustee reasonable compensation for the Trustee's services hereunder, including extra compensation for unusual or extraordinary services. All such liabilities, expenses, advances and compensation shall be secured hereby, shall be entitled to priority of payment over any of the Warrants.

Section 11.11 Maintenance and Operation of the System. The County shall keep the System in good repair and efficient operating condition, making from time to time all needed repairs and replacements thereto, the cost of which shall be paid from System revenues and the

Sewer Tax Proceeds, and it will continuously operate the System in an economical and efficient manner. The County shall maintain and operate the System in accordance with all applicable federal and state law, and prudent industry practices.

Section 11.12 To Warrant Title. The County warrants its title to each and every part of the System presently in existence as being free and clear of every lien, encumbrance, trust or charge prior hereto, other than Permitted Encumbrances, and warrants that it has power and authority to subject the System and the revenues therefrom to the lien of the pledge herein made and that it has done so hereby.

Section 11.13 To Grant Further Assurances. The County will, upon reasonable request, execute and deliver such further instruments and do such further acts as may be necessary or proper to carry out more effectually the purpose of the Indenture, and in particular (without in any way limiting the generality of the foregoing) to make subject to the pledge herein made the revenues from any property hereafter acquired by it for use as a part of the System, and to transfer to any successor trustee or trustees the assets, powers, instruments and funds held in trust hereunder and to confirm the Indenture with respect to any Warrants issued hereunder. No failure to request such further instruments or further acts shall be deemed a waiver of any right to the execution and delivery of such instruments or the doing of such acts or be deemed to affect the interpretation of any provision of the Indenture.

Section 11.14 Preservation of Tax-Exempt Status of Series 2024 Warrants. The County will (a) in a timely manner, make all required rebate payments on the Series 2024 Warrants required by the provisions of Section 148(f) of the Code and any applicable regulations and take such other action as shall be necessary, under the provisions of the Code and any applicable regulations, to preserve the exemption of the interest on the Series 2024 Warrants from gross income of the recipients thereof for federal income tax purposes, and (b) refrain from taking any action that would, under the Code and any applicable regulations, result in the interest on any of the Series 2024 Warrants being or becoming subject to gross income of the recipients thereof for federal income tax purposes. Further, and without in any way limiting the generality of the foregoing,

(a) the County will not apply the proceeds from the Series 2024 Warrants in a manner that would cause any of the Series 2024 Warrants to be a "private activity bond" within the meaning of Section 141(a) of the Code;

(b) the County will not make any investment of any moneys on deposit in any of the special funds created under the Indenture if, as a result thereof, any of the Series 2024 Warrants would be considered "arbitrage bond" within the meaning of Section 103(b)(2) and 148 of the Code and any applicable regulations.

Section 11.15 Budget and Related Financial Data. Not later than the beginning of each Fiscal Year, the County shall deliver to the Trustee:

(a) the operating budget of the System for such Fiscal Year and the County's calculation of the Required Operating Reserve and the Required Revenue Reserve for such Fiscal Year; and

(b) the capital improvement budget of the System for such Fiscal Year.

The budget in effect for any Fiscal Year may be amended or revised by the County in accordance with changed circumstances and conditions at any time during such Fiscal Year. Any revised budget shall be delivered to the Trustee.

ARTICLE 12
PROVISIONS RESPECTING INSURANCE

Section 12.1 Insurance on the System. The County shall maintain insurance with respect to the System against such risks as are customarily insured against by utility systems similar in size and character to the System, including:

(a) Insurance against loss or damage by fire or other casualty covered by the standard form of extended coverage endorsement at the time in use in the State, with loss retention or deductible amounts from coverage that, in the judgment of the County, are customary and prudent for the System;

(b) Self-insurance against liability for bodily injury to or death of persons (including the operation of vehicles owned or leased by the County and used in connection with the System), in the minimum amounts of $100,000 for bodily injury or death for one person in any single occurrence or $300,000 in the aggregate where more than two persons have claims or judgments on account of bodily injury or death arising out of any single occurrence; provided, however, that the coverage required by this paragraph shall be increased should the law limiting the County's liability for such risks be amended to increase the County's exposure to such liability; and

(c) Workmen's compensation insurance respecting all employees of the System in such amount as is customarily carried by utility systems similar in size and character to the System; provided, that the County may, at its election, be self-insured for such risk to the extent customary at the time for utility systems similar in size and character to the System.

Section 12.2 Premiums To Be Operating Expense. The premiums payable on all insurance required to be carried by the provisions hereof shall constitute an Operating Expense.

ARTICLE 13
EVENTS OF DEFAULT AND REMEDIES OF TRUSTEE AND WARRANTHOLDERS

Section 13.1 Events of Default Defined. Any of the following shall constitute default hereunder by the County:

(a) The failure by the County to pay the principal of, the interest on or the premium (if any) on any Warrant as and when the same become due as therein and herein provided (whether such shall become due by maturity or otherwise);

(b) The failure by the County to commence the repair or replacement of any property forming a part of the System that may be damaged or destroyed and that is necessary to the continued and efficient operation of the System, within one hundred twenty days after the occurrence of such damage or destruction;

(c) The sale, lease or other disposition by the County of the System or any integral part thereof in violation of any provisions of the Indenture;

(d) The failure by the County to perform and observe any of the agreements and covenants on its part herein contained (other than in the manner described in (a), (b) and (c) above) which such failure continues for a period of not less than sixty (60) days after written notice of such failure has been given to the County by the Trustee or by the Holders of not less than 25% in Outstanding Amount of the Warrants then outstanding and secured hereby, unless during such period or any extension thereof the County has commenced and is diligently pursuing appropriate corrective action; or

(e) an Act of Bankruptcy by the County.

Section 13.2 Remedies on Default. Upon any Indenture Default in any one of the ways defined in the preceding Section 13.1 hereof, the Trustee shall have the following rights and remedies:

(a) **Acceleration**. The Trustee may, by written notice to the County, declare the Outstanding Amount of and the interest accrued on all the Warrants forthwith due and payable, and such Outstanding Amount and interest shall thereupon become and be immediately due and payable, anything herein or in the Warrants to the contrary notwithstanding; provided, however, that a Supplemental Indenture authorizing a series of Additional Warrants secured in whole or in part by a Credit Facility may provide that the right of the Trustee to accelerate the maturity of the Warrants of that series (or the portion thereof secured by such Credit Facility) is subject to the consent of the Credit Facility Obligor issuing such Credit Facility. If, however, the County cures that Indenture Default and every other Indenture Default (except for those installments of Outstanding Amount and interest declared due and payable that would, absent such declaration, not be due and payable), with interest on all overdue payments of Outstanding Amount and interest, and makes reimbursement of all the reasonable expenses of the Trustee, then the Trustee may (and, if requested in writing by the Holders of a majority in Outstanding Amount of the then outstanding Warrants, shall), by written notice to the County, waive such default and its consequences, but no such waiver shall affect any subsequent default or right relative thereto.

(b) **Suits at Law or in Equity**. The Trustee is empowered (i) to sue on the Warrants, (ii) by mandamus, suit or other proceeding, to enforce all agreements of the County herein contained, including the fixing of rates, the collection and proper segregation of the revenues from the System and the proper application thereof, (iii) by action or suit in equity, to require the County to account as if it were the trustee of an express trust for the Holders of the Warrants, and (iv) by action or suit in equity, to enjoin any action or things which may be unlawful or a violation of the rights of the Holders of the Warrants.

Nothing herein contained, however, shall be construed to give any authority to the Trustee or the Holders of any of the Warrants to compel a sale of the System or any part thereof, and no foreclosure proceedings or sale shall ever be had under the authority of this Indenture with respect to the System or any part thereof.

Section 13.3 Remedies Vested in Trustee. All remedies hereunder are vested exclusively in the Trustee for the equal and pro rata benefit of all the Holders of the Warrants, unless the Trustee refuses or neglects to act within a reasonable time after written request so to act addressed to the Trustee by the Holders of a majority in Outstanding Amount of Warrants, accompanied by indemnity satisfactory to the Trustee, in which event the Holder of any of the Warrants may thereupon so act in the name and behalf of the Trustee or may so act in his own name in lieu of action by or in the name and behalf of the Trustee. Except as above provided, no Holder of any of the Warrants shall have the right to enforce any remedy hereunder, and then only for the equal and pro rata benefit of the Holders of all the Warrants.

Notwithstanding any other provisions hereof, the right of the Holder of any Warrant, which is absolute and unconditional, to receive payment of the principal of and the interest (and premium, if any) on such Warrant on or after the due date thereof, but solely from the revenues from the System as therein and herein expressed, or to institute suit for the enforcement of such payment on or after such due date, or the obligation of the County, which is also absolute and unconditional, to pay, but solely from said proceeds and revenues, the principal of and the interest (and premium, if any) on the Warrants to the respective Holders thereof at the time and place in said Warrants expressed, shall not be impaired or affected without the consent of such Holder; provided, however, that no Holder shall be entitled to take any action or institute any such suit to enforce the payment of his Warrants, whether for principal, interest or premium, if and to the extent that the taking of such action or the institution or prosecution of any such suit or the entry of judgment therein would under applicable law result in a surrender, impairment, waiver or loss of the lien hereof upon the revenues from the System, or any part thereof, as security for the Warrants held by any other Holder.

When the Trustee incurs costs or expenses (including the fees and expenses of its counsel) or renders services after the occurrence of an event of default, such costs and expenses and the compensation for such services are intended to constitute expenses of administration under any federal or state bankruptcy, insolvency, arrangement, moratorium, reorganization or other debtor relief law.

Section 13.4 Delay No Waiver. No delay or omission by the Trustee or by any Holder to exercise any available right, power or remedy hereunder shall impair or be construed a waiver thereof or an acquiescence in the circumstances giving rise thereto; every right, power or remedy given herein to the Trustee or to the Holders may be exercised from time to time and as often as deemed expedient.

Section 13.5 Remedies Cumulative. No remedy herein provided for, or herein reserved to the Trustee or to the Holders of the Warrants, is intended to be exclusive of any other available remedy or remedies, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute.

Section 13.6 Control by Holders. The Holders of a majority in principal amount of the outstanding Warrants shall have the right, during the continuance of an Indenture Default,

(a) to require the Trustee to proceed to enforce this Indenture, either by judicial proceedings for the enforcement of the payment of the Warrants or otherwise, and

(b) to direct the choice of remedies and the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee hereunder, including the power to direct or withhold directions with respect to any remedy available pursuant to Section 13.2; provided that

(i) such direction shall not be in conflict with any rule of law or this Indenture,

(ii) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction, and

(iii) the Trustee shall not determine that the action so directed would be unjustly prejudicial to the Holders not taking part in such direction.

ARTICLE 14
CONCERNING THE TRUSTEE

Section 14.1 Acceptance of Trusts. The Trustee, prior to the occurrence of an event of default and after the curing of all events of default which may have occurred, undertakes to perform such duties and only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations should be read into this Indenture against the Trustee. If any event of default under this Indenture shall have occurred and be continuing, the Trustee shall perform such duties and exercise such rights and powers vested in it by this Indenture and shall use the same degree of care as a prudent person would exercise or use in the circumstances in the conduct of such prudent person's own affairs, subject to the following terms and conditions:

(a) It shall not be liable hereunder except for its willful misconduct or its gross negligence.

(b) It may execute any of the trusts and powers conferred on it hereunder or perform any duty hereunder either directly or through agents and attorneys in fact who are not regularly in its employ and who are selected by it with reasonable care.

(c) It may consult Counsel on any matters connected herewith and shall not be answerable for any action taken or failure to take any action in good faith on the advice of Counsel, provided that its action or inaction is not contrary to any express provision hereof.

(d) It need not recognize a Holder of a Warrant as such without the satisfactory establishment of his title to such Warrant.

(e) It shall not be answerable for any action taken in good faith on any notice, request, consent, certificate or other paper or document which it believes to be genuine and signed or acknowledged by the proper party.

(f) It need not notice any default hereunder, except a default in the payment of the principal of and the interest (and premium, if any) on the Warrants, unless requested so to do by the Holders of 25% in Outstanding Amount of Warrants.

(g) In the event of default by the County hereunder, the Trustee need not exercise any of its rights or powers specified in Section 13.2 hereof or take any action under said Section 13.2 unless requested in writing so to do by the Holders of a majority in Outstanding Amount of Warrants; it may exercise any such rights or powers or take any such action, if it thinks advisable, without any such request; it shall do so when so requested; provided that the furnishing of indemnity, satisfactory to the Trustee, against its prospective liabilities and expenses (including the fees and expenses of its counsel) by the Holders requesting any action by the Trustee under said Section 13.2 shall be a condition precedent to the duty of the Trustee to take or continue any action under said Section 13.2 which in the opinion of the Trustee would involve it in any such liabilities or expenses. Whenever it has a choice of remedies under said Section 13.2 or a discretion as to details in the exercise of its powers thereunder, it must follow any specific directions given by the Holders of a majority in Outstanding Amount of Warrants, anything therein or herein to the contrary notwithstanding, unless the observance of such directions would, in the opinion of the Trustee (as evidenced by an opinion of its counsel), unjustly prejudice the non-assenting Holders.

(h) It shall be entitled to reasonable compensation for its services hereunder, including extra compensation for unusual or extraordinary services.

(i) Any action taken by the Trustee at the request of and with the consent of the Holder of a Warrant will bind all subsequent Holders of the same Warrant and any Warrant issued hereunder in lieu thereof.

(j) It may be the Holder of Warrants as if not Trustee hereunder.

(k) It shall not be liable for the proper application of any moneys other than those that may be paid to or deposited with it.

(l) It shall not unreasonably withhold or delay any consent or approval required of it under the provisions hereof.

(m) All moneys received by the Trustee to be held by it hereunder shall be held as trust funds until disbursed in the manner herein provided therefor. The Trustee shall not be liable to pay or allow interest thereon or otherwise to invest any such moneys except as specifically required herein.

(n) It may make any investments permitted hereby through its own investment department or its affiliates and may charge its ordinary and customary fees for such trades, and any certificates of deposit issued or held by it hereunder shall be deemed investments and not deposits. The Trustee may conclusively rely upon the County's written instructions as to both the suitability and legality of the directed investments. Ratings of investments shall be determined at the time of purchase of such investments and without regard to ratings subcategories. The Trustee shall have no responsibility to monitor the ratings of investments after the initial purchase of such investments. In the absence of written investment instructions from the County, the Trustee shall not be responsible or liable for keeping the moneys held by it hereunder fully invested. Confirmations of investments are not required to be issued by the Trustee for each month in which a monthly statement is rendered and, unless otherwise requested by the County, no statement need be rendered for any fund or account if no activity occurred in such fund or account during such month.

(o) It shall, upon reasonable written request, advise the County of the amount at the time on deposit in any of the special funds or accounts herein created.

(p) It shall, upon reasonable written request, issue to the County a certificate indicating whether, to the actual knowledge of a Responsible Officer of the Trustee, the County is in default under the provisions of the Indenture and, in the event there is such a default, briefly describing the nature thereof.

(q) The recitals of fact herein and in the Warrants are statements by the County and not by the Trustee, and the Trustee is in no way responsible for the validity or security of the Warrants, the existence of any part of the System, the value thereof, the title of the County thereto, the security afforded hereby or the validity or priority of the pledge herein made.

(r) The permissive right of the Trustee to do things enumerated in this Indenture shall not be construed as a duty.

(s) Notwithstanding the effective date of this Indenture or anything to the contrary in this Indenture, the Trustee shall have no liability or responsibility for any act or event relating to this Indenture which occurs prior to the date the Trustee formally executes this Indenture and commences acting as Trustee hereunder.

(t) The Trustee shall have no responsibility with respect to any information, statement or recital in any official statement, offering memorandum or any other disclosure material prepared or distributed with respect to the Warrants and shall have no responsibility for compliance with any state or federal securities laws in connection with the Warrants.

(u) None of the provisions of this Indenture shall require the Trustee to expend or risk its own funds or otherwise to incur any liability, financial or otherwise, in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers if it shall have reasonable grounds for believing that repayment of such funds or indemnity satisfactory to it against such risk or liability is not assured to it.

(v) The Trustee shall not be responsible or liable for any failure or delay in the performance of its obligation under this Indenture arising out of or caused, directly or indirectly, by circumstances beyond its reasonable control, including, without limitation, acts of God; earthquakes; fire; flood; hurricanes or other storms; wars; terrorism; similar military disturbances; sabotage; epidemic; pandemic; riots; interruptions, loss or malfunctions of utilities, computer (hardware or software) or communications services; accidents; labor disputes; acts of civil or military authority or governmental action; it being understood that the Trustee shall use commercially reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as reasonably practicable under the circumstances.

(w) The Trustee shall have the right to accept and act upon directions or instructions given by the County and delivered using Electronic Means (defined below); provided, however, that the County shall provide to the Trustee an incumbency certificate listing Authorized County Representatives, which shall have the authority to provide such directions or instructions and shall contain specimen signatures of such Authorized County Representatives, which incumbency certificate shall be amended whenever a person is to be added or deleted from the listing. If the County elects to give the Trustee directions or instructions using Electronic Means and the Trustee in its discretion elects to act upon such directions or instructions, the Trustee's understanding of such directions or instructions shall be deemed controlling. The County understands and agrees that the Trustee cannot determine the identity of the actual sender of such directions or instructions and that the Trustee shall conclusively presume that directions or instructions that purport to have been sent by an Authorized Officer listed on the incumbency certificate provided to the Trustee have been sent by such Authorized Officer. The County shall be responsible for ensuring that only Authorized County Representatives transmit such directions or instructions to the Trustee and that all Authorized County Representatives treat applicable user and authorization codes, passwords and/or authentication keys as confidential and with extreme care. The Trustee shall not be liable for any losses, costs or expenses arising directly or indirectly from the Trustee's reliance upon and compliance with such directions or instructions notwithstanding such directions or instructions conflict or are inconsistent with a subsequent written direction or written instruction. The County agrees: (i) to assume all risks arising out of the use of Electronic Means to submit directions or instructions to the Trustee, including without limitation the risk of the Trustee acting on unauthorized directions or instructions, and the risk of interception and misuse by third parties; (ii) that it is fully informed of the protections and risks associated with the various methods of transmitting directions or instructions to the Trustee and that there may be more secure methods of transmitting directions or instructions; (iii) that the security procedures (if any) to be followed in connection with its transmission of directions or instructions provide to it a commercially reasonable degree of protection in light of its particular needs and circumstances; and (iv) to notify the Trustee immediately upon learning of any compromise or unauthorized use of the security procedures. "Electronic Means" shall mean the following communications methods: e-mail, facsimile transmission, secure electronic transmission containing applicable authorization codes, passwords and/or authentication keys, or another method or system specified by the Trustee as available for use in connection with its services hereunder.

(x) The Trustee may conclusively rely upon as genuine any notice, direction, consent, opinion, certificate or other document provided to it pursuant to the terms of this

Indenture which the Trustee in good faith believes to have been signed by the proper person or persons.

(y) The Trustee shall have no duty to review or any financial statements delivered to it or to verify the accuracy thereof and shall hold such financial statements solely as a repository for the benefit of the Warrantholders; and the Trustee shall not be deemed to have notice of any information contained therein or event of default which may be disclosed therein in any manner.

Section 14.2 Trustee Authorized to Pay Certain Charges. Without relieving the County from the consequences of any default in connection therewith, the Trustee may pay any charge which the failure of the County to pay has made or will make an encumbrance or lien on the System or on the revenues therefrom prior to the pledge herein made and in the event the County shall fail to take out or cause to be taken out insurance on or with respect to the System to the extent required by the Indenture, the Trustee may take out any such insurance on or with respect to the System that the County has failed to furnish or cause to be furnished and may pay the premiums thereon; provided that in each case (a) the Trustee first gives to the County such notice as is reasonable under the circumstances of the County's failure to pay or cause to be paid such charge or take out or cause to be taken out such insurance, and (b) the County does not within such time thereafter as the Trustee deems reasonable under the circumstances pay or cause to be paid such charge or take or cause to be taken out such insurance. The Trustee, however, shall not be required to pay any such charge or take out any such insurance, and it shall not be liable in any manner for any failure to do so. All sums expended by the Trustee under the provisions of this section shall be secured by the Indenture and shall be entitled to priority of payment over the principal of or the interest (or premium, if any) on any of the Warrants. The County will reimburse the Trustee on demand for all sums so expended by the Trustee.

Section 14.3 Trustee May Institute Suit, Etc. The Trustee may, in its own name and at any time, institute or intervene in any suit or proceeding for the enforcement of all rights of action (including the right to file proof of claims in connection with any reorganization, bankruptcy, receivership or like proceeding) hereunder or under any of the Warrants, without the necessity of joining as parties to such suit or proceeding any Holders of the Warrants and without the necessity of possessing any of such Warrants or producing same in any trial or other proceedings related to such rights of action. The Holders of the Warrants do hereby appoint the Trustee as their irrevocable agent and attorney in fact for the purpose of enforcing all such rights of action, but such appointment shall not include the power to agree to accept new securities of any nature in lieu of the Warrants or to alter or amend the terms of the Indenture except as herein provided.

Section 14.4 Resignation and Discharge of Trustee. The Trustee may resign and be discharged of the trusts hereby created upon thirty (30) days written notice to the County and the Holders of the Warrants specifying the effective date of such resignation. The Trustee may at any time be removed by a written instrument upon thirty (30) days written notice signed by the County (so long as no event of default exists hereunder) or by Holders of a majority in Outstanding Amount of the Warrants then outstanding. No resignation or removal of the Trustee shall be effective until the appointment of a successor as provided below. If the Trustee shall resign or be removed, it shall be reimbursed for all its proper prior expenses reasonable under the circumstances and that would be due under this Indenture.

Section 14.5 Appointment of Successor Trustee. If the Trustee shall resign, be removed, be placed by a court or governmental authority under the control of a receiver or other public officer or otherwise become incapable of acting, a successor may be appointed by a written instrument signed by the Holders of a majority in Outstanding Amount of the Warrants and in the interim by an instrument executed by the County, such interim successor Trustee to be immediately and ipso facto superseded by the one appointed as above by the said Holders. The County shall give written notice of such interim appointment, in the event such is made, to the Holders of the Warrants, and when the appointment of a successor Trustee, as selected by the Holders of a majority in Outstanding Amount of the Warrants, becomes effective, such successor Trustee shall give written notice of that fact to the Holders of the Warrants. Any successor Trustee shall be a bank or trust company authorized to administer trusts and having, at the time of its acceptance of such appointment combined capital, surplus and undivided profits of at least $100,000,000. If no successor Trustee shall have been appointed and accepted appointment within sixty (60) days of the resignation, removal, or the occurrence of a vacancy in the office of Trustee in the manner herein provided, the Trustee or any Holder may petition any court of competent jurisdiction for the appointment of a successor Trustee until a successor shall have been appointed as above provided.

Section 14.6 Concerning Any Successor Trustee. Any successor Trustee shall execute and deliver to the County an instrument accepting the trusts and shall thereupon ipso facto succeed to all the estate and title of the retiring Trustee under the Indenture and to its rights, powers and responsibilities hereunder. The County will, upon request of the successor Trustee, execute and deliver to it any instrument reasonably requested in further assurance thereof. Any successor Trustee may effectively adopt the authentication certificate of a predecessor Trustee on Warrants already authenticated and not delivered, and may so deliver them; and it may effectively authenticate Warrants in its own name.

ARTICLE 15
AUTHORIZATION OF SUPPLEMENTAL INDENTURES AND MODIFICATION OF THE INDENTURE

Section 15.1 Supplemental Indentures without Warrantholder Consent. The County and the Trustee may at any time and from time to time enter into such Supplemental Indentures (in addition to such Supplemental Indentures as are otherwise provided for herein or contemplated hereby) as shall not be inconsistent with the terms and provisions hereof, for any one or more of the following purposes:

(a) to add to the covenants and agreements of the County herein contained other covenants and agreements thereafter to be observed and performed by the County, provided that such other covenants and agreements shall not either expressly or impliedly limit or restrict any of the obligations of the County contained in the Indenture;

(b) to cure any ambiguity or to cure, correct or supplement any defect or inconsistent provision contained in the Indenture or in any Supplemental Indenture or to make any provisions with respect to matters arising under the Indenture or any Supplemental Indenture for any other purpose if such provisions are necessary or desirable and are not inconsistent with the provisions of the Indenture or any Supplemental Indenture and do not adversely affect the interests of the Holders of the Warrants; or

(c) to provide for the issuance of Additional Warrants containing terms and conditions consistent with the terms of this Indenture.

Any Supplemental Indenture entered into under the provisions of and pursuant to this section shall not require the consent of any Holders of the Warrants.

Section 15.2 Supplemental Indentures Requiring Warrantholder Consent. In addition to those Supplemental Indentures permitted by Section 15.1 hereof, the County and the Trustee may, at any time and from time to time, with the written consent of the Holders of not less than a majority in Outstanding Amount of the Warrants, enter into such Supplemental Indentures as shall be deemed necessary or desirable by the County and the Trustee for the purpose of modifying, altering, amending, adding to or rescinding, in any particular, any of the terms or provisions contained in the Indenture or in any Supplemental Indenture; provided, that, without the written consent of the Holder of each Warrant affected, no reduction in the principal amount of, rate of interest on, or the premium payable upon the redemption of, any Warrant shall be made; and provided, further, that, without the written consent of the Holders of all the Warrants, none of the following shall be permitted:

(a) an extension of the maturity of any installment of principal of or interest on any Warrant;

(b) any change in the schedule of mandatory redemption requirements with respect to any series of the Warrants;

(c) the creation of a lien or charge on the System or the revenues therefrom ranking prior to or (except in connection with the issuance of Additional Warrants) on a parity with the lien or charge thereon contained herein;

(d) the establishment of preferences or priorities as between the Warrants; or

(e) a reduction in the Outstanding Amount of Warrants the Holders of which are required to consent to such Supplemental Indenture.

Upon the execution of any Supplemental Indenture under and pursuant to the provisions of this section, the Indenture shall be deemed to be modified and amended in accordance therewith, and the respective rights, duties and obligations under the Indenture of the County, the Trustee and all Holders of the Warrants then outstanding shall thereafter be determined, exercised and enforced hereunder, subject in all respects to such modifications and amendments.

Section 15.3 Execution of Supplemental Indentures. The Trustee is authorized to join with the County in the execution of any Supplemental Indenture authorized under the provisions of this article and to make the further agreements and stipulations which may be contained therein, but the Trustee shall not be obligated to enter into any such Supplemental Indenture which affects its rights, duties or immunities under the Indenture. Any Supplemental Indenture executed in accordance with the provisions of this article shall thereafter form a part of the Indenture, and all the terms and conditions contained in such Supplemental Indenture, as to any provisions authorized to be contained therein, shall be deemed to be a part of the terms and conditions of the Indenture for any and all purposes.

Section 15.4 Notices with Respect to Certain Changes in Indenture. If at any time the County shall request in writing that the Trustee enter into any Supplemental Indenture pursuant to Section 15.2, the Trustee shall, upon being satisfactorily indemnified with respect to its prospective expenses incident thereto, cause written notice of the proposed Supplemental Indenture to be given to the Holders of the Warrants. Such notice shall briefly set forth the nature of the proposed Supplemental Indenture and shall state that copies thereof are on file at the principal office of the Trustee for inspection by all Holders. If, within sixty (60) days or such longer period as shall be prescribed by the County following the giving of such notice, the Holders of a majority in Outstanding Amount of the Warrants at the time of the execution of any such Supplemental Indenture shall have consented to and approved the execution thereof as herein provided, no Holder of any Warrant shall have any right to object to any of the terms and provisions contained therein, or the operation thereof, or in any manner to question the propriety of the execution thereof, or to enjoin or restrain the Trustee or the County from executing the same or from taking any action pursuant to the provisions thereof.

Section 15.5 Discretion of the Trustee. In the case of any Supplemental Indenture authorized under the provisions of this article, the Trustee shall be entitled to exercise its discretion in determining whether or not any proposed Supplemental Indenture, or any term or provision therein contained, is proper or desirable, having in view the purposes of such instrument, the needs of the County, the System and the rights and interests of the Holders of the Warrants, and the Trustee shall not be under any responsibility or liability to the County or to any Holder or to anyone whomsoever for any act or thing which it may in good faith do or decline to do under the provisions of this article. The Trustee shall be entitled to receive, and shall be fully protected in relying conclusively upon, an opinion of Independent Counsel acceptable to it as conclusive evidence that any such Supplemental Indenture complies with the provisions of the Indenture and that it is proper for the Trustee acting under the provisions of this article to join in the execution of such Supplemental Indenture.

ARTICLE 16
PAYMENT AND CANCELLATION OF THE WARRANTS AND SATISFACTION OF THE INDENTURE

Section 16.1 Satisfaction of Indenture. Whenever the entire indebtedness secured by the Indenture, including all proper charges of the Trustee hereunder, shall have been fully paid, the Trustee shall cancel, satisfy and discharge the Indenture. For purposes of the Indenture, any of the Warrants shall be deemed to have been paid when there shall have been irrevocably deposited with the Trustee for payment thereof the entire amount (principal, interest and premium, if any) due or to be due thereon until and at maturity, and, further, any of the Callable Warrants shall also be deemed to have been paid when the County shall have deposited with the Trustee the following:

(a) the applicable Redemption Price of such Warrant, including the interest that will accrue thereon to the date on which it is to be redeemed, and

(b) a certified copy of the Resolution required in Section 6.1 herein.

In addition, any of the Warrants shall, for purposes of the Indenture, be considered as fully paid if there shall be filed with the Trustee each of the following:

(i) a trust agreement between the County and a financial institution (which may but does not have to be the Trustee) making provision for the retirement of such Warrants by creating for that purpose an irrevocable trust fund sufficient to provide for payment and retirement of such Warrants (including payment of the interest that will mature thereon until and on the dates they are retired, as such interest becomes due and payable), either by redemption prior to their respective maturities, by payment at their respective maturities or by payment of part thereof at their respective maturities and redemption of the remainder prior to their respective maturities, which said trust fund shall consist of (A) noncallable Federal Securities which will produce funds sufficient so to provide for payment and retirement of all such Warrants, or (B) both cash and such noncallable Federal Securities which together will produce funds sufficient for such purpose, or (C) cash sufficient for such purpose;

(ii) a certified copy of a Resolution calling for redemption those of such Warrants that, according to said trust agreement, are to be redeemed prior to their respective maturities; and

(iii) either (A) a verification report satisfactory to the Trustee to the effect that such noncallable Federal Securities and/or cash, together with earnings thereon, will be sufficient to pay interest and principal (and applicable premium, if any) on the Bonds to redemption or maturity or (B) an opinion of Independent Counsel satisfactory to the Trustee to the effect that all conditions precedent to the defeasance of the Warrants have been satisfied; provided however, that no such verification report or opinion shall be necessary in the event of a gross defeasance (where the cash and noncallable Federal Securities alone are sufficient to pay the debt service on the Warrants without relying on interest earnings) or a current refunding (where the Warrants are to be redeemed within ninety (90) days of the funding of the escrow).

The Trustee is hereby irrevocably authorized to publish or otherwise give notice, in accordance with the requirements of Article VI hereof, of the redemption of any Warrants to be made pursuant to any Resolution required by the preceding provisions of this Section 16.1.

Section 16.2 Cancellation of Paid Warrants. When and as the Warrants are paid, those so paid shall be forthwith cancelled by the Trustee, and upon the written request of the County, a certificate of cancellation shall be delivered to the County. Likewise all mutilated Warrants replaced by new Warrants shall forthwith be cancelled by the Trustee, and upon the written request of the County, a certificate of cancellation shall be delivered to the County.

ARTICLE 17
MISCELLANEOUS PROVISIONS

Section 17.1 Disclaimer of General Liability. It is hereby expressly made a condition of this Indenture that any agreements, covenants or representations herein contained or contained in the Warrants do not and shall never constitute or give rise to any personal or pecuniary liability or charge against the general credit of the County, and in the event of a breach of any such agreement, covenant or representation, no personal or pecuniary liability or charge payable directly or indirectly from the general revenues of the County shall arise therefrom. Neither the full faith and credit nor any taxing power of the County is pledged for payment of the Warrants. Nothing contained in this section, however, shall relieve the County from the observance and performance of the several covenants and agreements on its part herein contained.

Section 17.2 Retention of Moneys for Payment of Warrants. Should any of the Warrants not be presented for payment when due, whether by maturity or otherwise, the Trustee shall, subject to the provisions of any applicable escheat or other similar law, retain from any moneys transferred to it for the purpose of paying said Warrants so due, for the benefit of the Holders thereof, a sum of money sufficient to pay such Warrants when the same are presented by the Holders thereof for payment (upon which sum the Trustee shall not be required to pay interest). All liability of the County to the Holders of such Warrants and all rights of such Holders against the County under the Warrants or under the Indenture shall thereupon cease and determine, and the sole right of such Holders shall thereafter be against such deposit. If any Warrant shall not be presented for payment within a period of three (3) years following the date when such Warrant becomes due, whether by maturity or otherwise, the Trustee shall, subject to the provisions of any applicable escheat or other similar law, return to the County any moneys theretofore held by it for payment of such Warrant, and such Warrant shall (subject to the defense of any applicable statute of limitation) thereafter be an unsecured obligation of the County.

Section 17.3 Payment of Certain Surplus Moneys to County. If, upon full payment of all proper charges of the Trustee hereunder and full payment and retirement of all the Warrants, any moneys then remain in any of the special trust funds created in the Indenture, the Trustee shall thereupon pay such moneys to the County.

Section 17.4 Form of Requests, Etc., by Warrantholders. Any request, direction or other instrument required to be signed or executed by Holders of the Warrants may be in any number of concurrent instruments of similar tenor, signed, or executed in person or by agent appointed in writing. Such signature or execution may be proved by the certificate of a notary public or other officer at the time authorized to take acknowledgments to deeds to be recorded in Alabama, stating that the signer was known to him and acknowledged to him the execution thereof.

Section 17.5 Limitation of Rights. Nothing herein or in the Warrants shall confer any right on anyone other than the County, the Trustee, or the Holders of the Warrants.

Section 17.6 Manner of Proving Ownership of Warrants. The ownership at any given time of a Warrant may be proved by a certificate of the Trustee stating that on the date stated the Warrant described was registered on its books in the name of the stated party.

Section 17.7 Notices. All notices, demands and requests to be given or made hereunder shall be deemed sufficient and properly given or made if in writing and sent by United States registered or certified mail, postage prepaid, addressed as set forth in Exhibit 17.7 hereto and if to the Holder of a Warrant, at the address of such Holder as shown on the registry books of the Trustee pertaining to the Warrants. The County and the Trustee may, by like notice, designate any further or different addresses to which subsequent notices shall be sent. Any notice hereunder signed on behalf of the notifying party by a duly authorized attorney at law shall be valid and effective to the same extent as if signed by such party himself or on its behalf by a duly authorized officer or employee.

IN WITNESS WHEREOF, the County and the Trustee have caused this instrument to be duly executed by their duly authorized officers and to be dated this ______ day of January, 2024.

JEFFERSON COUNTY, ALABAMA

[SEAL]

By ___________________________________

Title: ________________________________

Attest:

____
Its Minute Clerk

REGIONS BANK, as Trustee

[SEAL]

By ___________________________________

Its ___________________________________

Attest:

____

Its ___________________________________

STATE OF ALABAMA)
:
COUNTY OF JEFFERSON)

I, the undersigned, a Notary Public in and for said county in said state, hereby certify that ______________________, whose name as ______________ of JEFFERSON COUNTY, ALABAMA, a political subdivision of the State of Alabama, is signed to the foregoing instrument and who is known to me, acknowledged before me on this day that, being informed of the contents of the within instrument, he, as such officer and with full authority, executed the same voluntarily for and as the act of said public corporation.

GIVEN under my hand and official seal of office, this ________ day of ____________________, 2024.

____
Notary Public

My Commission Expires: _______________

[NOTARIAL SEAL]

STATE OF ALABAMA)
:
COUNTY OF JEFFERSON)

I, the undersigned, a Notary Public in and for said county in said state, hereby certify that ______________________, whose name as ____________________ of REGIONS BANK, an Alabama state banking corporation, is signed to the foregoing instrument and who is known to me, acknowledged before me on this day that, being informed of the contents of the within instrument, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation.

GIVEN under my hand and official seal of office, this ___ day of ____________, 2024.

____
Notary Public

My Commission Expires: ________________

[NOTARIAL SEAL]

EXHIBIT 17.7

Directions for Notices

JEFFERSON COUNTY, ALABAMA

Mailing address:	Jefferson County, Alabama Attention: County Manager Room 251, Jefferson County Courthouse 716 Richard Arrington Jr. Boulevard North Birmingham, Alabama 35203 -and- Jefferson County, Alabama Attention: County Attorney Room 280, Jefferson County Courthouse 716 Richard Arrington Jr. Boulevard North Birmingham, Alabama 35203
Hand delivery or courier delivery address:	Jefferson County, Alabama Attention: County Manager Room 251, Jefferson County Courthouse 716 Richard Arrington Jr. Boulevard North Birmingham, Alabama 35203 -and- Jefferson County, Alabama Attention: County Attorney Room 280, Jefferson County Courthouse 716 Richard Arrington Jr. Boulevard North Birmingham, Alabama 35203
Email address:	County Manager: markertc@jccal.org County Attorney: lawsont@jccal.org
Facsimile transmissions	County Manager: (205)731-2879 County Attorney: (205) 325-5840

REGIONS BANK, as trustee

Mailing address:	1900 5th Ave North 26th Floor Birmingham, Alabama 35203 Attention: Corporate Trust
Hand delivery or courier delivery address:	Same as mailing address
Email address:	carmen.kilgore@regions.com
Facsimile transmissions:	205.264.5264

APPENDIX B
OUTSTADING 2013 SEWER WARRANTS

Current Outstanding Senior Lien Obligations

Senior Lien Sewer Revenue Current Interest Warrants	Series 2013-A
Senior Lien Sewer Revenue Capital Appreciation Warrants	Series 2013-B
Senior Lien Sewer Revenue Convertible Capital Appreciation Warrants	Series 2013-C

Current Outstanding Subordinate Lien Obligations

Subordinate Lien Sewer Revenue Current Interest Warrants	Series 2013-D
Subordinate Lien Sewer Revenue Capital Appreciation Warrants	Series 2013-E
Subordinate Lien Sewer Revenue Convertible Capital Appreciation Warrants	Series 2013-F

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APPENDIX C
JEFFERSON COUNTY SEWER SYSTEM

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APPENDIX C

JEFFERSON COUNTY SEWER SYSTEM

This section contains certain summary information regarding the System. **THE FOLLOWING IS NOT INTENDED TO COVER OR SUMMARIZE ALL MATERIAL ELEMENTS OF THE SYSTEM. PROSPECTIVE INVESTORS ARE ENCOURAGED TO READ, IN ITS ENTIRETY, THE MUNICIPAL ADVISOR'S FEASIBILITY STUDY ATTACHED AS APPENDIX E, WHICH CONTAINS, AMONG OTHER THINGS, DETAILED INFORMATION REGARDING THE SYSTEM, ITS OPERATIONS, THE CURRENT PHYSICAL CONDITION OF MATERIAL COMPONENTS OF THE SYSTEM, REVENUE, OPERATING EXPENSE AND CAPITAL EXPENDITURE FORECASTS, AND OTHER RELEVANT INFORMATION**.

Prospective investors in the Series 2024 Warrants should also read and review the unaudited financial and operating information respecting the System for the fiscal year ended September 30, 2023, set forth on APPENDIX J to the Official Statement to which this Appendix is attached.

Legislative and Constitutional Authority

Legislative History. Act No. 714 of the Alabama Legislature, enacted February 28, 1901, authorized the construction, maintenance and operation of the System in the County by the Jefferson County Sanitary Commission (which Act No. 714 created). Act No. 716, also enacted February 28, 1901, provided for the issuance of bonds for sanitary sewer purposes and for the levy of the Sewer Tax. On August 19, 1909, Act No. 48 was enacted into law to transfer the rights, duties and powers with respect to the System from the Jefferson County Sanitary Commission to the Commission (which at the time said act was enacted was referred to as the "Board of Revenue of the County"). Pursuant to these acts, municipalities in the County may construct their own sewage collection systems which connect to trunk or branch lines of the System. Private sewer systems, if any, may also be connected to the System with the permission of the Commission. In addition to building trunk and branch lines, the Commission is also authorized to locate and build wastewater treatment plants to carry out its legislative charge to protect the sources of drinking water supply from pollution.

Amendment No. 73 to the Constitution of Alabama of 1901 ("Amendment 73"), adopted in 1948, grants to the governing body of the County the "full power and authority" to levy and collect sewer service charges from the users of the System. Amendment 73 provides that the Commission shall have a lien against any property served by the System to secure the payment of any related sewer service charges. Any such lien may be enforced by foreclosure in the same manner as municipal assessments for public improvements. Under Amendment 73, any moneys derived by the County from sewer service charges may be expended only for purposes related to the improvement, extension, maintenance, and operation of the System.

Rate Setting Authority. Pursuant to Amendment 73, the governing body of the County has sole authority to set sewer rates and charges for the System and to provide for the collection, payment and enforcement thereof. In 1984, the Alabama Supreme Court confirmed the County's authority to set rates for sewer service and held unconstitutional an attempt by the Alabama Legislature to limit that authority. Since the County rate making authority is constitutionally granted, that authority can only be changed by further constitutional amendment. In order to amend the Alabama Constitution, a bill or joint resolution must be introduced and read at length on three different days in each of the Alabama House of Representatives and the Alabama Senate and must pass each such house by a three-fifths vote of all members elected. If so approved, the amendment is submitted to the voters of the State at an election held not less than three months after adjournment of the session of the Alabama Legislature in which the amendment is proposed. If a majority of those voting at the State-wide election approve the amendment, it becomes part of the Alabama Constitution.

Rates and charges for use of the System are set pursuant to the Charge Ordinance, which sets out pertinent defined terms and describes in detail the policies and procedures by which bills are calculated, and the 2023 Rate Resolution. See "Rate Structure" below.

Rate Structure

On November 6, 2012, the Commission adopted an ordinance (the "Charge Ordinance"), which established categories of charges for users of the System. The Charge Ordinance contains the Commission's determination of reasonable and nondiscriminatory rules and regulations fixing rates and charges for service from the System and provisions for payment, collection and enforcement thereof. The Charge Ordinance applies to all users of the System within the County and to persons outside the County who are, by contract or agreement with the County, users of the System.

Under the Charge Ordinance, each user pays (i) a monthly base charge that varies depending on meter size, and (ii) volumetric charges (measured on a per-hundred cubic feet ("CCF") basis) that vary depending on whether the user is classified as residential or non-residential and, for residential users, that vary based on the level of the user's consumption. The Charge Ordinance also specifies certain industrial waste surcharges, fees for discharging hauled wastewater and septage into the System and certain miscellaneous fees and charges, including fees for inspections, permits, returned checks and the like. All such fees and charges for use of the System are collectively referred to herein as "User Charges."

On October 12, 2023, the Commission adopted the 2023 Rate Resolution, which established the rate structure for User Charges, effective October 1, 2024 (provided that delivery of the Series 2024 Warrants has occurred on or before September 1, 2024), and which endeavors to mirror annual rate increases consistent with the 2013 Rate Resolution. A copy of the 2023 Rate Resolution is attached as APPENDIX I to this Official Statement. See also "RISK FACTORS – Challenges to, or Revision of, the Rate Structure" in the front portion of this Official Statement.

The following table shows the primary components of the rate structure as currently in effect:

Charge Description	**Amount**
Monthly base charge (5/8" meter)	$25.01
Monthly base charge (3/4" meter)	$27.50
Monthly base charge (1" meter)	$34.97
Monthly base charge (1.5" meter)	$44.98
Monthly base charge (2" meter)	$72.45
Monthly base charge (3" meter)	$274.67
Monthly base charge (4" meter)	$349.60
Monthly base charge (6" meter)	$524.39
Monthly base charge (8" meter)	$724.13
Monthly base charge (10" meter)	$923.87
Non-residential block volumetric charge	$13.12 per CCF
Residential block volumetric charge (first three CCF)	$7.52 per CCF
Residential block volumetric charge (next three CCF)	$11.68 per CCF
Residential block volumetric charge (additional CCF)	$13.33 per CCF
Surcharge for BOD (300 mg/l strength)	$1.3794 per pound
Surcharge for COD (750 mg/l strength)	$0.6897 per pound
Surcharge for TSS (300 mg/l strength)	$0.4554 per pound
Surcharge for FOG (50 mg/l strength)	$0.2855 per pound
Surcharge for TP (4 mg/l strength)	$5.4351 per pound
Septage and domestic wastewater charge	$99.90 per 1,000 gallons
Private meter application processing fee	$20.00 per application
Sewer impact fees for new connections to the system	$374.56 per fixture
Connection fee for properties currently on septic	$166.49
Impact fee refund charge (1-10 fixtures)	$33.32
Impact fee refund charge (11-50 fixtures)	$49.96
Impact fee refund charge (more than 50 fixtures)	$83.26
Connection permit (pre-installation)	$83.26
Connection permit (post-installation)	$915.58
Repair permit (pre-installation)	$83.26
Repair permit (post-installation)	$915.58

Tap permit	$249.73
Disconnection permit	$41.65
Grease trap annual inspection fee (1-5 units)	$499.43
Grease trap annual inspection fee (6-10 units)	$832.32
Grease trap annual inspection fee (additional units)	$332.95 per 5 additional units
Grease trap non-compliance fee	$665.88
Grease trap re-inspection fee	$665.88
Grease trap exemption fee	$499.43
Grease trap waste charge	$124.88 per 1,000 gallons
Lien recording fee	$26.66
Lien satisfaction fee	$26.66
Return check fee	$30.00
Payoff amount	$6.70 per sheet

Residential customers are given a 15% credit to account for water that does not enter the customer's sewer lines at their home. Residential customers who install a secondary, private meter for irrigation in accordance with County regulations are not entitled to the 15% credit, but receive a volumetric credit based on secondary meter readings.

Description of the System

General. The System's service area covers approximately 448 square miles and consists of approximately 3,224 miles of sanitary sewer lines (3,114 miles gravity and 110 miles force main), nine water reclamation facilities ("WRFs", also referred to as "wastewater treatment plants" or "WWTPs"), 177 pump/lift stations and 83,128 manholes. The service area is characterized by gently rolling topography, and, due to the nature of the topography, a large gravity sewer network is needed to collect and transmit sewage. Pump stations transfer these flows to other pump stations and gravity mains and eventually to their respective WRFs.

The System serves 23 municipalities, unincorporated Jefferson County and small portions of Shelby County and St. Clair County. Of the System's approximately 145,395 total accounts, approximately 2,400 are estimated to be located in Shelby County and approximately 650 are estimated to be located in St. Clair County. Almost all of the accounts located in Shelby County and St. Clair County are residential customers. All other customers, both residential and non-residential, are located within the County. The following is a map of the estimated service area of the System:

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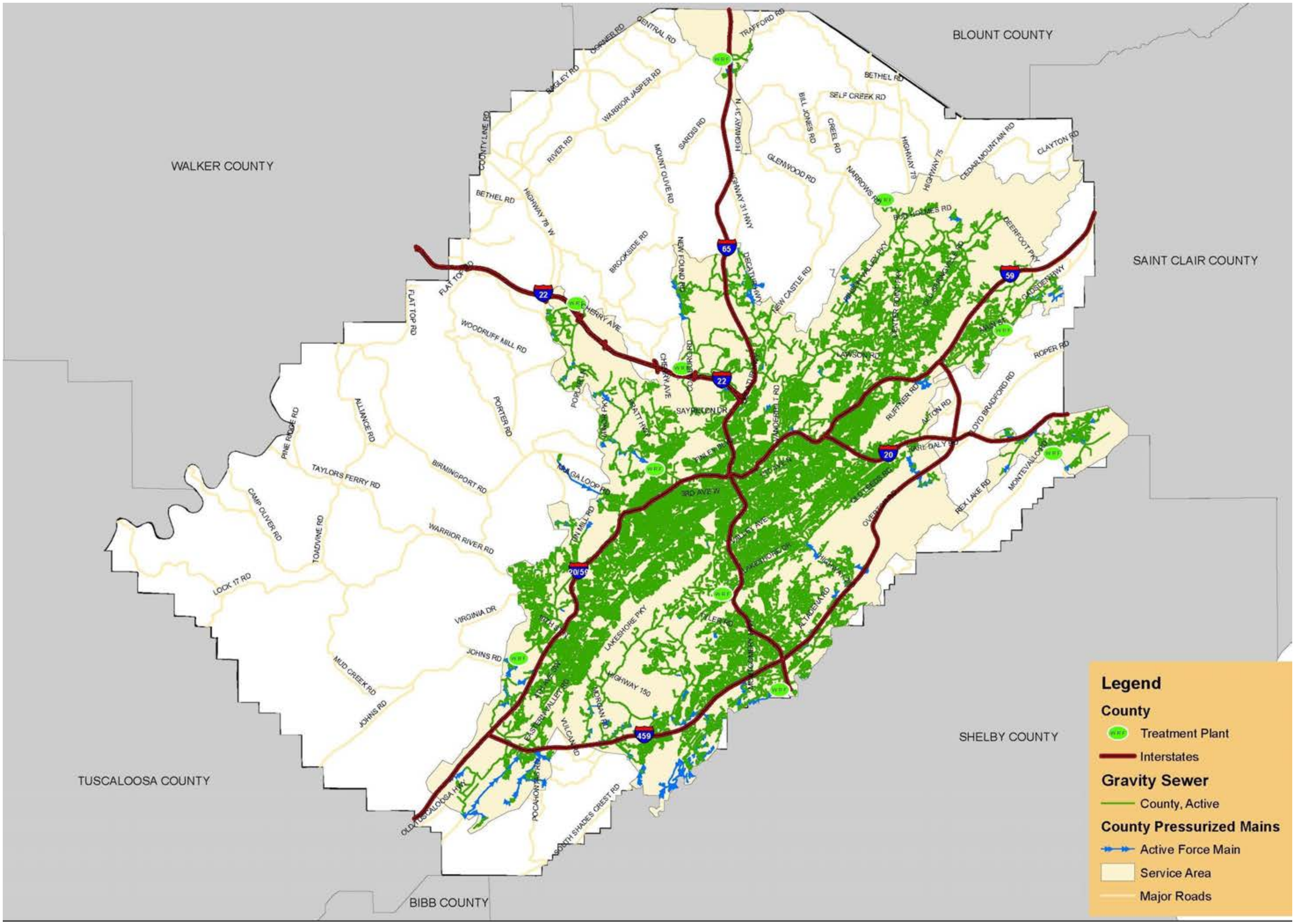
BLOUNT COUNTY
WALKER COUNTY
SAINT CLAIR COUNTY
TUSCALOOSA COUNTY
SHELBY COUNTY
BIBB COUNTY
Legend
County
Treatment Plant
Interstates
Gravity Sewer
County, Active
County Pressurized Mains
Active Force Main
Service Area
Major Roads

Water Providers to Users of the System. Users of the System receive water service from independent utilities located in Birmingham, Bessemer, Trussville, Irondale, Leeds, Graysville, Warrior River and Mulga. Of these utilities, the Birmingham and Bessemer systems, through contractual agreements, provide combined water and sewer billing, while customers of the remaining systems are billed directly by the County for sewer service only. Of those accounts estimated to have been billed during fiscal year 2022, The Water Works Board of the City of Birmingham ("BWWB") is estimated to have billed roughly 78% of accounts, Bessemer Utilities, acting as a department of the City of Bessemer ("Bessemer"), is estimated to have billed roughly 12% of accounts, and the County is estimated to have billed roughly 10% of accounts.

Residential and Non-Residential Accounts. Based on 2022 billing system records, the County estimates the System serves approximately 133,181 residential and 12,214 non-residential connections. Residential accounts primarily include single-family homes and duplexes, and non-residential accounts include larger multi-family residences, retail, office, restaurant, hotel and industrial users. The County estimates that, for fiscal year 2022, approximately 58% of System Revenues were from non-residential accounts, and that approximately 42% of System Revenues were from residential accounts.

Historical Sewer Rates for the System. The following is a summary of historical sewer rates and typical 5 CCF residential bills for the System for fiscal years ended September 30, 2014, through September 30, 2023:

	FY 2014[1]	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Base Charge										
5/8 inch meter	$ 15.00	$ 16.18	$ 17.46	$ 18.84	$ 20.33	$ 21.04	$ 21.78	$ 22.55	$ 23.34	$ 24.16
3/4 inch meter	16.50	17.80	19.21	20.73	22.37	23.15	23.96	24.80	25.67	26.57
1 inch meter	21.00	22.66	24.44	26.37	28.45	29.44	30.47	31.54	32.65	33.79
1 1/2 inch meter	27.00	29.13	31.43	33.91	36.59	37.87	39.20	40.57	41.99	43.46
2 inch meter	43.50	46.93	50.64	54.64	58.95	61.01	63.14	65.35	67.64	70.00
3 inch meter	165.00	178.02	192.06	207.21	223.56	231.36	239.44	247.80	256.45	265.40
4 inch meter	210.00	226.57	244.45	263.74	284.55	294.48	304.76	315.40	326.41	337.81
6 inch meter	315.00	339.85	366.67	395.60	426.81	441.71	457.13	473.09	489.61	506.70
8 inch meter	435.00	469.32	506.35	546.30	589.40	609.97	631.26	653.30	676.11	699.71
10 inch meter	555.00	598.79	646.03	697.00	751.99	778.23	805.40	833.51	862.60	892.71
Residential Volume Charge, per CCF										
0 - 3 CCF	$ 4.50	$ 4.86	$ 5.24	$ 5.65	$ 6.10	$ 6.31	$ 6.54	$ 6.77	$ 7.01	$ 7.26
4 - 6 CCF	7.00	7.55	8.15	8.79	9.48	9.81	10.16	10.52	10.89	11.28
7 CCF & Above	8.00	8.63	9.31	10.04	10.83	11.21	11.61	12.02	12.44	12.88
Non-Residential Volume Charge, per CCF										
All CCF	$ 7.87	$ 8.49	$ 9.16	$ 9.88	$ 10.66	$ 11.03	$ 11.42	$ 11.82	$ 12.24	$ 12.67
Residential Bill[2]	***$ 42.50***	***$ 45.86***	***$ 49.48***	***$ 53.37***	***$ 57.59***	***$ 59.59***	***$ 61.72***	***$ 63.90***	***$ 66.15***	***$ 68.50***
Bill increase	*13.3%*	*7.9%*	*7.9%*	*7.9%*	*7.9%*	*3.5%*	*3.6%*	*3.5%*	*3.5%*	*3.6%*

1 - Rates effective on November 1 for FY 2014, FY 2015, and FY 2016; on October 1 (beginning of FY) for subsequent years

2 - The monthly bill for residential accounts of the System with billable flows of 5 CCF and a 5/8 inch meter

National Sewer Rates. Two national rate surveys of water and sewer bills across major metropolitan areas are published bi-annually, with the most recent data available being for 2023. These surveys demonstrate that, as of 2023, the County's sewer rates were among the highest in the United States among major metropolitan communities. See Figure 8-2 of the Feasibility Study attached as APPENDIX E to this Official Statement for a representation of basic water and sewer bill data on the 50 largest cities in the United States. The following chart presents this data for selected metropolitan areas for residential users of 5 CCF and commercial users of 500 CCF (billable flows).

Service Provider[1]	Wastewater Charges 5 CCF[2]	500 CCF[3]
Honolulu	$94.87	NR[4]
San Francisco	$85.06	NR
Seattle	$85.05	NR
Kansas City	$76.57	NR
Jefferson County, AL	$68.50	$6,405.01
Cleveland (NEORSD)	$65.60	NR
Atlanta	$63.06	NR
Portland (OR)	$61.75	NR
Portland (ME)	$59.00	NR
New York City (Water Board)	$57.84	NR
New Orleans (SWBNO)	$57.26	$3,374.66
Indianapolis (Citizens Energy)	$53.90	NR
Cincinnati (MSDGC)	$50.88	$2,561.34
Toledo	$48.95	$2,845.12
Corpus Christi	$45.80	NR
Tulsa MUA	$43.81	$3,530.44
Charlotte Water	$41.34	$2,805.24
Asotin County PUD	$40.00	NR
San Diego	$38.39	NR
Austin	$37.86	NR
Gwinnett County	$37.57	NR
Houston	$33.33	$3,035.15
Jacksonville (JEA)	$32.58	$2,420.84
East Bay MUD	$29.93	NR
Fort Worth	$27.70	$1,213.75
Oklahoma City	$25.96	NR
Salt Lake City	$25.65	NR
Sacramento	$25.60	NR
Dallas	$25.06	$1,734.35
San Antonio	$21.59	$1,586.03
Miami-Dade County	$20.83	$3,530.26
Milwaukee Water Works	$16.54	$1,034.19
Albuquerque - Bernallilo Cty	$11.39	$902.62
Philadelphia Water	$8.89	$204.72

1 - Table sorted by 5 CCF bill
2 - Assumes residential customer with a 5/8 inch meter
3 - Assumes commercial customer with a 2 inch meter
4 - Information not reported

Utilization Data. The following table sets forth certain essential utilization data with respect to the System for fiscal years 2017 through 2022.

Fiscal Year Ended September 30,	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Active Accounts	141,632	140,012	141,124	142,228	143,657	145,395
Average Daily Treatment Volume (millions of gallons treated)	110	116	122	134	130	127
Sewer Charges (in thousands)[1]	$210,709	$223,789	$229,929	$227,376	$222,674	$243,639
% Revenue – Largest Account[2]	3.08%	3.39%	3.81%	3.20%	3.74%	3.13%
% Revenue – Top Ten Accounts[2]	8.89%	9.34%	10.31%	8.85%	9.96%	7.94%

[1] – Excludes proceeds from the Sewer Tax
[2] – Largest Account and Top Ten Accounts based on annual charges billed

Water Reclamation Facilities ("WRFs"). As mentioned above, the County operates nine WRFs as part of the System. The following presents summary details of the various WRFs. For additional information relating to each WRF, see Section 3.6 of the Feasibility Study attached as APPENDIX E to this Official Statement.

Cahaba River Water Reclamation Facility. The Cahaba River Plant is located in Hoover downstream of the I-65 bridge over the Cahaba River. The plant receives sewage flow from Hoover, Bluff Park, Vestavia, Rocky Ridge, Acton Valley, Cahaba Heights and a portion of Riverchase that is within Jefferson County. Built in 1984, the plant has an annual average daily design capacity of 12 MGD with a peak day flow capacity of 35 MGD. In 1993, the Patton Creek WRF was removed from service and its flow was transferred to the Cahaba River WRF. That same year, construction began to improve and increase the plant's peak flow treatment capabilities. These improvements along with the construction of the Al Seier Road Pump Station and Bluff Park Tunnel allowed the elimination of the Horse Farm and Hurricane Branch automatic bypasses. The Cahaba River Plant is staffed 24 hours per day, seven days a week.

Five Mile Creek Water Reclamation Facility. The Five Mile Creek Plant located in Lower Coalburg receives sewage from Tarrant City, Inglenook, Lewisburg, Roebuck, Center Point, Grayson Valley, the southern end of Pinson Valley, Fultondale and southern Gardendale. This facility was placed into operation in 1978 with a 10 MGD capacity. It replaced the Boyles Treatment Plant located in Tarrant. Since then, the plant has undergone major revisions and in 1991 was expanded to become a 20 MGD activated sludge plant with a 40 MGD peak hydraulic capacity. In 1999, the County installed improvements identified in the Five Mile Creek Waste Treatment System Capital Improvement Plan. This work was completed in advance of the April 1, 2000 construction completion deadline in the EPA Consent Decree (hereinafter defined). The Tarrant Springs and the Barton Branch automatic bypasses were removed in 2000, sending all wastewater flows to the plant. In December 2008, construction was substantially completed to increase the average daily treatment capacity of the plant from 20 MGD to 30 MGD and increase the peak flow treatment capacity from 40 MGD to 50 MGD. Plant employees staff the Five Mile Creek Plant 24 hours per day, seven days a week.

Leeds Water Reclamation Facility. The Leeds Plant is located in the City of Leeds off Montevallo/Cahaba Valley Road. The plant receives sewage flow from the City of Leeds, including small parts of St. Clair and Shelby Counties. The construction of the Leeds WRF at its current location began in November 1993. The facility began discharging April 20, 1995. The plant's average daily treatment capacity was increased to 2.0 MGD, and it has peak daily design capacity of 10 MGD.

Prudes Creek Water Reclamation Facility. The Prudes Creek Plant serves the Cities of Graysville and Adamsville. The former plant was a 600,000 gallon average daily design capacity facility that was originally constructed in 1986. From April 1997 to June 1999, a project was completed that addressed improvements identified in the Initial Waste Treatment System Capital

Improvement Plan for the Prudes WRF. The upgrades in the plant were substantially completed in January 2006, and currently the plant has a 0.9 MGD average daily design flow capacity and a daily peak flow capacity of 3.5 MGD. The plant is staffed one shift per weekday. During off shift periods and weekends, it is controlled and operated from the Five Mile Creek WRF via a Supervisory Control and Data Acquisition ("SCADA") system, which enables electronic monitoring and remote control of certain process equipment.

Trussville Water Reclamation Facility. The Trussville WRF is located in the City of Trussville behind the City Hall and receives flow from the City of Trussville and an area along U.S. Highway 11 between Trussville and I-459. The Trussville WRF, reconstructed in 1998 and subsequently upgraded, has a permitted capacity of 4.0 MGD. The facility is designed to treat a peak flow of 16.9 MGD. This facility is staffed eight hours per day, seven days a week.

Turkey Creek Water Reclamation Facility. The Turkey Creek WRF is located in Pinson just off The Narrows Road. The plant receives sewage flow from Pinson, the Sweeney Hollow Road area, and northern Center Point. A former plant was originally constructed on the site in 1970 and had a 4.0 MGD average daily flow capacity. The facility then underwent upgrades in the 70's, 80's and 90's, and was decommissioned on April 1, 2004 when the existing plant became operational. Currently, the plant is permitted for 5.0 MGD, designed for a 10.0 MGD average daily flow and has a peak hydraulic capacity of 25 MGD. This facility is staffed eight hours per day, seven days a week.

Valley Creek Water Reclamation Facility. The Valley Creek Plant is located in West Bessemer near the intersection of Johns Road and Powder Plant Road. The plant receives sewage flow from the Central Park – Fairgrounds area, Fairfield, Midfield, Powderly, Roosevelt City, Brighton, Lipscomb, Bessemer, Hueytown, Pleasant Grove, Dolomite, Garywood, Wylam and McCalla. The Valley Creek Plant also receives all the flow from the Shades Valley basin, including Irondale, Mountain Brook, Homewood and portions of Birmingham south of Red Mountain. The treatment capacity of the facility was expanded to an average day design flow of 85 MGD and a peak biologic treatment capacity of 170 MGD with an additional 110 MG of storage volume for peak flow equalization. This plant is staffed 24 hours per day, seven days a week.

Village Creek Water Reclamation Facility. The Village Creek Plant is located in Pratt City and receives sewage flow from most of the downtown Birmingham area, including Southside, West End, Avondale, Woodlawn, East Lake, Huffman, North Birmingham, Ensley, Pratt City, Forestdale and Hooper City. The Village Creek WRF was one of the original County treatment plants constructed in 1905. The plant was upgraded and expanded several times prior to the work undertaken in conjunction with the EPA Consent Decree. The Village Creek WRF consists of two treatment plants (with different treatment process units) designed to operate independently or in conjunction with each other. Plant 001 (old plant) and Plant 002 (new plant) have an average daily design flow combined capacity of 120 MGD and a combined peak hydraulic capacity of 240 MGD. Both facilities share the same solids treatment process. This facility is staffed 24 hours per day, seven days a week.

Warrior Water Reclamation Facility. The Warrior Plant is located to the west of the City of Warrior. A former plant was a 0.1 MGD average daily design capacity facility that was constructed in 1987, modified in 1996, and decommissioned on July 31, 2006, when a new plant became operational. Currently the plant is permitted for 0.1 MGD average daily flow, though it is designed for a 0.2 MGD average daily flow and has a peak hydraulic capacity of 0.5 MGD. This facility is staffed 4 hours per day, 3 days per week. Other times, this facility is monitored at the Turkey Creek WRF.

The WRFs range in dry weather capacity from 0.1 MGD to 120 MGD. The force main length and gravity main length for each of the nine WRFs are as follows:

WRF	Force Main Length (Linear Feet)	Gravity Main Length (Linear Feet)
Cahaba River	75,342	1,849,780
Five Mile Creek	51,572	2,241,009
Leeds	31,048	267,863
Prudes Creek	16,408	152,216
Trussville	29,929	499,618
Turkey Creek	7,565	591,996
Valley Creek	315,515	7,447,156
Village Creek	47,760	3,346,161
Warrior	8,711	44,828
Total	**583,851**	**16,439,626**

The following table provides the National Pollutant Discharge Elimination System ("NPDES") permit number, expiration date and receiving stream for each of the County's WRFs:

WRF	NPDES Permit #	Permit Expiration Date	Receiving Stream
Cahaba River	AL0023027	November 30, 2024	Cahaba River
Five Mile Creek	AL0026913	June 30, 2026	Five Mile Creek
Leeds	AL0067067	December 31, 2027	Little Cahaba River
Prudes	AL0056120	July 31, 2024	Five Mile Creek
Trussville	AL0022934	May 31, 2023*	Cahaba River
Turkey Creek	AL0022926	June 30, 2026	Turkey Creek
Valley Creek	AL0023655	April 30, 2028	Valley Creek
Village Creek	AL0023647	June 30, 2026	Village Creek
Warrior	AL0050881	December 31, 2025	Cane Creek

* This permit has been administratively extended and is currently valid under ADEM rules and procedures.

Pump Stations. The County operates 177 pump stations located throughout the service area. These stations are monitored and maintained daily by the Pump Station Operation and Maintenance Division of the Environmental Services Department and are not permanently staffed. All stations located in the collection system are equipped with remote monitoring units, which collect hourly runtimes and pump starts and provide alarms for various conditions at the station. In addition, the Al Seier Road Pump Station and Prudes Creek #1 and #2 Pump Stations are operated and maintained by personnel of the Cahaba River WRF and Five Mile Creek WRF, respectively, and are considered part of those WRFs' infrastructure. The following table sets forth the number of pump stations in each sewer basin:

Area	Number of Pump Stations
Cahaba River	22
Five Mile Creek	29
Leeds	9
Prudes Creek	6
Trussville	8
Turkey Creek	2
Valley Creek	77
Village Creek	22
Warrior	2
TOTAL	**177**

Pretreatment Facility. The System includes a pretreatment facility known as the Scott's Branch Pretreatment Facility. This facility is located on the site of the former Shades Valley treatment plant, which was originally constructed in 1928. The Shades Valley Plant ceased discharging in 1985 and operated until 2019 as a 0.5 MGD pretreatment facility, reducing the strength of high strength wastewater from upstream industries. The plant discharges into the Shades Valley Transfer Sewer that conveys flows to the Valley Creek WRF. The pretreatment facility consists of a 3.75 MGD influent pump station, three vertical loop reactors and two clarifiers. The pretreatment processes were taken offline in 2020 after the addition of a chemical addition system.

In 2019, a temporary chemical feed and storage system was added at the site as an alternative treatment method to prevent the formation of odorous and corrosive compounds in the downstream sewers. In late 2020, a permanent chemical treatment system was constructed and the existing pretreatment facilities were taken out of service.

Barton Laboratory. The System includes the Barton Laboratory, which is responsible for consolidated laboratory services and compliance monitoring for all WRFs. These services include testing effluent discharge samples for compliance with applicable water quality regulations and strength sampling of influent.

Sewer Plant Maintenance Shops. The County has electrical, electronic and mechanical maintenance shops at the Village Creek, Valley Creek and Five Mile Creek Plants. The shops perform maintenance activities at all of the WRFs.

Biosolids Program. This operation is responsible for land application and solids management for all WRFs. The County disposes of biosolids resulting from the treatment processes at the WRFs through a program of land application. Biosolids are periodically applied at the Flattop and Beltona Land Application sites. These sites are former strip mining locations. The Beltona Land Application site receives biosolids from the Village Creek WRF that have been lime stabilized. Biosolids at the Beltona Land Application site are beneficially used to grow hay that is baled and used for erosion control. The Flat Top Land Application site receives biosolids from the nine WRFs in the County. Biosolids are comingled at the site and are beneficially used for mine reclamation by building topsoils over the rocky surface.

Current Status of the System

The status and condition of the System is described in the Feasibility Study attached as APPENDIX E to this Official Statement. The collection system experiences overflows periodically, but, as of the date of this Official Statement, five of the County's nine basins have been released from the EPA Consent Decree. See "The EPA Consent Decree" below. The System's treatment plants are operating effectively and are complying with their respective permits. Portions of the collection system remain in need of continued rehabilitation, replacement and upsizing to address wet-weather overflows and to effectively maintain the System. The County has implemented asset management systems for the collection system and WRFs and will plan and execute System replacement and improvement priorities based on operating condition, performance and expected levels of service. See "Capital Improvement Program" below. **PROSPECTIVE INVESTORS MUST READ THE ENTIRE OFFICIAL STATEMENT, INCLUDING THE FEASIBILITY STUDY, IN ITS ENTIRETY TO OBTAIN INFORMATION IMPORTANT TO MAKING AN INFORMED INVESTMENT DECISION RESPECTING THE SERIES 2024 WARRANTS.**

Capital Improvement Program

The Environmental Service Department's capital improvement plan (the "CIP") is continually reevaluated and updated. The CIP has aggregate expenditure requirements of $1,033,000,000 for the fiscal years ended September 30, 2023, through September 30, 2032. The following sets forth projected capital project expenditures within the CIP by major program element in nominal dollar terms and the planned sources and uses of capital project expenditures. As shown below, projected capital expenditures over the forecast period will be funded primarily through existing capital reserves (32.5% of the required funds) and funds from System Revenues, or "PAYGO Financing" (64.6% of the required funds). Dollar amounts shown in the chart immediately below are in millions.

Project Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Annual Capital Escalation Rate		*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*
WRF Repair, Replacement & Renewal	$ 48.9	$ 46.3	$ 68.1	$ 21.8	$ 32.0	$ 40.1	$ 19.2	$ 29.4	$ 30.4	$ 22.2
WRF Regulatory Compliance	-	0.0	0.2	0.5	1.5	5.2	-	-	-	-
SSO Abatement & Capacity Improvement	10.1	23.0	31.5	34.7	11.3	15.6	1.0	-	-	0.2
Sanitary Sewer Repair & Replacement	8.5	2.5	6.5	7.3	9.1	5.8	6.0	6.1	6.8	6.5
Collection System Rehabilitation	22.3	33.2	21.9	13.4	15.6	15.7	18.4	17.4	20.3	17.0
Pump Station Upgrades	5.8	19.1	17.9	29.9	24.5	8.2	7.5	7.2	8.9	6.5
Capital Equipment[1]	5.2	5.7	4.8	4.9	5.1	5.2	6.0	7.4	7.6	6.0
Professional & Engineering Services[2]	10.5	8.3	8.3	9.0	7.5	7.8	7.3	8.8	10.1	8.2
TOTAL	**$ 111.3**	**$ 138.1**	**$ 159.2**	**$ 121.6**	**$ 106.6**	**$ 103.6**	**$ 65.4**	**$ 76.4**	**$ 84.1**	**$ 66.6**

1 - Includes limited capitalized right-of-way (ROW) acquisition expenditures

2 - Includes expenditures for information technology infrastructure and hydraulic modeling support and services

	Total FY 2023-2032	Percent of Total
Uses of Funds		
WRF Repair, Replacement & Renewal	$ 358,351,159	34.7%
WRF Regulatory Compliance	7,437,698	0.7%
SSO Abatement & Capacity Improvement	127,502,140	12.3%
Sanitary Sewer Repair & Replacement	65,229,212	6.3%
Collection System Rehabilitation	195,188,081	18.9%
Pump Station Upgrades	135,502,021	13.1%
Capital Equipment	57,804,590	5.6%
Professional & Engineering Services	85,995,666	8.3%
Total Uses of Funds	**$1,033,010,567**	**100.0%**
Sources of Funds		
Existing Capital Reserves[1]	$ 336,010,567	32.5%
PAYGO Financing	667,000,000	64.6%
Future Sewer Warrant Proceeds	-	0.0%
ARPA Funds	30,000,000	2.9%
Total Uses of Funds	**$1,033,010,567**	**100.0%**

1 - Excludes $10.3 million in unused reserves that will remain in the Construction Fund at the end of FY 2032

Details regarding the development, nature and composition of the CIP, and additional information concerning the source of funds to cover costs of the CIP within the ten-year forecast period, are contained in Section 7.0 (entitled "Capital Project Expenditures") and Section 8.8 (entitled "Capital Financing"), respectively, of the Feasibility Study attached as APPENDIX E to this Official Statement.

Major Accounts

Listed below are the top ten accounts of the System during the fiscal year of the County ended September 30, 2022, and the related consumption and sewer service charges billed:

Major Sewer User	Consumption (CCF)	Annual Sewer Service Charges Billed (in thousands)
University of Alabama at Birmingham "UAB"	606,691	$7,623
Birmingham Housing Authority	259,609	3,217
U.S. Steel	114,665	1,419
Tenet Healthcare	95,962	1,189
Samford University	94,542	1,175
St. Vincent's Hospital	94,851	1,171
SMI Steel, Inc.	93,637	1,152
Veterans' Administration	71,335	885
Dairy Farmers of America, Inc.	61,531	759
Valora at Homewood BL LLC	60,520	743
Total	1,553,343	$19,333

Sewer Tax

The Sewer Tax is levied and collected by the County as a 0.7 mill ad valorem tax for the purpose of paying a portion of the costs of improving, maintaining and operating the System. Proceeds from the Sewer Tax are not pledged for payment of the Series 2024 Warrants. For the fiscal year that ended September 30, 2022, the revenues derived from the Sewer Tax were approximately $7.571 million. The County does not possess the power to increase the Sewer Tax without authorization from the Alabama Legislature and approval by the public at a State-wide election held not less than three months after adjournment of the session of the Alabama Legislature in which the amendment was proposed. See "RISK FACTORS – Sewer Tax Proceeds" in the front portion of this Official Statement.

Billing, Collection and Rate Making Authority

Billing Partners. As noted above, the System has two billing partners in addition to its own billing operation, BWWB and Bessemer. BWWB and Bessemer provide billing services to approximately 90% (by volume) of the System's customers. The remaining customers, who are served by water utilities in Irondale, Trussville, Graysville, Warrior River, Leeds and Mulga, are billed directly by the System's billing operation. For BWWB and Bessemer, sewer charges are billed to customers at the same time and on the same billing statement as water charges are billed. Customers in those service areas make one payment for both water and sewer service each month, and thus for BWWB and Bessemer, sewer charges are collected/billed at the same time as water charges. Typically, BWWB remits sewer collections to the County on a weekly basis, and Bessemer remits billings to the County on a monthly basis.

Billing Contract with Birmingham Water Works Board. By Act No. 886 adopted at the 1961 Regular Session of the Alabama Legislature ("Act No. 886"), the County was authorized to require BWWB to collect service charges for use of the System from BWWB's water customers as a separate item on BWWB's water bills. Act No. 886 prohibits the payment of one bill without the payment of the other and requires that BWWB discontinue water service for nonpayment of either the water or sewer service charge within thirty days after billing. On August 22, 1961, BWWB and the County entered an agreement to implement the provisions of Act No. 886 (the "1961 Collection Agreement"). Act No. 886 prescribes a collection charge of not less than 5% nor more than 10% of the amount collected as agreed by BWWB and the County and, should they fail to agree, a charge of 7½% of such amount. During the period from 1961 to 2018, the Collection Agreement was amended from time to time to establish a collection charges mutually acceptable to the County and BWWB.

On February 22, 2018, the County and BWWB entered a new Joint Billing and Collection Agreement (the "2018 Collection Agreement") to provide for the billing and collection of County charges from the System. The 2018 Collection Agreement had an initial term of roughly five years, with provisions for additional one-year extensions. In 2022, prior to the end of the last annual extension term in then in effect, BWWB notified the County that it was not electing to extend the 2018 Collection Agreement. The County and BWWB then entered a short-term extension of the 2018 Collection Agreement to permit time to negotiate a new collection agreement.

2023 Collection Agreement with BWWB.

New Agreement. On April 12, 2023, the County and BWWB entered a new Joint Billing and Collection Agreement (the "2023 Collection Agreement") to provide for the billing and collection of County sewer charges. The 2023 Collection Agreement also extended the term of the 2018 Collection Agreement to December 31, 2023, after which the 2023 Collection Agreement becomes effective.

Initial Term and Fees Charged by BWWB to County. The 2023 Collection Agreement has a five (5) year initial term commencing January 1, 2024, and ending December 31, 2028 (the "Initial Term"). Under the 2023 Collection Agreement, the County and BWWB will jointly bill customers receiving both sewer service from the System by the County and water service from BWWB's water system, and BWWB will be responsible for preparing and delivering the joint bill to customers of those two systems. Under this arrangement BWWB is paid (i) a per meter per month fee (the "Base Fee") that increases 3% each year of the 2023 Collection Agreement, and (ii) an additional fee (the "Collection Fee") that, for the first year of the 2023 Collection Agreement, is three percent (3%) of all sewer sewage charges, less all County adjustments and credits, billed by BWWB (the "Collection Fee Percentage"). In the second year of the Collection Fee Percentage is 2.5%, and in the third year and thereafter the Collection Fee Percentage is 2%.

Automatic Meters and Changes to Fees Charged by BWWB to County. BWWB is presently evaluating the benefits and potential cost savings of installing and operating automatic meters ("AMRs"), and the County anticipates that a separate AMR cost study (the "AMR Cost Study") may be commissioned that could result in the reestablishment of the share of costs for billing, collecting and remitting sewer System charges. Per the 2023 Collections Agreement, following the AMR Cost Study, BWWB and the County will address the County's financial contribution toward AMRs through payment of the Base Fee or a combination of capital contributions by the County and the Base Fee. The manner in which the County would make its financial contribution for AMRs, and any change in the Base Fee or otherwise under the 2023 Collections Agreement, will be addressed in an amendment renewing the 2023 Collections Agreement.

Additional Terms; Termination of 2023 Collection Agreement. The 2023 Collection Agreement provides for successive renewals for additional five-year terms following the Initial Term. Beginning January 1, 2028, then every five (5) years during the term of the 2023 Collection Agreement, BWWB and the County shall jointly commission a cost study to determine an allocation of the mutually agreed upon joint billing costs associated with the billing and collection of sewer charges for use of the System. It is expected that a revised Base Fee for the then succeeding five-year term will be based on and derived from the results of such cost study. In the event BWWB and the County are unable to agree, by the end of the then applicable term, to amend and renew the 2023 Collection Agreement to reflect the new Base Fee, then the 2023 Collection Agreement shall terminate 365 days therefrom unless otherwise mutually agreed by the County and BWWB.

Additionally, under the 2023 Collection Agreement, either party may elect to terminate the said agreement upon 365 days' prior notice to the other party.

Absence of Billing Agreement with BWWB. In the absence of a billing and collection contract with BWWB, the County would either bill and collect for System services using internal resources or engage a third-party contractor for the same. While the County recently procured software for customer billings, it does not have a system or resources for direct customer billing and collections of BWWB users, and due to the substantial amount of time and resources necessary to create and implement such a system, there likely would be a substantial lag in customer bills and collections, along with associated reductions in revenues, during the initial years of system implementation. Also, whether using a third-party contractor and/or an internal system, the County would be reliant upon BWWB for customer data and water usage information for System charges and collections. See "RISK FACTORS – Collection Risks – Reliance on BWWB for Customer Data Necessary for Billing; Additional Legal Authority for Production of Customer Data" in the front portion of this Official Statement.

It is also noteworthy that the County lacks a mechanism to directly halt or otherwise disconnect service from any one or more customers of the System. Therefore, the County's primary recourse for delinquent and unpaid System bills is to rely on water shut-offs by BWWB, which could be unreliable. In addition, the County has the right to impose a lien on the property of System users for payment of past-due bills, but this process would be lengthy and inefficient, as it requires sending certain notices, recording certain items in the real property records and conducting foreclosure proceedings in accordance with Alabama law.

Charges and Adjustments. Monthly sewer charges reflect base charges, volume charges and other usage and class related billing determinants. Adjustments are then made by the County and its billing partners to the recorded sewer charges to arrive at the monthly revenue accrual. Adjustments include private meter credits, adjustments for leaks or usage anomalies, and adjustments for meter misreads. Other adjustments affecting monthly billed revenues include account charge-offs, returned checks, application of customer overpayments and final bill adjustments. Under the current BWWB billing contract, BWWB assumes liability for collection of sewer revenues; therefore, uncollectable accounts and charge offs are not a significant offset to revenue.

Method of Revenue Accounting. The County has adopted an accrual method of revenue accounting and employs an accounts receivable control schedule. At the end of each fiscal year, the County accrues an estimate of incurred, but unbilled, usage with corresponding adjustments to accounts receivable.

Private Meter Credits. Private meters comprise a significant portion of the monthly adjustments made to sewer charges. Private meters are secondary water meters installed on the customers' side of the primary billing meter, and are typically connected to dedicated irrigation lines, to outdoor fixtures or to swimming pools. Private meters measure an amount of water usage that is not returned to the sewer system. Residential customers who install a private meter must have the meter certified by System inspectors and, once installed, are not entitled to the 15 percent residential credit. See "Rate Structure" above. Customers with private meters are charged a monthly sewer amount based on the primary meter reading. Not more often than quarterly, a customer with a private meter may submit the reading from the private meter for credit to their account.

Delinquent Customer Accounts. As noted previously, sewer charges collected by BWWB are not subject to offset for delinquent accounts under the 2023 Collection Agreement with BWWB. Bessemer revenues are based entirely on the billed amount, and thus collections achieved by Bessemer are remitted to the County on a percentage basis. The County has the statutory authority on delinquent accounts to disconnect sewer service directly, unless the County health department overrides the shutoff for public health reasons. Through contract, the County may direct certain water providers (including BWWB, Trussville and Irondale) to shut off water to parcels when those parcels have delinquent County sewer bills. The County (with certain restrictions) has the power, to the extent permitted by Alabama law, to place a lien on the property of a customer whose sewer charges are delinquent no later than 12 months after the charges are billed.

System Management

The Director of the Environmental Services Department ("ESD"), David Denard, P.E., oversees the management, billing and administrative operations of the System under the direction of the County Manager, Cal Markert. The Chief Financial Officer for the County, Angela Dixon, is responsible for finance and accounting for the System. The Commission retains the responsibility for all financial policy making decisions respecting the System.

Mr. Denard has administered the management and administrative operations of the System since November 2007. Mr. Denard earned a Bachelor of Science in Civil Engineering degree from the University of Alabama at Birmingham. Mr. Denard is a registered Professional Engineer in the State of Alabama and has over twenty (20) years of engineering experience. Mr. Denard oversees the daily operations of the System, including wastewater treatment, collection system management, billing and collections, planning and budgeting.

The Deputy Director for Capital Planning for ESD, Daniel White, P.E., is responsible for budgeting, capital planning and engineering for the System.

Mr. White earned a Bachelor of Science in Civil Engineering degree from the University of Alabama at Birmingham. Mr. White is a registered Professional Engineer in the State of Alabama and has over twenty-four (24) years of engineering experience in wastewater and prior experience in residential development.

The Deputy Director for WRF Operations for ESD, Margaret Tanner, P.E., is responsible for water reclamation facility and collection system operations for the System. Ms. Tanner earned a Master's of Science in Civil Engineering from Auburn University. Ms. Tanner is a registered Professional Engineer in the States of Alabama and Georgia and has almost 40 years of experience in water, wastewater and other engineering fields.

The Deputy Director for Collection System Operations for ESD is currently vacant and planned to be filled in the future.

For biographical information regarding Cal Markert, Angela Dixon and other County officers, see APPENDIX D – "THE COUNTY; GOVERNMENT; FINANCIAL SYSTEM – County Management" attached to this Official Statement.

Environmental Services Department

The Environmental Services Department is organized into six functional areas that are divided into 24 budgetary divisions, primarily by function and location. The six functional areas are as follows: (1) impact and plans review; (2) billing, budget and human resources; (3) regulatory compliance; (4) engineering and capital project management; (5) collection system operations; and (6) water reclamation facility operations. As of September 1, 2023, the Environmental Services Department has a total of 550 budgeted positions, of which 448 are presently filled. See APPENDIX D - "THE COUNTY; GOVERNMENT; FINANCIAL SYSTEM – County Employees and County Employment Decisions" for information concerning the current process for hiring within the County.

Impact and Plans Review. This area includes the Impact Division within the Administration Division. This area reviews and approves private development work that affects the System and requires County approval. This includes assessing charges for new connections to the System and assuring that new connections can be properly served by the public system, and that privately constructed modifications to the public system adhere to the County's specifications.

Billing, Budget and Human Resources. This area is responsible for the portion of the billing services performed by the County and assuring that billing services performed by others are timely and accurate. The Environmental Services Department's budget preparation and tracking as well as human resource functions are handled in this area in coordination with other County departments. This functional area includes the Sewer Billing division and portions of the Administration division.

Regulatory Compliance. This area includes the administration of the County's industrial pretreatment program and the operations of the Barton Laboratory. This area is responsible for working with the other areas to assure that state and federal regulatory requirements are satisfied.

Engineering and Capital Project Management. This area is responsible for all construction, condition assessment, asset management and capital replacement and maintenance activities performed by ESD employees and contractors in the collection system. This area includes three divisions that handle a variety of services such as construction, inspection and surveying.

Collection System Operations. This area is responsible for sewer cleaning and maintenance, sewer inspection and pump station operations and maintenance. This area includes five divisions and is responsible for continuing to implement the County's efforts to achieve system performance that will result in the final termination of the EPA Consent Decree.

Water Reclamation Facility Operations. This area is responsible for the operations of the County's nine treatment facilities and its biosolids program. This area is separated into 13 divisions, including the staff required to operate and maintain the treatment facilities.

The following table shows the breakdown of budgeted and filled positions for the 24 budgetary divisions of the ESD:

		Number of Employees	
Budget Division	**Division Number**	**Filled**	**Budgeted**
Administration/Impact	7100	52	58
Sewer Billing	7101	14	15
Barton Laboratory	7102	17	20
Inspection	7210	23	24
Survey	7211	12	13
Construction	7230	18	24
Pump Stations	7240	22	26
Line Maintenance Administration	7250	8	13
Village Line Maintenance	7252	18	27
Shades Line Maintenance	7253	41	53
TV Inspection	7270	34	36
Cahaba River	7301	20	26
Five Mile Creek	7302	20	24
Leeds	7303	7	8
Trussville	7304	4	8
Turkey Creek	7305	5	7
Valley Creek	7306	31	46
Village Creek	7307	34	50
Five Mile Maintenance	7320	8	8
Valley Maintenance	7321	11	13
Village Maintenance	7322	12	13
Village Electrical	7323	13	14
Instrumentation	7324	10	10
Biosolids	7330	14	14
		448	550

Functional Support Services. Various departments of the County that are outside the System enterprise operations, such as the County's finance, accounting, purchasing, payroll, budget management, legal services, information technology, human resources, right-of-way, and fleet management departments, provide services for the Environmental Services Department. The costs allocated to the Environmental Services Department for these services are based on a County-wide indirect cost allocation study and direct charges for parts and supplies. See the second table within the subsection entitled "Summary of Revenues and Expenditures" below.

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Certain Financial Information Concerning the System

Summary of Results of Operations. The following table shows the historical operating results of the System (exclusive of depreciation) for the fiscal years ended September 30, 2018, through September 30, 2022, as taken from the audited financial statements of the County for the fiscal year indicated. All dollar amounts shown below are in thousands.

	2018	2019	2020	2021	2022
Revenues					
Service Revenues	$223,789	$229,929	$227,376	$222,674	$243,639
Intergovernmental[(1)]	109	109	110	111	-
Other Operating	694	753	628	13,652	15,599
Subtotal[(2)]	$224,592	$230,791	$228,114	$236,437	$259,238
Expenses					
Operating Expenses[(3)]	73,906	81,301	91,226	91,243	94,149
Revenues over Expenses	**$150,686**	**$149,490**	**$136,888**	**$145,194**	**$165,089**

1 Taxes and Intergovernmental were reclassified in 2022 to Nonoperating Revenue and Miscellaneous Revenue, respectively.
2 Proceeds from the Sewer Tax are legally restricted, and were used, for payment of operating expenses and capital improvements to the System. Even though use of such tax for System operating expenses reduces the amount of operating expenses otherwise permitted to be covered by System revenues, Sewer Tax revenues are not reflected in this chart because the Sewer Tax is not legally permitted to be used or pledged for payment of debt service. See "Sewer Tax" above.
3 Excludes depreciation. See "Summary of Revenues and Expenditures" below.

Summary of Revenues and Expenditures - Audited. The following table sets forth the consolidated revenues, expenditures and changes in fund balance with respect to the System for each of the past five fiscal years. Such information is taken from the audited financial statements for the County for the fiscal years ended September 30, 2018, through and including September 30, 2022, and should be read in conjunction with the financial statements of the County, and the associated notes to such financial statements, as of and for the fiscal year ended September 30, 2022, attached as APPENDIX H to this Official Statement.

(amounts shown in thousands)

	2018	2019	2020	2021	2022
Operating Revenues					
Taxes	$6,441	$6,564	$7,213	$7,567	-
Intergovernmental	109	109	110	-	-
Charges for services, net	223,789	229,929	227,376	-	-
Charges for services:					
Sewer Sales	-	-	-	222,674	243,639
Other	-	-	-	13,652	15,599
Other operating revenue	694	753	628	-	-
Total operating revenue	231,033	237,355	235,327	243,893	259,238
Operating Expenses					
Salaries	20,899	23,026	25,505	-	-
Employee benefits and payroll taxes	7,245	4,461	7,087	-	-
Salaries and benefits	-	-	-	34,337	29,695
Maintenance and operating	12,905	12,046	12,464	11,311	14,827
Materials and supplies	4,959	6,901	6,051	6,321	7,796
Utilities	9,750	9,481	10,527	10,034	10,465
Outside services	11,977	18,561	18,852	-	-
Office expenses	1,000	1,017	4,652	1,206	1,227
Depreciation and amortization	142,415	144,499	145,090	145,132	143,716
Indirect expenses	5,171	5,808	6,088	8,079	-

	(amounts shown in thousands) 2018	2019	2020	2021	2022
Other	-	-	-	19,955	30,139
Total operating expenses	216,321	225,800	236,316	236,375	237,865
Operating Income (Loss)	14,712	11,555	(989)	7,518	21,373
Nonoperating Revenues (Expenses)					
Property tax	-	-	-	-	7,571
Interest expense, net	(71,204)	(70,496)	(70,497)	-	-
Interest expense (accretion)	(57,383)	(61,718)	(66,387)	-	-
Interest and amortization expense	-	-	-	(144,072)	(149,108)
Interest revenue	399	13,251	13,515	3,301	-
Warrant related costs	(1,958)	(2,013)	(2,084)	-	-
Contributions of infrastructure assets	10,027	12,366	10,300	-	-
Investment earnings (losses)	-	-	-	-	(42,563)
Gain (loss) on sale or retirement of capital Assets	141	324	33	345	193
Miscellaneous revenue	-	-	-	675	1,298
Net nonoperating revenues (expenses)	(119,978)	(108,286)	(115,120)	(139,751)	(182,609)
Operating Transfers					
Transfers in	-	-	-	394	-
Capital contributions	-	-	-	6,826	6,287
Total capital contributions and Transfers	-	-	-	7,220	6,287
Change in Net Position	(105,266)	(96,731)	(116,109)	(125,013)	(154,949)
Net Position – beginning of year, as previously reported	742,842	616,985	520,254	404,145	279,132
Prior Period Adjustments	(20,591)	-	-	-	-
Net Position, beginning of year, as restated	722,251	616,985	520,254	404,145	279,132
Net Position, end of year	$616,985	$520,254	$404,145	$279,132	$124,183

Summary of Revenues and Expenditures – Unaudited Nine Month Period Ended June 30.[1] The following table sets forth the unaudited summary of consolidated revenues, expenditures and changes in fund balance with respect to the System for the nine month periods ended June 30, 2022, and June 30, 2023 (amounts shown in thousands).

	9-Month Period Ended June 30, 2023	**9-Month Period Ended June 30, 2022**
Operating Revenues		
Charges for Services		
Sewer Sales (Revenues)	$180,908	$166,739
Other	6,553	12,471
Total Operating Revenues	187,461	179,210
Operating Expenses		
Salaries and Benefits	29,109	27,698
Maintenance and Operating Expenses	9,324	8,112
Office Expenses	1,101	934
Materials and Supplies	6,989	5,172
Utilities	7,920	7,127
Other Operating Expenses	13,930	14,873
Depreciation	107,398	107,208

[1] This information is to be removed from this Official Statement once the unaudited financial statements of the System and related operating information for the fiscal year ended September 30, 2023, is attached as APPENDIX J to this Official Statement.

Total Operating Expenses	175,771	171,124
Operating Income (Loss)	11,690	8,086
Nonoperating Revenues (Expenses)		
Property Taxes	8,073	7,360
Investment Earnings (Losses)	19,457	(29,318)
Miscellaneous Revenue	160	749
Gain on Disposal of Capital Assets	47	130
Interest and Amortization Expense	(115,475)	(111,483)
Total Nonoperating Revenues (Expenses)	(87,738)	(132,562)
Loss Before Capital Contributions and Transfers	(76,048)	(124,476)
Capital Contributions	-	-
Transfers In	3,293	-
Total Capital Contributions and Transfers	3,293	-
Change in Net Position	(72,755)	(124,476)
Net Position, Beginning of Year	124,183	279,132
Net Position, End of Year	$51,428	$154,656

Summary of Balance Sheet - Audited. The following table sets forth a summary of the assets and liabilities of the System for each of the past five fiscal years. Such information is taken from the audited financial statements for the County as of and for the fiscal years ended September 30, 2018, through and including September 30, 2022, and should be read in conjunction with the financial statements of the County, and the associated notes to such financial statements, as of and for the fiscal year ended September 30, 2022, attached as APPENDIX H to this Official Statement.

(amounts shown in thousands)

	2018	2019	2020	2021	2022
Current Assets					
Cash and investments	$12,348	$14,980	$19,497	$15,396	$9,747
Accounts receivable, net	34,093	32,232	24,203	29,439	35,703
Taxes receivable, net	6,008	6,866	6,978	6,890	6,958
Due from (to) other governments	1,982	1,866	2,018	2,145	2,985
Bond insurance costs	1,013	1,049	1,087	-	-
Restricted assets – current	354,098	375,625	424,016	-	-
Restricted assets – cash	-	-	-	78,578[(1)]	119,868
Restricted assets – investments	-	-	-	392,795[(1)]	346,326
Total Current Assets	409,542	432,618	477,799	525,243	521,587
Noncurrent Assets					
Restricted assets	-	-	-	-	-
Bond insurance costs	31,470	30,421	29,334	29,334	28,209
Net pension asset	17,929	26,379	22,643	20,416	45,864
Capital assets:					
Depreciable assets, net	2,072,607	2,026,046	1,921,788	4,865,785	4,915,496
Nondepreciable assets	154,911	126,507	135,126	100,801	113,400
Less: accumulated depreciation	-	-	-	(3,010,619)	(3,153,079)
Total Noncurrent Assets	2,276,917	2,209,353	2,108,891	2,005,716	1,949,890
Total Assets	$2,689,399	$2,644,525	$2,592,074	$2,530,959	2,471,476
Deferred Outflows of Resources					
Pension-related deferred outflows	1,951	1,597	1,340	5,275	8,184
Deferred outflows – OPEB	989	957	4,044	2,823	3,609
Total Deferred Outflows of Resources				8,098	11,793

	2018	2019	2020	2021	2022
	(amounts shown in thousands)				
Current Liabilities					
Accounts payable	$16,070	$14,671	$9,750	$9,556	17,230
Accrued wages and benefits	947	1,143	1,333	1,538	598
Accrued interest	35,539	35,183	35,183	35,183	34,965
Retainage payable	3,744	3,063	2,217	1,637	2,518
Estimated liability for compensated absences	1,824	1,604	1,799	1,808	-
Estimated litigation liability	262	262	3,933	-	-
Estimated claims liability	495	677	888	439	-
Unearned revenue	-	-	-	7,146	7,284
Claims payable	-	-	-	-	436
Compensated absences, current	-	-	-	-	1,903
Warrants payable	14,215	-	-	8,745	10,980
Less: Unamortized discounts	(1,000)	(1,036)	(1,074)	-	-
	13,215	(1,036)	(1,074)	-	-
Total Current Liabilities	72,096	55,567	54,029	66,052	75,913
Noncurrent Liabilities					
Estimated liability for other postemployment benefits	24,801	22,001	26,808	27,326	28,415
Estimated liability for compensated absences	1,973	2,130	2,065	2,169	2,339
Estimated claims liability/claims payable	1,101	1,276	1,436	1,499	1,540
Litigation payable	-	-	-	3,862	4,047
Warrants payable	1,990,837	2,052,555	2,118,942	2,152,639	2,219,583
Less: Unamortized discounts	(31,081)	(30,045)	(28,972)	-	-
Total Long-Term Liabilities	1,959,756	2,022,510	2,089,970	2,187,496	2,255,924
Total Liabilities	2,059,727	2,103,484	2,174,308	2,253,548	2,331,837
Deferred Inflows of Resources					
Property Taxes	6,212	7,086	7,224	-	-
Pension-related deferred inflows	5,185	9,757	3,037	1,443	23,026
Deferred inflows – OPEB	1,290	3,944	3,360	4,935	4,222
Net Position					
Net investment in capital assets	287,030	162,549	387,272	185,739	150,557
Restricted for:					
Debt service or capital improvements	354,098	375,625	-	-	466,193
Net pension assets and deferred outflows/inflows	14,695	18,219	20,946	-	-
Operating Reserve	-	-	-	78,578[(2)]	-
Unrestricted	(38,838)	(36,139)	(4,073)	14,815	(492,567)
Total Net Position	$616,985	$520,254	$404,145	$279,132	$124,183

(1) For the fiscal year ended September 30, 2021, the County divided "Restricted Assets – Current" into two sub-classifications, resulting in the classification and presentation of (i) $78,577,630 of restricted cash and (ii) $392,795,006 of restricted investments for such fiscal year.
(2) In its audited financial statements for the fiscal year ended September 30, 2021, the County classified the $78,577,630 of restricted cash described in footnote 1 immediately above as being a restricted operating reserve; however, under the 2013 Indenture such funds are restricted for capital improvements to the System and to retire sewer revenue warrants. The 2013 Indenture permits use of such funds for payment of System operating expenses or sewer warrant debt service, but only when funds sufficient for such purposes are not available within the operating account and debt service fund, respectively, of the 2013 Indenture. See "FINANCIAL STATEMENTS – Certain Classifications and Reclassifications" in the front portion of this Official Statement.

Summary of Balance Sheet – Unaudited Nine Month Period Ended June 30.[2] The following table sets forth the unaudited summary of balance sheet with respect to the System for the nine month periods ended June 30, 2022, and June 30, 2023 (amounts shown in thousands).

2 This information is to be removed from this Official Statement once the unaudited financial statements of the System and related operating information for the fiscal year ended September 30, 2023, is attached as APPENDIX J to this Official Statement.

	9-Month Period Ended June 30, 2023	9-Month Period Ended June 30, 2022
Current Assets		
Cash and Cash Equivalents	$14,256	$16,042
Receivables, Net	33,478	33,301
Taxes Receivable	114	6,890
Intergovernmental Receivables	2,985	2,145
Prepaid Expenses	250	-
Restricted Assets		
Cash	139,176	69,052
Investments	309,928	377,868
Total Current Assets	500,187	505,298
Noncurrent Assets		
Net Pension Asset	45,864	20,416
Prepaid Bond Insurance Costs, Net	27,337	28,493
Capital Assets		
Capital Assets, not being depreciated	161,257	123,237
Capital Assets, being depreciated	4,936,861	4,870,584
Less Accumulated Depreciation	(3,260,372)	(3,116,989)
Total Capital Assets, Net of Accumulated Depreciation	1,837,746	1,876,832
Total Noncurrent Assets	1,910,947	1,925,741
Total Assets	2,411,134	2,431,039
Deferred Outflows of Resources		
Pension	8,184	5,275
OPEB	3,609	2,823
Total Deferred Outflows of Resources	11,793	8,098
Current Liabilities		
Accounts Payable	742	1,811
Accrued Interest	17,345	17,482
Retainage Payable	4,294	2,178
Accrued Payroll	598	1,538
Unearned Revenue	440	7,146
Claims Payable	436	439
Compensated Absences – Current	1,903	1,808
Warrants Payable – Current	14,780	10,980
Total Current Liabilities	40,538	43,382
Long-Term Liabilities		
Litigation Payable	4,156	3,979
Claims Payable	1,540	1,499
Compensated Absences	2,339	2,169
Warrants Payable	2,267,264	2,199,748
Total OPEB Liability	28,415	27,326
Total Current Liabilities	2,303,714	2,234,721
Total Liabilities	2,344,252	2,278,103
Deferred Inflows of Resources		
Pension Related Items	23,026	1,443
OPEB Related Items	4,222	4,935
Net Position (Deficit)		
Net Investment in Capital Assets	131,520	(336,073)
Restricted for Capital Improvements and Debt Service	449,104	446,920
Unrestricted	(529,196)	43,809
Total Net Position	$51,428	$154,656

Summary of Cash Flows – Audited. The following table sets forth the cash flows of the System for each of the past five fiscal years. Such information is taken from the audited financial statements for the County for the fiscal years ended September 30, 2018, through and including September 30, 2022, and should be read in conjunction with the financial statements of the County, and the associated notes to such financial statements, as of and for the fiscal year ended September 30, 2022, attached as APPENDIX H to this Official Statement.

	(amounts shown in thousands)				
	2018	2019	2020	2021	2022
Cash Flows from Operating Activities					
Cash received from services	$215,102	$231,906	$235,253	$239,535	$253,365
Cash payments to employees	(27,520)	(29,761)	(33,354)	(34,457)	(37,557)
Cash payments for goods and services	(49,482)	(55,213)	(63,555)	(57,687)	(55,673)
Other receipts and payments, net	8,026	5,887	10,664	-	-
Net Cash Provided (Used) by Operating Activities	146,126	152,819	149,008	147,391	160,136
Cash Flows from Capital and Related Financing Activities					
Repayment of warrants payable	(12,995)	(14,215)	-	-	(9,584)
Acquisition of capital assets	(68,601)	(57,168)	(39,151)	(37,358)	(57,341)
Sale of capital assets	141	324	33	345	193
Interest and fiscal charges paid	(71,546)	(70,852)	(70,497)	(70,315)	(68,267)
Net Cash Provided (Used) by Capital and Related Financing Activities	(153,001)	(141,911)	(109,615)	(107,328)	(134,998)
Cash Flows From Investing Activities					
Investment income	399	13,251	13,515	3,301	45,496
Purchases of investments	-	-	-	(49,301)	(42,563)
Net Cash Provided by Investing Activities	399	13,251	13,515	(46,000)	2,932
Cash Flows from Noncapital Financing Activities					
Property taxes	-	-	-	-	7,571
Other receipts	-	-	-	675	-
Net Cash Provided By (Used In) Noncapital Financing Activities	-	-	-	675	7,571
Change in Cash and Investments	(6,476)	24,159	52,908	(5,261)	35,641
Cash and Investments - beginning of year	372,922	366,446	390,605	99,235[(1)]	93,974
Cash and Investments - end of year	$366,446	$390,605	$443,513	$93,974	$129,615
Displayed As					
Cash and investments	$12,348	$14,980	$19,497	$15,396	$9,747
Restricted assets - current and noncurrent cash and Investments	354,098	375,625	424,016	78,578[(2)]	119,868
	$366,446	$390,605	$443,513	$93,974[(2)]	$129,615
Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities					
Operating income (loss)	$14,712	$11,555	$(989)	$7,518	21,373
Adjustments to reconcile operating income (loss) to net cash provided (used) by operating activities:					
Depreciation	142,415	144,499	145,090	145,132	143,716
Provision for bad debts	1,337	4,902	1,890	-	
Miscellaneous revenue	-	-	-	-	1,298
Change in accounts receivable	(10,206)	(3,041)	6,139	(4,317)	(6,264)
Change in taxes receivable, net	(176)	(858)	(112)	87	(67)
Change in due from (to) other governments	182	116	(152)	(128)	(839)
Change in advances due to other funds	-	-	-	-	-

	(amounts shown in thousands)				
	2018	2019	2020	2021	2022
Change in accounts payable	(3,720)	(1,399)	(4,921)	(193)	7,675
Change in accrued wages and benefits	114	196	190	(124)	(940)
Change in health claims payable	-	-	-	(120)	(3)
Change in retainage payable	958	(681)	(846)	(580)	881
Change in estimated litigation liability	-	-	-	(71)	185
Change in liability claims payable	-	-	-	-	40
Change in estimated claims liability	(124)	357	371	64	-
Change in estimated liability for compensated absences	363	(63)	130	112	265
Change in estimated liability for other postemployment benefits	719	(114)	1,136	-	-
Change in total OPEB liability	-	-	-	519	1,088
Change in deferred inflows from OPEB	-	-	-	1,575	(712)
Change in deferred outflows from OPEB	-	-	-	1,221	(786)
Change in net pension asset and pension related deferred inflows and outflows	(577)	(3,524)	(2,727)	-	-
Change in net pension asset	-	-	-	2,227	(25,448)
Change in deferred inflows from pension	-	-	-	(1,595)	21,583
Change in deferred outflows from pension	-	-	-	(3,935)	(2,909)
Change in deferred inflows – property taxes	129	874	138	-	-
	131,414	141,264	149,997	-	-
Net Cash Provided (Used) by Operating Activities	$146,126	$152,819	$149,008	$147,391	$160,136
Noncash Capital and Related Financing Activities					
Capital contributions	-	-	-	-	6,287
Total noncash capital and related financing activities	-	-	-	-	6,287

(1) Consistent with the manner of classification described in footnote (1) immediately above, this figure was adjusted to reflect only the restricted cash component of current restricted assets for and as of the end of the September 30, 2021 fiscal year. See also "FINANCIAL STATEMENTS – Certain Classifications and Reclassifications" in the front portion of this Official Statement.

(2) Consistent with the manner of classification described in footnote (1) immediately above, excludes $392,795,006 of restricted investments. For previous fiscal years, restricted investments were included in this line item entitled "Restricted Assets – Current and noncurrent cash and investments". See also "FINANCIAL STATEMENTS – Certain Classifications and Reclassifications" in the front portion of this Official Statement.

Summary of Cash Flows – Unaudited Nine Month Period Ended June 30.[3] The following table sets forth the unaudited summary of cash flows with respect to the System for the nine month periods ended June 30, 2022, and June 30, 2023 (amounts shown in thousands).

	9-Month Period Ended June 30, 2023	**9-Month Period Ended June 30, 2022**
Cash Flows From Operating Activities		
Receipts from Customers	$196,688	$175,348
Payments to Suppliers and Service Providers	(60,960)	(43,423)
Payments to Employees	(29,109)	(27,698)
Net Cash Provided (Used) from Operating Activities	106,619	104,227
Cash Flows from Noncapital Financing Activities		
Other Receipts	-	866
Property Taxes	8,073	7,360
Net Cash Provided (Used) from Noncapital Financing Activities	8,073	8,226
Cash Flows from Capital and Related Financing Activities		
Purchases of Capital Assets	(69,326)	(28,073)
Proceeds from Sale of Capital Assets	47	130
Principal Payments on Warrants	(10,980)	(8,745)
Interest and Fiscal Charges Paid	(69,763)	(70,255)
Operating Transfers In	3,293	-
Net Cash Provided (Used In) by Capital and Related Financing Activities	(146,729)	(106,943)

[3] This information is to be removed from this Official Statement once the unaudited financial statements of the System and related operating information for the fiscal year ended September 30, 2023, is attached as APPENDIX J to this Official Statement.

Cash Flows From Investing Activities		
Proceeds from Sales and Maturities of Investments	44,076	76,121
Purchases of Investments	-	(95,068)
Interest Received (Losses)	11,778	4,557
Net Cash Provided (Used In) Investing Activities	55,854	(14,390)
Net Change in Cash and Cash Equivalents	23,817	(8,880)
Cash and Cash Equivalents – Beginning of Year	129,615	93,974
Cash and Cash Equivalents – End of Year	153,432	85,094
Classified as:		
Cash and Cash Equivalents	14,256	16,042
Restricted Cash and Cash Equivalents	139,176	69,052
Total Cash and Cash Equivalents	$153,432	$85,094

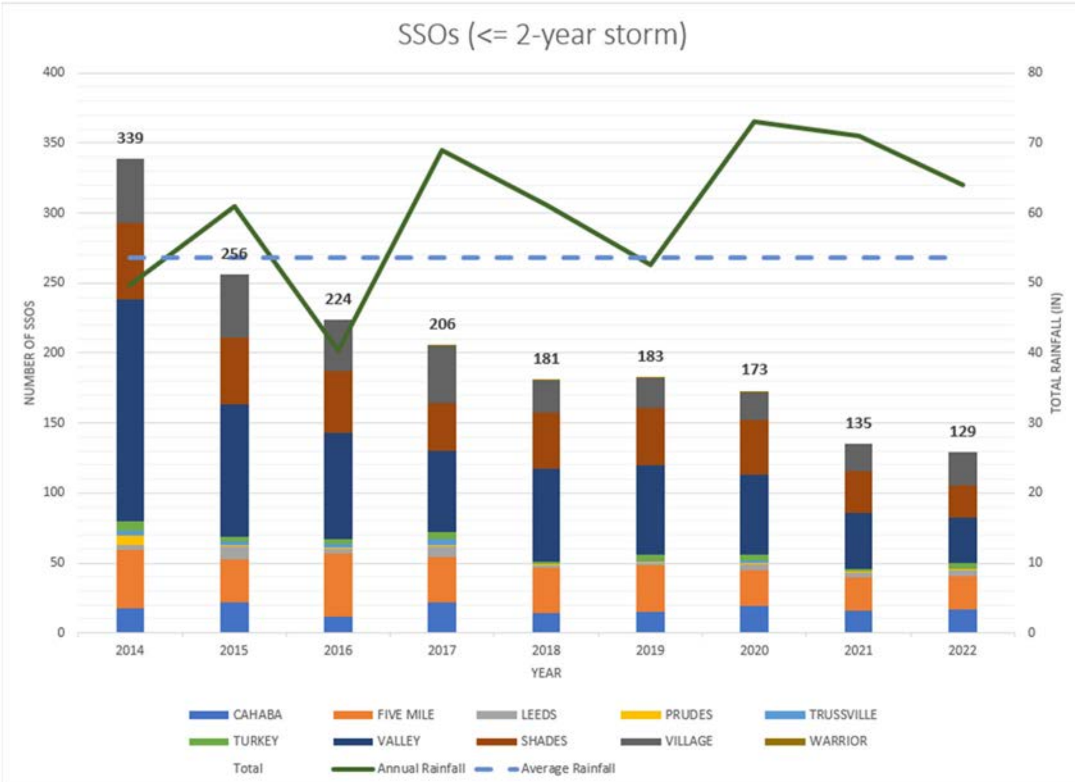
The EPA Consent Decree

Notwithstanding rate hikes and increased borrowings undertaken by the County going back to the 1970s and 1980s, the County had fallen behind its then schedule of planned rate increases and to catch up, it implemented multi-year rate increases in 1991. However, during the 1990s the Alabama Department of Environmental Management ("ADEM") imposed much stricter pollution standards. Specifically, ADEM required the County to measure its pollutant discharge not by the quantities discharged, but rather by the concentration of pollutants that resulted from the discharge. This methodology hinged on the volume of water of the streams into which the System discharged, and the volume in those streams would vary seasonally. ADEM required the County to use the most "conservative" volume, *i.e.*, lowest flow volume, to calculate pollutant concentrations. To meet these strict requirements, the County had to implement more stringent treatment methods. ADEM also imposed new limitations on sewer bypasses. A bypass results when more sewage comes into a treatment plant or collection system than the system can convey or plant can treat. Bypasses are usually caused by rainwater that infiltrates the collection system of a sewer, so the normal method of preventing bypasses is to repair the pipes and mains that constitute the collection system or store excess flows for later treatment. According to a plan commissioned by the County, making the required improvements to the collection system and treatment plants would cost $416.8 million. ADEM required the County to perform this plan and to make annual reports about the County's progress.

Shortly thereafter, three citizens filed suit against the County in federal court alleging violations of the Clean Water Act. The EPA filed a separate action the next year, and the suits were consolidated. The court found the County to be in violation of its discharge permits and required the parties to negotiate a plan to fix the System's problems.

The result of this negotiation process was a Consent Decree (the "EPA Consent Decree"), which was formally entered on December 9, 1996, between the County and the EPA. The EPA Consent Decree required the County to eliminate all sanitary sewer overflows ("SSOs") and bypasses. To fix the long-standing problem of poorly-performing municipal collection systems, the County assumed responsibility for the collection systems of twenty-one municipalities – more than 2,100 miles of sewer pipe and approximately 100 pump stations – without compensation from the municipalities. These municipal collection systems were consolidated under the County's control as part of the System, resulting in a system with more than 3,000 miles of sewer lines, 140 pump stations and nine WRFs. The County also repaired or replaced roughly 730 miles of sewer mains and made significant upgrades to the capacities of its treatment plants.

To date, the EPA Consent Decree has been terminated for five of the nine System basins. All specifically identified work has been completed under the EPA Consent Decree. The chart below demonstrates System performance (specifically, System overflows) since 2014 despite heavier rainfall during the period.



On September 19, 2023, the County filed a motion with the federal court overseeing the EPA Consent Decree certifying that the County has satisfied the requirements of the EPA Consent Decree with respect to the four System basins still subject thereto and seeking termination of and release of the County from the EPA Consent Decree. In the motion filed with the federal court, the County's basis for termination of the EPA Consent Decree is that it has demonstrated substantial compliance therewith by completing all deliverables, paying all demanded penalties, completing all planned work, consistently and substantially reducing SSOs, maintaining outstanding effluent discharge compliance, and establishing and implementing programs to continue improvements and maintain compliance with the Clean Water Act. The County's motion seeking termination of the EPA Consent Decree is currently pending before the federal court. The EPA filed a limited objection on the basis that the County pay certain stipulated penalties, which the County immediately paid; the EPA, ADEM and the Department of Justice have otherwise indicated that they have no objection to the County's release from the EPA Consent Decree. A private plaintiff, the Cahaba River Society ("CRS"), has filed an objection to the County's motion. After a status conference conducted by the court on December 6, 2023, the court ordered CRS to retain an expert by December 20, 2023, and inform the County by January 12, 2024, of what information it needs to properly evaluate whether to maintain its objection to the termination of the EPA Consent Decree. The court further ordered that on or before January 31, 2024, the County and CRS must meet and confer regarding areas of agreement and/or dispute regarding whether the County is in substantial compliance with the terms of the EPA Consent Decree. On or before February 7, 2024, the County and CRS must file a joint report regarding the results of that process, and if CRS continues to maintain its objection, it must provide a legal explanation in the February 7, 2024, filing as to the basis for its maintained objection when the EPA, ADEM and the Department of Justice do not object. Upon receipt of the joint report to be filed on or before February 7, 2024, the court will set further hearings and/or status conferences, as needed. The County is unable to predict how or when the federal court may rule on its motion to terminate the EPA Consent Decree.

For additional information relating to the EPA Consent Decree, see Section 4.3 of the Feasibility Study attached as APPENDIX E to this Official Statement.

Closing Agreement with IRS

In August 2013, the County and the IRS entered a Closing Agreement on Final Determination Covering Specific Matters (the "Closing Agreement") permitted under Section 7121 of the Internal Revenue Code of 1986, as amended. The Closing Agreement addressed and conclusively resolved certain tax issues considered by the IRS in an examination of the sewer revenue warrants that were ultimately refinanced by the 2013 Sewer Warrants. As a condition to the Closing Agreement, the County paid the IRS a $4.5 million settlement amount from System Revenues. The Closing Agreement was requested by the County in anticipation of the issuance of the 2013 Sewer Warrants. The Closing Agreement, and the terms reached thereunder between the County and the IRS, applies solely to the System revenue warrants refinanced by the 2013 Sewer Warrants. It does not apply to or otherwise cover the 2013 Sewer Warrants or to the Series 2024 Warrants.

APPENDIX D
THE COUNTY; GOVERNMENT; FINANCIAL SYSTEM

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APPENDIX D
THE COUNTY; GOVERNMENT; FINANCIAL SYSTEM

General

The County is a political subdivision of the State of Alabama ("Alabama" or the "State") that was created by the legislative branch of the state government of Alabama (the "Alabama Legislature") on December 13, 1819. The County is located in the north-central portion of the State, on the southern extension of the Appalachian Mountains, in the center of the iron, coal and limestone belt of the South. The County is approximately 1,124 square miles in size.

The County is Alabama's most populous county and is the principal center of finance, trade, manufacturing, transportation, health care and education in the State. Birmingham, the State's second largest city and the county seat, and 43 other incorporated and unincorporated cities and towns, are located within the County. Since 2003, the Birmingham Metropolitan Statistical Area (officially designated the "Birmingham-Hoover MSA" by the federal Office of Management and Budget)[1] has included Bibb, Blount, Chilton, Jefferson, Shelby, St. Clair and Walker Counties and covers approximately 5,332 square miles.[2]

The area's economy was originally based on steel production, but has diversified over the past several decades as healthcare, banking and professional services emerged to become leading industries in the metro area. Heavy industry continues to be an important component of the local economy. Automotive manufacturing has become prominent in the greater metro area and elsewhere in the State, as several auto assembly plants and related suppliers have established businesses in North and Central Alabama in the past two decades. The County is strategically located at the center of many of these facilities, making it a great site for suppliers of all types of industries.

Mercedes-Benz, Honda and Hyundai have major automobile assembly facilities within an eighty-five mile radius of the County. In early 2018, Toyota Motor Corporation and Mazda Motor Corporation announced their decision to locate a $1.6 billion automobile manufacturing facility approximately 90 miles North of the County in Huntsville, Alabama. Volkswagen operates a major manufacturing facility towards the Northeast of the County in Chattanooga, Tennessee. As of the date of this Official Statement, the County is not aware of any ongoing strikes at any of the aforementioned automobile manufacturing facilities. Similarly, Airbus operates a major aircraft manufacturing facility in Mobile, Alabama, located approximately 250 miles South of the County (which facility is to be expanded to accommodate a recently announced partnership between Airbus and Bombardier USA for the production of a new "C Series" aircraft at that facility).

In September 2017, Autocar, LLC ("Autocar"), one of the oldest truck manufacturers in the nation, undertook a $120 million automotive assembly plant in the City of Center Point, Alabama (located within the County) that created approximately 750 new jobs. Autocar began producing automotive vehicles in or around September 2017 at the site in Center Point.

In early 2020, Amazon opened an approximately 855,000 square foot fulfillment center in the City of Bessemer, Alabama, which is located within the County and employs an estimated number of 1,500 full-time employees. According to Amazon, employees at the fulfillment center pick, pack and ship small items to customers such as books, household items and toys.

The healthcare sector has become a primary driver of economic activity in the Birmingham-Hoover MSA, and is anchored by the University of Alabama at Birmingham Heersink School of Medicine, which is ranked among the top three medical schools in the Southeast in allocations from the National Institutes of Health ("NIH").[3]

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[1] The Birmingham Standard Metropolitan Statistical Area ("SMSA") was established in 1967, and originally included Jefferson, Shelby and Walker Counties. St. Clair County was added to the SMSA in 1973. Blount County was added in 1983, at which time the official federal government designation became the Birmingham Metropolitan Statistical Area ("MSA"). Walker County was removed from the MSA in 1993. Bibb, Chilton and Walker Counties were added in 2003, at which time the official federal government designation became the Birmingham-Hoover MSA.

[2] Source: National Telecommunications and Information Administration State Broadband Initiative

[3] Source: NIH, NIH Awards by Location

Banking and finance also contribute significantly to the region's economic base. Birmingham is the Southeast's largest banking center outside Charlotte, North Carolina, and is headquarters to one of the nation's top fifty largest banks, Regions Financial Corporation. With banking subsidiaries operating as "Regions Bank" in 16 states in the Southern and Midwestern United States, Regions Bank operates 1,454 branches and 1,952 automated teller machines, producing $4 billion in revenue in 2021. The purchase of BBVA Compass (previously headquartered in Birmingham, and the U.S. subsidiary of Banco Bilbao Vizcaya Argentaria, S.A., Spain's second largest bank) was finalized by PNC Financial Services in 2021.

In late 2021, J.M. Smucker Co. announced its decision to invest $1.1 billion to build a new manufacturing and distribution center in McCalla (located in the western part of the County). The company plans to produce its "Uncrustables" products at the facility and reported it will generate 750 direct jobs. Also in 2021, the real estate technology company Landing moved its headquarters from San Francisco to Birmingham, bringing more than 816 jobs and a $13.7 million investment. This relocation is estimated to produce $1.3 billion in new payroll over the next 20 years.

In Made in Alabama's New & Expanding Industry Announcements 2021 Report, the County is listed as second in the State of Alabama for new and expanding total investment, and first in the State of Alabama for new and expanding total jobs. In the summer of 2022, the County and the Birmingham-Hoover MSA hosted the 2022 World Games, which drew a diverse international crowd of athletes, fans and media to enjoy 34 unique, multi-disciplinary sporting events at a variety of venues throughout the area over the course of 11 days. The City was also recently selected to host the Transplant Games in 2024 and the World Police and Fire Games in 2025. This sporting event features more than 10,000 first responders competing in 1,600 medal matches.

Demographic Information

The City of Birmingham has served as the county seat of the County since 1873, and the County continues to maintain its primary offices and courthouse in Birmingham. Pursuant to acts passed in the early 1900s, the Alabama Legislature assigned certain obligations to the County with regard to the maintenance of an additional courthouse and other County offices in a region of the County commonly known as the "Bessemer Cutoff." That term references the City of Bessemer, the largest city in the Bessemer Cutoff, which, as of 2020, had a population of approximately 26,019 people.

Cities and Towns

The City of Birmingham, with a population of 200,733 in 2020, is the largest city in the County. Though Birmingham has decreased considerably from its population of 348,500 in 1960, that rate of decline has slowed in recent years. From 2010 to 2020, Birmingham's population is estimated to have decreased by 5.73%.

The City of Hoover, the sixth largest city in the State, is located primarily within the County, with approximately 72.5% of its citizens residing within the County and the remainder living in Shelby County. Hoover had a population of 92,606 in 2020. From 2010 to 2020, Hoover's population increased by 13.4%.

Other incorporated cities and towns located within the County (either wholly or in part) include Adamsville, Adger, Argo, Bessemer, Brighton, Brookside, Cardiff, Center Point, Clay, Fairfield, Fultondale, Gardendale, Graysville, Homewood, Hueytown, Irondale, Kimberly, Leeds, Lipscomb, Maytown, Midfield, Morris, Mountain Brook, Mulga, North Johns, Pinson, Pleasant Grove, Sylvan Springs, Tarrant, Trafford, Trussville, Vestavia Hills, Warrior, and West Jefferson. The County is also home to numerous unincorporated communities.

Population

The County is the center of the seven-county Birmingham-Hoover MSA. The Birmingham-Hoover MSA had a population of 1,115,289 as of April 1, 2020, and is the 50th most populous area among the 384 Metropolitan Statistical Areas in the United States, according to figures from the U.S. Census Bureau.

As reflected in the table below, during the period from 2005 to 2020, the population of the County increased by approximately 0.28%, compared to population increases of approximately 3.4% for the Birmingham-

Hoover MSA, 10.9% for the State, and 13.2% for the United States during the same timeframe.

YEARLY POPULATION TRENDS

Year	Jefferson County	Birmingham-Hoover MSA	State of Alabama	United States
2005	654,919	1,086,318	4,569,805	295,516,599
2006	655,893	1,098,818	4,628,981	298,379,912
2007	655,163	1,107,256	4,672,840	301,231,207
2008	656,510	1,117,101	4,718,206	304,093,966
2009	658,441	1,125,271	4,757,938	306,771,529
2010	658,116	1,128,879	4,785,161	309,346,863
2011	657,779	1,130,905	4,801,108	311,718,857
2012	657,704	1,133,993	4,816,089	314,102,623
2013	658,913	1,139,018	4,830,533	316,427,395
2014	660,368	1,142,823	4,846,411	318,907,401
2015	660,367	1,145,647	4,858,979	321,418,820
2016	659,096	1,147,417	4,860,545	323,405,935
2017	659,197	1,149,807	4,874,747	325,719,178
2018	659,429	1,087,967	4,887,681	326,687,501
2019	658,573	1,090,435	4,903,185	328,239,523
2020	674,721	1,115,289	5,024,279	331,449,281
2021	667,820	1,114,262	5,039,877	331,893,745
2022	665,409	1,116,857	5,074,296	333,287,562

Source: U.S. Census Bureau

Employment

According to preliminary data provided by the Alabama Department of Labor, the County's civilian labor force totaled 323,474 as of March 2023. Of those persons, 317,311 were employed and 6,163 were unemployed, reflecting an unemployment rate for the County of 1.9%.

The following tables summarize the labor force, employment and unemployment figures for the period indicated for the County, the Birmingham-Hoover MSA, the State and the United States.

ANNUAL AVERAGE LABOR FORCE ESTIMATES
JEFFERSON COUNTY

Year	Total Labor Force	Employed Labor Force	Unemployed Labor Force	Unemployment Rate[1]
2018	319,162	307,307	11,855	3.7%
2019	321,838	312,050	9,785	3.0
2020	320,567	298,906	21,661	6.8
2021	320,324	308,963	11,361	3.5
2022	323,290	314,943	8,347	2.6
2023[2]	326,269	318,497	7,772	2.4

AVERAGE ANNUAL LABOR FORCE ESTIMATES
BIRMINGHAM-HOOVER MSA

Year	Total Labor Force	Employed Labor Force	Unemployed Labor Force	Unemployment Rate[1]
2018	554,788	535,215	19,573	3.5%
2019	561,468	545,269	16,199	2.9
2020	559,005	525,766	33,239	5.9
2021	560,677	543,364	17,313	3.1
2022	567,206	553,752	13,454	2.4
2023[2]	573,049	560,503	12,546	2.2

ANNUAL AVERAGE LABOR FORCE ESTIMATES
STATE OF ALABAMA

Year	Total Labor Force	Employed Labor Force	Unemployed Labor Force	Unemployment Rate[1]
2018	2,240,109	2,152,270	87,839	3.9%
2019	2,272,935	2,200437	72,498	3.2
2020	2,269,672	2,124,409	145,263	6.4
2021	2,259,349	2,183,330	76,019	3.4
2022	2,286,028	2,226,670	59,358	2.6
2023[2]	2,329,015	2,273,304	55,711	2.4

ANNUAL AVERAGE LABOR FORCE ESTIMATES
UNITED STATES

Year	Total Labor Force	Employed Labor Force	Unemployed Labor Force	Unemployment Rate[1]
2018	162,075,000	155,761,000	6,314,000	3.9%
2019	163,539,000	157,538,000	6,001,000	3.7
2020	160,742,000	147,795,000	12,947,000	8.1
2021	161,204,000	152,581,000	8,623,000	5.3
2022	164,287,000	158,291,000	5,996,000	3.6
2023[2]	167,774,000	161,676,000	6,098,000	3.6

[1] Expressed as a percentage.
[2] Preliminary Estimates. As of October 2023.
Estimates prepared by the Alabama Department of Labor in cooperation with the Bureau of Labor Statistics, based on 2022 benchmark.
Source: Alabama Department of Labor, Bureau of Labor Statistics

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Industries and Employers

According to the Alabama Department of Labor, the region's workforce is employed within the following occupational categories:

Employment by North American Industry Classification System (NAICS) Birmingham-Hoover MSA

	2017		2018		2019		2020		2021	
Industry	**Number**	**% of Total**	**Number**	**% of Total**	**Number**	**% of Total**	**Number**	**% of Total**	**Number**	**% of Total**
Agriculture, Forestry, Fishing and Hunting	517	0.1%	511	0.1%	543	0.1%	492	0.1%	492	0.1%
Mining, Quarrying, and Oil and Gas Extraction	1,934	0.4%	2,042	0.5%	1,736	0.4%	1,515	0.4%	1,646	0.4%
Utilities	8,084	1.8%	7,889	1.8%	7,807	1.7%	7,962	1.9%	8,328	1.9%
Construction	22,094	5.1%	23,226	5.3%	24,394	5.5%	23,882	5.6%	23,851	5.4%
Wholesale Trade	25,902	5.9%	25,594	5.8%	25,603	5.7%	24,954	5.8%	24,734	5.6%
Information	7,644	1.7%	7,649	1.7%	7,498	1.7%	7,398	1.7%	7,870	1.8%
Finance and Insurance	35,798	8.2%	35,372	8.0%	34,933	7.8%	35,404	8.3%	34,509	7.8%
Real Estate and Rental and Leasing	6,546	1.5%	6,627	1.5%	6,949	1.6%	6,818	1.6%	6,991	1.6%
Professional, Scientific, and Technical Services	25,383	5.8%	26,270	6.0%	27,143	6.1%	26,803	6.3%	27,335	6.2%
Management of Companies and Enterprises	8,705	2.0%	8,505	1.9%	8,567	1.9%	8,133	1.9%	8,101	1.8%
Admin & Support & Waste Mgmt & Remediation Svcs	24,941	5.7%	25,751	5.8%	25,819	5.8%	23,127	5.4%	25,097	5.7%
Educational Services	35,165	8.0%	35,385	8.0%	36,085	8.1%	34,981	8.2%	36,287	8.2%
Health Care and Social Assistance	66,260	15.2%	67,264	15.2%	68,921	15.4%	67,161	15.7%	69,155	15.7%
Arts, Entertainment, and Recreation	5,239	1.2%	5,418	1.2%	5,495	1.2%	4,129	1.0%	4,497	1.0%
Accommodation and Food Services	33,764	7.7%	33,560	7.6%	33,596	7.5%	28,249	6.6%	29,370	6.7%
Other Services (except Public Administration)	13,287	3.0%	13,468	3.1%	13,705	3.1%	12,550	2.9%	12,678	2.9%
Public Administration	16,967	3.9%	17,385	3.9%	17,379	3.9%	17,369	4.1%	17,455	4.0%
Manufacturing	33,005	7.5%	33,667	7.6%	34,301	7.7%	32,574	7.6%	32,477	7.4%
Retail Trade	52,160	11.9%	51,638	11.7%	50,786	11.4%	48,403	11.3%	50,086	11.4%
Transportation and Warehousing	13,938	3.2%	14,278	3.2%	15,054	3.4%	14,522	3.4%	18,984	4.3%
Total All Sectors	**437,327**		**441,497**		**446,311**		**426,423**		**439,940**	

Numerous governmental entities and private companies are major employers within the County. The following table lists the largest employers in the Birmingham-Hoover MSA and their approximate number of employees as of 2022:

LARGEST EMPLOYERS
BIRMINGHAM-HOOVER MSA

Company	Employment	Product	Type of Presence
University of Alabama at Birmingham (includes University of Alabama Health Services Foundation)	23,000	Education and Healthcare Services	Headquarters
Regions Financial Corporation	9,000	Financial Services (Banking)	Headquarters
St. Vincent's Health System	5,100	Healthcare and Management Services	Headquarters
Children's Health System/Children's of Alabama	5,000	Healthcare and Management Services	Headquarters
AT&T	4,517	Information	Major Operations
Brookwood Baptist Health	4,459	Healthcare and Management Services	Headquarters
Jefferson County Board of Education	4,400	Government, Public Education	Headquarters
City of Birmingham	4,200	Government, City Administration	Headquarters
Blue Cross-Blue Shield of Alabama	3,100	Financial Services (Insurance)	Headquarters
Alabama Power Company	3,092	Utility	Headquarters
Birmingham Board of Education	2,721	Government, Public Education	Headquarters
Jefferson County Commission	2,500	Government, County Administration	Headquarters
Shelby County Board of Education	2,491	County Public Schools	Headquarters
Birmingham VA Medical Center	2,440	Healthcare and Management Services	Regional
BBVA Compass	2,285	Financial Services (Banking)	Headquarters
Grandview Medical Center	2,172	Healthcare Services	Regional
U.S. Postal Service	2,000	Government/ Mail Processing/Delivery	Regional
Wells Fargo	1,978	Financial Services (Banking)	Major Operations
Southern Company Services	1,881	Utility	Major Operations
United States Social Security Administration	1,800	U.S. Government, Benefits	Regional
Hoover Board of Education	1,773	Government, Public Education	Headquarters
Dollar General Distribution Center	1,700	Wholesale Distribution, Retail Merchandise	Regional
EBSCO Industries, Inc.	1,600	Professional Services and Manufacturing Conglomerate	Headquarters
Protective Life Corporation	1,550	Financial Services (Life Insurance)	Headquarters
American Family Care, Inc.	1,464	Healthcare, Medical Clinic	Headquarters

Source: Birmingham Business Alliance, as of February 2022.

Median Family Income

Median Family Income is defined by the U.S. Census as the amount which divides the income distribution of families into two equal groups, half having incomes above the median and half having incomes below the median.

ESTIMATED MEDIAN FAMILY INCOME
(IN DOLLARS)

Year	United States	State of Alabama	Birmingham-Hoover MSA
2018	$71,900	$60,200	$71,000
2019	75,500	63,500	74,400
2020	78,500	65,300	73,100
2021	79,900	66,700	78,000
2022	90,000	73,600	84,800
2023	96,200	79,600	90,400

Source: HUD Office of Economic Affairs, Economic and Market Analysis Division

Personal Income

"Per Capita Personal Income" is defined as the current income from all sources received by one resident in an area. It is measured before deduction of income and other personal taxes, but after deduction of personal contributions for social security, government retirement and other social insurance programs. Per capita personal income in the Birmingham-Hoover MSA and the County are above the average for the State. Per capita personal incomes in the Birmingham-Hoover MSA are slightly below national averages, while per capita personal incomes in the County are generally at or above the national average.

Year	United States	State of Alabama	% of Nat'l Average	Jefferson County	% of Nat'l Average	Birmingham-Hoover MSA	% of Nat'l Average
2022	$65,470	$50,916	77.8%	$66,345	101.3%	$62,262	95.1%
2021	64,143	49,769	77.6	62,371	97.2	59,107	92.1
2020	59,765	46,179	77.3	58,053	97.1	55,086	92.2
2019	56,250	43,288	77.0	55,052	97.9	52,310	93.0
2018	53,786	41,539	77.2	53,421	99.3	50,385	94.1
2017	51,550	40,223	78.0	51,404	99.7	48,428	94.0
2016	49,613	39,014	78.7	48,909	98.6	46,389	93.5
2015	48,725	38,531	79.1	48,332	99.2	45,870	94.1
2014	46,887	37,055	79.0	46,244	98.6	43,975	93.8
2013	44,798	36,014	80.4	44,701	99.8	42,425	95.0
2012	44,548	35,824	80.4	45,420	102.0	42,779	94.7
2011	42,747	35,010	82.0	43,383	101.5	40,888	95.7
2010	40,683	33,946	83.4	42,184	104.0	39,511	97.1
2009	39,376	32,685	82.7	40,596	103.1	37,793	92.5
2008	41,082	33,430	83.0	42,313	103.0	39,555	92.5
2007	39,821	32,581	82.1	41,109	103.2	38,859	93.4
2006	38,144	31,315	81.8	40,093	105.1	37,443	93.8
2005	35,904	29,802	81.4	37,711	105.0	35,493	94.7
2004	34,316	28,371	83.0	36,552	106.5	33,678	94.1
2003	32,692	26,513	83.7	33,288	101.8	31,109	91.2
2002	31,815	25,485	81.7	31,935	100.4	30,053	90.4
2001	31,540	25,001	80.1	31,065	98.5	29,485	89.4
2000	30,602	24,258	80.4	31,201	102.0	28,970	90.2

1990	19,591	15,820	79.3	18,940	96.7	17,980	87.5
1980	10,153	7,913	78.9	9,491	93.5	8,983	84.5
1970	4,196	3,074	79.0	3,629	86.5	3,411	77.3

Per capita personal income is total personal income divided by total midyear population estimates. BEA produced intercensal annual county population statistics for 2010 to 2019 that are tied to the Census Bureau decennial counts for 2010 and 2020.
Note-- All dollar estimates are in thousands of current dollars (not adjusted for inflation).
Last updated: November 16, 2023—new statistics for 2022; revised statistics for 1979-2021.
Source: U.S. Department of Commerce, Bureau of Economic Analysis

Poverty Estimates

The following tables set forth poverty estimates and rates for the United States, the State, the County and the Birmingham-Hoover MSA:

Poverty Estimates (All People)	2015	2016	2017	2018	2019	2020	2021	2022
United States	46,153,077	46,932,225	42,583,651	41,852,315	39,490,096	40,910,326	41,393,176	40,951,625
State of Alabama	875,853	868,666	802,656	800,422	739,108	762,642	794,326	800,395
Jefferson County	115,897	116,750	108,413	102,816	105,080	100,865	109,044	106,039
Birmingham-Hoover MSA	187,065	181,343	164,809	161,877	149,331	144,371	156,545	151,453

Poverty Estimates (Percentage)	2015	2016	2017	2018	2019	2020	2021	2022
United States	14.7%	15.1%	13.4%	13.1%	12.3%	12.8%	12.8%	12.6%
State of Alabama	18.5	17.2	16.9	16.8	15.5	16.0	16.1	16.2
Jefferson County	18.0	18.1	16.8	16.0	16.3	15.7	16.6	16.4
Birmingham-Hoover MSA	16.8	16.1	14.6	14.4	14.0	13.6	14.3	13.9

Source: U.S. Census Bureau, American Community Survey, 2022 1-Year Estimates Subject Tables.

County Growth Patterns

Similar to many urban areas in the United States, growth in the County has occurred in the suburbs, away from the original center of the City of Birmingham. The out-migration that occurred after 1950, coupled with the mountainous topography of the County outside of the city center, led to significant demand for sewer service in the growth areas during a time period when regulatory requirements increased the cost of wastewater treatment.

The growth in the housing stock in the County does not mirror the County's population growth. Despite modest population growth in the County over the past several decades, housing units have nearly doubled since 1950, as the following table depicts:

HOUSING UNITS JEFFERSON COUNTY

Year	Total Establishments
1950	159,377
1960	194,751
1970	212,726
1980	259,843
1990	273,097
2000	288,162
2010	300,552
2015	303,755
2016	305,262

2017	308,822
2018	309,579
2019	309,673
2020	308,825
2021	309,206
2022	310,690

Source: U. S. Census Bureau, American Community Survey, Selected Housing Characteristics, 1-Year Estimates

Several socio-economic factors have influenced the growth in housing, including a lower birthrate, smaller family size, and an increase in multifamily housing units. Several other factors have negatively impacted growth in the County, including moratoria on sanitary sewer facilities during the 1970s and economic downturns.

During the 1980s and 1990s, while the County's population declined by nearly 20,000, the population of Shelby County grew dramatically. The growth in Shelby County was facilitated by the completion of Interstate 459 in southern Jefferson County. Population growth was also occurring in other surrounding counties during the 1980s and 1990s, as the Birmingham MSA (then comprised of Blount, Jefferson, Shelby, St. Clair and Walker Counties) increased by 24,000.

Despite some variations, the general population growth trend over the past several decades has been away from the City of Birmingham's core and out to the suburbs. Commuting patterns substantiate these trends, as the U.S. Census Bureau's American Community Survey currently estimates that businesses within the County employ more than 94,000 residents of other counties, the majority of whom live in Shelby and St. Clair Counties.

Jefferson County Commission

Pursuant to Alabama Code Title 11, Act No. 97-147 and the case of *Michael Taylor et al. v. Jefferson County Commission, et al.,* CV 84-C-1730-S (1985), in the United States District Court for the Northern District of Alabama, the County is governed by a five (5) member Commission (each member, a "Commissioner", who is elected concurrently with the other members of the Commission). Each Commissioner serves and is elected from one of five geographical districts. Each Commissioner serves as the chair of one of the Commission's standing committees, which are identified as (1) Public Works, Community Services & Inter-Governmental Relations Committee, (2) Community Development & Health Services Committee, (3) Administrative & Infrastructure Committee, (4) Finance, Judicial, Emergency Management & Development and General Services Committee, and (5) Information Technology & Economic Development Committee. All five Commissioners sit on each of the five standing committees. The standing committees exist to evaluate proposed items of Commission business and to advance or decline to advance such items to the agenda for a Commission meeting. Committees and their members have no operational responsibilities of the County - those responsibilities are expressly delegated to the County Manager under applicable state law.

The Commissioners elect one of their members to serve as President of the Commission at the beginning of each four-year Commission term. The President's duties include serving as presiding officer at all Commission meetings, executing all contracts and other agreements which require approval of the Commission and executing all checks and/or warrants on the Commission accounts.

The current Commissioners are listed below.

James A. "Jimmie" Stephens. Commissioner Stephens was re-elected in November 2022 to his fourth term on the Commission, where he represents District 3. Commissioner Stephens attended Samford University, where he obtained both a Bachelor of Science in Business Administration and a Masters of Business Administration. He previously served as a city councilor on the Bessemer City Council and is past chairman of the Bessemer Board of Zoning Adjustments, the Bessemer Airport Authority and the Bessemer Commercial Development Authority. In addition, he is a former high school educator, where he taught business education courses. Commissioner Stephens has extensive business experience, primarily in the wholesale and retail fields. He lives in Bessemer, Alabama.

Commissioner Stephens currently serves as the President of the Commission, and is Chair of the Administrative & Infrastructure Committee.

Joe Knight. Commissioner Knight was re-elected in November 2022 to his fourth term on the Commission, where he represents District 4 of the County. Commissioner Knight has practiced as an attorney for the past thirty years and is the principal in T. Joe Knight, LLC, located in Birmingham. He is a member of the Alabama State Bar and Birmingham Bar Association. Prior to becoming an attorney, Commissioner Knight was Certified Registered Nurse Anesthetist (CRNA), a Nurse Clinician at UAB Hospital and Registered Nurse specializing in trauma. Commissioner Knight is General Counsel for the Alabama Association of Nurse Anesthetists. He is a member of the Alabama Association of Nurse Anesthetists and the American Association of Nurse Anesthetists. Commissioner Knight was on the executive committee for the World Games 2022, is a member of the Greater Birmingham Convention and Visitors Bureau, and is a board member of the Regional Planning Commission of Greater Birmingham. Commissioner Knight was also recently elected as President of the Association of County Commissioners of Alabama. He lives in Trussville.

Commissioner Knight is President Pro Tempore of the Commission, and is Chair of the Finance, Judicial, Emergency Management & Development and General Services Committee.

Lashunda Scales. Commissioner Scales was re-elected in November 2022 to serve her second term on the Commission where she represents District 1. Commissioner Scales previously served as a city councilor on the Birmingham City Council from 2009 through 2018 and has been an active resident in the metro area for 25 years. She is a graduate of the Harvard Kennedy School of Government, Leadership Birmingham, Leadership Alabama, Jefferson State Community College and Stillman College. She currently serves as Chair of the Public Works, Community Services & Inter-Governmental Relations Committee.

Shelia Tyson. Commissioner Tyson was re-elected in November 2022 to serve her second term on the Commission where she represents District 2. Commissioner Tyson is former president of the West End community and the Birmingham Citizens Advisory Board. She studied business accounting at the Quartermaster School operated by the U.S. Army. Commissioner Tyson is a former leader of the Alabama Coalition on Black Civic Participation in its pursuit to concentrate on the formerly incarcerated population to engage and mobilize them to participate in the 2008 presidential election. She also has a reputation as a strong community leader and is a certified facilitator by the International Research Board and UAB. She currently serves as Chair of the Community Development & Health Services Committee.

Michael F. "Mike" Bolin. Commissioner Bolin was elected to represent District 5 in a special election held on July 18, 2023, to fill the vacancy created when former Commissioner Steve Ammons stepped down in May 2023 to become the Chief Executive Officer of the Birmingham Business Alliance. Commissioner Bolin is a graduate of Samford University and of the Cumberland School of law, where he graduated Cum Laude and was Associate Editor of the Cumberland Law Review. Commissioner Bolin was a practicing attorney in Birmingham from 1973 through 1988 prior to his election as Jefferson County Probate Judge, Place 2, in November, 1988. He was re-elected in 1994, and was elected as Probate Judge, Place 1 (Presiding Judge) in 2000. Commissioner Bolin served in that position until 2004 when he was elected to the Alabama Supreme Court and began his first term as an Associate Justice. He served as an Associate Justice for 18 years until his retirement in December 2022. Commissioner Bolin served as Treasurer, Secretary and President of the Alabama Probate Judges Association (APJA), and is a former Chairperson of the APJA Continuing Education and Adoption Committees. He is a member of the Alabama State Bar Association and the Birmingham Bar Association, and served as President of the Jefferson County Young Lawyers section.

The County holds general elections for all five County Commissioner spots, as well as for the district attorney, county sheriff, circuit clerk and circuit, district and probate court judgeships. The next election will be held on November 10, 2026.

Other Elected Officials

Sheriff. The Sheriff of Jefferson County is an elected official who serves as the chief law enforcement officer of the County. The Sheriff maintains full law enforcement jurisdiction throughout the County, with particular regard for providing service to the unincorporated areas of the County. These enforcement duties include handling criminal investigations and traffic accident investigations. The Sheriff also is responsible for the service of legal process for County courts, the conduct of public elections and the operation and maintenance of the County jails.

The Sheriff is a member of the executive department of the State under Alabama Constitution §112 and regarded as a State official under Alabama law. *See Marsh v. Butler Co., Ala.,* 268 F.3d 1014, 1028 (11th Cir. 2001). Under Alabama Code (1975) § ll-8-3(c), as amended, and Alabama Code (1975) § 36-22-18, the County is required to fund the operations of the Sheriff's office.

Mark Pettway is the current Sheriff of Jefferson County, having been elected as the first African American Sheriff of the County in 2018 and having been re-elected as Sheriff on November 8, 2022.

County Treasurer. The County Treasurer is an elected position whose office is responsible for receiving and keeping the money of the County and disbursing the same as provided for by State law.

Eyrika Parker is the current County Treasurer, being first elected in 2020. Sherry McClain is the current Deputy County Treasurer of the "Bessemer Cutoff" division, having won re-election in 2020.

Tax Assessor. The Jefferson County Tax Assessor is responsible for processing tax returns on real and personal property, discovering and assessing taxable property, recording the ownership of property, and maintaining the County's tax roll.

Gaynell Hendricks is the current County Tax Assessor. She was elected to her first four-year term in 2008, and was re-elected in 2012, 2016 and 2020. Charles R. Winston, Jr. is the current Assistant Tax Assessor, serving the "Bessemer Cutoff" division of the County.

Tax Collector. The County Tax Collector is an elected officer who is responsible for the collection of real property and other taxes assessed by the County.

J.T. Smallwood currently serves as County Tax Collector, holding that position since first elected in 2002. Johnny Curry is the Assistant Tax Collector position serving the "Bessemer Cutoff" division of the County.

Probate Court Judges. The County Probate Judges are responsible for a variety of tasks, including issuing marriage licenses, recording real estate documents and other public records, probating wills and administering estates, issuing letters of guardianship and conservatorship, hearing adoptions and name change matters, hearing adult mental health involuntary commitment cases, processing applications for notaries public, and serving as the chief election official for the County.

The Honorable James Naftel and the Honorable Sherri Friday both currently serve as Probate Judges, with the Honorable Elizabeth North serving as Deputy Probate Judge in the Bessemer Division.

District Attorney. The District Attorney is a publicly elected official who represents the State in the prosecution of criminal offenses within the County. Danny Carr is the current District Attorney. Lynneice Washington is the District Attorney serving the "Bessemer Cutoff" division of the County.

County Management

County Manager/Chief Executive Officer. In August 2009, the Alabama Legislature passed Act 2009-662 and Act 2009-812 (collectively, the "County Manager Act"), pursuant to which the Alabama Legislature directed the Commission to hire a county manager on or before April 1, 2011, to serve as the County's chief executive officer. The legislation provided that the votes of four of the five Commissioners would be necessary to select a county manager. The legislation further mandated that the County engage a qualified national search firm to recruit candidates at any time the county manager position is vacant.

Since October 1, 2021, Cal Markert has served as the County's County Manager. Mr. Markert came to the position with extensive public service and management experience. Mr. Markert has been with the County since 2017 and previously served as Deputy County Manager since May 2018. Previously, he served as the Director of Roads and Transportation for Baldwin County, Alabama, as the Director of Roads and Transportation of Jefferson County, Alabama, as the County Engineer for Russell County, Alabama and in various engineering roles for the Alabama Department of Transportation. He has a Civil Engineering degree from Auburn University and holds a certificate in County Engineering Administration from the Association of County Engineers of Alabama.

As County Manager, Mr. Markert assumes day-to-day management authority for the County's operations, a responsibility that previously had been borne by the Commissioners themselves, on top of their legislative functions. Centralizing the executive functions of the County in the County Manager's office has resulted in substantial efficiencies and improvements in the County's operations. Mr. Markert oversees the implementation of authorized projects and programs, ensures appropriate coordination of departmental operations, analyzes and implements organizational changes to improve the efficient and economical operation of County government, and recommends policies and adopts procedures for the orderly conduct of the County's administrative affairs. Mr. Markert's office also is charged with the County's budget planning and oversight process, which entails reviewing and evaluating budget estimates of all County departments, submitting an annual budget to the Commission for its review and approval, reviewing County revenues and expenditures throughout the year to ensure budgetary control and to keep the Commission advised of the financial condition and needs of the County, implementing necessary and prudent fiscal controls, and providing recommendations as to supplemental appropriations and budget transfers which require Commission approval. Mr. Markert attends all Commission meetings, where he, as County Manager, may discuss any matter before the Commission, although he has no vote on Commission matters.

The County Manager is the appointing authority for all County employees with the exception of the County Attorney, the County Attorney's staff attorneys and their merit system staff, elected County officials and their appointed staff. Aside from the limited exceptions stated above, the County Manager has the authority to select, appoint, evaluate, terminate and retain department heads and county employees. Darren Lanier and Heather Carter each serve as Deputy County Manager for the County.

Chief Financial Officer. Angela M. Dixon is the Chief Financial Officer ("CFO") for the County, a position established pursuant to the County Manager Act. Ms. Dixon brings more than 30 years of finance and accounting experience in both the public and private sectors. Ms. Dixon has been with the County since 2017 and previously served as Deputy Finance Director.

Prior to joining the County, Ms. Dixon held roles as director of fiscal affairs at Wallace Community College Selma, acting internal audit director/manager at the Alabama Community College System, controller at Alabama State University and Texas Southern University, and manager at Ernst & Young LLP and Blazek and Vetterling LLP. She earned her Master of Accountancy degree from Auburn University and Bachelor of Science degree from Alabama State University. Ms. Dixon is a Certified Public Accountant in Alabama and Texas.

As Chief Financial Officer, Ms. Dixon reports directly to the County Manager and has primary executive responsibility for the County's finance, revenue, purchasing, board of equalization and budget management offices.

County Attorney. Theo Lawson is a graduate of the University of Alabama-Tuscaloosa, the Birmingham School of Law, and the Jefferson County Law Enforcement Academy. He began his law career with the law firm of Barnes, Zinder, and Lawson in the general practice of law; while also serving as the night court and Ensley court prosecutor for the City of Birmingham. Mr. Lawson then began a career with the Jefferson County District Attorney's Office where he prosecuted many high profile and multi-defendant criminal cases. He has also served on the faculty of the National College of District Attorneys. He was appointed Chief Assistant City Attorney for the City of Birmingham under Mayor Bernard Kincaid serving as second in command of the City of Birmingham's legal department. In 2004, Mr. Lawson was appointed as an Assistant County Attorney for Jefferson County representing Jefferson County in civil litigation and serving as legal officer to EMA. In November of 2016, Mr. Lawson was unanimously appointed to the position of County Attorney. He is the first African American to ever hold this position within the County. Mr. Lawson served as a professor of criminal law and procedure at Miles Law School and Director of Public Safety at Miles College Police Department, and currently serves as a Police Academy Instructor for the Birmingham Police Department and the Jefferson County Sheriff's Academy.

As County Attorney, Mr. Lawson reports directly to the Commission. He supervises a staff of five in-house attorneys and oversees the work of numerous outside law firms retained from time to time by the County. The County Attorney's office is responsible for representing and advising the County, its elected officials and appointed officers and department heads. The elected officials and appointed officers include the Commission, the County Manager, the Deputy County Managers, the Chief Financial Officer, the Tax Collector and Tax Assessor, the Probate Judges, the Election Commission (comprised of the Sheriff, Clerk of Court and Probate Judge) and the Treasurer. The operating departments include the Finance Department, Revenue Department, Roads and Transportation Department, Environmental Services Department, Land Development Department, the Board of Equalization, the Coroner, the General Services Department, the Family Court, the Juvenile Detention Facility, the Human Resources Department, the Budget Management Department, the Board of Registrars, the Inspection Services Department, the Community Services Department, the Department of Information Technology and the Jefferson County Emergency Management Agency. The County Attorney's office represents these persons in a variety of matters, including the defense of claims, negotiation of contracts, compliance, and a variety of litigation matters. The County Attorney is also responsible for Risk Management and oversees the Minute Clerk of the Commission.

County Employees and County Employment Decisions

County employment for the past 10 years has been as follows:

Year	Employees
2022	2,474
2021	2,488
2020	2,497
2019	2,635
2018	2,628
2017	2,592
2016	2,429
2015	2,365
2014	2,267
2013	2,251

The Personnel Board of Jefferson County (the "Personnel Board") possesses substantial administrative responsibility over the County's employment practices. The Personnel Board is a human resources organization established by the Alabama Legislature in 1935 to administer the civil service, or merit, system for the County and certain other municipalities within the County. The Personnel Board is responsible for establishing and administering rules and regulations to assure compliance with Act 248, H.580, adopted by the Alabama Legislature in 1945 (as amended, the "Enabling Act"), and to ensure that the County's civil service employees are treated in accordance with the Enabling Act's provisions. To that end, the Personnel Board classifies positions throughout the County, tests potential candidates for employment, establishes hiring registers, develops and administers pay schedules, coordinates the adjudication of grievances, and maintains employee history records. The County's participation in the Personnel Board system is not optional and is mandated by the Enabling Act.

The Personnel Board operates under the auspices of a three-member panel. This three-member panel is appointed by a Citizens' Supervisory Commission comprised of 17 civic leaders from throughout the County. The composition of the Citizens' Supervisory Commission is defined in the Enabling Act. Each panel member serves a staggered six-year term. A personnel director reports directly to the three-member panel and is responsible for the day-to-day operations of the Personnel Board.

The Personnel Board's expenses throughout its fiscal year are paid by the County, as required by the Alabama Legislature pursuant to the Enabling Act. At the end of each fiscal year, the County submits to the Personnel Board the total sum the County has expended on Personnel Board operations. Once these expenses have been approved, the County and the other municipalities that participate within the Personnel Board system are billed for their respective shares of such annual expenses. For fiscal year 2022, the percentage of the Personnel Board's expenses allocated to the County was 30.44% of the total amount billed.

In 1975, various private plaintiffs and the United States filed suit against the Personnel Board and other defendants, including Jefferson County, to remedy alleged wrongs in the hiring and promotion of African-American and female applicants and employees. After considerable negotiations, litigation, and appeals, the county entered into a consent decree on December 29, 1982. This decree, along with other consent decrees executed by other parties (collectively, the "Hiring Practices Consent Decree"), remained the subject of further litigation and negotiations, including, in 2002, the Federal District Court appointing a receiver for the Personnel Board.

On October 3, 2007, two groups of plaintiffs claimed that the County had failed to comply with the Hiring Practices Consent Decree's requirements to ensure equal employment for African- Americans and women and to remedy the effects of prior discrimination. The plaintiffs also alleged that the County failed to comply with Hiring Practices Consent Decree requirements regarding hiring specific compliance officers and recordkeeping. The plaintiffs sought to hold the County in contempt and sought to modify the Hiring Practices Consent Decree to mandate particular practices that the plaintiffs would like to see implemented.

On December 11, 2012, at the conclusion of a contempt hearing in the long-standing employment discrimination Consent Decree case *United States v. Jefferson County*, CV-75-666 (N.D. Ala.), the U.S. District Court ordered that all hiring activity at the County be halted. The U.S. District Court allowed, however, that limited and essential recall, hiring and promotion could occur pursuant to interim selection procedures under a court-approved process. This process was subsequently pronounced under a set of temporary orders.

The United States District Court on August 20, 2013, entered its decision and order finding the Commission in contempt of court and informing the parties that a receiver would be appointed over the Human Resources Department. On October 25, 2013, the Court appointed Dr. Ronald Sims, Ph.D., from the College of William and Mary in Williamsburg, Virginia to serve as the receiver (the "Employment Discrimination Receiver") under the direction of and reporting only to the Court. On May 28, 2015, the United States District Court advised the parties that it had called for Dr. Sims to step down as the Receiver and terminated his appointment. On June 11, 2015, the United States District Court appointed Lorren Oliver, Executive Director of the Personnel Board of Jefferson County, to serve as Interim Receiver.

On November 25, 2015, the United States District Court appointed Lorren Oliver to the position of Receiver under a Modified Order. The Employment Discrimination Receiver's authority was to exercise full control over nearly all employment decisions of the Commission, subject to a court-approved budget, until full and sustainable compliance with the employment discrimination consent decree was achieved. The District Court's modified order contemplated the Employment Discrimination Receiver's duties and obligations be substantially completed in three years or less. Pursuant to the Employment Discrimination Order, the County could challenge any actions proposed or taken by the Employment Discrimination Receiver if the Commission in good faith believed such actions materially interfered with the functions of the County.

Beginning November 25, 2015, the County, through working with the Receiver, developed and implemented non-discriminatory hiring and promotion procedures in accordance with the Court's directive. Further, the Receiver developed a Human Resources Department within the County to support and ensure compliance with the Consent Decree. The Receiver's budget for Fiscal Year 2014-15 was close to $17,000,000. The Receiver's budget for Fiscal Year 2015-16 was $14,000,000. The Receiver's budget for Fiscal Year 2016-17 was $12,670,000. The Receiver's budget for Fiscal Year 2017-18 was $11,970,000. The decrease in budget can be attributed in part to the lack of need for the Receiver to employ or appoint personal staff and the reduced need for the employment of outside experts and consultants. The County's Human Resources Department is now able to independently oversee and manage lawful selection procedures.

On May 15, 2018, two groups known as the Martin Plaintiffs and the Bryant Intervenors, along with the United States of America, the Receiver, and the County, jointly submitted a plan (the "Transition Plan") proposing that the County assume responsibility for hiring within the County and for the Receiver to serve as a monitor of the County's continued Compliance with the Consent Decree. On June 6, 2018, the U.S. District Court entered an order (the "Transition Plan Order") ratifying, approving, and adopting the Transition Plan.

The Transition Plan Order effectively terminated the role of receiver and returned personnel decision-making to the County. Under the Transition Plan, the County was still subject to and required to comply with the Consent Decree; however, the Human Resources Department, the County Manager, County Attorney, and the Commission oversee and direct all employment decisions for the County.

Under the Transition Plan, Lorren Oliver served in the role of Monitor of Jefferson County, and in that capacity monitored the County for compliance with the Consent Decree. Mr. Oliver's role was as an agent of the District Court, and in that regard was independent of the parties that submitted the Transition Plan.

Upon consideration of all parties, a Joint Motion for Termination of the County's Consent Decree was filed, granted, and entered on December 21, 2020, ending the longest employment Consent Decree in the nation (38 years). Attorney's fees and costs to the plaintiff were paid on April 16, 2021, settling all but the County's reporting requirements for 18 months, which terminated on June 30, 2022.

Department of Finance

The Department of Finance is responsible for the administration of the financial affairs of the County and the maintenance of its accounting records. Malinda S. Parker is the Director of Finance. The Finance Department directs the County's financial program by assembling, maintaining and preparing the County's financial records and statements and by assisting in budget hearings.

Historically, the County was audited by the State Department of Examiners of Public Accounts. In 2006, the County decided to have its financial statements audited by a certified public accounting firm. A copy of the financial statements of the County, and the associated notes to such financial statements, as of and for the fiscal year ended September 30, 2022, as audited by Mauldin & Jenkins, LLC, Independent Certified Public Accountants, Birmingham, Alabama, is attached as APPENDIX B to this Official Statement.

Budget System

The budget for the County consists of an operating budget for each of the funds maintained by the County. Together, these separate operating budgets constitute a complete financial plan for the County and reflect the projection of the receipts, disbursements and transfers from all sources. Pursuant to Act 2011-69 of the Alabama Legislature, all of the operating budgets are developed by the County Manager in conjunction with the CFO, who reviews and evaluates budget estimates from the County's various departments and then submits the recommended annual budget to the Commission. Under Alabama law, the County Manager is charged with causing the planning process for the County's budget to be compatible with approved County policies and long-range plans. The Commission is prohibited by law from adopting budgets in which the total of expenditures exceeds the estimated total receipts and available surplus.

The Commission is required to adopt the annual budgets before October 1 of the fiscal year in which the budgets are to take effect. Upon adoption by the Commission, the budgets are printed for distribution to all departments of the County, as well as financial institutions and the general public. Appropriations in addition to those in the original budgets may be made by the Commission if unencumbered and unappropriated moneys sufficient to meet such appropriations are available.

Accounting System

Government-Wide and Fund Financial Statements. Basic financial statements include both the government-wide (based on the County as a whole) and fund financial statements. The government-wide financial statements (i.e., the statement of net position and the statement of activities) report information on all of the non-fiduciary activities of the primary government and its component units. For the most part, the effect of interfund activity has been removed from these statements. Exceptions to the general rule are charges between the government's enterprise functions and various other functions of the government. Elimination of these charges would distort the direct costs and program revenues reported for the various functions concerned. Governmental activities, which normally are supported by taxes, charges for services and intergovernmental revenues, are reported separately from business-type activities, which rely to a significant extent on fees and charges for support as well as property taxes. Likewise, the primary government is reported separately from certain legally separate component units for which the primary government is financially accountable.

The statement of activities demonstrates the degree to which the direct expenses of a given function or segment is offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or segment. Program revenues include 1) charges to customers or applicants who purchase, use, or directly benefit from goods, services, or privileges provided by a given function or segment and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Taxes and other items not properly included among program revenues are reported instead as general revenues.

Separate financial statements are provided for governmental funds, proprietary funds, and fiduciary funds, even though the latter are excluded from the government-wide financial statements. Major individual governmental funds and major individual enterprise funds are reported as separate columns in the fund financial statements

Measurement Focus, Basis of Accounting and Financial Statement Presentation. The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting, as are the proprietary fund and fiduciary fund financial statements. Revenues are recorded when earned, and expenses are recorded when liabilities are incurred, regardless of the timing of related cash flows. Nonexchange transactions, in which the County gives (or receives) value without directly receiving (or giving) equal value in exchange, include property taxes, grants, entitlements and donations. On an accrual basis, revenue from grants, entitlements and donations is recognized in the fiscal year in which all eligibility requirements have been satisfied. Revenue from grants is recognized in the fiscal year for which the taxes and grants are both due and collectible and available to fund operations. Property taxes are recognized as revenue in the year for which they are levied.

Under the terms of grant agreements, the County funds certain programs by a combination of specific cost-reimbursement grants, categorical block grants and general revenues. Thus, when program expenses are incurred, there are both restricted and unrestricted net assets available to finance the program. It is the County's policy to first apply cost-reimbursement grant resources to such programs, followed by general revenues.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the County considers property taxes to be available if they are collected within sixty (60) days of the end of the current fiscal period for which they are levied. Other revenues susceptible to accrual are also considered available if they are collected within ninety (90) days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred, as under accrual accounting. However, debt service expenditures, as well as expenditures related to compensated absences and claims and judgments, are recorded only when payment is due.

Property taxes, sales taxes, charges for services, intergovernmental grants, and interest income and other miscellaneous receipts associated with the current fiscal period are all considered to be susceptible to accrual and so have been recognized as revenues of the current fiscal period. All other revenue items are considered to be measurable and available only when cash is received by the County.

The following major governmental funds are included in the County's financial statements:

- *General Fund* - This fund is the primary operating fund of the County. It is used to account for financial resources except those required to be accounted for in another fund. The County primarily receives revenues from collections of property taxes, county sales taxes and revenues collected by the State of Alabama and shared with the County.

- *Special Sales Tax Revenue Fund* - This fund is used to account for the special revenue sales tax collected and used for the payment of principal and interest on certain governmental bonds and distributed in accordance with Article 9 of the trust indenture dated July 1, 2017.

- *Indigent Care Fund* - This fund is used to account for the expenditure of beverage and sales taxes designated for indigent residents of the County.

- *American Rescue Plan Fund* - This fund is used to account for grant funding received by the County under the American Rescue Plan Act of 2021.

Other nonmajor governmental funds are as follows:

- *Debt Service Fund* - This fund is used to account for the accumulation of resources for, and the payment of, the County's principal and interest on governmental bonds.

- *Community Development Fund* - This fund is used to account for the expenditure of federal block grant funds.

- *Community Development Loan Fund* - This fund is used to account for loans to businesses through the federal block grant funds.

- *Capital Improvements Fund* - This fund is used to account for the financial resources used in the improvement of major capital facilities.

- *Bridge and Public Buildings Fund* - This fund is used to account for the expenditure of special County property taxes for building and maintaining public buildings, roads and bridges.

- *Road Fund* - This fund is used to account for the receipt and expenditure of the County's share of proceeds from applicable gasoline taxes, ad valorem taxes, inspection fees, and other taxes and fees designated for the construction and maintenance of County roads.

- *Road Construction Fund* - This fund is used to account for the financial resources expended in the construction of roads.

- *Home Grant Fund* - This fund is used to account for the expenditure of funds received to create affordable housing for low income households.

- *Board of Equalization Fund* - This fund is used to account for property taxes restricted by the State for the operation of the Board of Equalization.

- *Workforce Development Fund* - This fund is used to account for the expenditures of the Workforce Innovation Opportunity Act.

- *Emergency Rental Assistance Fund* – This fund is used to account for the expenditure of funds received for emergency use rental assistance.

- *Limited Obligation Refunding Debt Fund* – This fund is used to account for the payment of principal and interest on the County's $338,925,000 Limited Obligation Refunding Warrants, Series 2017, dated July 31, 2017 (the "Series 2017 Special Sales Tax Warrants").(1)

- *Tax Assessor – Birmingham Fund* – This fund is used to account for the expenditures for the State funded Tax Assessor Birmingham operations.

- *Tax Assessor – Bessemer Fund* – This fund is used to account for the expenditures for the State funded Tax Assessor Bessemer operations.

(1) This fund accounts for the Special Sales Tax (hereinafter described) collected by the County and used to pay debt service on the Series 2017 Special Sales Tax Warrants.

- *Sheriff Condemnations Fund* – This fund is used to account for funds from fines and forfeitures to be used for law enforcement activities.

- *Sheriff Special Programs Fund* – This fund is used to account for funds from fines, forfeitures and contributions and donations received that are to be expended within the guidelines of each program as established by external resource providers.

- *Law Library Fund* – This fund is used to account for funds from the related revenues and expenditures of operating the County's Law Library.

The County also reports on several discretely presented component units that are described below:

- *Emergency Management Agency* – This component unit used to account for the operations of the Jefferson County Emergency Management Agency which oversees disaster assistance programs.

- *Personnel Board* – This component unit is used to account for the operations of the Jefferson County Personnel Board, which oversees personnel management for various municipalities located in the County.

- *Jefferson County Economic and Industrial Development Authority* – This component unit is used to account for the operations of the Jefferson County Economic and Industrial Development Authority. This authority was incorporated in 1995 to engage in the solicitation and promotion of industry and industrial development and to induce industrial and commercial enterprises to locate, expand or improve their operations or remain in the County.

The County currently reports enterprise funds as its only type of proprietary fund. Enterprise funds report the activities for which fees are charged to external users for goods or services. This fund type is also used when the activity is financed with debt that is secured by a pledge of the net revenues from the fees. Proprietary funds distinguish operating revenues and expenses from nonoperating items in their statement of revenues, expenses and changes in fund net assets. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the County's enterprise funds are charges to customers for the purchase or use of the proprietary fund's principal product or service. Operating expenses for the County's enterprise funds include the cost of providing those products or services, administrative expenses, depreciation on capital assets and closure and postclosure care costs. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

The following major enterprise funds are included in the County's financial statements:

- *Sanitary Operations Fund* - This fund is used to account for the operations of the County's sanitary sewer systems. Revenues are generated primarily through user charges, impact fees and designated property and ad valorem taxes.

Other nonmajor enterprise funds are as follows:

- *Landfill Operations Fund* - This fund is used to account for the operations of the County's landfill systems. Revenues are generated primarily through user charges and lease payments from a third-party lessee.

- *Hallmark Farms Cooperative* - This fund is used to account for the activities of the County's cooperative agreement with the City of Warrior, Alabama. The Hallmark Farms Cooperative is a blended component unit of the County.

The preparation of financial statements in accordance with United States generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

As a governmental unit, the County is exempt from federal and state income taxes.

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County Revenues and Expenditures

Summary of General Fund Revenues and Expenditures – General Fund. The following table sets forth the consolidated revenues, expenditures and changes in fund balance with respect to the County's General Fund for each of the past five fiscal years. Such information is taken from the audited financial statements for the County for the fiscal years ended September 30, 2018, through and including September 30, 2022. Amounts shown are in thousands.

	2018	2019	2020	2021	2022
Revenues					
Taxes	$97,902	$99,797	$111,448	$126,327	$134,237
Licenses and Permits	10,818	11,099	10,880	11,843	16,138
Intergovernmental	8,734	8,572	9,955	4,568	9,526
Charges for services, net	30,387	30,594	32,262	37,829	43,865
Miscellaneous	7,234	9,742	9,488	7,547	2,508
Interest and invest. income	742	1,658	970	239	362
Total Revenues	155,817	161,462	175,003	188,351	206,637
Expenditures					
Current:					
General government	104,101	111,862	114,552	131,250	126,323
Public safety	81,852	81,312	58,538	81,052	91,723
Highway and roads	--	--	--	--	--
Community development	--	949	--		--
Health and welfare	--	--	--	691	930
Capital outlay	--	1,814	--	--	--
Indirect expenses	(7,477)	(8,341)	(6,228)	(8,108)	--
Debt service:					
Principal retirement	--	326	344	348	711
Interest and fiscal	9	674	664	660	730
Total Expenditures	178,485	188,596	167,870	205,894	220,417
Excess (Deficiency) of Revenues over Expenditures	(22,668)	(27,134)	7,133	(17,542)	(13,780)
Other Financing Sources (Uses)					
Sale of capital assets	194	337	28	1,403	384
Transfers in	87,545	80,397	62,394	74,998	90,226
Transfers out	(41,113)	(29,551)	(9,385)	(16,627)	(26,708)
Net Changes in Fund Balance	23,958	24,049	60,170	42,232	50,123
Fund Balance - beginning of year	130,088	154,046	178,095	238,265	281,751*
Prior Period Adjustments	--	--	--	1,254	5,000
Fund Balance – beginning of year, as restated	130,088	154,046	178,095	239,519	286,751
Fund Balance – end of year	$154,046	$178,095	$238,265	$281,751	$336,874

* For fiscal year 2022, management of the County determined that a restatement to the beginning fund balance of the General Fund was needed to correct an error in the prior fiscal year's financial statements pertaining to the County's contingent liability associated with its bankruptcy. See Note 15 to the County's audited financial statements as of and for the fiscal year ended September 30, 2022, attached as APPENDIX B for more information.

General Sales and Use Tax Revenues. The County levies and collects sales and use taxes (the "General Sales and Use Tax") pursuant to the provisions of Act No. 405 enacted at the 1967 Regular Session of the Alabama Legislature, as amended by Act No. 659 enacted at the 1973 Regular Session of the Alabama Legislature (the "Tax Act"). The General Sales and Use Tax is levied at one-quarter of the rate at which the State sales and use taxes are levied. The State sales and use taxes are currently levied at the rate of 4% of the gross sales or gross receipts, as the case may be, of all businesses subject to the tax, except that the rate with respect to certain machinery, motor vehicles and trailers is 1-1/2%. The Tax Act provides that certain sales are exempt from both the State tax and the County tax. In the event the present State sales and use tax statutes are repealed, under the Tax Act the General Sales and Use Tax will continue to be imposed as if such repeal had not occurred.

The sales tax is due and payable on or before the twentieth day of the month next succeeding the month during which the tax accrued. The use tax is due and payable on or before the twentieth day of the month next succeeding the quarterly period during which the tax accrued. Both taxes are payable to the County Director of Revenue. Under the Tax Act, on or before the twentieth day of each month, the County Director of Revenue is required to make a division of the total proceeds of the General Sales and Use Tax collected during the immediately preceding month for the following purposes and in the following order:

(1) The first one-half share of the total tax proceeds is applied as follows:

(a) an amount equal to 1-1/2% of the total tax proceeds is paid into the General Fund of the County to pay the costs of administering and enforcing the Tax Act;

(b) 9% of the first one-half share is paid directly to the Jefferson County Board of Health; and

(c) the balance of such one-half share is paid into the Indigent Care Fund of the County.

(2) The second one-half share of the total tax proceeds is applied as follows:

(a) $100,000 is paid each month directly to the Birmingham-Jefferson Civic Center Authority (the "BJCC Authority");

(b) in the event that the total of the amounts paid to the BJCC Authority during the month from the net proceeds of the tobacco tax levied by Act No. 524 enacted at the 1965 Regular Session of the Alabama Legislature and the lodging tax levied by Act No. 525 enacted at the 1965 Regular Session of the Alabama Legislature aggregates less than $100,000, an amount of the second one-half share equal to the difference between $100,000 and the total amount so paid from the proceeds of such taxes is paid directly to the BJCC Authority;

(c) 22% of the second one-half share is paid directly to the Jefferson County Board of Health;

(d) 9% of the second one-half share is payable directly to the Jefferson County Board of Health; and

(e) the remaining balance of the second one-half share is paid into the General Fund of the County.

The following table sets forth the gross General Sales and Use Tax revenues for the fiscal years ended September 30, 2013, through September 30, 2022. Amounts shown are in thousands.

Fiscal Year Ending September 30	Total Amount
2013	$97,380
2014	99,183
2015	104,513
2016	102,752
2017	111,339
2018	120,361
2019	114,549
2020	117,379
2021	129,399
2022	139,672

Source: Jefferson County Revenue Department

Special Sales and Use Tax Revenues. Pursuant to Act No. 2015-226 adopted by the Alabama Legislature during the 2015 Regular Session (the "Special Sales Tax Act") and a resolution of the County adopted by the Commission on August 13, 2015 (the "Special Sales Tax Resolution"), the County levies and collects a sales tax (the "Special Sales Tax") at a general rate of 1% of gross sales or sale price, as appropriate. Vending machine sales are taxed at a rate of 0.750%. Automobiles and manufacturing equipment are taxed at a rate of 0.375%. The Special Sales Tax Act provides that exemptions applicable to the State sales and use taxes apply to the Special Sales Tax. The Special Sales Tax is currently administered by the County.

The Special Sales Tax Act provides that proceeds of the Special Sales Tax shall be distributed each fiscal year in the following priority and amounts:

> *First*, so long as the Series 2017 Special Sales Tax Warrants, or any warrants subsequently issued to refinance the Series 2017 Special Sales Tax Warrants (collectively with the Series 2017 Special Sales Tax Warrants, "Refunding School Warrants") are outstanding and not defeased or otherwise fully paid, so much of the proceeds received during a fiscal year of the County as may be necessary to satisfy the County's obligations with respect to the Refunding School Warrants, including payment of principal or premium, if any, and interest on the Refunding School Warrants due during any such fiscal year of the County, any ongoing expenses of administration of the Refunding School Warrants, amounts required to be deposited in any debt service reserve fund for the Refunding School Warrants, and amounts necessary to provide for the payment of rebate to the United States Treasury, if any, or other amounts due to the United States shall be paid over to the trustee or paying agent for the Refunding School Warrants to be held solely for payment of such amounts;
>
> *Second*, to the extent there remain additional proceeds of the Special Sales Tax following the application described above, up to $36,300,000 per fiscal year of the County shall be deposited to the general fund of the County for use as the Commission shall determine;
>
> *Third*, to the extent there remain additional proceeds of the Special Sales Tax following the applications described above, up to $18,000,000 per fiscal year of the County shall be deposited into a fund created pursuant to the Special Sales Tax Act and shall be distributed to the public school systems in the County as provided therein;

Fourth, to the extent there remain additional proceeds of the Special Sales Tax following the applications described above, up to $3,600,000 per fiscal year of the County shall be deposited in the Jefferson County Community Service Fund and used for certain public purposes as determined in accordance with the Special Sales Tax Act;

Fifth, to the extent there remain additional proceeds of the Special Sales Tax following the applications described above, up to $2,000,000 per fiscal year of the County shall be paid over to the Birmingham-Jefferson County Transit Authority for each of the first 10 fiscal years of the County following the adoption of the Special Sales Tax Act, and thereafter up to $1,000,000 per fiscal year of the County;

Sixth, to the extent there remain additional proceeds of the Special Sales Tax following the applications described above, up to $500,000 per fiscal year of the County shall be paid over to the Birmingham Zoo; and

Seventh, to the extent there remain additional proceeds of the Special Sales Tax following the applications described above, such remaining proceeds shall be deposited in the general fund of the County for use as the Commission shall determine.

The Special Sales Tax was first levied on August 1, 2017, and is collected a month in arrears. For the fiscal year ended September 30, 2017, the County collected $7,173,077. This represents collections during just one month. Provided below are the collections of the Special Sales Tax for the fiscal years ended September 30, 2017, through September 30, 2022. Amounts shown are in thousands.

Fiscal Year Ending September 30	**Total Amount**
2017	$ 7,173
2018	115,048
2019	115,984
2020	113,537
2021	127,335
2022	138,936

Source: Jefferson County Revenue Department

The County has covenanted in the indenture under which the Series 2017 Special Sales Tax Warrants were issued that it will continue to levy and collect the Special Sales Tax and will apply the proceeds as provided in said indenture until the payment in full of the Series 2017 Special Sales Tax Warrants and any other refunding obligations secured by the Special Sales Tax on parity therewith.

Ad Valorem Taxes

General. The levy and collection of ad valorem taxes in Alabama is subject to the provisions of the Constitution of Alabama of 1901, as amended (the "Alabama Constitution") which limit the ratios at which property may be assessed, specifies the maximum millage rates that may be levied on property and limits total ad valorem taxes on any property in any year.

Classification of Taxable Property. For purposes of ad valorem taxation, all taxable property in Alabama is required under current law to be divided into the following four classes:

Class I	All property of utilities used in their business*
Class II	All property not otherwise classified
Class III	All agricultural, forest and single family, owner-occupied residential property, and historic buildings and sites
Class IV	Private passenger automobiles and pickup trucks

* Under applicable law, railroad property is not considered Class I (utility) property and is instead Class II.

Taxable property designated as "Class III" may, upon the request of the owner of such property, be appraised at its "current use value" rather than its "fair and reasonable market value." "Current use value" was originally defined in a legislative act as the value of such property based on the use being made of it on October 1 of the preceding year, without taking into consideration the "prospective value such property might have if it were put to some other possible use." Amendatory legislation, effective since the beginning of the 1981-82 tax year, extensively revised the formulas and methods to be used in computing the current use property value of agricultural and forest property. However, the original statutory definition, though somewhat modified, remains applicable to residential and historical property.

There are exempted from all ad valorem taxes household and kitchen furniture, farm tractors, farming implements when used exclusively in connection with agricultural property, and inventories of goods, wares and merchandise.

Assessment Ratios. The following are the assessment ratios now in effect in the County for purposes of state and local taxation.

Class I	-	30%
Class II	-	20
Class III	-	10
Class IV	-	15

Although current law provides in effect that with respect to ad valorem taxes levied by the County, the governing body of the County may, subject to the approval of the Alabama Legislature and of a majority of the electorate of the County at a special election, and in accordance with criteria established by legislative act, adjust (by increasing or decreasing) the ratio of assessed value of any class of taxable property to its fair and reasonable market value or its current use value (as the case may be), the governing body of the County has not heretofore sought to make any adjustment of the assessment ratio applicable to any class of taxable property in the County and has no present plans for any such adjustment. The Alabama Legislature has no power over the adjustment of assessment ratios pertaining to local taxes except to approve or disapprove an adjustment proposed by a local taxing authority. The assessment ratio applicable to each class of taxable property must in any event be uniform with respect to ad valorem taxes levied by the County.

Current Ad Valorem Tax Rates. Pursuant to the Alabama Constitution and the laws of the State, ad valorem taxes on property in the County (excluding, however, municipal and school district ad valorem taxes levied in the County) are currently levied at the following rates:

	Rates in Mills (Dollars per 1,000 of Assessed Value)
State of Alabama	6.5
Jefferson County:	
General	5.6
Road	2.1
Bridge	5.1
Sewer	0.7
County-wide School	8.2
	21.7
TOTAL MILLS	28.2

Source: Alabama Department of Revenue, 2022 Millage Rates

Existing law provides that the rate of any ad valorem tax levied by the County may be increased only after the approval of the Alabama Legislature and of a majority of the electorate of the County at a special election. The constitutional limitation on the total ad valorem taxes *(i.e.,* state, county, municipal, school district, etc.) on any property in any one year to certain percentages of the fair and reasonable market value of such property is by its terms not applicable to property in two municipalities in the County.

Homestead Exemption. The governing body of the County is authorized by law to grant a homestead exemption of not exceeding $4,000 in assessed value against any County ad valorem tax except one "earmarked for public school purposes."

Assessment and Collection. Ad valorem taxes on taxable properties, except motor vehicles and public utility properties, are assessed by the County Tax Assessor and collected by the County Tax Collector. Ad valorem taxes on motor vehicles in the County are assessed and collected by the Jefferson County License Director, and ad valorem taxes on public utility properties are assessed by the State Department of Revenue and collected by the County Tax Collector.

Ad valorem taxes are due and payable on October 1 and delinquent after December 31 in each year (except for taxes with respect to motor vehicles, which have varying due dates), after which a penalty and interest are required to be charged. If real property taxes are not paid by the March 1 following the due date, a tax sale is required to be held.

The County Tax Collector has in recent years collected, on average, in excess of 98% of ad valorem taxes (state, county, municipal and school district) levied.

Property Re-evaluation Program. Under existing procedures of the State Department of Revenue, each county in the State is effectively required to carry out a property reappraisal program over a four-year cycle so that each year at least 25% of the taxable property in the County is reappraised for ad valorem tax purposes. The Department of Revenue also annually reviews the appraised values and the fair market values of a representative sample of taxable property in each county in the State. A county property reappraisal program is customarily ordered by the Department of Revenue if such annual review indicates that the appraised value of property in such county has fallen below 85% of its then current fair market value.

The current level of property tax collection is dependent on many factors, including possible taxpayer appeals from increased property assessments. There can be no assurance that the current level of property tax collection will continue.

Assessed Valuation. The following table sets forth the net assessed value of taxable property in the County for the fiscal years ended September 30, 2010, through September 30, 2023:

Fiscal Year Ending September 30 [1]	Real & Personal Property and Public Utility Property	Motor Vehicle	Total Net Assessed Values
2023	$13,136,679,500	$1,334,218,020	$14,470,897,520
2022	11,449,705,880	1,015,138,000	12,464,843,880
2021	10,738,763,380	1,034,897,440	11,773,660,820
2020	10,531,999,240	979,906,820	11,511,906,060
2019	10,332,614,760	956,518,280	11,289,133,040
2018	9,025,019,000	944,596,640	9,969,615,640
2017	8,755,351,060	1,006,199,260	9,761,550,320
2016	8,578,419,100	1,037,058,545	9,615,477,645
2015	8,374,355,060	970,132,998	9,344,488,058
2014	8,051,541,180	955,622,913	9,007,164,093
2013	7,882,513,300	947,476,600	8,829,989,900
2012	7,766,614,346	914,057,340	8,680,671,686
2011	7,894,069,219	846,704,740	8,740,773,959
2010	8,025,885,906	838,645,840	8,864,531,746

[1] Taxes are paid in arrears: current tax collections for each year are collected October 1st through mid-May. Therefore, taxes assessed as of September 30th are not collected until the following fiscal year.
Sources: Jefferson County Tax Assessor, Jefferson County Revenue Department-Accounting Division

Principal Ad Valorem Taxpayers. The following sets forth the principal Ad Valorem Taxpayers in the County for 2023:

Company	**Assessed Value**	**County Tax**
Alabama Power Company	$773,672,260	$10,444,575
United States Steel Corporation	87,613,520	1,182,782
Affinity Hospital LLC	75,160,980	1,014,673
Norfolk Southern Combined Rail	64,106,580	865,438
Bellsouth Telecommunications LLC	59,339,140	801,078
Wells Fargo Bank National Association	57,629,300	777,995
GSA Birmingham Realty	51,800,300	699,304
Mercedes Benz U S International Inc.	43,721,460	590,239
American Cast Iron Pipe Co.	40,603,240	548,143
Hoover Mall Limited L P	38,322,020	517,347

Source: Jefferson County Tax Assessor's Office

Ad Valorem Tax Collections. The following table sets forth the Ad Valorem Tax collections for the fiscal years ended September 30, 2013, through September 30, 2022, collected by all tax collectors, and levied by all ad valorem taxing authorities, within the County. Amounts shown are in thousands.

Ad Valorem Tax Collections

Tax Year Ended September 30 [(1)]	**Total Net Tax Levy**	**Current Tax Collections**	**Percent of Levy Collected**	**Delinquent Tax Collections**	**Total Tax**	**Percent of Total Tax Collection to Tax Levy**
2022	$775,377	754,090	97.25%	6,606	760,696	98.11%
2021	760,809	739,252	97.17	7,055	746,307	98.09
2020	741,487	706,909	95.34	8,281	715,191	96.45
2019	649,100	639,433	98.51	8,022	647,456	99.75
2018	628,709	617,697	98.25	8,427	626,124	99.59
2017	613,117	600,525	97.95	9,590	610,115	99.51
2016	597,336	580,276	97.14	10,161	590,437	98.85
2015	565,752	556,568	98.38	8,780	565,348	99.93
2014	550,902	540,580	98.13	7,552	548,133	99.50
2013	542,537	532,280	98.11	7,768	540,048	99.54

Source: Jefferson County Tax Collector

(1) Taxes collected in each fiscal year represent the taxes levied in the prior fiscal year, as taxes are collected in arrears.

The Sewer System

General. The County owns and operates a sanitary sewer system (the "Sewer System") that covers approximately 448 square miles and consists of approximately 3,224 miles of sanitary sewer lines (3,114 miles gravity and 110 miles force main), nine wastewater treatment plans ("WWTPs"), 177 pump/lift stations, and 83,128 manholes. The service area is characterized by gently rolling topography and, due to the nature of the topography, a large gravity sewer network is needed to collect and transmit sewage. Pump stations transfer these flows to other pump stations and gravity mains and eventually to their respective WWTP.

The Sewer System serves 23 municipalities, unincorporated Jefferson County and small portions of Shelby County and St. Clair County. Of the Sewer System's approximately 145,395 total accounts, approximately 2,400 are estimated to be located in Shelby County and approximately 650 are estimated to be located in St. Clair County.

Summary of Revenues, Expenses and Changes in Fund Net Position – Sanitary Operations Fund. The Sanitary Operations Fund is an enterprise fund of the County supported by revenues of the Sewer System. See APPENDIX C – "Jefferson County Sewer System – Certain Financial Information Concerning the System" for audited financial information regarding the consolidated revenues, expenditures and changes in fund net position for the Sanitary Operations Fund (the proprietary fund of the County respecting the Sewer System) for fiscal years ended September 30, 2018, through and including September 30, 2022.

Employee Retirement Plan

Defined Benefit Pension Plan

General Overview. The County sponsors a defined benefit pension plan (the "Pension Plan") for certain employees and officers of the County. The General Retirement System for Employees of Jefferson County (the "Pension System"), which administers the Pension Plan, was established pursuant to Act No. 497 enacted at the 1965 Regular Session of the Legislature of Alabama (as amended, the "Pension Act"). With certain limited exceptions, the Pension System covers all employees of the County who are subject to the Civil Service System.

County officers and those employees not subject to the Civil Service System may elect to participate in the Pension System. Membership in the Pension System for those employees automatically covered under the Pension Act is compulsory. As of the most recent actuarial valuation of the Pension Plan (October 1, 2022) prepared by Cavanaugh Macdonald Consulting, LLC (the "Independent Actuary"), there were 2,527 active members in the Pension System with aggregate annual compensation of $161,416,223, and 2,447 retired members and beneficiaries in the Pension System with aggregate annual benefits of $72,591,613.

Pension Plan Funding. The Pension Act requires that members of the Pension System contribute 6% of their gross salary to the Pension Plan and that the County contribute an equivalent amount for each member, for a total annual contribution equal to 12% of each member's gross salary. Certain proceeds from the sale of pistol permits in the County are also contributed to the Pension Plan. The following is a summary of actuarial assumptions and a schedule of trend information pertaining to funding of the Pension Plan, taken from the 202 Pension Valuation:

Valuation date	10/01/2022
Actuarial cost method	Entry age
Amortization method	Level percent open
Remaining amortization period	14 years
Asset valuation method	5-year market related value
Actuarial assumptions	
Investment rate of return*	6.50%
Projected salary increases*	4.25-6.75%
Cost-of-living adjustments	None

* Includes inflation at 2.75%

Trend Information

Fiscal Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
9/30/2016	$7,393,000	100.0%	$0
9/30/2017	7,627,000	100.0%	0
9/30/2018	8,340,000	100.0%	0
9/30/2019	8,710,000	100.0%	0
9/30/2020	9,180,000	100.0%	0
9/30/2021	8,401,000	100.0%	0
9/30/2022	9,502,000	100.0%	0

Fiscal Summary. As of the October 1, 2022, the unfunded actuarial accrued liability ("UAAL") for the Pension Plan was ($124,328,711) (i.e., actuarial plan assets exceed actuarial plan liabilities). The following is a schedule of funding progress and trend information pertaining to the Pension Plan:

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) / c)
10/01/2016	$1,084,886,713	$1,007,174,968	($77,711,745)	107.7%	$124,769,019	(62.3)%
10/01/2017	1,125,217,227	1,024,939,296	(100,277,931)	109.8	131,976,909	(76.0)
10/01/2018	1,172,618,765	1,045,751,504	(126,867,261)	112.1	143,426,027	(88.5)
10/01/2019	1,204,591,468	1,065,974,464	(138,617,004)	113.0	148,941,376	(93.1)
10/01/2020	1,244,959,689	1,115,549,228	(129,410,461)	111.6	150,285,517	(86.1)
10/01/2021	1,312,548,211	1,169,178,654	(143,369,557)	112.3	150,855,014	(95.0)
10/01/2022	1,320,880,083	1,196,551,372	(124,328,711)	110.4	161,416,223	(77.0)

In the 2022 Pension Valuation, the Independent Actuary concluded that the Pension Plan was operating on an actuarially sound basis and that the sufficiency of the assets in the Pension Plan may be safely anticipated. See Note 9 to the County's audited financial statements, and the associated notes to such financial statements, as of and for the fiscal year ended September 30, 2022, attached as APPENDIX B for more information about the Pension Plan.

Other Post-Employment Benefits (OPEB)

General Overview. In addition to the Pension Plan, the County sponsors a single-employer postretirement welfare benefit plan (the "OPEB Plan") in accordance with a resolution first approved by the Commission on September 25, 1990, and approved annually each year thereafter. The OPEB Plan provides medical and prescription drug benefits to eligible retirees and their dependents by subsidizing a portion of the retirees' health insurance premiums. As of the most recent actuarial valuation of the OPEB Plan (September 30, 2021), there were 2,458 active participants, no vested terminated participants and 424 retired participants in the OPEB Plan.

OPEB Plan Funding. Unlike the Pension Plan, the County does not set aside assets in a qualifying trust fund for the purpose of paying future benefits. The County operates the OPEB Plan on a "pay-as-you-go" basis. Employees of the County and retirees and their dependents are not required to contribute to the OPEB Plan. The following is a summary of the actuarial assumptions and a schedule of trend information pertaining to funding of the

OPEB Plan, taken from the County's audited financial statements as of and for the fiscal year ended September 30, 2022:

Valuation date	09/30/2021
Actuarial cost method	Entry Age Normal
Amortization method	Level percent of pay, Closed
Remaining amortization period	30 years
Asset valuation method	Market Value of Assets
Actuarial assumptions	
Discount Rate	2.26%
Medical Cost trend rate	7.00%
Ultimate trend rate	4.75%
Year of Ultimate trend rate	2029
Inflation Rate	2.75%
Projected Salary increases	4.25% including inflation

Schedule of Funding Progress

Actuarial Valuation Date	**Actuarial Value of Assets (a)**	**Accrued Liability (AAL) Entry Age (b)**	**Unfunded AAL (UAAL) (b-a)**	**Funded Ratio (a/b)**	**Covered Payroll (c)**	**UAAL as a Percentage of Covered Payroll ((b-a) / c)**
09/30/2021	$0	$119,673,000	$119,673,000	0.0%	$145,971,000	81.9%
09/30/2020	0	$116,925,000	$116,925,000	0.0	$145,971,000	80.1%
09/30/2019	0	$121,814,000	$121,814,000	0.0	$147,969,000	82.3%
09/30/2018	0	$102,689,000	$102,689,000	0.0	$147,969,000	69.4%
09/30/2017	0	$113,926,000	$113,926,000	0.0	$126,645,000	89.9%

In the 2021 OPEB Valuation, the Independent Actuary concluded that if the required contributions to the OPEB Plan are made by the County from year to year in the future at the levels required on the basis of successive actuarial valuations, the OPEB Plan will operate in an actuarially sound manner. See Note 10 to the County's audited financial statements as of and for the fiscal year ended September 30, 2022, attached as APPENDIX B for more information about the OPEB Plan.

New Accounting Pronouncements. In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 67, *Financial Reporting for Pension Plans,* and Statement No. 68, *Accounting and Financial Reporting for Pensions* (the "GASB Statements"), which became effective for the County beginning with its fiscal year ended September 30, 2015.

GASB also issued in June 2015 Statement No. 75 ("GASB No. 75"). The objective of this statement is to improve accounting and financial reporting by state and local governments for OPEB. This statement is effective for fiscal years beginning after June 15, 2017. The County is currently evaluating the impact that GASB No. 75 will have on its financial statements, but notes that the adoption of this standard will likely result in the recognition of a material liability and a corresponding material reduction of the County's unrestricted net position.

In November 2016, the GASB issued Statement No. 83, *Certain Asset Retirement Obligations*. Under Statement No. 83, a government that has legal obligations to perform future asset retirement activities related to its tangible capital assets is required to recognize a liability and corresponding deferred outflow of resources. The guidance also identifies the circumstances that trigger recognition of these transactions. The requirements of this statement are effective for fiscal year 2019. The County is currently evaluating the impact this standard may have on its financial statements.

In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities*. The objective of Statement No. 84 is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The requirements of this statement are effective for fiscal year 2020. The County is currently evaluating the impact this standard may have on its financial statements.

GASB Statement No. 85, *Omnibus 2017*, was issued to address practice issues that have been identified during implementation and application of certain GASB Statements. The requirements of this statement are effective for fiscal year 2018. The County is currently evaluating the impact this standard may have on its financial statements.

GASB Statement No. 86, *Certain Debt Extinguishment Issues*, was issued to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources (resources other than the proceeds of refunding debt) are placed in an irrevocable trust for the sole purpose of extinguishing debt. The County is currently evaluating the impact this standard may have on its financial statements.

GASB Statement No. 87, *Leases*, was issued to improve accounting and financial reporting for leases by governments. The requirements of this statement are effective for fiscal year 2021. The County is currently evaluating the impact this standard may have on its financial statements.

See Note 1 to the County's audited financial statements as of and for the fiscal year ended September 30, 2022, attached as APPENDIX B for more information regarding the GASB Statements and the effect implementation thereof may have on the County's fiscal condition.

Debt Management

General. The principal forms of indebtedness that the County is authorized to incur include general obligation bonds, general obligation warrants, general obligation bond anticipation notes, special or limited obligation warrants and various revenue anticipation bonds and warrants relating to enterprises. In addition, the County has the power to enter into certain leases which constitute a charge upon the general credit of the County. Under existing law, the County may issue general obligation bonds only after a favorable vote of the electorate of the County. General and special obligation warrants issued for certain specified purposes may be issued without voter approval.

General Obligation Warrants. On May 31, 2018, the County issued its General Obligation Refunding Warrants, Series 2018-A in the initial principal amount of $111,360,000 (the "Series 2018-A Warrants"), and its General Obligation Refunding Warrants (Delayed Delivery), Series 2018-B in the initial principal amount of $26,815,000 (the "Series 2018-B Warrants" and, together with the Series 2018-A Warrants, the "Series 2018 Warrants"). The Series 2018-B Warrants matured in fiscal year 2021. The Series 2018 Warrants are general obligations of the County for the payment of which the full faith and credit of the County are pledged. The Series 2018-A Warrants are the only general obligation warrants of the County that are outstanding.

Limited Tax Warrants and Limited Tax County Payments Respecting the 2018 Funding Agreement, the Cooper Green Authority Bonds, and the 2023 Funding Agreement

Series 2017 Special Sales Tax Warrants. On July 31, 2017, the County issued the Series 2017 Special Sales Tax Warrants in the initial principal amount of $338,925,000. The Series 2017 Special Sales Tax Warrants are limited obligations of the County payable solely from the Special Sales Tax. The County has no other obligations payable from the Special Sales Tax.

2018 Funding Agreement. The County approved an agreement (the "2018 Funding Agreement") with the BJCC Authority in connection with a major expansion of a civic center convention complex located in and for the benefit of the City of Birmingham, Alabama and the County (the "BJCC"). The expansion consisted of the renovation of Legacy Arena and the BJCC Authority's existing convention and meeting space and construction of a new open-air stadium to provide an additional venue for convention, sports and entertainment events, including football games for UAB.

Pursuant to the 2018 Funding Agreement, the County agreed to make payments to the BJCC Authority over a 30 year period in the amount of $1,000,000 per year for a total of $30,000,000 of payments from the County. Such payments are to be made in 60 equal semi-annual installments due each March and September during the term of the 2018 Funding Agreement. The County's payment obligations are general obligations of the County secured by the full faith and credit of the County (like with respect to the Series 2018 Warrants).

The 2018 Funding Agreement was authorized pursuant to Amendment No. 772 of the Alabama Constitution, recodified as Section 94.01 of the Official Recompilation of the Constitution of Alabama of 1901 ("Amendment 772"). Under Amendment 772, certain counties and municipalities in Alabama may become indebted and issue bonds, warrants, notes, and other obligations in an amount not exceeding 50% of the assessed value of the taxable property located within its corporate limits in furtherance of any of the economic development powers or authorities granted in such amendment. Obligations authorized under Amendment 772 are not chargeable against the constitutional debt limitation determined under the Alabama Constitution described below.

Series 2022 PBBR Ad Valorem Tax Warrant. On July 1, 2022, the County issued its $66,335,000 principal amount Limited Obligation Warrant, Series 2022 (the "Series 2022 PBBR Ad Valorem Tax Warrant") to the Alabama Transportation Infrastructure Bank, in evidence of a loan made to the County in the original principal amount of $66,335,000 to pay costs of road and bridge improvements within the County. The Series 2022 PBBR Ad Valorem Tax Warrant is a limited obligation of the County payable from, and secured by, a pledge by the County of its share of the 5.1 mill ad valorem tax levied by the County pursuant to the second proviso of Section 215 of the Alabama Constitution (the "PBBR Ad Valorem Tax"). Under the Alabama Constitution, revenues from the PBBR Ad Valorem Tax may be used by the County to pay any debt created by the County for the erection of public buildings, bridges, or roads, and after payment of any such indebtedness issued for such purposes the excess may be used for general purposes of the County. Other than the Series 2022 PBBR Ad Valorem Tax Warrant, the County has no debt obligations payable from the PBBR Ad Valorem Tax. It has been the County's budget practice to structure its general obligation indebtedness so that the debt service payable thereon could be paid out of proceeds of the PBBR Ad Valorem Tax.

Cooper Green Authority Bonds. The County has entered a Funding Agreement dated September 14, 2022 (the "Cooper Green Funding Agreement") with the Cooper Green Mercy Health Services Authority, an Affiliate of UAB Health System (the "Cooper Green Authority"), respecting the $84,525,000 Revenue Bonds (Jefferson County Funding), Series 2022A (the "Cooper Green Authority Bonds"), issued by the Cooper Green Authority to finance construction of a new full-service ambulatory medical clinic to provide health care services primarily to low income residents of the County.

Under the Cooper Green Funding Agreement, the County has agreed to make payments ("County Contributions") to the Cooper Green Authority equal to maturing installments of principal and interest on the Cooper Green Authority Bonds. The County's obligation to make the County Contributions is a limited obligation of the County payable solely from and secured solely by certain taxes levied by to pay maturing installments of debt service on the Cooper Green Authority Bonds, but such obligation is limited to (i) proceeds received by the County and allocated to the County for indigent care purposes from the alcoholic beverage tax levied in the County pursuant to Act No. 388 of the Regular Session of the Legislature of Alabama of 1965, as amended by the act of the Legislature of Alabama adopted during its regular session of 1979 amending Section 3 of Act No. 388, and (ii) proceeds received by the County and allocated for indigent care purposes from the sales and use tax levied in the County pursuant to Act 405 enacted at the 1967 Regular Session of the Alabama Legislature, as amended by Act No. 659 enacted at the 1973 Regular Session of the Alabama Legislature, under which the County receives 89.5% of the first one-half share of the total proceeds of the said sales and use tax.

<u>2023 Funding Agreement</u>. in 2023, the County approved an agreement (the "2023 Funding Agreement") with the BJCC Authority in connection with a new open air amphitheater and related facilities that will provide an additional venue for concerts, theatrical performances and entertainment events at the Birmingham-Jefferson Convention Complex (which is comprised of several structures providing complete facilities for sports events, musical and theatrical entertainment, conventions, meetings, banquets, trade shows and other events). Pursuant to the 2023 Funding Agreement, the County agreed to make payments to the BJCC Authority in such amount as shall

equal one-third (1/3) of the debt service requirements on the $30,000,000 initial principal amount Revenue Bonds (City and County Support), Series 2023A, issued by the BJCC Authority (the "BJCCA Amphitheater Bonds"). The County's payment obligations under the 2023 Funding Agreement are general obligations of the County secured by the full faith and credit of the County (like with respect to the Series 2018 Warrants and the 2018 Funding Agreement).

Annual Debt Service Requirements on and respecting all County Warrants, the 2018 Funding Agreement, the Cooper Green Authority Bonds, and the 2023 Funding Agreement

The following table reflects the scheduled annual debt service requirements on and respecting all currently outstanding long-term obligations of the County prior to issuance of the Series 2023 Warrants:

Fiscal Year	Outstanding 2013 Sewer Warrants	Series 2017 Special Sales Tax Warrants	Series 2018-A Warrants	2018 Funding Agreement	Series 2022 PBBR Ad Valorem Tax Warrants[1]	Cooper Green Authority Bonds	2023 Funding Agreement[2]	Total
2024	$120,034,541	$26,400,288	$22,310,000	$1,000,000	$5,137,976	$5,622,488	-	$180,505,293
2025	141,128,883	26,404,038	14,090,000	1,000,000	5,135,159	5,626,488	-	193,384,568
2026	145,828,883	26,399,038	14,091,000	1,000,000	5,137,039	5,621,988	$661,883	198,739,831
2027	150,728,883	26,404,038	-	1,000,000	5,133,111	5,624,238	662,550	189,552,820
2028	155,808,883	26,401,788	-	1,000,000	5,133,376	5,622,738	661,092	194,627,877
2029	161,078,883	26,400,788	-	1,000,000	5,132,329	5,622,488	662,467	199,896,955
2030	166,468,883	26,399,038	-	1,000,000	5,129,716	5,623,238	661,633	205,282,508
2031	172,053,883	26,400,600	-	1,000,000	5,130,286	5,624,738	660,300	210,869,807
2032	177,848,883	26,403,850	-	1,000,000	5,128,534	5,626,738	660,092	216,668,097
2033	183,828,883	26,399,850	-	1,000,000	5,124,206	5,623,988	660,925	222,637,852
2034	190,003,883	26,401,600	-	1,000,000	5,122,051	5,626,488	659,467	228,813,489
2035	196,383,883	26,401,350	-	1,000,000	5,121,564	5,623,738	659,050	235,189,585
2036	202,983,883	26,401,600	-	1,000,000	5,122,239	5,625,738	659,592	241,793,052
2037	208,901,258	26,400,000	-	1,000,000	5,118,571	5,621,988	659,383	247,701,200
2038	214,135,395	2,245,000	-	1,000,000	5,115,559	5,622,488	658,425	228,776,867
2039	221,292,645	2,246,200	-	1,000,000	5,116,066	5,626,738	358,342	235,639,991
2040	222,953,913	2,249,400	-	1,000,000	5,109,689	5,622,363	657,425	237,592,790
2041	191,456,433	2,244,400	-	1,000,000	5,111,426	5,625,638	657,300	206,095,197
2042	192,167,048	2,246,400	-	1,000,000	5,109,784	5,625,775	541,927	206,690,934
2043	192,929,573	-	-	1,000,000	-	5,622,513	543,148	200,095,234
2044	173,493,935	-	-	1,000,000	-	5,625,588	541,546	180,661,069
2045	179,654,654	-	-	1,000,000	-	5,624,213	655,267	186,934,134
2046	185,639,591	-	-	1,000,000	-	5,623,125	656,267	192,918,983
2047	192,349,004	-	-	1,000,000	-	5,621,800	654,475	199,625,279
2048	199,178,524	-	-	1,000,000	-	5,624,713	654,850	206,458,087
2049	206,144,379	-	-	-	-	5,626,075	653,975	212,424,429
2050	212,976,448	-	-	-	-	5,625,363	538,983	219,140,794
2051	220,747,900	-	-	-	-	5,622,050	538,383	226,908,333
2052	229,166,413	-	-	-	-	5,625,613	536,883	235,328,909
2053	237,477,988	-	-	-	-	-	1,074,408	238,552,396
2054	246,433,125	-	-	-	-	-	-	246,433,125

[1] Reflects scheduled debt service on the Series 2022 PBBR Ad Valorem Tax Warrants plus an administrative fee.
[2] Reflects 1/3 of scheduled debt service on the BJCCA Amphitheater Bonds.

County Financial Policies

General. The Commission adopted a comprehensive set of fiscal policies (collectively, the "Fiscal Policies") on September 28, 2011. The following information reflects certain elements of those of the Fiscal Policies presently in place, and recent actions of the Commission pursuant to the guidelines set forth in such Fiscal Policies.

The County's fiscal year begins October 1 and ends on September 30. The main sources of income for the County are property taxes, sales taxes, licenses and permits and intergovernmental revenues. In addition to governmental revenues, the County also generates income for its enterprise funds through collection of rates and charges for related services.

The County Manager and the CFO bear primary responsibility for the major financial functions of the County. The County Manager reports directly to the Commission.

The CFO is the County's chief fiscal and accounting officer. The duties associated with this role include the preparation and maintenance of accurate books and records, the custody and supervision of County funds, the preparation of annual budgets, management of County debt obligations, and the management of the investment of County money. The CFO also recommends financial policies to the County Manager and implements policies as set by the County Manager.

The County Tax Assessor and the Tax Collector are elected officials in charge of the assessment, levying, collection and distribution of ad valorem taxes within the County. The Treasurer is also an elected official, whose primary responsibilities include managing the receipt of funds into various bank accounts, reconciling and reporting on monthly funds, and managing the investment of funds which the Treasurer's department oversees. The Treasurer is also by state law the treasurer of the Pension System.

Budgeting and Audited Financial Statements. The CFO is responsible for the preparation of the annual budgets of the County. Budgets for governmental funds are prepared on the modified accrual basis. The modified accrual basis means that County obligations are recognized as expenditures but revenues are only recognized when they become measurable and available. The budgets of proprietary funds are prepared on the accrual basis of accounting. Budgets may be adjusted during the fiscal year when approved by the Commission, but changes to the budget must be within the revenues and reserves estimated to be available.

The County provides audited financial statements on an annual basis. The firm of Warren Averett, LLC performed audits of the County's financial statements for fiscal years 2007 through 2020, inclusive. The firm of Mauldin & Jenkins, LLC performed the audits of the County's financial statements for fiscal years 2021 and 2022. The audited financial statements of the County provide certain unaudited comparisons of revenue and expenditures on a GAAP basis to the budget.

In fiscal year 2015, the Commission commenced and successfully completed a software implementation project to port its existing financial system to a Munis ERP software solution delivered by Tyler Technologies, Inc. The Munis system significantly improves the Commission's ability to access real-time, relevant data regarding the County's finances. In addition, the Munis implementation improves the Commission's reporting capabilities for long-term debt related continuing disclosure and other purposes.

Expenditure Policies. The County has implemented a performance-based budgeting system with special emphasis on labor costs.

The Commission, County Manager and the CFO have made significant progress in paring back activities requiring subsidies from the General Fund.

Debt Issuance. The Commission does not at the present time plan to access the debt market for General Fund needs.

Investment Monitoring and Management. The County has several types of investment funds including revenue funds, bond proceeds funds, capital funds, and pension funds. Generally, State statutes authorize the County to invest in obligations of the U.S. Treasury and securities of federal agencies and certificates of deposit. Investments are reported at fair value based on quoted prices except for money market investments and repurchase agreements, which are reported at amortized cost. The primary objective of the investment program is safety.

In accordance with formal Investment Policies adopted by the Commission in January, 2011, the County has a designated Investment Committee to monitor investment decisions made by or on behalf of the County. The Investment Committee consists of the President of the Commission, the County Finance Committee Chairman, the County Manager, the County Treasurer (Birmingham), the County Treasurer (Bessemer), the Revenue Director, and the CFO. The Commission makes decisions based on recommendations from the Investment Committee.

The Commission maintains an investment policy which manages its exposure to market movements by limiting the average maturity of its investment portfolio, depending on liquidity and growth goals, to between 0.5 and 4.5 years.

The Commission has set strict limits on the types of derivatives and illiquid investments allowable for use in its investment program. Generally, derivatives are to be avoided, and a list of prohibited investments may be found in the Fiscal Policies.

Pension funds are administered by the Pension System, which covers substantially all of the County's employees and was established by Alabama law in 1965. The Commission does not manage funds in the Pension System. See "Employee Retirement Plan" above.

Economic Development. The Commission is keenly interested in developing the economic base of the County, and it has a policy of employing incentives to encourage economic growth. However, incentives are limited to enterprises that enhance the employment base or assessed valuation of the County, increase the infrastructure of the County, or increase access to other public services. The Commission makes decisions regarding economic development based on recommendations from the Economic Development Committee and a finding thereby that the project for which the incentive is being made constitutes a good and sufficient public purpose for the expenditure of public funds. In addition, funding for incentives must be identified in advance of approval. The County's budget includes approximately $10.0 million each year for economic development.

Pension and Retirement Funding. Annual required contributions for current pension liabilities are to be funded on an annual basis. The County also provides certain other-than-pension post-employment benefits ("OPEB") for qualified retired employees. The County's goal with regard to OPEBs is to maintain and manage a non-fiduciary OPEB fund that will be funded periodically with such allocations as are approved by the Commission until the balance of the OPEB fund is equal to its OPEB liability. Total OPEB obligation for the fiscal year ended September 30, 2022, was $119,673,261. The actuarial valuation of the Pension System was funded at 110.4% as of the October 1, 2022 actuarial valuation.

Material Litigation - Diesel Fuel Tax Refund Claims

This summary pertains to a number of lawsuits arising out of litigation commenced by CSX Transportation challenging the imposition of sales and use taxes on diesel fuel purchased and used for rail transportation purposes as discriminatory and unlawful under the Railroad Revitalization and Regulatory Reform Act of 1976 (the "4-R Act"). CSX Transportation commenced a federal lawsuit against the Alabama Department of Revenue in 2008. CSX sought to restrain and enjoin the State from assessing, levying, or collecting the offending sales and use tax on diesel fuel. The County was not a party to this litigation but the County's tax scheme is consistent with the State's. Following CSX's lead, railroad companies BNSF, Norfolk Southern, Alabama Warrior Railway, and Birmingham Terminal Railway commenced lawsuits alleging 4-R Act violations against the State and numerous local taxing authorities, including the County. The non-CSX lawsuits were stayed pending final resolution of the CSX lawsuit. The CSX matter was resolved in December 2019. The court held the State could not collect sales and use tax on the purchase or use of diesel fuel from railroads when the railroad was engaged in foreign, international, or interstate commerce. Thereafter, the remaining federal cases were consolidated. The district court held in the consolidated cases that the tax schemes of the local taxing authorities, including the County, violated the 4-R Act. The court held that the local taxing authorities cannot collect any sales and use tax on the purchase or use of diesel fuel from the railroads conducting business in Alabama. The order exempts railroads from the payment of any tax on the purchase or use of diesel irrespective of whether the railroad is engaged in intrastate or interstate commerce. All taxing authorities recently appealed the decision to the Eleventh Circuit Court of Appeals.

In conjunction with the federal cases, the railroads commenced six lawsuits in the Circuit Court of Jefferson County, Alabama, against the County seeking refunds of sales and use taxes paid on the purchase or use of diesel fuel: 1) *CSX Transportation v. Jefferson County*, Case No. 01-CV-2010-1490, 2) *BNSF Railway Co., et al. v. Jefferson County, Alabama, et al.*, Case No. 01-CV-2010-903065, 3) *Alabama Warrior Railway, LLC v. Jefferson County*, Case No. 01-CV-2016-901414, 4) *Alabama Warrior Railway, LLC v. Jefferson County*, Case No. 01-CV-2020-900065, 5) *Birmingham Terminal Railway, LLC v. Jefferson County*, Case No. 68-CV-2016-900271, and 6) *Birmingham Terminal Railway, LLC v. Jefferson County*, Case No. 68-CV-2020-900132. Norfolk Southern did not file a tax refund lawsuit. The refund cases have been stayed pending final disposition of the federal 4-R Act cases. In addition to the state court tax refund proceedings, CSX, BNSF, and Norfolk Southern filed proofs of claim in the Bankruptcy Case. The County, along with the other local taxing authorities, has taken the position that the 4-R Act does not provide for retrospective relief and that the railroads are not entitled to refunds irrespective of the legality of the tax scheme. Notably, the City of Birmingham and CSX agreed to proceed with their tax refund case and in March 2021, Judge Robert Vance of the Jefferson County Circuit Court held that the 4-R Act did not provide for retrospective relief, that any relief from the City's tax scheme should be prospective only, and thus, CSX was not entitled to a refund. On reconsideration, however, Judge Vance reversed course and held that CSX was entitled to a refund, plus accrued interest. The City of Birmingham appealed the decision to the Alabama Supreme Court. The County will continue to monitor the status of the CSX/Birmingham litigation.

To the extent it is determined that the railroads are entitled to refunds, any refund owed to CSX, BNSF, and Norfolk Southern will be handled through the Bankruptcy Case. Each of these claims would be treated as a General Unsecured Claim under the Plan of Adjustment. As such, each of these railroad companies would be entitled to receive only the appropriate pro rata distribution from the $5,000,000 "General Unsecured Claims Pool", plus any interest accrued thereon.

In Case No. 01-CV-2016-901414, Alabama Warrior Railway seeks a refund for taxes paid between November 9, 2011, and September 30, 2013. In Case No. 68-CV-2016-900271, Birmingham Terminal Railway seeks a refund for taxes paid between November 9, 2011, and September 30, 2013. Neither Alabama Warrior Railway nor Birmingham Terminal Railway filed a proof of claim in the Bankruptcy Case. Thus, claims were discharged by and are barred pursuant to the discharge language in the 2013 Confirmation Order entered by the Bankruptcy Court. The County anticipates both of these cases being dismissed.

In Case No. 01-CV-2020-900065, Alabama Warrior Railway seeks a refund for taxes paid between May 1, 2015, and April 30, 2018, in the amount of $9,143.86, plus accrued interest. In Case No. 68-CV-2020-900132, Birmingham Terminal Railway seeks a refund for taxes paid between May 1, 2015, and April 30, 2018, in the amount of $39,969.88, plus accrued interest. Neither of these cases is subject to the County's bankruptcy discharge. To the extent it is determined that the railroads are entitled to refunds, the County and the respective railroad will evaluate how to apportion the sales and use tax paid between intrastate as opposed to foreign, international, or interstate commerce, *i.e.*, the portion of the sales and use tax that is owed versus that which is subject to a refund.

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APPENDIX E
FEASIBILITY STUDY

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Municipal Advisor's Feasibility Study

Sewer Revenue Warrants, Series 2023

Prepared for:

Jefferson County, Alabama

Prepared by:

Galardi Rothstein Group

OCTOBER 2023

October 1, 2023

Jefferson County Commissioners
Jefferson County Courthouse
716 Richard Arrington Jr. Blvd North
Birmingham, AL 35203

GALARDI ROTHSTEIN GROUP

Subject: Municipal Advisor's Feasibility Study
Sewer Revenue Warrants, Series 2023

Dear Commissioners,

Jefferson County engaged Galardi Rothstein Group to prepare this report on the financial feasibility of the County's Sewer Revenue Warrants, Series 2023 (2023 Sewer Warrants). This report has been developed in collaboration with the County's Environmental Services Department (the Department), which is responsible for managing, operating, controlling, and administering the County's sewer system (the System).

The report provides projections of System revenues, operating expenses, and capital improvement project expenditures. It reviews the financial performance of the System since bankruptcy, offering comparisons to projections reported in conjunction with issuance of the 2013 Sewer Warrants. The report summarizes a comprehensive projection of the Department's financial performance for the period FY 2023 through FY 2032. Of particular importance, this report incorporates:

- Service revenue projections over the forecast period reflecting assumptions of limited account growth, declining per account billable volumes (due to price elasticity and price independent conservation), and continuation of annual 3.5 percent rate adjustments;
- Revisions to Operation & Maintenance expense projections that phase in funding for a low-income customer assistance program (CAP) and adjust billing services expenses based on new contract terms with The Water Works Board of the City of Birmingham (BWWB); and
- Capital improvement program (CIP) expenditure projections that reflect recent favorable negotiations of regulatory compliance requirements, improved asset condition data, and revision of asset renewal and replacement scheduling to accommodate financial constraints.

The financial projections reported herein demonstrate that the County can support the 2023 Sewer Warrants throughout the forecast period from System revenues derived primarily from Commission-approved sewer rates and charges. We affirm the financial feasibility of the Department's revised capital financing strategy for the forecast period. We appreciate the opportunity to conduct this review and are prepared to answer any questions regarding its contents.

Eric Rothstein, CPA
Principal

Contents

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Acronyms and Abbreviations

ADEM	Alabama Department of Environmental Management
AMP	asset management program
ARPA	American Rescue Plan Act
Bessemer	Bessemer Utilities
BOD	biochemical oxygen demand
BWWB	The Water Works Board of the City of Birmingham
CAP	customer assistance program
CCF	hundred cubic feet
CCTV	closed-circuit television inspection
CD	EPA Consent Decree
CIP	capital improvement program
CIPP	cured-in-place pipe
Clean Water Act	Federal Water Pollution Control Act
CMOM	Capacity, Management, Operations, and Maintenance
County	Jefferson County, Alabama
CY	calendar year
Department / ESD	County’s Environmental Services Department
DSS	decision support system
EPA	U.S. Environmental Protection Agency
FOG	fats, oils, and grease
FY	fiscal year

GAO	U.S. Government Accountability Office
GIS	geographic information system
GRG	Galardi Rothstein Group, LLC
Hazen	Hazen and Sawyer, PC
I/I	inflow/infiltration
IRMA	independent registered municipal advisor
IWG&S	industrial waste, grease, and septage
LA	land application
LDSSCA	Large Diameter Sanitary Sewer Condition Assessments
LF	linear feet
LOS	level of service
MG	million gallons
MGD	million gallons per day
mg/L	milligrams per liter
MOR	monthly operating reports
MSRB	Municipal Securities Rulemaking Board
NACWA	National Association of Clean Water Agencies
NASSCO	National Association of Sewer Service Companies
NPDES	National Pollutant Discharge Elimination System
O&M	operation and maintenance
OPEB	other post-employment benefits
PACP	Pipeline Assessment Certification Program
PAYGO	pay as you go
PBJC	Personnel Board of Jefferson County

PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
RDII	rainfall derived inflow and infiltration
RMP	Remedial Measures Plan
ROI	return on investment
ROW	right of way
SCADA	supervisory control and data acquisition
SEP	supplemental environmental project
SRF	state revolving fund
SSO	sanitary sewer overflow
Study	Municipal Advisor's Feasibility Study
System	County's sewer system
TMDL	total maximum daily load
TP	total phosphorous
TSS	total suspended solids
TVI	closed-circuit television inspection
UV	ultraviolet
WAS	waste activated sludge
WEF	Water Environment Federation
WRF	water reclamation facility
WWTP	wastewater treatment plant

Credit Summary

Jefferson County, Alabama's sanitary sewer system (the System), operated by the County's Environmental Services Department (the Department or ESD), has faced an unprecedented series of challenges since the mid-1990s.[1] Under a Consent Decree entered by a U.S. District Court, the County was required to consolidate disparate community systems and work aggressively to eliminate Sanitary Sewer Overflows (SSOs) and bypasses in the County's collection systems and water reclamation facilities (WRF).[2] The County had been under a different federal Consent Decree (terminated on June 30, 2021) related to hiring practices (among other things) that had limited the Department's flexibility with respect to personnel management.[3] In November 2011, the County filed for Chapter 9 bankruptcy protection following a series of unexpected events relating to its outstanding indebtedness, including most notably the acceleration of debt service obligations on a portion of the System's outstanding sewer warrants.[4] The County's 2013 Sewer Warrants were a component of the reduction and restructuring of the System's indebtedness under the County's Amended and Restated Plan of Adjustment (Plan of Adjustment).[5]

Since the issuance of the 2013 Sewer Warrants, actual System financial performance has exceeded financial projections developed at that time. Operational and capital project delivery improvements have been implemented. Negotiations of prospective regulatory requirements have attenuated future capital improvement program (CIP) requirements. The County has established a ten-year track record of sound System management following confirmation of its Plan of Adjustment to exit Chapter 9 bankruptcy in 2013.

County issuance of the 2023 Sewer Warrants to refund the 2013 Sewer Warrants is a critical next step in rebuilding the financial foundation and resiliency of the System by reducing annual debt service. As discussed in subsequent sections, the County has:

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[1] See generally Jefferson County's Memorandum in Support of Eligibility, pp. 17-34, filed in Jefferson County, Alabama, Case No. 11-05736-TBB9, United States Bankruptcy Court for the Northern District of Alabama, Nov. 9, 2011 ("Memorandum in Support of Eligibility").

[2] *See* Consent Decree in *R. Allen Kipp et al. v. Jefferson County, Alabama et al.*, Civil Action No. 93-G-2492-S, consolidated with *United States v. Jefferson County, Alabama et al.*, Civil Action No. 94-G-2947-S, United States District Court for the Northern District of Alabama, December 9, 1996. The sewer Consent Decree litigation is discussed more fully in Section 4.3.

[3] *See* Consent Decree in *United States v. Jefferson County, et al.*, Civil Action No. 2:75-cv-00666-CLS, United States District Court for the Northern District of Alabama, Dec. 29, 1982, as modified on Oct. 16, 2013. The hiring practices Consent Decree litigation is discussed more fully in Section 2.4 of this report.

[4] *See generally* Memorandum In Support of Eligibility, pp. 10-38.

[5] Prior to and in connection with the issuance of the 2013 Sewer Warrants, the County filed with the United States Bankruptcy Court for the Northern District of Alabama, Southern Division (the "Bankruptcy Court"), a Plan of Adjustment for Jefferson County, Alabama, dated July 29, 2013, as amended by its Chapter 9 Plan of Adjustment for Jefferson County, Alabama, dated November 6, 2013. The Plan of Adjustment was confirmed by an order (the "Confirmation Order") of the Bankruptcy Court under Section 943(b) of Title 11 of the United States Code. The Plan of Adjustment included the County's obligation to comply with a rate resolution (the "Approved 2013 Rate Structure") pursuant to which the County established prospective rates and rate increases necessary to satisfy the obligations arising under the 2013 Sewer Warrants. The entry of the Order by the Bankruptcy Court constituted a validation by the Bankruptcy Court of the 2013 Sewer Warrants and of the Approved 2013 Rate Structure. Among other things, this validation provided considerable insulation of the Approved 2013 Rate Structure from legal challenge (such as challenges on the basis that rates violated Alabama law as being unreasonable and/or confiscatory). Prospective investors in the Series 2023 Warrants should assume that the Confirmation Order and the aforesaid validation of the 2013 Sewer Warrants and Approved 2013 Rate Structure would have deterred individuals, if any, that otherwise may have instituted or considered instituting legal challenges to the rates charged under the Approved 2013 Rate Structure.

- imposed all of the sewer rate and charge increases prescribed in the rate resolution adopted in conjunction with the Plan of Adjustment from FY 2013 to FY 2022, resulting in a cumulative rate increase of 76.4 percent over the ten-year reporting period[6] (see Section 8.5). The County plans to continue to impose 3.49 percent annual rate increases, as prescribed in the Plan of Adjustment, over the forecast period (see Appendix: Projected Rate Schedule);
- constrained operating expenses, with the exception of external billing services expenses imposed by The Water Works Board of the City of Birmingham (BWWB), to align with projections included in the 2013 Sewer Warrants offering documents. The County plans to implement a customer assistance program (CAP) to complement its progressive rate design to address water affordability concerns;
- implemented a capital improvement program that reflects sound engineering and asset management principles. The CIP anticipates termination of remaining basins from the EPA Consent Decree, deferral of WRF upgrades as a result of sustained in-stream Total Phosphorus (TP) compliance, and proactive repair, replacement, and rehabilitation of the sanitary sewer collection system, pump stations, and WRFs. The Department also has engaged an industry leading program management firm; and
- revised Indenture provisions to provide for greater capital financing flexibility and strength, improved liquidity, and better alignment with other water and wastewater industry credits than that required for the 2013 Sewer Warrants.

The System will continue to face significant challenges over the FY 2023 to FY 2032 forecast period and beyond. Uncertainties prevail with respect to post-pandemic revenue performance, future regulatory requirements, asset renewal and replacement needs, O&M (operation and maintenance) and capital cost Inflationary pressure, project delivery constraints, and other factors. Perhaps most notably, beyond the forecast period the Department will face the need to finance a substantial amount of capital expenditures that may require increases to service rates different from those anticipated in the historic 2013 Approved Rate Structure. However, these uncertainties are typical of major sewer systems, and County staff is well-prepared and capable of managing the System.

Notably, potential positive developments that would enhance the System's financial position also characterize the outlook for the System, especially in light of the conservative nature of projection protocols. In particular,

- service revenue projections are based on assumptions of limited account growth and factors relating to prospective declines in per account consumption. Revenue generation performance will be higher than forecast if pandemic recovery is more robust than conservatively forecast, new account growth is higher than projected, or if exhibited water conservation is less pronounced than forecast. These positive outcomes would be readily supportable by sufficient treatment capacity that is available in the County's facilities;
- projections of O&M expenses incorporate conservative assumptions related to billing services expenses, particularly in the near-term. In the event that the County is able to implement billing solutions at costs that better align to industry norms, forecasted O&M expenses may be materially lower than forecast;

6 As measured by the residential bill for a customer with a 5/8 inch meter using 5 CCF per month. An additional 3.49 percent rate increase was implemented in FY 2023, consistent with the 2013 Approved Rate Structure.

- CIP expenditures are forecast to average approximately $92.5 million per annum in constant dollar terms from FY 2023 to FY 2032, and substantially higher than capital project expenditures that averaged $45.6 million in the most recent 3-year period, FY 2020 through FY 2022, most acutely impacted by inflationary pressures. To the extent that prospective capital project spending lags behind that forecasted, capital project expenditures and related financing pressures may be mitigated; and
- the CIP financing plan assumes that the County will receive a $15 million American Rescue Plan Act (ARPA) commitment from the County and another $15 million in grant funding, also funded through ARPA, from the Alabama Department of Environmental Management (ADEM). Although the CIP financing plan does not currently anticipate additional debt issuance during the forecast period, the Department will pursue lower cost financing options through the State of Alabama's state revolving fund (SRF) loan program if additional funding is needed.

The projections of revenues, operating expenses, and capital expenditures presented herein demonstrate the feasibility of the 2023 Sewer Warrants. With its continued implementation of rate increases prescribed in the 2013 Approved Rate Structure under the Plan of Adjustment, the County is projected:

- to fund all Operations and Maintenance expenses notwithstanding inflationary pressures and atypical contracted billing service expense levels,
- to fund with existing reserves and PAYGO funding (e.g., without additional debt) nearly the entirety of a capital program structured to meet regulatory requirements and effectively manage system asset renewal and replacement requirements,
- to maintain adequate liquidity with combined minimum fund balances of no less than 150 days of annual operating expenses[7], and
- to exceed covenanted 1.30x debt service coverage,

Based on the assumptions, projections, and conclusions of this Municipal Advisor's Feasibility Study (the "Feasibility Study"), the County will be able to meet its debt obligations and establish a resilient and sustainable foundation for efficient sewer service delivery throughout the forecast period.

[7] Includes a 120 day minimum fund balance requirement in the Operating Reserve Fund and 30 day balance in the Revenue Account, as specified in the 2023 Indenture.

1.0 Introduction

1.1 Purpose

The purpose of this report is to review the O&M of Jefferson County's (the County's) sanitary sewer system, update progress on the County's capital improvement programs including compliance with its Consent Decree, and provide a detailed projection of the financial performance of the Environmental Services Department of the County (the "Department" or "ESD") for the period Fiscal Year (FY) 2023 through FY 2032.

This report has been developed in collaboration with the Department that is responsible for operating, maintaining, and upgrading the System. The County has requested that Galardi Rothstein Group (GRG) prepare this report to demonstrate the financial feasibility of its planned issuance of its 2023 Sewer Warrants. The proceeds of these warrants will be used to refinance selected outstanding debt obligations. The County will employ current revenues (including future rate increase service revenues, impact fees and miscellaneous charges) to finance future capital projects as delineated in Section 8.

1.2 Scope

This report summarizes the results of reviews and revisions of the Department's revenue performance, operating expenses, and capital project plans conducted by GRG and Department staff. The Department has developed its plans with the objective of meeting the requirements of the Federal Clean Water Act and related regulations and laws specific to the State of Alabama.

GRG has worked with the County since 2017 to update and modify the Department's strategic financial plan based on detailed analysis of customer billing data, budgeted and actual O&M expenses, capital project expenditure data, and evolving projections of future capital spending requirements. For this report, GRG and Department staff developed projections based on relevant data available as of June 30, 2023. These updates consider:

- residential and non-residential customer account trends and billable wastewater flow patterns;
- exhibited O&M expense patterns and inflation rates by cost category as well as selected expense reclassifications; and
- detailed review and updating of planned capital expenditure schedules based on asset condition assessments, regulatory compliance requirements, operational levels of service and recent construction project cost escalation experience.

GRG has updated the Department's strategic financial planning model to project all System cash flows. The update incorporates scheduled debt service for the County's 2023 Sewer Warrants based on credit market conditions as of August 11, 2023 (with a conservative assumption of an additional basis point yield increment over market rates). The resulting financial plan, which is reported on herein, was developed to ensure compliance with covenants of the County's new 2023 indenture (the "2023 Indenture").

1.3 Firm Qualifications

GRG[8] produced this report for the County which relies upon detailed information provided by the Department. The engineering firm of Hazen and Sawyer also supports the Department for program management services and contributed information on the Department's planned capital improvement project expenditure schedule.

Hazen and Sawyer, PC (Hazen) is a national engineering firm focused exclusively on the water industry; water and wastewater are Hazen's only business. Hazen has grown steadily over the years, from the original six-person office established in 1951 by Richard Hazen and Alfred W. Sawyer to a present staff of over 1,300 employees across nearly 70 offices nationwide. Hazen is a design professional corporation owned entirely by their employees. Executive-level management is provided by a Board of Directors, consisting of licensed Professional Engineers. Hazen focuses on the technical and professional aspects of their work to deliver quality client service and provide benefits to the communities they serve. Since their founding, they have completed thousands of major assignments in the United States and abroad for government agencies, utilities, and industrial organizations. These have ranged in scope from simple analyses for small communities to multi-municipal, multi-million-dollar projects. Hazen has served as the County's sanitary sewer collection system Asset Management Program (AMP) consultant since 2012, providing extensive engineering and program management services.

GRG provides strategic financial and management consulting services to government agencies, public-private partnerships, and special districts worldwide. GRG is the partnering of Galardi Consulting, LLC, established in 1996 and a certified Woman-Owned and Emerging Small Business Enterprise in the State of Oregon; the Rothstein Group, LLC established in 2007 and located in Black Mountain, NC; and Stanger Consulting, LLC established in 2012 and located in the State of Utah. Eric Rothstein and Cody Stanger are Municipal Advisors registered with the Municipal Securities Rulemaking Board (MSRB).

GRG has prepared strategic financial plans, prepared Municipal Advisor Feasibility Study reports, conducted cost-of-service rate studies, and participated in Consent Decree negotiations related to financial capabilities for numerous utilities throughout North America including Akron, OH; Metropolitan Sewerage District of Greater Cincinnati, OH; Guam Waterworks Authority, GU; Halifax Regional Water Commission, NS, Honolulu, HI; Northeast Ohio Regional Sewer District (Cleveland, OH); Salem, OR; St. Louis Metropolitan Sewerage District, MO; Tucson, AZ and Winnipeg, MB. GRG Principals have been involved in the development of wastewater industry manuals of practice for financial planning and rate setting and authored numerous articles and presentations for industry professional societies and research organizations including the National Association of Clean Water Agencies (NACWA), Water Environment Federation (WEF), and Water Research Foundation.

GRG served as the County's sewer rate expert throughout the course of its bankruptcy, adoption of revised rates in November 2012 and September 2013, and approval of its Plan of Adjustment.

[8] The County has **not** designated Galardi Rothstein Group as its independent registered municipal advisor ("IRMA") for purposes of SEC Rule 15Ba1-1(d)(3)(vi) (the "IRMA exemption").

1.4 Report Organization

This Report contains the following sections:

- **Credit Summary:** Provides an overview of initiatives that the County has implemented to establish a financially stable structure for future System development and service delivery. Prevailing risks are also highlighted as well as potential positive developments that could enhance projected financial performance.
- **Section 1 – Introduction:** Outlines the purpose and scope of the report and provides firm qualifications.
- **Section 2 – Environmental Services Department:** Provides an overview of the County's governance of the Department and ratemaking and billing authority, billing partners and method of accounting, personnel management, the Department's organizational structure and functional areas, and FY 2023 budget.
- **Section 3 – Sewer System**: Describes the current System service area, collection and transmission system, pump stations, individual wastewater treatment plants (Wastewater Treatment Plant nomenclature was updated in 2018 to Water Reclamation Facilities due to the recycle and positive environmental impacts of these facilities), and biosolids management program. WRF operational performance data for calendar year (CY) 2022 is also provided.
- **Section 4 – Permitting and Regulatory:** Provides a review of the permitting status of the System, Consent Orders, and other legal issues to which the Department is subject, and future regulatory issues for the System.
- **Section 5 – Historical Financial Performance, FY 2013 through FY 2022:** Summarizes historical financial performance following approval of the County's bankruptcy Plan of Adjustment in 2013 and compares actual results to forecasts presented in the 2013 Municipal Advisor's Feasibility Study. Demonstrates that System financial performance has exceeded expectations, providing a ten-year track record of sound System financial management.
- **Section 6 – Operations and Maintenance Expenses:** Provides an overview of System components, staffing, Department budget, descriptions of budget categories and projected expenditures, and a summary of the ten-year operating expense projection.
- **Section 7 – Capital Improvement Program:** Provides an overview of System capital expenditure categories, its Asset Management Program, Capital Improvement Program (CIP) development process, projected FY 2023 through FY 2032 CIP expenditures, project category descriptions, and a summary of capital project sources and uses of funding.
- **Section 8 – Financial Evaluation:** Provides historical rates and financial performance information, a description of the System's fund structure and flow of funds, comparisons of System sewer bills with those of other major metropolitan areas, and a review of planned System capital financing. Historical and projected service revenue billing determinants are discussed as well as the associated revenue projections. Finally, this section provides projections of revenues, expenses, debt service coverage and fund balances for the period FY 2023 through FY 2032.
- **Section 9 – Findings**: Summarizes findings and conclusions of the report.

- Appendix – Projected Rate Schedule

2.0 Environmental Services Department

2.1 Departmental Governance Structure

2.1.1 Jefferson County Commission

The County is governed by a five (5) member County Commission. Each of the five County Commissioners is elected from one of five geographical districts concurrently with the other members of the Commission. Each Commissioner serves as the chair of one of the County Commission's standing committees, which are identified as (1) Public Works, Community Services, and Intergovernmental Relations; (2) Community Development and Human Resource Services; (3) Administrative Services, Public Works, and Infrastructure; (4) Judicial Administration, Emergency Management, and Finance; and (5) Information Technology and Economic Development. All five Commissioners sit on each of the five standing committees. The standing committees exist to evaluate proposed items of County Commission business and to advance or decline to advance such items to the agenda for a County Commission meeting. Committees and their members have no operational responsibilities of the County — those executive responsibilities being expressly delegated to the County Manager under applicable state law.

The Commissioners elect one of their members to serve as President of the Commission at the beginning of each four-year Commission term. The President's duties include serving as presiding officer at all Commission meetings, executing all contracts and other agreements which require approval of the Commission, and executing all checks and/or warrants on the Commission accounts.

The current County Commissioners are Lashunda Scales, Sheila Tyson, James "Jimmie" Stephens, T. Joe Knight, and Mike Bolin. Commissioner Stephens serves as the President of the Commission. Commissioner Knight is President Pro Tempore of the Commission. Four Commissioners were elected in 2022 to serve four-year terms on the Commission. Commissioner Bolin was elected to a vacated seat in 2023 to serve the remainder of the term.

2.1.2 County Management

2.1.2.1. County Manager / Chief Executive Officer

In August 2009, the Alabama Legislature passed Act 2009-662 and Act 2009-812, pursuant to which the Alabama Legislature directed the Commission to hire a County Manager to serve as the County's Chief Executive Officer.

Cal Markert was named County Manager on Oct. 1, 2021. He previously served as Deputy County Manager over Infrastructure and as Director of Roads and Transportation. Prior to joining Jefferson County, Markert served as the Director of Roads and Transportation for Baldwin County from 2005–2017, served as the County Engineer for Russell County, and in various engineering roles for the Alabama Department of Transportation. He has a Civil Engineering degree from Auburn University, 1995, and earned his PE (Professional Engineering) designation in 2000. He also has a certificate in County Engineering Administration from the Association of County Engineers of Alabama in 2002.

As County Manager, Mr. Markert has day-to-day management authority for the County's operations, a responsibility that before 2011 had been borne by the Commissioners themselves, on top of their legislative functions. Centralizing the executive functions of the County in the County Manager's office has resulted in substantial efficiencies and improvements in the County's operations. Mr. Markert oversees the implementation of authorized projects and programs, assures appropriate coordination of departmental operations, analyzes and implements organizational changes to improve the efficient and economical operation of County government, and recommends policies and adopts procedures for the orderly conduct of the County's administrative affairs. Mr. Markert's office is also charged with the County's budget planning and oversight process, which entails reviewing and evaluating budget estimates of all County departments, submitting an annual budget to the Commission for its review and approval, reviewing County revenues and expenditures throughout the year to insure budgetary control, keeping the Commission advised of the financial condition and needs of the County, implementing necessary and prudent fiscal controls, and providing recommendations as to supplemental appropriations and budget transfers which require Commission approval. Mr. Markert (or Deputy County Managers Daren Lanier or Heather Carter) attends all Commission meetings, where he may discuss any matter before the Commission, although he has no vote on Commission matters.

2.1.2.2. Chief Financial Officer

In May 2020, the Commission promoted Angela Dixon from Deputy Director of Finance to Chief Financial Officer. Dixon joined Jefferson County in Sept. 2017 and has 30 years of accounting, finance and management experience including eight years in public accounting. Ms. Dixon is a licensed Certified Public Accountant in Alabama and Texas, a member of the Alabama Society of CPAs, and earned her Master of Accountancy degree from Auburn University and Bachelor of Science degree from Alabama State University. Before joining Jefferson County, Dixon worked as Director of Fiscal Affairs at Wallace Community College Selma, Acting Internal Audit Director/Manager at the Alabama Community College System, Controller at Alabama State University and Texas Southern University, and Manager at Ernst & Young, LLP and Blazek and Vetterling, LLP. The Chief Financial Officer has primary executive responsibility for the County's finance, revenue, purchasing, information technology, and budget management offices.

2.1.2.3. County Attorney

In 2004, Theo Lawson was appointed as an Assistant County Attorney for Jefferson County representing Jefferson County in civil litigation. In November of 2016, Mr. Lawson was unanimously appointed to the position of County Attorney. Mr. Lawson is a graduate of the University of Alabama-Tuscaloosa, the Birmingham School of Law, and the Jefferson County Law Enforcement Academy. He serves as a professor of criminal law and procedure at Miles Law School and Police Academy Instructor for the Birmingham Police Department. As County Attorney, Mr. Lawson reports directly to the Commission. He supervises in-house attorneys and oversees the work of numerous outside law firms retained from time to time by the County. The County Attorney's office is responsible for representing and advising the County's elected officials, appointed officers, and department heads, including the Environmental Services Department.

2.1.2.4. Environmental Services Director

David Denard is the Director of the County's Environmental Services Department. In this capacity, Mr. Denard manages the day-to-day operations of the County's sanitary sewer system and is primarily responsible for long-range planning for the Department. He is also responsible for the management of approximately 448 County employees who work within the Environmental Services Department. Mr. Denard has been employed with the County since 1999, serving as Director of the Environmental Services Department since 2007. Mr. Denard graduated with honors from the University of Alabama at Birmingham with a bachelor's degree in Civil Engineering. He is a registered Professional Engineer in the State of Alabama and has more than twenty years of experience in the civil and environmental engineering field. Mr. Denard reports to the Deputy County Manager.

2.2 Billing, Collection and Rate-Making Authority

Sewer customers in the County are provided water service by the The Water Works Board of the City of Birmingham ("BWWB") system, Bessemer Utilities ("Bessemer"), or smaller municipal or community water systems. Sewer customers served by BWWB and Bessemer are billed for sewer service on their monthly water bills. The County's remaining sewer customers are billed by, and pay directly to, the County. Some industrial and commercial users are subject to a surcharge based on the strength of their contributed waste under the industrial waste surcharge program administered by the ESD.

Pursuant to Amendment No. 73 of the Alabama Constitution (the County Sewer Amendment), the governing body of the County has sole authority to set sewer rates and charges in the County and to provide for the collection, payment and enforcement thereof. In 1984, the Alabama Supreme Court confirmed the County's authority to set rates for sewer service and held unconstitutional an attempt by the Alabama Legislature to limit that authority. Since the County rate making authority is constitutionally granted, it can only be changed by further constitutional amendment.

2.3 Billing Partners and Method of Accounting

As described above, the System has two billing partners in addition to its own billing operation. Billed rate revenues from BWWB represent 82.5 percent and Bessemer represents 8.7 percent of System totals.[9] The County has adopted an accrual method of revenue accounting and employs an accounts receivable control schedule. At the end of each fiscal year, the County accrues an estimate of incurred, but not yet billed, usage with corresponding adjustments to accounts receivable.

2.3.1 Charges and Adjustments

Monthly sewer charges reflect base charges, volume charges, and other usage and class-related billing determinants. Residential bills consist of a volumetric charge based on the amount of water used and a fixed charge based on the size of the water meter. Billable flows for residential customers are calculated by multiplying metered water use by a factor of 85% to account for outdoor water use that is not returned to the System. Non-residential bills also consist of a volumetric charge based on metered water use as well as a fixed charge based on the water meter size. Some non-residential customers receive additional charges based on the strength or classification of the sewer flows that are returned to the System.

Adjustments are then made to the recorded sewer charges, including private water meter credits, adjustments for leaks or usage anomalies, and adjustments for meter misreads. Other adjustments affecting monthly billed revenues include account charge-offs, returned check charges, application of customer overpayments, and final bill adjustments.

[9] Based on FY 2022 billed revenue data provided by the Department.

Private meters comprise a significant portion of the monthly adjustments made to sewer charges. Private meters are separate water meters installed on the customers' side of the primary billing meter. These secondary meters measure the amount of water usage that is not returned to the sewer system. Typically, private meters are installed for irrigation systems, outdoor fixtures, and swimming pools. Residential customers who install a private meter are not entitled to the 15 percent residential credit since outdoor water use is measured separately by the private meter. After applying for a credit equal to the secondary usage amount, these customers are typically charged a monthly sewer amount based on 100 percent of the primary (indoor water) meter reading.

2.4 Department Organization and Staffing Levels

The ESD is managed within the County's organizational structure by an Environmental Services Director that operates under the direction of the County Manager. The Environmental Services Director is responsible for the strategic and day-to-day operations of the Department. The organizational structure, as shown in Figure 2-1, includes three Deputy Director positions to assist in the Department's operation. The ESD relies upon services from other departments in the County including Finance, Human Resources, Information Technology, and Legal.

The Department is organized into six functional areas that are subdivided into 24 budgetary divisions, primarily by function and location. These functional areas described in more detail below include Impact and Plans Review; Engineering and Capital Project Management; Collection System Operations; Billing, Budget, and Human Resources; Water Reclamation Facility Operations; and Regulatory Compliance. As of August 1, 2023, the Department has a total of 448 filled and 550 budgeted positions. The ESD organizational structure is shown in Figure 2-1 and the breakdown of positions by division is shown in Table 2-1.

2.4.1 Functional Areas

The **Impact and Plans Review** area includes the Impact Division within the Administration Division. This area reviews and approves private development work that affects the System and requires County approval. This includes assessing charges for new connections to the System and assuring those new connections can be properly served by the public system, and that privately constructed modifications to the public system adhere to the County's specifications.

The **Billing, Budgeting and HR** area reports to the Director and is responsible for the portion of the billing services performed by the County and assuring that billing services performed by others are timely and accurate. The Department's budget preparation and tracking as well as limited human resource functions are handled in this area in coordination with other County Departments. This functional area includes the Sewer Billing division and portions of the Administration division.

The **Regulatory Compliance** area includes the administration of the County's industrial pretreatment program and the operations of the Barton Laboratory. This important area reports directly to the Director and is responsible for working with the other areas to assure that state and federal regulatory requirements are satisfied. The industrial pretreatment program places the Department in the position of being the local regulator with respect to Clean Water Act pretreatment requirements. This program is required to protect the County's treatment facilities from negative impacts from industrial and commercial discharges. The Barton Laboratory conducts thousands of analyses per year to assure the compliance of industries and the County's nine treatment facilities.

FIGURE 2-1
Environmental Services Department Organization

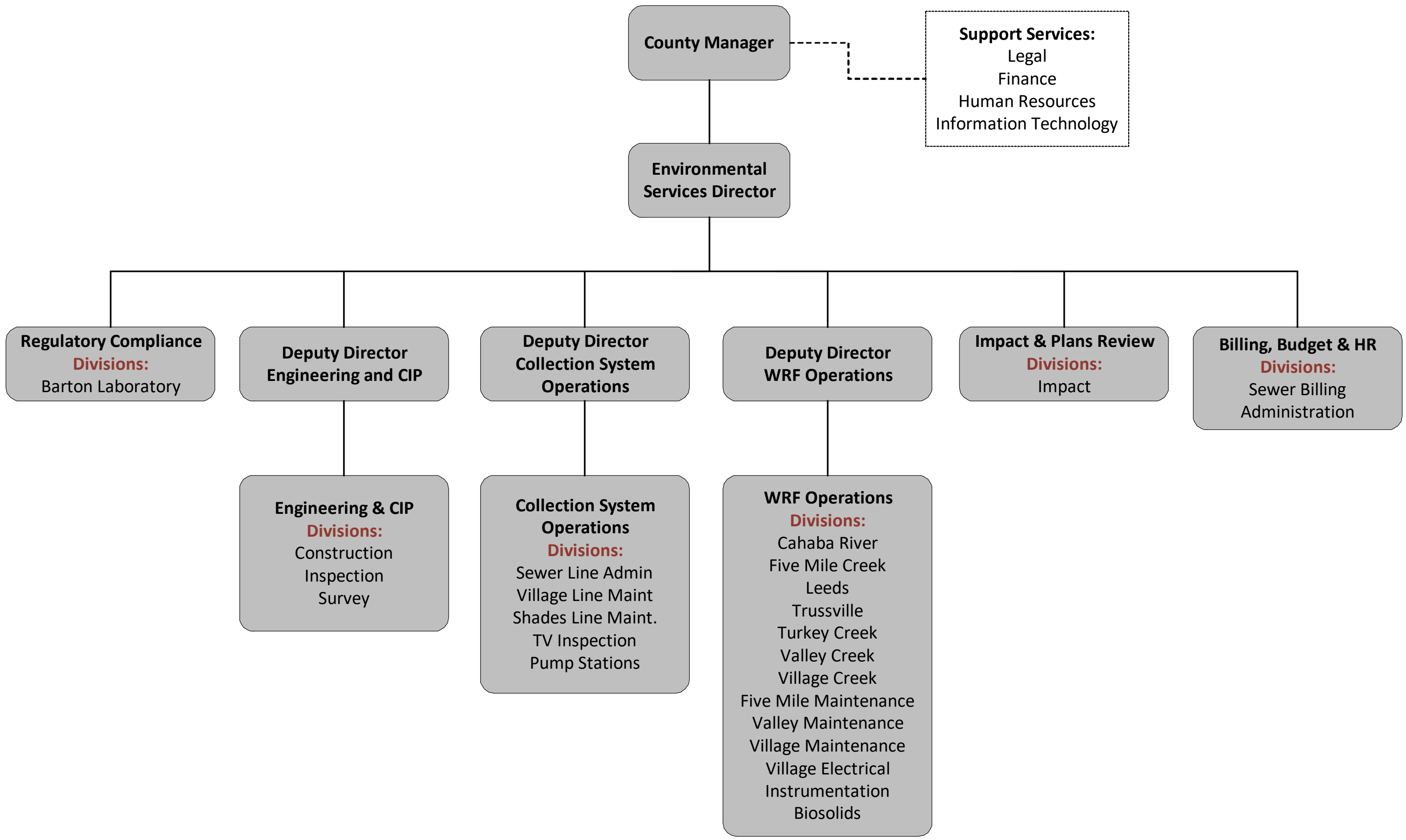


TABLE 2-1
Environmental Services Department Staffing – As of August 2023

Budget Division	Division Number	Number of Employees Filled	Number of Employees Budgeted
Administration/Impact	7100	52	58
Sewer Billing	7101	14	15
Barton Laboratory	7102	17	20
Inspection	7210	23	24
Survey	7211	12	13
Construction	7230	18	24
Pump Stations	7240	22	26
Line Maintenance Administration	7250	8	13
Village Line Maintenance	7252	18	27
Shades Line Maintenance	7253	41	53
TV Inspection	7270	34	36
Cahaba River	7301	20	26
Five Mile Creek	7302	20	24
Leeds	7303	7	8
Trussville	7304	4	8
Turkey Creek	7305	5	7
Valley Creek	7306	31	46
Village Creek	7307	34	50
Five Mile Maintenance	7320	8	8
Valley Maintenance	7321	11	13
Village Maintenance	7322	12	13
Village Electrical	7323	13	14
Instrumentation	7324	10	10
Biosolids	7330	14	14
		448	**550**

The **Engineering & Capital Project Management** area is responsible for all construction, condition assessment, asset management, and capital replacement and maintenance activities performed by ESD employees and contractors in the collection system. This area includes three divisions that handle a variety of services such as construction, inspection, and surveying.

The **Collection System Operations** area is responsible for sewer cleaning and maintenance, sewer inspection and pump station operations, and maintenance. This area includes five divisions. As described in Section 4, the County's Consent Decree was concerned with SSOs and bypasses within the collection system and at the treatment plants. This functional area is responsible for continuing to implement the County's efforts to achieve system performance that will result in the final termination of this enforcement action. Addressing collection system and pump station repairs and ongoing maintenance activities are essential to continuing to improve that performance. Additionally, the collection system area is also where significant customer impact occurs. Addressing sewer-related problems, minimizing sewer construction impacts, and reducing to the extent possible basement backups are all essential to providing high quality customer service.

The **Water Reclamation Facility Operations** area is responsible for operations of the County's nine treatment facilities and its biosolids program. The area is separated into 13 divisions. This includes the staff required to operate and maintain the treatment facilities. The Department locates operating staff at the various treatment plants to handle day-to-day operations. These staff work shifts appropriate to the facility, with larger plants staffed continuously and smaller plants staffed during day shifts and monitored remotely at night and on weekends. The Department performs light preventive maintenance with operating staff at each facility. Centralized mechanical, electrical, and instrumentation staff at the Village Creek, Valley Creek, and Five Mile facilities provide higher level maintenance to all the treatment plants.

Each of the treatment facilities generates biosolids residuals in their plant processes. Treatment plant biosolids must be properly handled by the Department to comply with regulatory standards. The County operates two biosolids disposal sites on leased strip-mine sites. These biosolids operations are included in the WRF operations area.

2.4.2 County Support Services

The County currently provides support services to the Department for finance, accounting, purchasing, payroll, budget management, legal services, information technology, human resources, right-of-way, and fleet management. The costs allocated to the Department for these services are based on a County-wide indirect cost allocation study and direct charges for parts and supplies.

2.5 Budget Process

The County operates on an October through September fiscal year with an annual budget approved by the Jefferson County Commission. The Department develops a budget each year reflective of the expected cost of facility operations, providing customer services, and meeting regulatory requirements.

The County is required by Alabama law to operate under a balanced budget. The Department typically pays for certain services provided by other County departments as discussed in the previous section. These costs are included in user fee revenue requirements that the County charges customers for services.

In the budgeting process, Department management is expected to develop budgets for operations and maintenance needs that are then rolled up into a total departmental budget. The Department Director and Deputy Directors review divisional budget requests for accuracy and appropriateness. Each division's budget request is to be substantiated with appropriate documentation. The Department's senior management has initial responsibility to address divisional budget requests that exceed projected revenues such that Departmental budget requests are within prevailing financial constraints of the System. When necessary, budget requests will be amended to conform to the realities of expected revenues.

The budget is reviewed with other County departmental requests by the County Manager and finance staff following approval and submittal by the ESD Director. When approved by the County Manager, the draft budget is presented in conjunction with those of other County Departments to the Jefferson

County Commission for final approval. For selected reporting purposes and expense projections, the Department's Operating Budget is organized by categories that include personnel, utilities, legal and professional, billing, indirect and direct costs, and other expenses. A summary of projected operating expenses by category in current dollar terms is provided in Section 6 and escalated operating expenses are incorporated into the Projected Sources and Uses of Funds reported in Section 8.

3.0 Sewer System

3.1 Overview and Legislative Authority

The sanitary sewer system of Jefferson County was created in the early 1900s to protect public health and allow the continued development of the Birmingham area. The sanitary sewer collection system serves 23 municipalities, unincorporated Jefferson County, and small portions of Shelby and St. Clair Counties. The County's wastewater collection and treatment system consists of approximately 3,224 miles of sanitary sewer lines (3,114 miles gravity and 110 miles force main), pump stations, 83,128 manholes, and nine water reclamation facilities. Table 3-1 shows a listing of County WRFs with corresponding collection system gravity and force main footage in linear feet (LF).

TABLE 3-1
Jefferson County Water Reclamation Facilities and Collection Systems

Water Reclamation Facility (WRF)	NPDES#	Force Main Length (L.F.)	Gravity Main Length (L.F.)
Cahaba River	AL0023027	75,342	1,849,780
Five Mile Creek	AL0026913	51,572	2,241,009
Leeds	AL0067067	31,048	267,863
Prudes Creek	AL0056120	16,408	152,216
Trussville	AL0022934	29,929	499,618
Turkey Creek	AL0022926	7,565	591,996
Valley Creek	AL0023655	315,515	7,447,156
Village Creek	AL0023647	47,760	3,345,161
Warrior	AL0050881	8,711	44,828
TOTAL		**583,851**	**16,439,626**

Act No. 714 of the Alabama Legislature, enacted February 28, 1901, authorized the construction maintenance and operation of a sewage disposal system in Jefferson County by the Jefferson County Sanitary Commission, which Act No. 714 created. Act No. 716, also enacted February 28, 1901, provided for the issuance of bonds for sanitary sewer purposes and for the levy of a special ad valorem tax (the "Sewer Tax") for sanitary sewer purposes. On August 19, 1909, Act. No. 48 was enacted and transferred rights, duties, and powers with respect to the System from the Jefferson County Sanitary Commission to the Board of Revenue of the County. Pursuant to these acts, municipalities in the County may construct their own sewage collection systems that connect to trunk or branch lines of the System. Private sewer systems, if any, can also be connected to the System with the permission of the County Commission. In addition to building trunk and branch lines, the Commission is also authorized to locate and build wastewater treatment plants to carry out its legislative charge to protect the sources of drinking water supply from pollution.

The County Sewer Amendment empowers the County Commission to levy and collect sewer service charges from the users of the System. The County Sewer Amendment provides that the County

Commission shall have a lien against any property served by the System to secure the payment of any related sewer service charges. Any such lien may be enforced by foreclosure in the same manner as municipal assessments for public improvements. Under the County Sewer Amendment, sewer service charge revenues may be expended only for purposes related to the improvement, extension, maintenance, and operation of the System (including the costs of financing thereof).

Cybersecurity threats and corresponding risks to the System and business processes are managed by the County through a variety of measures. Inventory and risk assessments are conducted to determine areas of vulnerability, including annual internal and external testing by third parties. The County has also adopted an information security awareness program that includes awareness training for all employees, phishing testing, and monthly information security newsletters to educate employees. Critical operational data backups, cyber insurance, and security incident response plans are all part of the County's plan to mitigate the risks associated with cybersecurity threats.

3.2 Sewer Accounts

Based on 2022 billing system records provided by the Department, the sewer system serves approximately 133,200 residential and 12,200 non-residential customer accounts in Jefferson County. These users receive water service from the Birmingham, Bessemer, Trussville, Irondale, Leeds, Graysville, Warrior River, and Mulga water utilities. Of these, the Birmingham and Bessemer systems, through contractual agreements, provide combined water and sewer billing while the remaining systems are billed directly by the County for sewer service only. Of the total customer accounts estimated to be billed in FY 2022, BWWB was estimated to bill roughly 78 percent, Bessemer billed approximately 12 percent, and Jefferson County billed the remaining 10 percent.

Residential accounts primarily include single-family homes and duplexes. Non-residential accounts include larger multi-family residences, retail, office, restaurant, hotel, and industrial users. Growth in system-wide residential accounts has averaged approximately 1 percent since FY 2018, while non-residential accounts have decreased modestly (less than 0.1 percent) over the same time period.

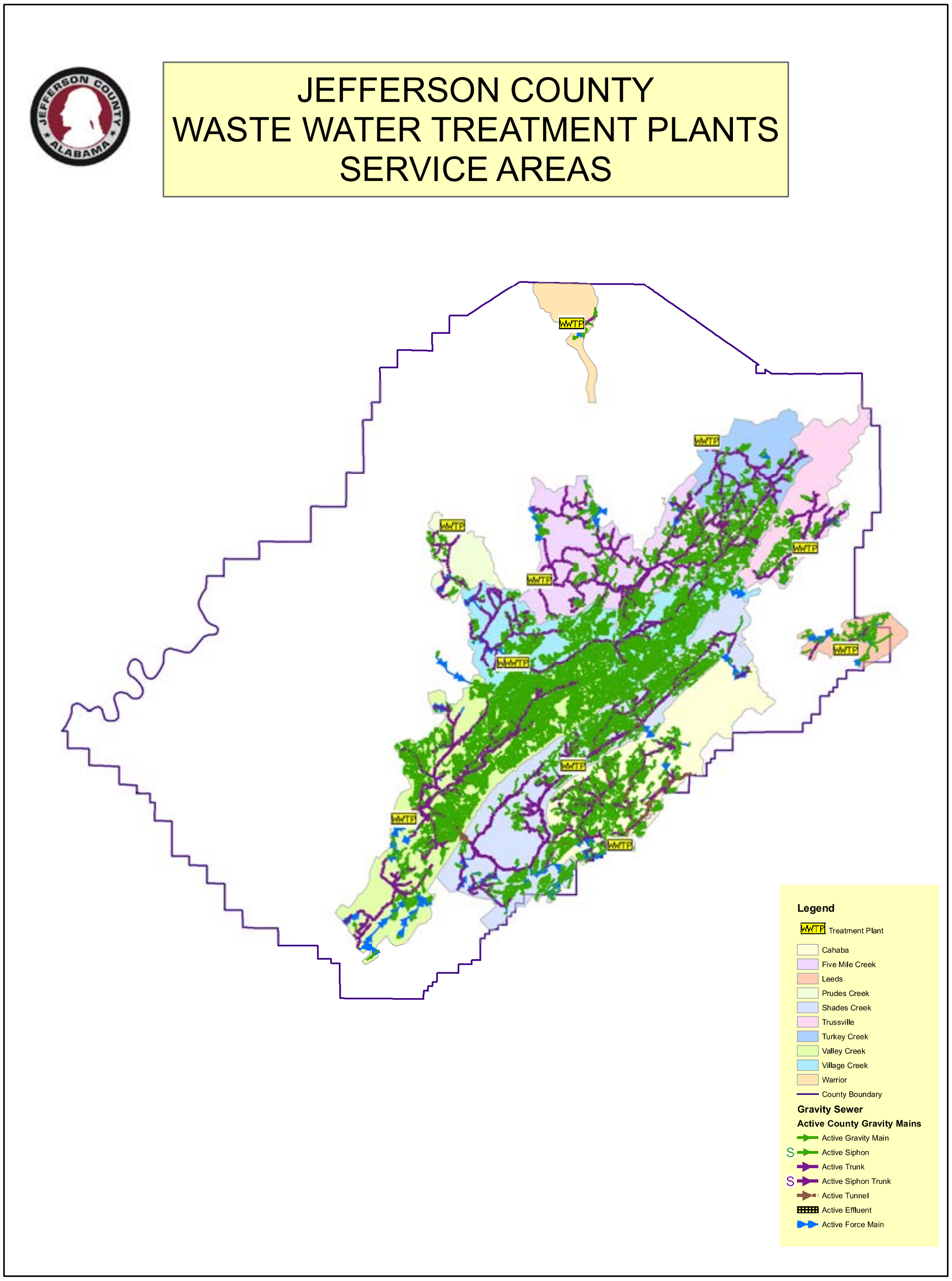
3.3 Service Area

Located in the north-central part of Alabama, at the southern end of the Appalachian Mountains, the County lies within the Cumberland Plateau and Tennessee Valley and Ridge physiographic sections. The County's highest point (Shades Mountain) is at 1,150 feet. Watersheds in the County flow to the Black Warrior and Cahaba rivers. Shades Creek, Little Shades Creek, and Patton Creek flow into the Cahaba River; Five Mile Creek, Turkey Creek, Valley Creek, and Village Creek flow into the Black Warrior River. The Department's 448 square mile service area is characterized by gently rolling topography and, because of this, a large gravity sewer network is utilized to collect and transmit sewage. Pump stations transfer these flows to other pump stations and gravity mains and eventually to their respective treatment plants. The Department's service area is presented in Figure 3-1.

3.4 Collection and Transmission System

There are a significant number of sewer pipe segments that traverse or are adjacent to critical areas such as railroad rights-of-way (ROW), U.S. highways (elevated and non--elevated), water recreational areas, and sensitive wetland areas. Among system components that require routine maintenance are

FIGURE 3-1
Sewer Service Area



152 inverted siphons[10] under streams, creeks, rivers, roads, railroads, and other surface conditions. The area experiences an average annual precipitation rate of 54 inches and frequent high volume rainfall events that can overwhelm the collection system and result in wet weather SSOs. There are likely several contributing factors to these weather-related SSO events, which account for approximately 25 to 50 percent of total System SSOs depending on the year. ESD has developed a comprehensive flow-monitoring program, management of which is contracted to a private firm, which features approximately 50 rain gauges, 254 flow monitors, and 60 depth alarms for site investigations and real-time SSO notifications positioned strategically throughout the collection system.

3.5 Pump Stations

The County operates 177 pump stations located throughout the service area. These stations are monitored and maintained daily by the Pump Station Operation and Maintenance Division of the ESD and are not permanently staffed. All stations located in the collection system are equipped with a Mission supervisory control and data acquisition (SCADA) unit, which collects hourly runtime, pump starts and provides alarms for malfunctions at the station. In addition, the Al Seier Road Pump Station and Prudes Creek #1 and #2 Pump Stations are operated and maintained by personnel located at the Cahaba River and Five Mile Creek WRFs and are operated as part of the treatment process. Table 3-2 lists the number of pump stations in each sewer basin.

TABLE 3-2
Number of Pump Stations by Basin

Area	Number of Pump Stations
Cahaba River	22
Five Mile Creek	29
Leeds	9
Prudes Creek	6
Trussville	8
Turkey Creek	2
Valley Creek	77
Village Creek	22
Warrior	2
TOTAL	**177**

3.6 Wastewater Treatment Facilities

The County ESD owns and operates nine (9) water reclamation facilities at various locations throughout the County. Treatment plant construction histories range from the early 1900s (Valley Creek and Village Creek WRFs) to the mid-2000s. Each WRF has gone through major upgrades over

[10] An inverted siphon is a segment of gravity sewer that drops below a stream or roadway and then rises up to allow flow to continue flowing through the System. Inverted siphons are prone to increased maintenance needs because they tend to trap debris in the depressed section of the sewer.

the years in order to improve the level of treatment and meet stringent regulatory standards. The WRFs generally employ tertiary treatment[11] with most designed for, or practicing, nutrient (phosphorous) removal. The WRFs generally meet individual treated wastewater discharge permit standards with a combination of biological (activated sludge) and physical/chemical treatment processes. Most of the treatment plants are designed with sand filtration, with the exception of the older treatment trains at Village Creek WRF and the Turkey Creek WRF. The plants are also designed to meet bacteriological standards with UV (ultraviolet) disinfection, except for the older treatment train at Village Creek WRF which utilizes chlorination/dechlorination for disinfection. The treated effluent water quality (visual) ranges from excellent to exceptional. Almost without exception, the Department is in compliance with point-source National Pollutant Discharge Elimination System (NPDES) permit requirements.

Most of the WRFs, except the Warrior, Trussville, and Prudes Creek WRFs, have significant constructed wet weather storage capacity, and each of the facilities have developed appropriate standard procedures for managing wet weather flows, including moving water between plants and using idle treatment process basins for emergency storage.

Generally, the WRFs are in good physical and operational condition, with the newer facilities incorporating the appropriate technology at the time of construction. The Department has a balanced plan of equipment and systems capital repair including the addition of, or improvements to, its remote SCADA systems to improve reliability and control labor costs. The Department is currently implementing a Vertical Asset Management Program. The program will improve inventory, management of condition and maintenance activities of WRF assets, and allow the Department to refine maintenance practices, asset replacement, and capital forecasting.

A review of the operational performance of each facility is provided in Table 3-3 at the close of this section. Figure 3-2 provides the sewershed for, and the location of, the nine water reclamation treatment facilities in the service area.

3.6.1 Cahaba River WRF

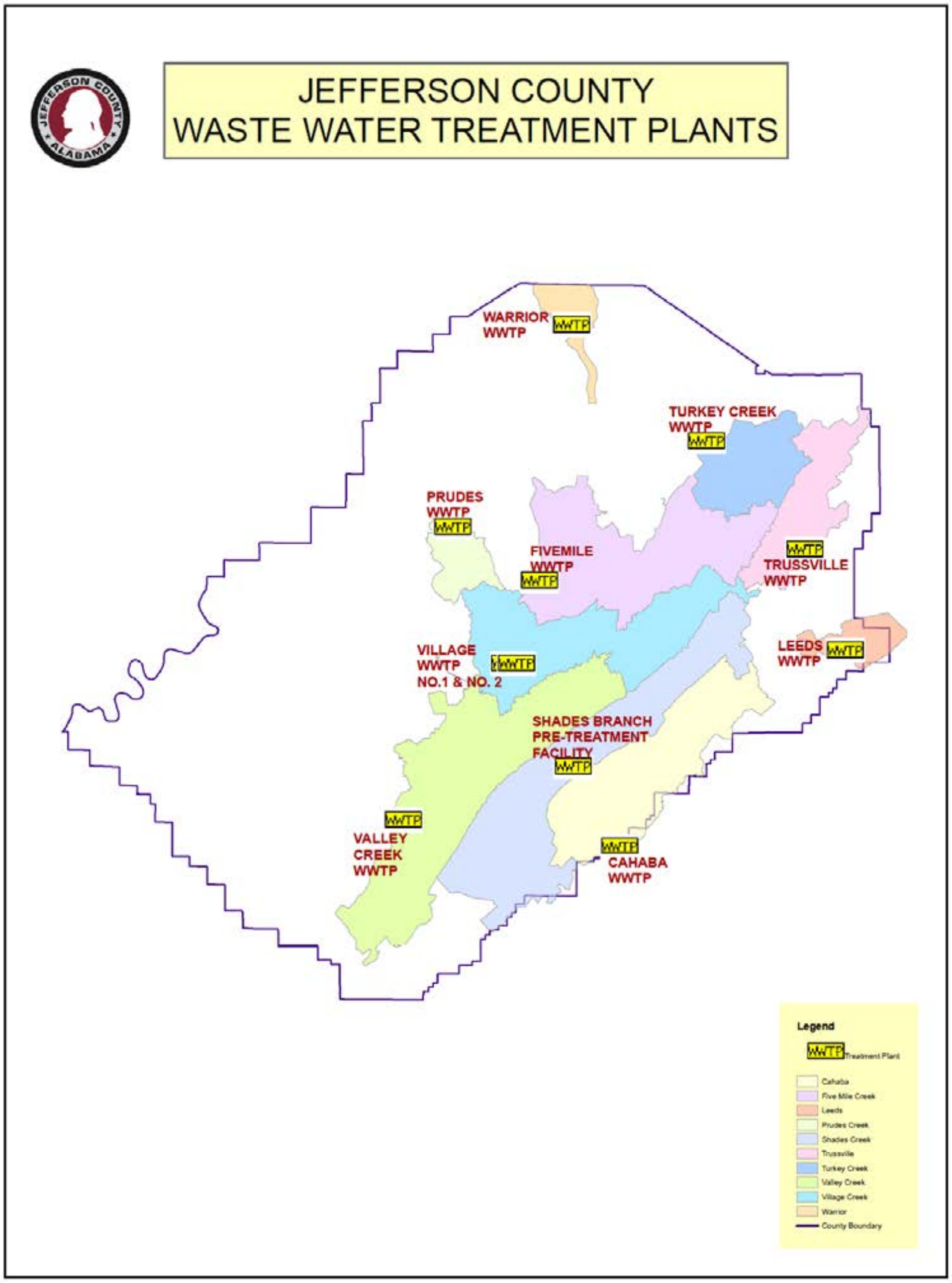
The Cahaba River WRF is located in Hoover, downstream of the I-65 bridge over the Cahaba River. The plant receives sewage flow from Hoover, Bluff Park, Vestavia, Rocky Ridge, Acton Valley, Cahaba Heights, and a portion of Riverchase that is within Jefferson County. Built in 1984, the plant has an annual average daily design capacity of 12 million gallons per day (MGD) with a peak day flow capacity of 35.0 MGD. In 1993, the Patton Creek WWTP was removed from service and its flow was transferred to the Cahaba River WRF. That same year, construction began to improve and increase the plant's peak flow treatment capabilities. These improvements, along with the construction of the Al Seier Road Pump Station and Bluff Park Tunnel, allowed the elimination of the Horse Farm and Hurricane Branch automatic bypasses.

Currently, flow that enters the Cahaba WRF via 18" and 36" force mains and 48" and 54" gravity sewers is lifted by the influent pump station. The influent flow receives preliminary treatment at the headworks through coarse bar screens followed by grit and grease removal. The facility has primary clarifiers available for primary treatment (currently not in service). Peak flows under 35.0 MGD are routed to 2, five-stage Bardenpho (biological nutrient removal carrousels) tanks for secondary treatment and then to 4 final clarifiers (generally 2 in service). After final clarification, the flow goes

11 Advanced cleaning of wastewater that goes beyond the secondary or biological stage, removing nutrients such as phosphorus, nitrogen, and most BOD and suspended solids.

into advanced treatment processes through deep bed sand filters. Metal salts can be introduced into the feed box prior to the final clarifiers and at the coagulation and flocculation wells prior to filtration to enhance solids and phosphorus removal. Following advanced treatment, UV irradiation is used for disinfection. The treated effluent flow receives post aeration with a cascade aerator prior to discharge to the Cahaba River.

FIGURE 3-2
Jefferson County Water Reclamation Facility Locations



Peak flows over 35.0 MGD are routed to five peak flow aeration and sedimentation basins (20 million gallons [MG] total storage capacity). Peak flow is stored and reintroduced to the headworks as the flows subside. The peak storage basins may also be used during dry weather to regulate flow to the biological process to maintain a steady flow due to the sensitivity of the process to wide variations in flow or loading. When the WRF's storage and treatment capacity are exceeded, the direction of the flow in the Al Seier force main can be reversed, and flow can be siphoned from the influent pump station to the Al Seier pump station and routed to the Valley Creek WRF.

Sludge processing at the Cahaba River WRF ceased in 2020. Currently, Waste Activated Sludge (WAS) is diverted to the former aerobic digesters for holding. WAS, mixed with wastewater, is pumped to the Al Seier Pump station and sent to the Valley Creek WRF where it enters the normal treatment train. This project eliminated the high-strength phosphorus return stream from the former solids processing treatment train and allows for better, more predictable, operation of the phosphorus removal process.

The County, in response to the nutrient Total Maximum Daily Load (TMDL) limit for the Cahaba River Watershed discussed in Section 4.4, has upgraded and improved the treatment capabilities of the Cahaba River WRF. This has included upgrades for nutrient removal at a cost of approximately $55 million. Projects have been implemented to coincide with the regulatory phasing of TMDL limits for phosphorus loading. The current Phase II limit for TP of 0.2 milligrams per liter (mg/L) was implemented in 2016.

The Cahaba River TMDL Phase III TP discharge limit for the Cahaba River WRF is 0.043 mg/L. Substantial process modifications and additions may be needed to ensure compliance with this final Phase III TMDL limitation. Through TMDL implementation, the Cahaba River has met the instream target TP concentration for the river of 0.035 mg/L for 20 of the 21 compliance monitoring events since 2015. The Department believes the continued meeting of the instream TP target is indicative of compliance with the TMDL and warrants a revision of the TMDL and/or delisting of the affected segments for point-source nutrients. As such, the Department has not included projects in the capital improvement program (CIP) to meet Phase III limits.

The Cahaba River WRF is staffed 24 hours per day, 7 days a week. The facility is well maintained by operations staff and is in good condition.

3.6.2 Five Mile Creek WRF

The Five Mile Creek WRF, located in Lower Coalburg, receives sewage from Tarrant City, Inglenook, Lewisburg, Roebuck, Center Point, Grayson Valley, the southern end of Pinson Valley, Fultondale, and southern Gardendale. This facility was placed into operation in 1978 with a 10.0 MGD capacity. It replaced the Boyles Treatment Plant located in Tarrant. Since then, the plant has undergone major revisions and in 1991 was expanded to become a 20.0 MGD activated sludge plant with a 40.0 MGD peak hydraulic capacity. In 1999, the County installed improvements identified in the Five Mile Creek Waste Treatment System Capital Improvement Plan that called for flow-monitoring and automatic sampling facilities at the discharge from the aerated peak flow handling facilities. This work was completed in advance of the Consent Decree's April 1, 2000, construction completion deadline. The Tarrant Springs and the Barton Branch automatic bypasses were removed in 2000, sending all wastewater flows to the plant. In December 2008, construction was substantially completed to increase the average daily treatment capacity of the plant from 20.0 MGD to 30.0 MGD and increase the peak flow treatment capacity from 40.0 MGD to 50.0 MGD.[12]

Wastewater enters the facility via a 72" gravity line. Influent flows under 50.0 MGD receive preliminary treatment through mechanically aerated grit chambers. The flow is then pumped into six aeration basins, followed by secondary (final) clarifiers. Following the activated sludge processes, the facility has eight sand filters to enhance removal efficiency. Disinfection at the plant is provided with UV light irradiation prior to discharge through the cascade aerator at the outfall into Five Mile Creek. Extended peak flows and flows over 50.0 MGD are directed to the peak flow aeration and sedimentation basins. Flow from the peak flow basins is stored and pumped to the aeration basins as the flows subside.

Sludge handling consists of aerobic digestion, thickeners and sludge drying beds. Dried solids are handled by the biosolids operations discussed in Section 3.6.12.

WRF operations employees staff the Five Mile Creek WRF 24 hours per day, 7 days a week. The facility is overall in good condition.

Additional work is currently being designed to address functional and maintenance issues with the screening conveyance system.

3.6.3 Leeds WRF

The Leeds WRF is located in the City of Leeds off Montevallo/Cahaba Valley Road. The plant receives sewage flow from the City of Leeds, including small parts of St. Clair and Shelby Counties. The construction of the Leeds WRF at its current location began in November 1993. The facility began discharging April 20, 1995. The plant's average daily treatment capacity was increased to 2.0 MGD and has a peak daily design capacity of 10.0 MGD.

Flow enters the Leeds WRF via a 30" gravity sewer. The influent flow receives preliminary treatment through coarse bar screens followed by in-channel grinders. Influent flow is lifted by the influent pump station and travels through a grit tank where large solids are removed by the grit classifier. Flows under 3.0 MGD are pumped to one aeration basin for biological treatment. The second aeration basin functions as redundant process equipment that is rotated into service to enable scheduled maintenance and can be used for storage of peak flows. Metal salt is introduced into the process prior to the final clarifiers to enhance copper and nutrient removal. Final clarification of the flow occurs at the two final clarifiers. Advanced treatment is provided through traveling bridge sand filters before disinfection via UV irradiation. The flow then receives cascade post aeration prior to discharge to the Little Cahaba River.

Peak flows over 3.0 MGD are routed to one or both of the peak flow aeration and sedimentation basins (5.0 MG total storage capacity). Flow from the peak flow aeration and sedimentation basin is stored and reintroduced to the influent pump station wet well as the peak flows subside.

Waste activated sludge from the process is stabilized in aerobic digesters and dewatered in sludge drying beds. Final biosolids that are produced are sent to a land application (LA) site.

12 The planned peak flow capacity of 70.0 MGD cannot be reached due to design errors such that the actual peak flow capacity is limited at 50.0 MGD.

The plant is in generally good condition and has been maintained well. Due to the nearly 20-year age of the electrical and mechanical equipment and systems, some are reaching the end of their useful life estimates.

3.6.4 Prudes Creek WRF

The Prudes Creek WRF serves the cities of Graysville and Adamsville. The former plant was a 600,000-gallon average daily design capacity facility that was originally constructed in 1986. From April 1997 to June 1999, improvements identified in the initial Waste Treatment System Capital Improvement Plan for the Prudes Creek WWTP were completed. Additional upgrades were substantially completed in January 2006, and the plant currently has a 0.9 MGD average daily design flow capacity and a daily peak flow capacity of 3.5 MGD.

Flow enters the Prudes Creek WRF from two pump stations within the facility. Pump Station No. 1 receives flow via a 20" gravity sewer, and Pump Station No. 2 receives flow from a 16" gravity sewer. The influent wastewater is pumped to the headworks where it receives preliminary treatment through in-channel grinders. The flow travels through the grit tank and the grit classifier removes large solids. Influent screw pumps lift the flow. The flow is split between three aeration basins for biological treatment, each of which is followed by a final clarifier. The flow receives advanced treatment through deep bed sand filters and disinfection from ultra-violet irradiation. The flow receives cascade post aeration prior to discharge to Five Mile Creek.

Solids removed from final clarifiers are pumped into the sludge thickener with dewatering on sand drying beds. The final biosolids produced are sent to a land application site.

The facility is in good condition. The WRF is staffed one shift per weekday. During off-shift periods and weekends, the Prudes Creek WRF is controlled and operated from the Five Mile Creek WRF via a SCADA system.

3.6.5 Trussville WRF

The Trussville WRF is located in the city of Trussville behind the City Hall and receives flow from Trussville and an area along U. S. Highway 11 between Trussville and I-459. The Trussville WRF, upgraded in 1998, has a permitted capacity of 4.0 MGD. The facility is designed to treat a peak flow of 16.9 MGD.

Influent wastewater enters the Trussville WRF and is lifted by the influent pump station. The flow receives grit removal before it is equalized between three identical carousel type aeration basins. Two final clarifiers provide settling of activated sludge solids following aeration. The flow then receives tertiary treatment through sand filtration prior to disinfection by UV irradiation and discharge to the Cahaba River.

Solids are removed from the final clarifiers and aerobically digested before being gravity thickened. The thickened sludge is pumped to a dewatering screw press or to covered drying beds; dried biosolids are hauled to the County's land application site.

The WRF has a chemical addition system using metal salts for TP removal. The facility must comply with the Cahaba River Nutrient TMDL Phase II limit of 0.2 mg/L. Implementation of TMDL Phase III requirements is currently scheduled for April 2027. Substantial process modifications and additions may be needed to ensure compliance with the final Phase III TMDL limitation of 0.043 mg/L TP.

Studies and designs have not yet been initiated for this work given demonstrated compliance with in-stream TP targets as discussed in 3.6.1, and no additional improvements at the Trussville WRF to meet Phase III limits are included in the Department's CIP.

The plant is in good condition. It is staffed 8 hours per day, 7 days a week.

3.6.6 Turkey Creek WRF

The Turkey Creek WRF is located in Pinson just off Narrows Road. The plant receives sewage flow from Pinson, Clay, the Sweeney Hollow Road area, and northern Center Point. A former plant was originally constructed on the site in 1970 and had a 4.0 MGD average daily flow capacity. The facility then underwent upgrades in the 1970s, 1980s and 1990s. The original facility was decommissioned in 2004 when the existing plant became operational. Currently, the plant is permitted for 5.0 MGD, designed for a 10.0 MGD average daily flow and has a peak hydraulic capacity of 25.0 MGD.

Flow enters the Turkey Creek WRF via a 48" gravity sewer. The influent flow receives preliminary treatment through coarse climber screens followed by a vortex type grit removal system. Flows under 10.0 MGD are lifted by screw pumps and feed into an aeration basin. A second aeration basin functions as redundant process equipment that is rotated into service for maintenance. The flow then receives final clarification from some combination of four final clarifiers. Disinfection is provided by UV irradiation. Disinfected flow then receives cascade post aeration prior to discharge to Turkey Creek.

Peak flows over 10.0 and up to 25.0 MGD are routed to the four peak flow primary clarifiers and then to the peak flow aeration and sedimentation basin that has 14.0 MG total capacity. Flow from the peak flow aeration and sedimentation basin is stored and reintroduced at the aeration basins as the flows subside.

Sludge handling consists of aerobic digesters followed by sludge drying beds. Dried solids are handled by the biosolids operations discussed in Section 3.6.12.

The facility has been recently upgraded and is in good condition. It is staffed 8 hours per day, 7 days a week.

3.6.7 Valley Creek WRF

The Valley Creek WRF is located in west Bessemer near the intersection of Johns Road and Powder Plant Road. The WRF receives sewage flow from the Central Park — Fairgrounds area, Fairfield, Midfield, Powderly, Roosevelt City, Brighton, Lipscomb, Bessemer, Hueytown, Pleasant Grove, Dolomite, Garywood, Wylam, and McCalla areas. The Valley Creek WRF also receives all the flow from the Shades Valley Basin including Irondale, Mountain Brook, Homewood, and portions of Birmingham south of Red Mountain – and from the Cahaba River WRF and Village Creek WRF. The treatment capacity of the facility was expanded to an average daily design flow of 85.0 MGD and a peak biologic treatment capacity of 170.0 MGD with an additional 110.0 MG of storage volume for peak flow equalization.

Influent flow enters the facility through a 102" gravity sewer and receives preliminary treatment through the headworks that includes fine screening, grit and grease removal, and pre-aeration processes. Flows then receive primary clarification. Recent upgrades enable flows up to 170.0 MGD to receive activated sludge treatment. The primary effluent is routed to second stage aeration followed by final clarification. Currently, the deep bed sand filters are out of service, and final clarified effluent is routed to the UV irradiation and cascade post aeration prior to discharge into Valley Creek.

Influent flow over 170.0 MGD enters through 102” gravity sewer and spills over a weir within an offsite upstream flow control box and is directed to the influent pump station via a 120” gravity sewer. The pumped influent receives primary treatment through mechanical screens and discharges into 110.0 MG aerated peak flow holding basins. As incoming flow decreases, sewage detained in the basins is drained back to the influent pump station where it is pumped back to the headworks and receives treatment as described above. If the peak hydraulic capacity of the biological plant and the storage capacity of the aerated peak flow basins are exceeded, the basin includes weir baffles to capture floatable solids and is designed for low surface overflow rates to maximize sedimentation. Overflows would be directed to the effluent pump station, UV disinfection, and finally cascade post-aeration before entering Valley Creek.

Primary sludge and WAS is gravity thickened or processed through gravity belt thickeners and treated in anaerobic digesters. After digestion, the biosolids are pumped to belt filter presses for dewatering. Ultimate disposal occurs at beneficial land application sites.

The facility currently receives significantly lower flows and loads compared to design values and, as a consequence, experiences some operational inefficiencies. Due to low flows, many pieces of major equipment (such as pumps and disinfection units), especially those located at the influent and effluent end of the process units that were designed for 600.0 MGD, are not in service. Engineering designs to replace the UV system with a more efficient 270 MGD UV system capable of treating current and projected flows is underway.

The older facilities are in fair to average condition; the newer facilities are in very good condition. Construction work is underway to renew at risk structural, mechanical, and electrical equipment. This plant is staffed 24 hours per day, 7 days a week.

3.6.8 Village Creek WRF

The Village Creek WRF is located in Pratt City and receives sewage flow from most of the downtown Birmingham area, including Southside, West End, Avondale, Woodlawn, East Lake, Huffman, North Birmingham, Ensley, Pratt City, Forestdale, and Hooper City. The Village Creek WRF was one of the original County treatment plants constructed in 1905. The plant was upgraded and expanded several times prior to the work undertaken in conjunction with the Consent Decree. The Village Creek WRF consists of two treatment plants (with different treatment process units) designed to operate independently or in conjunction with each other. Plant 001 (old plant) and Plant 002 (new plant) have an average daily design flow capacity of 120.0 MGD and a peak hydraulic capacity of 240.0 MGD. The old and new facilities share the same solids treatment process.

The flow primarily comes into the old plant through a 120” gravity sewer line. Under normal operations, most of the influent flow enters Plant 001 and flows through the preliminary treatment unit that consists of mechanical bar screens, grit and grease removal basins, and pre-aeration basins. Flow then goes to the eight primary clarifiers and is then split between Plant 001 and Plant 002.

In Plant 001, flow enters the secondary treatment units consisting of diffused air aeration basins and final clarifiers. After the final clarifiers, flow is disinfected using chlorine and sulfur dioxide for dechlorination. Plant 001 also includes an effluent lift station that is used when levels in Village Creek rise above the normal effluent discharge point.

Plant 002 receives flow through a 132" tunnel and from Plant 001. Plant 002 was designed for an average daily design flow of 60.0 MGD. The plant has a peak biologic treatment capacity of 100.0 MGD, and there is an additional 90.0 MG of storage volume for peak flow equalization. The facility was constructed with a significantly higher capacity for influent pumping and UV disinfection (420.0 MGD) for the potential to blend screened and settled peak flows with biologically treated effluent prior to disinfection and discharge. Currently, portions of the UV system are intended to be replaced and portions of the current system will remain for peak flows. The new plant includes mechanical bar screens, an influent pump station, grit and grease removal basins, pre-aeration basins, activated sludge treatment, final clarifiers, deep-bed sand filtration, and UV disinfection.

Solids from both facilities are treated in the solids handling facility. The solids are treated through gravity thickeners, aerobic digesters, two-stage anaerobic digesters, elutriation tanks, thickening and dewatering centrifuges, lime stabilization, and covered and uncovered drying beds. Stabilized solids are then either mechanically dewatered in centrifuges or sent to drying beds.

The Village Creek WRF is staffed 24 hours per day.

3.6.9 Warrior WRF

The Warrior WRF is located to the west of the city of Warrior. The former plant was a 0.1 MGD average daily design capacity facility that was constructed in 1987, modified in 1996, and decommissioned on July 31, 2006, when a new plant became operational. Currently the plant is permitted for 0.1 MGD average daily flow, though it is designed for a 0.2 MGD average daily flow and has a peak hydraulic capacity of 0.5 MGD.

Flow enters the Warrior WRF via a 12" gravity sewer. The influent flow receives preliminary treatment through in-channel grinders. Flow is pumped to one aeration basin for biological treatment. A second aeration basin functions as redundant process equipment that is rotated into service for maintenance and can be used for storage of peak flows. After aeration basins, the flow then enters two final clarifiers for final clarification. Advanced treatment is provided through travelling bridge sand filters. The flow then receives disinfection from UV irradiation prior to cascade aeration and discharge to Cane Creek.

Solids produced in this facility are stabilized in two aerobic digesters and dewatered in covered sand drying beds before being hauled to the land application.

The plant is in good condition and staffed for four hours per day, three days per week (these staffing levels exceed permit requirements for this relatively small facility). Other times, the WRF is monitored at the Turkey Creek WRF.

3.6.10 Scott's Branch Pretreatment Facility

The Scott's Branch Pretreatment facility is located on the site of the original Shades Valley treatment plant that was originally constructed in 1928. The facility ceased discharging in 1985 and operated until 2019 as a 0.5 MGD pretreatment facility, reducing the strength of high strength wastewater from upstream industries. The plant discharges into the Shades Valley trunk sewer that conveys flows to the Valley Creek WRF. The inactive pretreatment facility consists of a 3.75 MGD influent pump station, three vertical loop reactors, and two clarifiers.

In 2019, a temporary chemical feed and storage system was added at the site as an alternative treatment method to prevent the formation of odorous and corrosive compounds in the downstream sewers. In the chemical treatment process, ferric chloride is added to the high-strength waste stream and discharged into the Shades Valley trunk sewer. In late 2020, a permanent chemical treatment system was constructed and the existing pretreatment facilities were taken out of service.

3.6.11 Barton Laboratory

The Barton Laboratory is responsible for consolidated laboratory services and compliance monitoring for all of the County's WRFs. These services include testing effluent discharge samples for compliance with applicable water quality regulations and strength sampling of influent.

3.6.12 Biosolids Program

The Biosolids Division is responsible for land application and solids management for all WRFs. The County disposes of biosolids resulting from the treatment processes at the WRFs through a program of land application. Biosolids are periodically applied at the Flattop and Beltona Land Application sites. These sites are former strip-mining locations. The Beltona LA site receives biosolids from the Village Creek WRF that have been lime stabilized. Biosolids at the Beltona LA are beneficially used to grow hay that is baled and used for erosion control. The Flat Top LA site receives biosolids from the nine WRFs in Jefferson County. Biosolids are comingled at the site and are beneficially used for mine reclamation by building topsoil over the rocky surface.

3.7 WRF Operational Performance

A review of operation performance at each WRF was performed based on Monthly Operating Reports (MOR) from 2022. A summary of current permit requirements and operational performance for each WWTP is provided in Table 3-3. Based on the information provided, all facilities were operating within permit limits for the overwhelming majority of parameters. There were two numerical exceedances in 2022 for E. coli at the Village Creek WRF due to high flow. There was one unpermitted discharge at the Village Creek WRF in March 2022 due to a power failure. Effluent discharge performance is indicative of generally high-quality treatment plant performance and the adequacy of facilities and staff to meet permit requirements.

TABLE 3-3
Water Reclamation Facility Operational Performance Summary – CY 2022

Water Reclamation Facility (WRF):		Cahaba	Five Mile Creek	Leeds	Prudes Creek	Trussville	Turkey Creek	Valley Creek	Village Creek - I	Village Creek -II	Village Creek - III	Warrior
Permitted Capacity (MGD) - annual aver		12	30	2.0	0.9	4.0	5.0	85	60	60	NA	0.1
Flow (MGD) - daily max	Permit	report	report	report	report	report	report	report	report	report	report	report
	Actual	22	57	6.1	2.3	8.7	13	135	44	109	146	0.41
Effluent Total Suspended Solids (mg/L) -weekly avg	Permit	45	45	45	45	45	45	45	36	36	report	45
	Actual	0.54	0.49	0.72	0.27	2.0	1.6	4.4	1.9	0.17	0.87	1.6
Effluent Ammonia (as N, mg/L) -weekly avg	Permit	1.5 (summer) 3.0 (winter)	3.0 (summer) 3.75 (winter)	3.0 (summer) 4.5 (winter)	3.75 (summer) 15 (winter)	1.5 (summer) 3.0 (winter)	3.7 (summer) 7.5 (winter)	1.5 (summer) 3.0 (winter)	1.5	1.5	report	1.8 (summer) 3.1 (winter)
	Actual	0.00	0.01	0.01	0.01	0.00	0.00	0.02	0.02	0.01	0.01	0.01
Effluent TKN (as N, mg/L) - weekly average	Permit	3.0 (summer) 6.0 (winter)	6.0 (summer) 7.5 (winter)	6.0 (summer) 12.0 (winter)	7.5 (summer) 30 (winter)	3.0 (summer) 4.5 (winter)	report	3.0 (summer) 6.0 (winter)	report	report	report (b)	report
	Actual	0.47	0.40	0.41	0.32	0.44	0.41	0.84	0.69	0.59	0.64	0.57
Effluent Total Phosphorus (as P, mg/L or lbs/day*) - monthly average	Permit	0.2 (Growing season April - October)	report	1.0	2.0 (Nutrient Summer March-October)	0.2 (Growing season April - October)	[21*] (Growing Season May - October)	report	report	report	[600*] (Growing Season May - November)	2.0 (Nutrient Summer March-October)
	Actual	1.0	0.44	0.07	0.25	0.79	0.58	0.76	0.43	0.30	0.35	0.49
Effluent E. Coli (#/100mL) - daily max	Permit	298 (summer) 2507 (winter)	298 (summer) 2507 (winter)	298 (summer) 2507 (winter)	298 (summer) 2507 (winter)	298 (summer) 2507 (winter)	298 (summer) 2507 (winter)	298 (summer) 2507 (winter)	2507	2507	NA	298 (summer) 2507 (winter)
	Actual	34	85	380	809	17	80	250	12,700	240	NA	330
Effluent Fecal Coliform (#/100 mL) -daily max	Permit	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Actual	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous BOD (mg/L or lbs/day -weekly avg	Permit	6.0 (summer) 15.0 (winter)	9.0 (summer) 10.5 (winter)	6.0 (summer) 15.0 (winter)	12 (summer) 37.5 (winter)	4.5 (summer) 15.0 (winter)	30	7.5 (summer) 10.5 (winter)	6.0 (summer) 9.0 (winter)	6.0 (summer) 9.0 (winter)	NA	27.0 (summer) 37.5 (winter)
	Actual	1.4	1.2	1.1	1.5	1.5	1.5	2.2	2.0	1.1	1.4	3.1

** Based on 2022 monthly operating reports*

4.0 Permitting and Regulatory Issues

4.1 Overview

As described in Section 3, the County operates an extensive wastewater system that consists of nine water reclamation facilities and their associated separate sanitary sewage collection systems. The operation of the System is regulated under the Federal Water Pollution Control Act (Clean Water Act) and the regulations and laws specific to the State of Alabama. The State of Alabama is delegated by the Environmental Protection Agency (EPA) to administer the NPDES on their behalf. This includes the issuance of operating permits for the County's wastewater treatment plants and collection systems. Although this program is delegated, EPA still plays a significant role in the NPDES program.

4.2 Permitting Status – Wastewater System

4.2.1 Treatment Plants

As previously described, the County operates nine water reclamation facilities ranging in dry weather permitted capacity from 0.1 to 120.0 MGD. Each of these facilities is in general compliance with the requirements of its NPDES permit. Table 4-1 provides the NPDES permit number and expiration dates for each of the County's treatment facilities. Under the NPDES program, it is possible that the requirements of these permits could be modified before their expiration date. However, such modifications are unusual, and it is reasonable to assume that the current treatment plant standards will remain in place until at least the expiration dates shown. The Department does not anticipate any significant changes to these permits during the next renewal cycle.

TABLE 4-1
WRF NPDES Permit Information

WRF Name	NPDES Permit #	Permit Expiration Date	Receiving Stream
Cahaba River	AL0023027	November 30, 2024	Cahaba River
Five Mile Creek	AL0026913	June 30, 2026	Five Mile Creek
Leeds	AL0067067	December 31, 2027	Little Cahaba River
Prudes	AL0056120	July 31, 2024	Five Mile Creek
Trussville	AL0022934	May 31, 2023*	Cahaba River
Turkey Creek	AL0022926	June 30, 2026	Turkey Creek
Valley Creek	AL0023655	April 30, 2028	Valley Creek
Village Creek	AL0023647	June 30, 2026	Village Creek
Warrior	AL0050881	December 31, 2025	Cane Creek

* *This permit has been administratively extended and is currently valid under ADEM rules and procedures.*

All nine plants have achieved good compliance records with only occasional excursions in spite of having relatively stringent effluent standards. Each of the facilities have received Peak Performance

Awards from the National Association of Clean Water Agencies in the last five years for perfect or near perfect compliance with the effluent standards mandated by their NPDES permit. Effluent data, drawn from 2022 Monthly Operating Reports for each of the facilities is provided in Table 3-3: Water Reclamation Facility Operational Performance.

4.2.2 Collection Systems

The County's primary compliance concerns relate to the frequency and volume of sanitary sewer overflows in some of the County's sewer basins which arise from both wet-weather (rain-induced infiltration and inflow) and dry-weather (maintenance) causes. In CY 2022, the County experienced 169 SSOs in its various basins. The Department employs a two-year design storm to determine the capacity required to provide a minimum level of service, meaning all sewer flows should be conveyed without the system experiencing SSOs. Excessive rainfall which exceeded the 2-year design storm induced 40 of the 169 SSO occurrences; therefore, 129 SSOs were not caused by extreme rainfall. SSOs in the Cahaba River, Valley Creek, Village Creek, and Five Mile Creek facility basins that remain subject to the federal Consent Decree accounted for 120 of the 129 preventable SSOs (93 percent) in calendar year 2022. Approximately 87 percent of these SSOs are not caused by capacity deficiencies but are maintenance related and attributed to grease, roots, or debris that has accumulated in the collection system, pipe failures, and some other preventable and non-preventable causes.

The Department continually monitors collection system wet-weather performance through a series of flow monitors and measures rain events to determine storm intensity from deployed rain gauges. Flows are compared against expected performance from system hydraulic models to determine if the system is meeting expected performance for the two-year design storm. Corrective measures are developed for portions of the system that do not meet the established level of service. Efforts to identify and remediate wet-weather overflows have reduced total SSO volume from all events significantly with 2022 accounting for only 8 percent of the total volume during the last five-year period, 2018 to 2022, and 15 percent of the total SSO count. Further details regarding capital improvement projects to address SSOs are provided in Section 7.4.3.

Continued reduction and prevention of dry-weather SSOs is a major focus of system maintenance efforts performed by County employees and outside contractors. The Department has improved its cleaning practices and has transitioned from primarily reactive to preventative work under the sewer cleaning program. Crews collect data on the causes of SSOs and numerically score pipes based on cleaning and TV findings. This methodical collection of data has allowed the Department to develop a decision support system (DSS) to apply consistent, objective business rules to optimize sewer cleaning as new data points are collected.

The DSS maps where sewers need to be cleaned based on an assigned frequency. The DSS generates recommendations that a planner/scheduler then reviews. If the planner/scheduler accepts the recommendation, the DSS automatically updates the maintenance management database. The types of cleaning recommendations include the following: increase/decrease the frequency, add/remove a pipe to the schedule, and accelerate/defer the next scheduled cleaning date. The goal is to only clean pipe that is classified as moderately dirty. In other words, the Department's goal is to clean pipe at the right time, not too early but also not too late. Ideally, the Department wants to only clean pipe when the findings so indicate, and with each successive iteration of cleaning, the recommended frequency should get closer to the ideal target. This has resulted in more efficient and effective use of cleaning resources and a 31 percent reduction in dry-weather SSOs in the past 6 years as shown in Figure 4-2.

FIGURE 4-1
SSO Count < 2-year Storm, CY 2017 to CY 2022

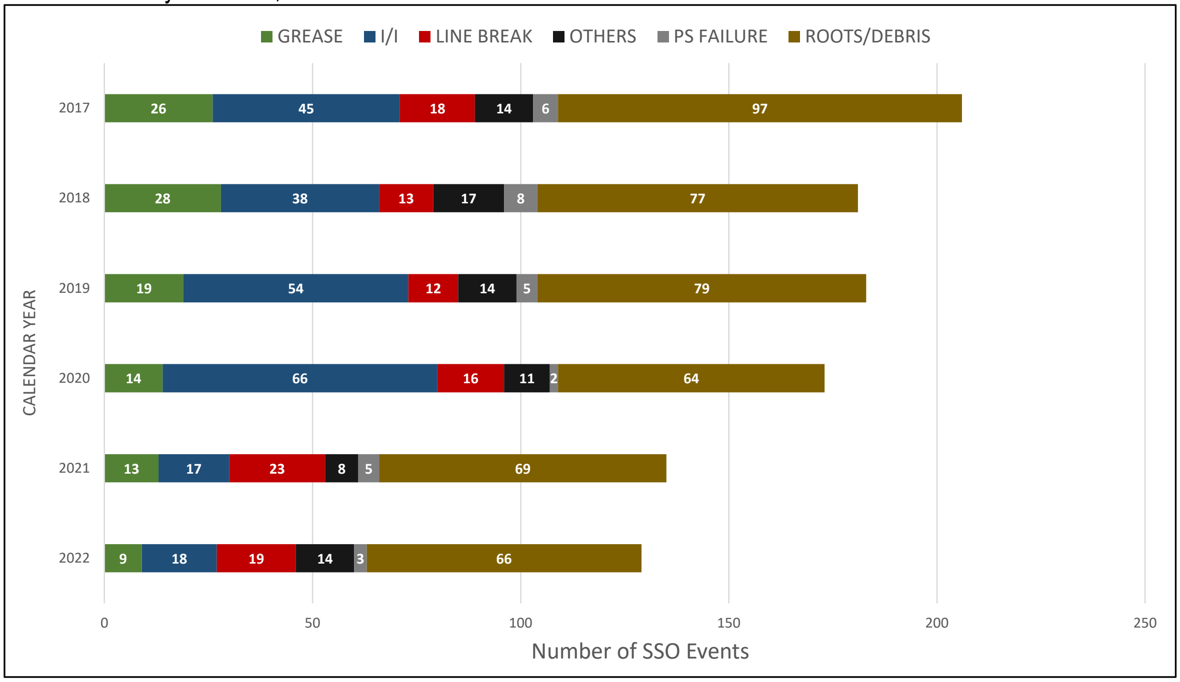
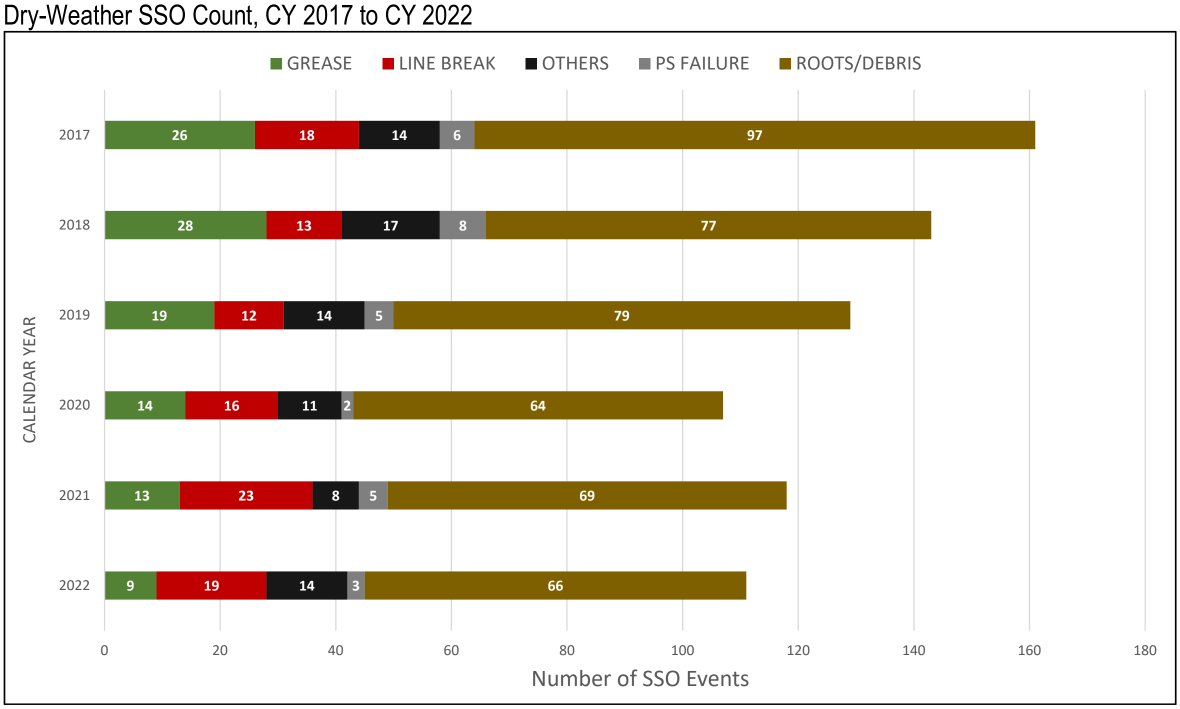


FIGURE 4-2
Dry-Weather SSO Count, CY 2017 to CY 2022



Also included in the collection system are the Department's 177 pump stations. Proper pump station reliability and maintenance is essential to achieving compliance. Reoccurring pump station failures have been a focus of enforcement actions from EPA. While the County does not have a high degree of pump station failures at present, this represents a significant compliance risk if maintenance is not addressed. The County meets pump station performance through remote monitoring, maintenance management, and capital equipment replacements.

4.3 Consent Orders and Other Legal Issues

The County is a defendant in certain civil actions (collectively referred to as the "Clean Water Act litigation") alleging that the County violated various provisions of the federal Clean Water Act in the operation of the System. The Plaintiffs in the Clean Water Act litigation included private citizens, an environmental group, and the United States Justice Department, acting at the request and on behalf of the Environmental Protection Agency. The actions were filed and consolidated in the United States District Court, Northern District of Alabama, Southern Division (United States of America v. Jefferson County, Alabama, et al., Civil Action No. 94-G-2947-S, and R. Allen Kipp, Jr. et al. and Cahaba River Society, Inc. v. Jefferson County, Alabama, et al., Civil Action No. 93-G-2492-S).

The thrust of the plaintiffs' claims in the Clean Water Act litigation was that the System was discharging untreated water containing raw sewage into the Cahaba River and the Black Warrior River and that these discharges violated the standards and limitations of the Clean Water Act as well as the System's various NPDES permits issued under the Clean Water Act. The plaintiffs claimed that the discharges occurred during periods of heavy rainfall when the rainwater infiltrated or flowed into the lateral and collector lines for the System; that this infiltration and inflow increased the volume of water in the System beyond capacity limits of the System's treatment plants; and that untreated or partially treated wastewater above treatment plant capacity limits bypassed the treatment plants and was diverted during these periods directly into surface waters.

On January 20, 1995, the District Court granted partial summary judgment in favor of the plaintiffs, finding that the County and the System were in violation of the Clean Water Act, and directed the parties to engage in settlement discussions with respect to the appropriate remedy. On July 31, 1995, the County announced that it had reached an agreement with the plaintiffs on the essential terms of a settlement; the terms of such settlement are now embodied in a Consent Decree (the "Consent Decree") that was approved and entered by the District Court on December 9, 1996.

A significant feature of the Consent Decree is a mechanism to provide for the establishment of a unified County-wide system for collection and treatment of sewage under the authority of the County. Such unification has now been achieved, resulting in the conveyance to the County of all municipal systems in the County. This unification provides the County with the means to address the problems of infiltration and inflow in lateral and collector lines, which is the principal objective of the Consent Decree.

The Consent Decree called for the development and implementation of a remedial plan that is intended to eliminate bypasses and other unlawful discharges of untreated sewage to streams in the County. The remedial plan required, among other things, extensive rehabilitation of lateral and collector sewers throughout the County and construction of additional capacity to the treatment plants in the System. The requirements of the decree consisted of three phases: a planning phase, an investigative phase, and an implementation phase, all of which were completed by dates required in the Consent Decree with the exception of one project.

Phase I of the remedial plan involved the preparation of planning documents used to evaluate the physical condition and hydraulic capacity of the County's sewage collection system and wastewater treatment plants. Phase II involved a detailed analysis of the conditions of the County and municipal sewage collection systems and wastewater treatment plants, including reports quantifying the amount of infiltration and inflow in each sewage collection system, describing the types of remedial or corrective work needed, and quantifying the benefits expected. Phase III is the implementation phase of the Consent Decree. This phase consisted of numerous projects aimed at achieving appropriate capacity or reducing wet-weather flows in the County's collection system and treatment plants. This phase also consisted of the elimination of automatic diversion structures in the collection system that allowed excess sewage flows to spill into area streams and rivers.

The status of the three phases and basin termination therefrom of the Consent Decree is shown in Table 4-2.

TABLE 4-2
Consent Decree Status

Basin	Phase I Complete	Phase II Complete	Phase III Complete	Basin Termination from CD
Leeds	✓	✓	✓	✓
Prudes Creek	✓	✓	✓	✓
Trussville	✓	✓	✓	✓
Turkey Creek	✓	✓	✓	✓
Warrior	✓	✓	✓	✓
Cahaba River	✓	✓	✓	
Five Mile Creek	✓	✓	✓	
Shades Creek	✓	✓	✓	Note 1
Valley Creek	✓	✓	✓	
Village Creek	✓	✓	✓	

Note 1 - The Shades basin is named separately in the consent decree but is part of and will be terminated with the Valley Creek basin.

Since the completion of implementation phase the County has requested and has been granted the termination of five basins from the Consent Decree (shown above). No Consent Decree-required construction projects remain unfinished in these basins; however, the County has continued to perform additional collection system maintenance and implement capacity improvements to achieve appropriate sanitary sewer overflow control. Insofar as the Consent Decree is an enforcement action, the County's continued compliance with its prescriptions is a System performance imperative which limits exposure to penalties or further enforcement measures. The County's compliance history over the last decade, as signaled by prior and pending basin terminations, is indicative of key System improvements and strong environmental performance.

As previously mentioned, the County still experiences sewage overflows in the Valley Creek, Village Creek, and Five Mile Creek basins that are largely to be addressed through the County's Capacity, Management, Operations and Maintenance (CMOM) Program and wet-weather management program. This is an ongoing operations effort to address blockages related to grease accumulations, root intrusion, and other forms of debris through effective cleaning and to address wet-weather capacity overflows through the Remedial Measures Plan (RMP) program. As this work continues and overflows are further reduced, the County plans to request termination of the remaining basins. The Consent Decree does not have a specific final completion date beyond the dates associated with the completion of the implementation phase. The County routinely reports its progress on finalizing the Consent Decree in monthly and quarterly reports to Region IV of EPA.

The Consent Decree provides for stipulated penalties if the County fails to meet submittal dates for plans, reports, and schedules under the remedial plans, deadlines for completing remedial work, and deadlines relating to the Supplemental Environmental Project referred to below. Such stipulated penalties are applied for each occurrence on a per-day basis. If EPA makes a written demand for stipulated penalties, the County has the right to contest EPA's position, both directly with EPA and with the District Court pursuant to dispute resolution provisions in the Consent Decree. Moreover, if delays result from causes outside the County's control (force majeure), stipulated penalties may not be assessed. The County has not been assessed stipulated penalties for failing to complete any portion of the Consent Decree deliverables by the required date nor do any future deliverables remain beyond routine monthly and quarterly reporting.

Stipulated penalties have been assessed in the past related to sanitary sewer overflows and bypasses as provided for in Section XI of the Consent Decree. Since January 16, 2008, the EPA has not demanded payment for stipulated penalties related to the Consent Decree. The present value of potential violations is approximately $3.6 million. The County has accounted for stipulated penalties potentially accrued since 2008 as an expense in FY 2020 though the Agency has not demanded payment. The liability associated with the eventual cash payment of accrued penalties is recognized in the Feasibility Study financial forecast by deducting the accrued penalties amount from the beginning Revenue Account balance.

Pursuant to the Consent Decree, the County has paid a $750,000 civil penalty and $577,000 in stipulated penalties to the United States Government for past violations of the Clean Water Act.[13] In addition, the County agreed to undertake a supplemental environmental project (SEP) at a cost of $30 million to create greenways in the service area. The County has completed commitments related to the SEP and anticipates no further costs related to the greenways including any ongoing operations and maintenance expenses.

In 2021, the County entered into discussions with the EPA and citizen plaintiffs regarding a potential amendment to the Consent Decree in an effort to assess compliance, identify additional work needed, if any, and bring the Consent Decree to termination. These discussions are ongoing.

4.4 Future Regulatory Issues

Identifying future regulatory issues is difficult given the number of regulators and the ever-changing environmental regulatory situation in the United States. Future regulatory issues that have the

[13] The civil penalty was paid in 1997 and the stipulated penalties were paid in two parts, one in October of 2006 ($339,000) and one in January of 2008 ($238,000).

possibility of affecting the County are related to potential increases in effluent standards for some of the County's treatment facilities. The likelihood of these changes in standards is very hard to quantify, and regulators were unable to definitively state when the changes might occur, if ever. The potential changes described below are driven by one of the following:

- Receiving streams that are added to the states 303d list[14] due to impairment
- Changes in the receiving stream use designation[15]
- Additional water quality information that causes increased effluent requirements
- Emerging contaminants such as PFOA (perfluorooctanoic acid) and PFOS (perfluorooctane sulfonate)

4.4.1 Nutrient Removal Requirements

Eight of the nine WRFs (with the exception of the Valley Creek WRF) have effluent limits for total phosphorus in their current NPDES permit. The Leeds facility has an effluent total phosphorus requirement of 1.0 mg/L. The facility readily meets this effluent standard with its current treatment process. In the future, it is possible that this standard will become more stringent to meet water quality standards in a downstream lake. More stringent nutrient limits for the Leeds WRF would likely arise only if the receiving waters for these facilities are included on future 303d lists for phosphorus impairment. If a listing for phosphorus impairment does occur, a TMDL[16] analysis will determine the required effluent limits for the Leeds plant. It is not expected that the limits, if changed, would result in as stringent a standard as the Trussville and Cahaba River facilities. The most likely sequence for an effluent standard change to occur would include listing on the state's 303d list, determination of a TMDL, and creation of a compliance schedule in the next permit cycle following the TMDL with ultimate compliance estimated as being 5-7 years into the future.

The Cahaba River and Trussville WRF have compliance schedules included in their current NPDES operating permits that will increase the required level of control for total phosphorus significantly in three steps. At this time, compliance with the TMDL is in Phase II with a 0.2 mg/L effluent limit for TP. Phase III of the TMDL (with an effluent discharge limit of 0.043 mg/L) is scheduled for potential implementation by April 1, 2032. However, the Cahaba River segments listed in the Cahaba River Nutrient TMDL have been in compliance with the instream TP target of 0.035 mg/L since 2013. As the TMDL allows for adaptive management in the implementation of permit limits, Jefferson County has requested and received a permit revision for the Cahaba River WRF's NPDES permit to extend compliance to 2032 and has done the same for the Trussville WRF permit renewal application in 2022.

14 The term "303(d) list" is short for the list of impaired and threatened waters (stream/river segments, lakes) that the Clean Water Act requires all states to submit for EPA approval every two years on even-numbered years. The states identify all waters where required pollution controls are not sufficient to attain or maintain applicable water quality standards and establish priorities for development of TMDLs based on the severity of the pollution and the sensitivity of the uses to be made of the waters, among other factors (40C.F.R. §130.7(b)(4)). States then provide a long-term plan for completing TMDLs within 8 to 13 years from first listing.

15 "Designated Uses" are those uses specified in water quality standards for each water body or segment. Recreational uses; the propagation and growth of a balanced, indigenous population of aquatic life; wildlife; and the production of edible and marketable natural resources are generally stated as "fishable and swimmable" uses. Other uses may be industrial water supply, irrigation, and navigation.

16 Total Maximum Daily Load is an allocation of pollutants discharges among all pollutant sources on an impaired water body. This is the way the Clean Water Act determines the total amount of a specific pollutant can be released to a water body and still allow for the attainment of appropriate water quality. The total load is allocated to various sources which then dictates what effluent standards are required to be achieved in NPDES permits.

Should Phase III of the TMDL be implemented, the final effluent discharge concentration could require significant capital costs. Notably, these costs have not been included in the CIP based on in-stream TP performance, a pattern of extension of Phase III compliance dates in various NPDES permits, and better than expected low-level effluent TP concentrations achieved through improvements and operational performance at the Cahaba and Trussville WRFs.

The County has collected and intends to continue to collect water quality data to support additional permit modifications regarding the 0.043 mg/L final phosphorus limits discussed above. Like many other areas of the country, the nutrient issue in the Cahaba River cannot be adequately addressed through increased standards at treatment plants. Non-point source runoff from various areas in the basin contributes to the phosphorus concentrations in these streams.

In addition to TP limits in the Cahaba River Watershed due to the Cahaba River Nutrient TMDL, ADEM has issued the Locust Fork (of the Black Warrior River) Nutrient TMDL. This TMDL imposes TP limits for the Turkey Creek WRF, Warrior WRF, Village Creek WRF, Five Mile Creek WRF, and the Prudes Creek WRF. At this time, upgrades have been completed to meet the Phase II TMDL requirements at each facility. However, Phase III TMDL requirements for the Locust Fork Nutrient TMDL requires effluent discharge concentrations of 0.25 mg/L for large dischargers. While Warrior WRF and Prudes Creek WRF will remain at the Phase II limits (less than 1.0 MGD facilities), Turkey Creek WRF, Five Mile Creek WRF, and Village Creek WRF are scheduled to comply with 0.25 mg/L Phase III limit by March 1, 2027.

To achieve reliable performance, major upgrades for the Turkey Creek WRF and the Village Creek WRF, Plant 001 may be required. Capital work consisting of additional tertiary treatment units such as deep bed sand filters may be needed. As with the Cahaba River, the County has conducted and will continue to monitor instream water quality in the Locust Fork to assess whether adaptive management is appropriate.

It is also anticipated that a nutrient TMDL may be developed for Valley Creek, with levels similar to Locust Fork. Future work at the Valley Creek WRF to place the existing filters back in service and add chemical addition is included in the CIP to achieve some level of nutrient reduction. These planned reductions or an alternative 303(d) listing approach may be sufficient to either meet or preclude the need for a Valley Creek nutrient TMDL.

All of the County's facilities are presently required to remove ammonia nitrogen. The degree of ammonia removal is based upon requirements established by ADEM for the respective receiving stream. ADEM officials stated that whenever nutrients are reviewed, the analysis includes both phosphorus and nitrogen. Typically, the streams in the Jefferson County area are limited for phosphorus and therefore the ammonia nitrogen removal requirements are not exceedingly stringent. With the exception of the use designation considerations listed in the next subsection, changes in ammonia nitrogen effluent standards are not expected for any of the County's treatment facilities in the near future.

4.4.2 Changes in Use Designation

The Village Creek and Valley Creek WRFs could be subject to changes in their receiving stream use designation in future years. Presently Valley Creek and Village Creek are listed as Limited Warm Water Fisheries in the state's use designation system. This stream designation is a lesser use and therefore a less stringent water quality situation than the highest use of "Fishable Swimmable". In the last permit cycle, ADEM received comments from a local environmental organization that the designation should be changed to the higher standard.

A change in the stream designation does not necessarily change the effluent requirements of the associated treatment facilities. Changes in stream use could trigger more frequent toxicity testing on plant effluent. If toxicity were a problem, it could result in higher required levels of treatment for biochemical oxygen demand and ammonia nitrogen. Since these plants already achieve a high degree of treatment for these pollutants it is unlikely that this is a serious concern.

4.4.3 Perfluoroalkyl Substances

PFOS, PFOA and related compounds are emerging contaminants with potential impact to future water quality and biosolids land application limitations. In September 2022 the EPA released a proposed rule designating certain polyfluoroalkyl substances (PFAS) as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This rule is currently planned to be finalized in February 2024. The County has not assessed its influent, effluent, or biosolids against any potential PFAS limits, nor have any wastewater effluent or biosolids concentration limits been proposed by ADEM or EPA. Current wastewater processes are not designed to remove PFOS and related compounds and are not assumed to be effective. Additionally, PFAS designation under CERCLA may have cleanup, land restriction, or monitoring implications for previously land applied biosolids. Source control of PFOS generators will likely be the most effective and economical approach to meeting potential limits. Given the highly speculative nature of potential PFOS limits for wastewater dischargers, no provision to meet limits has been included in the County's CIP. A proposed settlement agreement in a class action suit between 3M Company (a significant manufacturer of PFOS/PFOA substances) and various public water systems was proposed in July 2023. It is unknown whether this or other potential settlements would provide significant funding to address potential PFAS expenses for the System.

4.4.4 Biosolids

The Biosolids Division is responsible for land application and solids management for all WRFs. The County disposes of biosolids resulting from the treatment processes at the WRFs through a program of land application (LA). Biosolids are periodically applied at the Flattop and Beltona Land Application sites. These sites are former strip-mining locations. The Beltona LA site receives biosolids from the Village Creek WRF that have been lime stabilized. Biosolids at the Beltona LA are beneficially used to grow hay that is baled and used for erosion control. The Flat Top LA site receives biosolids from the nine WRFs in Jefferson County. Biosolids are comingled at the site and are beneficially used for mine reclamation by building topsoil over the rocky surface.

In 2018, ADEM promulgated Beneficial Use for Byproduct Materials regulations that include municipal biosolids. These rules were revised in June of 2022. Current ADEM rules require annual registration that includes an Operations and Nutrient Management Plan. Seven of the nine Jefferson County facilities require annual registration under the current rules. Considerable uncertainty exists regarding implementation of some aspects of the new rules to the County's current practices. As solids continue to increase from area growth and adequate levels of topsoil at the Flat Top LA site are achieved or significant load restrictions are imposed by the new rules, additional mine land or other agricultural areas may need to be procured. For agricultural use, substantial land area would be needed. Since it takes several years to prepare an area for application of biosolids, procurement of additional site(s) will be needed in the next few years. If additional land cannot be procured, landfilling of biosolids (if practical) or other disposal method could significantly increase disposal costs.

5.0 Historical Financial Performance

5.1 Overview

This section summarizes historical financial performance following approval of the County's bankruptcy Plan of Adjustment in 2013 and compares actual results to forecasts presented in the Series 2013 Sewer Warrant Municipal Advisor's Feasibility Study (2013 Feasibility Study). The historical reporting demonstrates that actual financial performance has largely aligned with forecasts in the 2013 Feasibility Study. The County has managed its sewer system and capital program effectively and absorbed unforeseen adverse financial impacts including, most notably, pandemic-related revenue declines. The County has met or exceeded established financial performance targets and has fulfilled its sewer warrant obligations.

Historical financial performance of the System over the FY 2013 to FY 2022 period is summarized in Table 5-1. Overall sewer system revenue generation was higher than that forecasted for the 2013 Feasibility Study in each year of the period and $152.8 million higher overall (7.4 percent). In contrast, actual operating expenses relative to the 2013 Feasibility Study forecast were $3.8 million (0.5 percent) higher over the same period. Capital project spending was below levels forecast in 2013 by 41.6 percent, or approximately $305.8 million. Though net revenues available for debt service and coverage values fell below forecasted levels in FY 2020 and FY 2021 due to pandemic-induced revenue impacts, annual net revenues available for debt were $13.0 million higher, on average, than those forecasted in 2013. Total debt service coverage averaged 2.04x compared to a forecasted average of 1.87x.

TABLE 5-1
Overview of System Financial Performance

	FY 2013 - FY 2022 Total		Difference	Difference
	Forecast[1]	*Actual*	$	%
System Revenues	$2,071.5	$2,224.3	$152.8	7.4%
Operating Expenses	$706.7	$710.5	$3.8	0.5%
Capital Project Expenditures	$735.3	$429.4	($305.8)	-41.6%
Net Operating Revenues[2]	$141.9	$155.0	$13.1	9.2%
Debt Service Coverage[2]	**1.87**	**2.04**	**0.17**	**9.3%**

1 - As summarized in the 2013 Feasibility Study

2 - Annual average values

The County's sewer system has emerged from bankruptcy in a stronger position than anticipated under the Plan of Adjustment. System revenue generation, stronger than projected before the pandemic, was sufficiently robust to enable the County to weather revenue loss and maintain compliance with financial performance targets. Operating expenses have been rigorously managed, resulting in lower overall spending notwithstanding significant increases in billing-related expenses beyond the County's control. Capital program spending has enabled regulatory compliance and service improvements, though expenditures are well below forecasted requirements for the FY 2013 to FY 2022 period presented in the 2013 Feasibility Study.

In contrast to the difficult and tumultuous circumstances surrounding Jefferson County's prior sewer warrant default, relative stability and progress have characterized the System since approval of the bankruptcy Plan of Adjustment in 2013. The County was released from its long-term federal Consent Decree related to hiring practices in 2021. Specific to its System finances, the County has implemented required rate adjustments and met all financial and regulatory obligations. Department leadership, in place since 2008, has been augmented by a Program Management team to facilitate capital program implementation and install new project delivery and asset management practices. The System has remained in compliance with its federal and state regulatory obligations while, at the same time, negotiating for favorable permit conditions. The audited financial performance of the Department is summarized in Section 8.2.

5.2 Capital Expenditures

The Department's recent historical and planned capital program spending reflect a cost-effective commitment to regulatory compliance, System upgrade and rehabilitation, and improved coverage of the County's expansive service area. The System is under an EPA Consent Decree (CD) from 1996 related to overflows and bypasses, from which portions of the System have been released. Capital projects directly designated under the CD are complete; however, future capital spending includes work to continue to address wet-weather sanitary sewer overflows to demonstrate CD compliance for the remainder of the System.

The 2013 Feasibility Study anticipated capital expenditures of $735.3 million from FY 2013 through FY 2022. However, modest delays in installing project delivery capacity and program management functions, as well as evolving regulatory compliance mandates, resulted in a different pattern of spending than anticipated in 2013 as illustrated in Figure 5-1.

Actual capital expenditures for the same time period have totaled $429.4 million, $305.8 million (41.6 percent) lower than originally anticipated. Perhaps most notably, selected water reclamation facility regulatory compliance projects that had previously been scheduled for construction in FY 2019 and FY 2020 have been eliminated or deferred beyond the forecast period. Based on continuing regulatory compliance discussions with ADEM, subsequent permit revisions, and project cost re-evaluations, the total projected costs for these improvements have been reduced by $143.8 million (current dollars). The Department's program management focus has also shifted from a traditional capacity approach to an asset optimization methodology which has resulted in a greater emphasis on asset renewal and rehabilitation rather than the asset replacement approach that was assumed as part of the 2013 Feasibility Study. A comparison of forecast to actual project expenditures for the historical period is presented in Table 5-2.

FIGURE 5-1
Comparison of Actual to Forecasted Capital Expenditures, FY 2013-2022

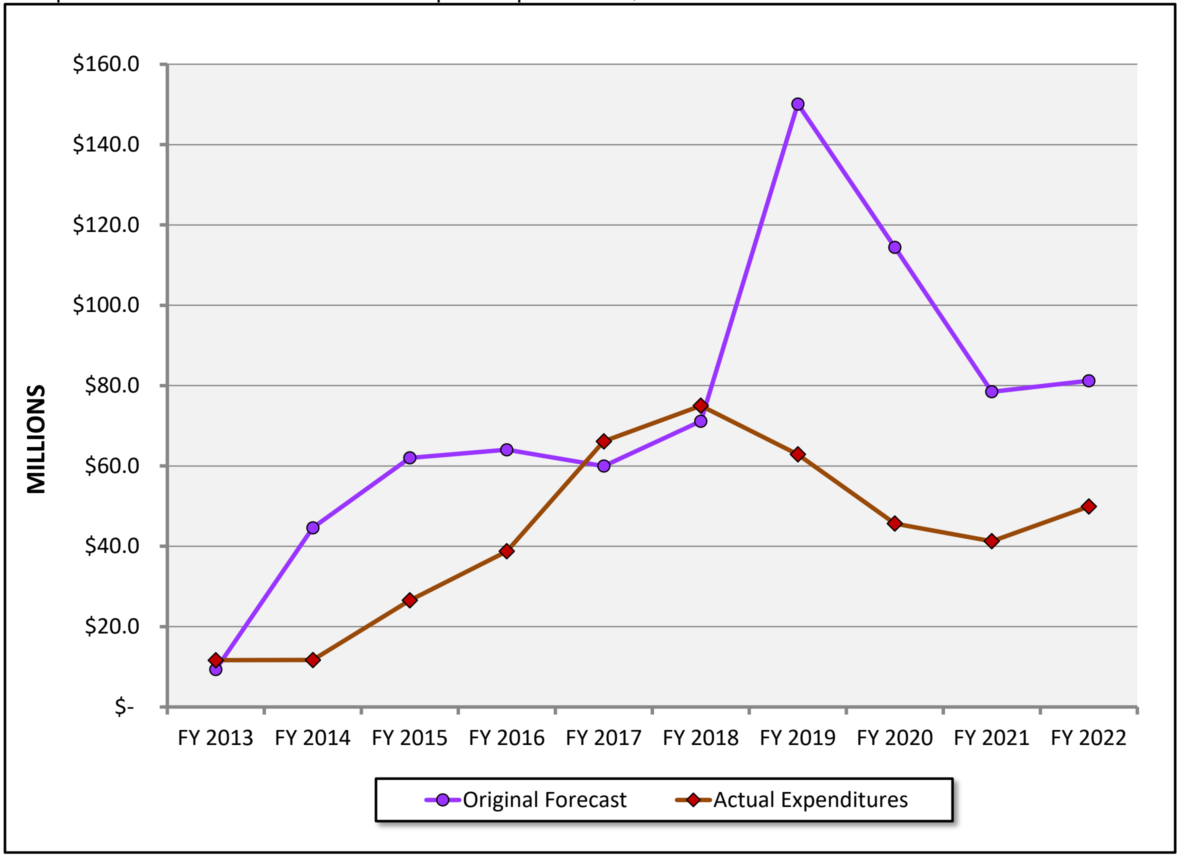


TABLE 5-2
Comparison of Actual to Forecasted CIP by Project Category, FY 2013-2022

		Forecast[1]		Actual[1]		Difference	Percent
WRF Repair, Replacement & Renewal	$	112,713,466	$	118,220,166	$	5,506,700	4.9%
WRF Regulatory Compliance		237,678,449		64,196,235		(173,482,213)	-73.0%
SSO Abatement & Capacity Improvement		56,359,218		46,890,428		(9,468,790)	-16.8%
Sanitary Sewer Repair & Replacement		104,832,924		56,654,590		(48,178,334)	-46.0%
Collection System Rehabilitation[2]		110,913,124		34,151,955		(76,761,168)	-69.2%
Pump Station Upgrades		34,639,926		17,549,574		(17,090,352)	-49.3%
Capital Equipment[3]		30,769,860		33,821,244		3,051,384	9.9%
Professional & Engineering Services[4]		47,364,904		57,956,093		10,591,189	22.4%
Subtotal	**$**	**735,271,871**	**$**	**429,440,287**	**$**	**(305,831,585)**	**-41.6%**

1 - To facilitate an accurate comparison, both the actual and forecasted CIP excludes various activities (TV inspection, root control, on-call construction services) that were previously designated capital projects but have since been reclassified as O&M

2 - Includes manhole rehabilitation expenditures

3 - Includes capitalized right-of-way (ROW) acquisition expenditures

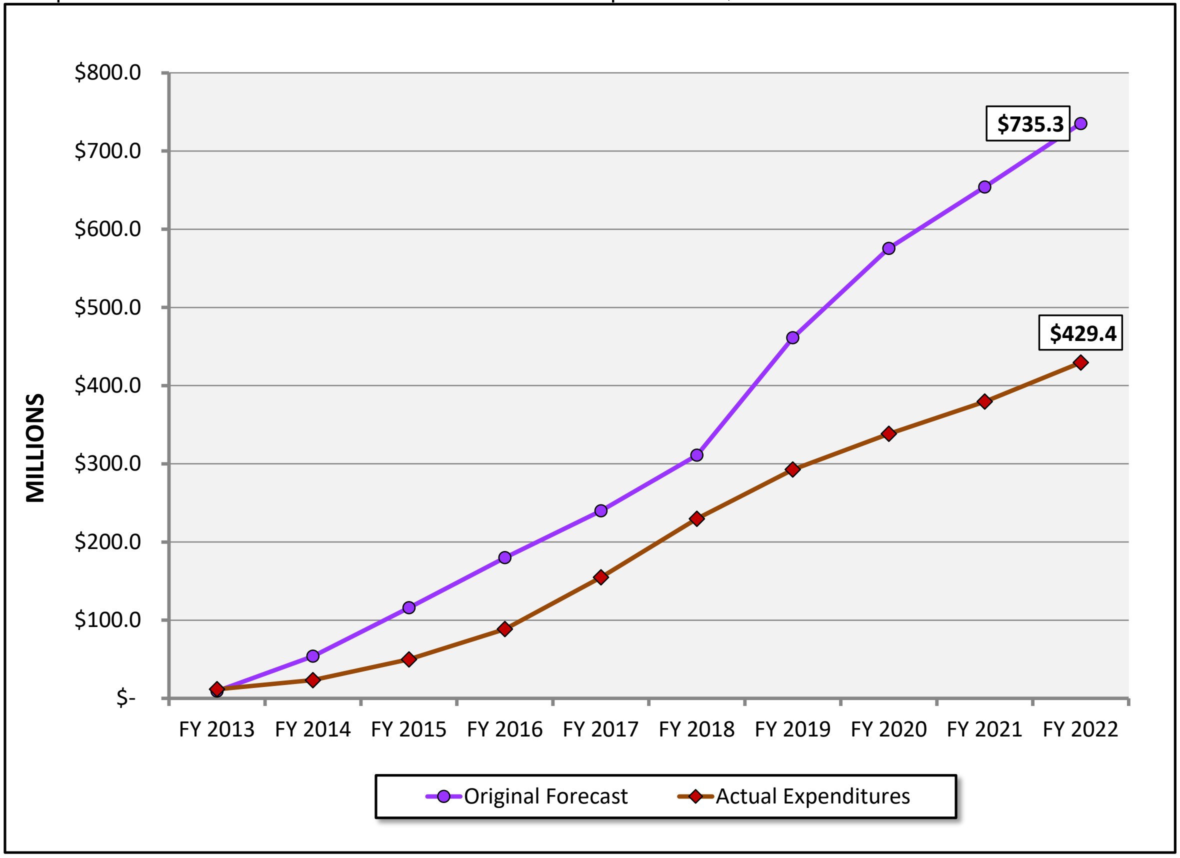
4 - Includes IT infrastructure and hydraulic modeling support and services

Capital project spending related to the County's collection system assets has lagged relative to 2013 spending forecasts as reflected in the variances related to sewer pipeline categories. These variances reflect, in part, the refinement of asset management systems, added project controls, gathering and use of additional system condition data, installation of the County's program management staff, and related revisions to capital project costing and delivery protocols. In addition, this work is informed by the County's hydraulic modeling and capacity assurance work, which was undertaken in large part in the FY 2015 to FY 2018 timeframe.

Certain activities that were previously included in the Department's forecast of capital expenditures, such as TV inspection and root control, have been reclassified as operating expenses by the County's auditors. As a result, these expenditures have been grouped with operating expenses and excluded from both actual and forecasted capital expenditure figures to ensure a consistent comparison of historical data. The reclassification of these expenditures will therefore not contribute to any variances delineated in the table above.

The cumulative capital expenditure variance over the ten-year historical period is shown in Figure 5-2. The increasing divergence of actual and forecasted capital expenditures, especially during the last three fiscal years, is primarily due to the deferral and reduction of previously planned WRF compliance projects. Significant volatility in construction markets from material and labor shortages has also contributed to project timing adjustments. The Department has been able to delay these projects because interim improvements implemented by the County have yielded in-stream conditions that meet the desired water quality standards and have been reflected in revised permit conditions.

FIGURE 5-2
Comparison of Actual to Forecasted Cumulative CIP Expenditures, FY 2013-2022



5.3 Operations & Maintenance Expenses

Operation and maintenance expenses include all costs associated with operating and maintaining the County's sewer system, including personnel costs, utilities, billing services, legal and professional services, functional support services (indirect costs), materials and supplies, and contracted services (see Section 6 for a detailed discussion of O&M expense categories).

The historical perspective of system operations and maintenance reflect some pronounced variances between forecasted and actual expenditures *by individual line item* with actual overall spending 0.5 percent higher over the FY 2013 to FY 2022 period than forecast, as presented in Table 5-3.

Certain activities that were previously included in the Department's forecast of capital expenditures, such as TV inspection and root control, have been reclassified as operating expenses by the County's auditors. As a result, these expenditures have been grouped with operating expenses and are included in both actual and forecasted O&M expense figures to ensure a consistent comparison of historical data. The reclassification of these expenditures will therefore not contribute to any variances delineated in the table below.

TABLE 5-3
Comparison of Actual to Forecasted O&M Expense, FY 2013-2022

	Forecast	Actual	Difference	Percent
Personnel	$ 298,654,643	$ 275,415,858	$ (23,238,785)	-7.8%
Utilities	91,689,341	92,278,330	588,989	0.6%
Billing Services[2]	50,973,244	99,493,881	48,520,637	95.2%
Legal & Professional Services[2]	36,556,682	25,376,936	(11,179,746)	-30.6%
Functional Support Services[3]	75,452,088	50,256,142	(25,195,946)	-33.4%
Materials & Supplies	67,124,140	50,191,952	(16,932,188)	-25.2%
Maintenance & Contractual Operations	62,301,480	71,294,865	8,993,385	14.4%
TV Inspection of Sewer Lines	*19,865,016*	*29,660,321*	*9,795,305*	*49.3%*
Other Expense[4]	23,922,881	46,196,598	22,273,717	93.1%
Subtotal	**$ 706,674,500**	**$ 710,504,563**	**$ 3,830,063**	**0.5%**

1 - Both actual and forecasted O&M includes activities that were designated as capital projects in the 2013 Feasibility Study but have since been reclassified as operating expense (TV inspection, root control, on-call construction services)

2 - Expenses are included in the Outside Services cost category in the County's Comprehensive Annual Financial Report

3 - Classified as Indirect Expenses in the County's Comprehensive Annual Financial Report

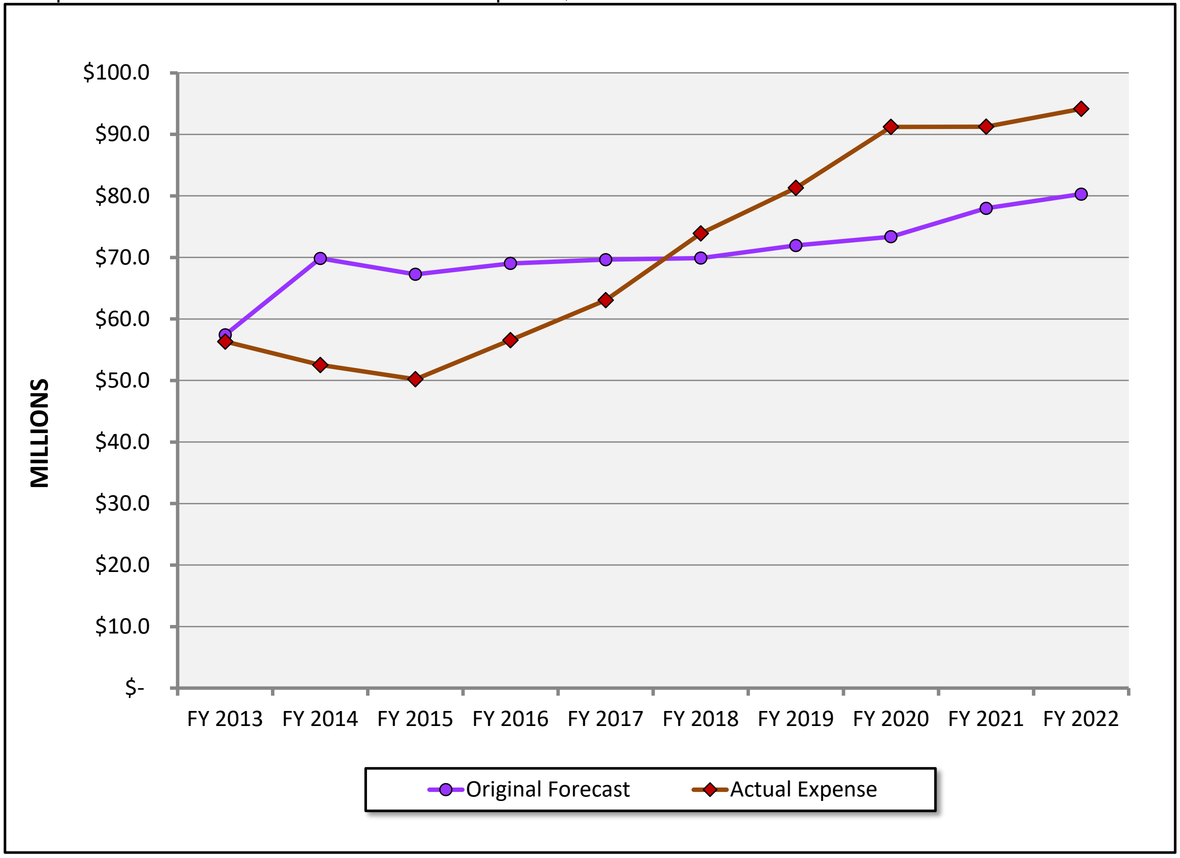
4 - This cost category includes Information Technology Support as well as root control, on-call construction, and TV inspection services (the latter category, delineated separately on the row above, represents the majority of Other Expense)

Relative to O&M expense forecasts provided in the 2013 Feasibility Study, overall variances may be attributed largely to the significant increase in costs for billing services provided by BWWB. As shown in Figure 5-3 below, O&M expenses were trending below projections through FY 2017 with billing services expenses averaging approximately $5.1 million per year between FY 2013 and FY 2016. However, billing service expenses[17] more than tripled over the historical reporting period, increasing from $5.1 million in FY 2013 to $17.2 million in FY 2022 as a result of changes to the County's service contract with BWWB (see Sections 6.3.5 and 6.4.5).

In general, other significant variances between actual and forecasted expenses reflect support of capital project delivery and a disciplined approach to discretionary expense management.

[17] Billing services expense is composed primarily of BWWB charges for billing services but also includes expenses associated with billing for Bessemer and Jefferson County accounts. In FY 2022, BWWB charges were $15.2 million (88.4 percent of total billing services costs), expenses for Bessemer accounts were $1.6 million (9.3 percent) and Jefferson County billing expenses were $0.4 million (2.3 percent)

FIGURE 5-3
Comparison of Actual to Forecasted O&M Expense, FY 2013-2022



5.4 Revenues

System revenues include rate revenues (base charge and volumetric components), industrial waste surcharge revenues, grease and septage revenues, tax revenues, and other operating revenues. This section provides a comparison of actual to forecasted revenue components and discusses the revenue impact of the COVID-19 pandemic. Table 5-4 summarizes revenue performance by category for FY 2013 through FY 2022.

Overall system revenues were $152.8 million higher (7.4 percent) for the ten-year historical period than originally forecast in the 2013 Feasibility Study; actual revenues for every revenue category were higher than prior forecasts.

The Jefferson County Commission has consistently implemented the prescribed rate increases outlined in the bankruptcy Plan of Adjustment. Annual rate increases were 7.89 percent in FY 2015 through FY 2018 and 3.49 percent thereafter. Including structural modifications made to the Department's rate structure in FY 2013 and FY 2014, the typical bill for a residential customer with billable flows of 5 hundred cubic feet (CCF) increased $28.65, or 76.4 percent, from FY 2013 through

FY 2022 (compounded average annual bill increase of 6.5 percent).[18] Higher sewer rate revenues contributed $91.3 million to the overall difference compared to forecasts in the 2013 feasibility study.

TABLE 5-4
Comparison of Actual to Forecasted Revenues, FY 2013-2022

	Forecast	Actual	Difference	Percent
Sewer Rate Revenues	$ 1,867,267,799	$ 1,958,568,750	$ 91,300,951	4.9%
Industrial Waste, Grease & Septage	47,191,006	54,466,451	7,275,445	15.4%
Taxes	64,157,501	64,944,512	787,012	1.2%
Intergovernmental	1,082,023	1,089,853	7,830	0.7%
Other Operating Revenue	91,802,978	145,236,853	53,433,876	58.2%
Subtotal	**$ 2,071,501,306**	**$ 2,224,306,420**	**$ 152,805,113**	**7.4%**

Despite the fact that actual rate revenues have exceeded prior forecasts (as noted above), actual rate revenues were trending even higher before the pandemic. In 2019, the Department updated and revised rate revenue forecasts based on prevailing billing determinant trends at that time. That analysis estimated average annual rate revenues of $235.4 million, net of bad debt expense, for the subsequent five-year period (FY 2020 through FY 2024). Actual rate revenue results[19], combined with updated forecasts prepared for this report, result in a revised annual average estimate for the same period equal to $231.5 million, or approximately $3.9 million per year lower than anticipated in the pre-pandemic forecast. Overall rate revenue loss, as estimated by this analysis, is therefore less than $20 million over the five-year period. Despite this difference attributed to the pandemic, Figure 5-4 indicates that actual revenue performance still exceeded forecasts presented in the 2013 Feasibility Study in every year of the reporting period.

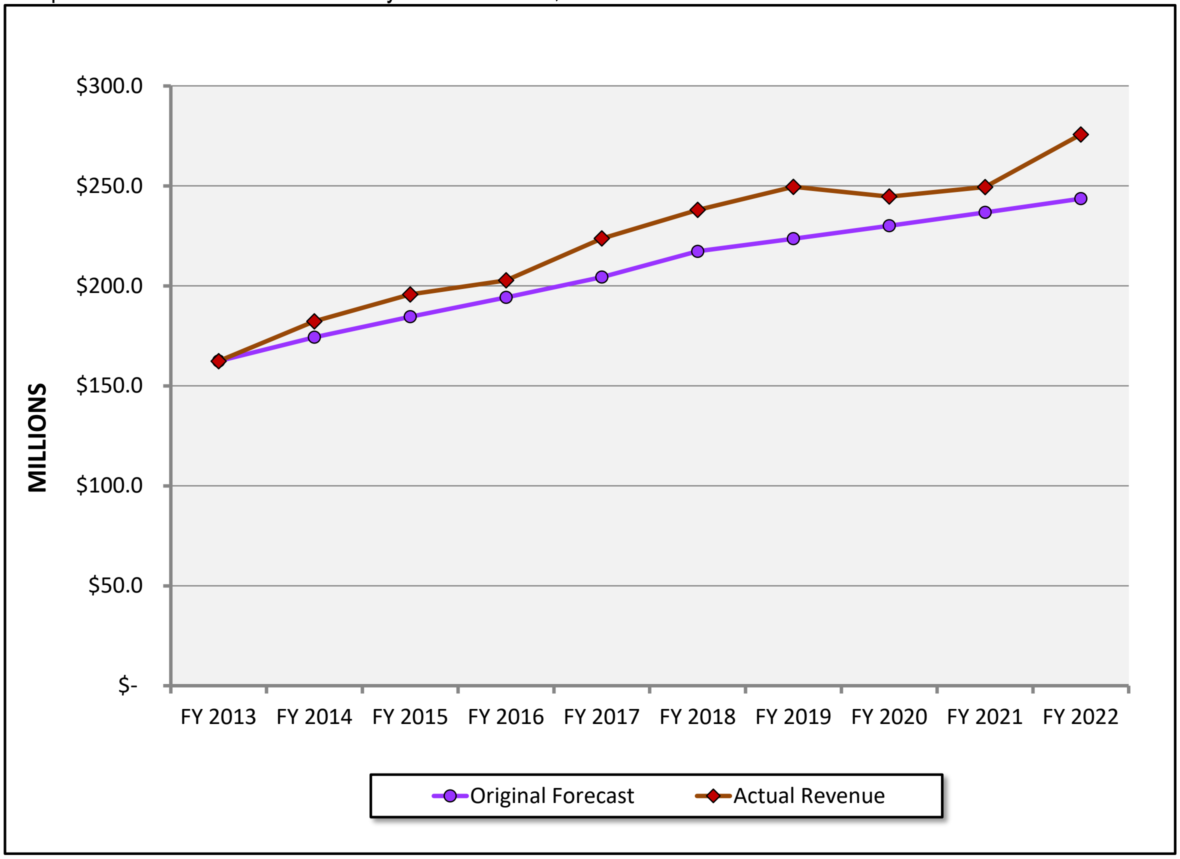
Industrial waste, grease, and septage revenues were moderately higher while tax and intergovernmental revenues were mostly in line with the multi-year forecasts developed in 2013. Other operating revenues include impact fees, investment income, and other miscellaneous revenue sources. This revenue category was almost 60 percent higher than anticipated largely as a result of higher impact fee revenues from economic development and higher investment income from the Department's retention of substantial operating reserves occasioned by its strong financial performance.

The System's revenue performance between its emergence from bankruptcy through FY 2022 was largely as anticipated, despite the estimated pandemic-related revenue impacts outlined above. Historical revenue performance reflects the impacts of implementation of the County's rate resolution and suggests moderately more robust economic growth than conservatively forecast in 2013. Notwithstanding current macro-economic factors, actual FY 2020 through FY 2022 revenues exceeded that forecasted in the 2013 Feasibility Study indicating, in part, the conservative assumptions used for the Department's prior revenue forecasting.

[18] See Section 8.5 for more information.

[19] The analysis uses audited rate revenue totals, net of bad debt expense, for fiscal years 2020 through 2022.

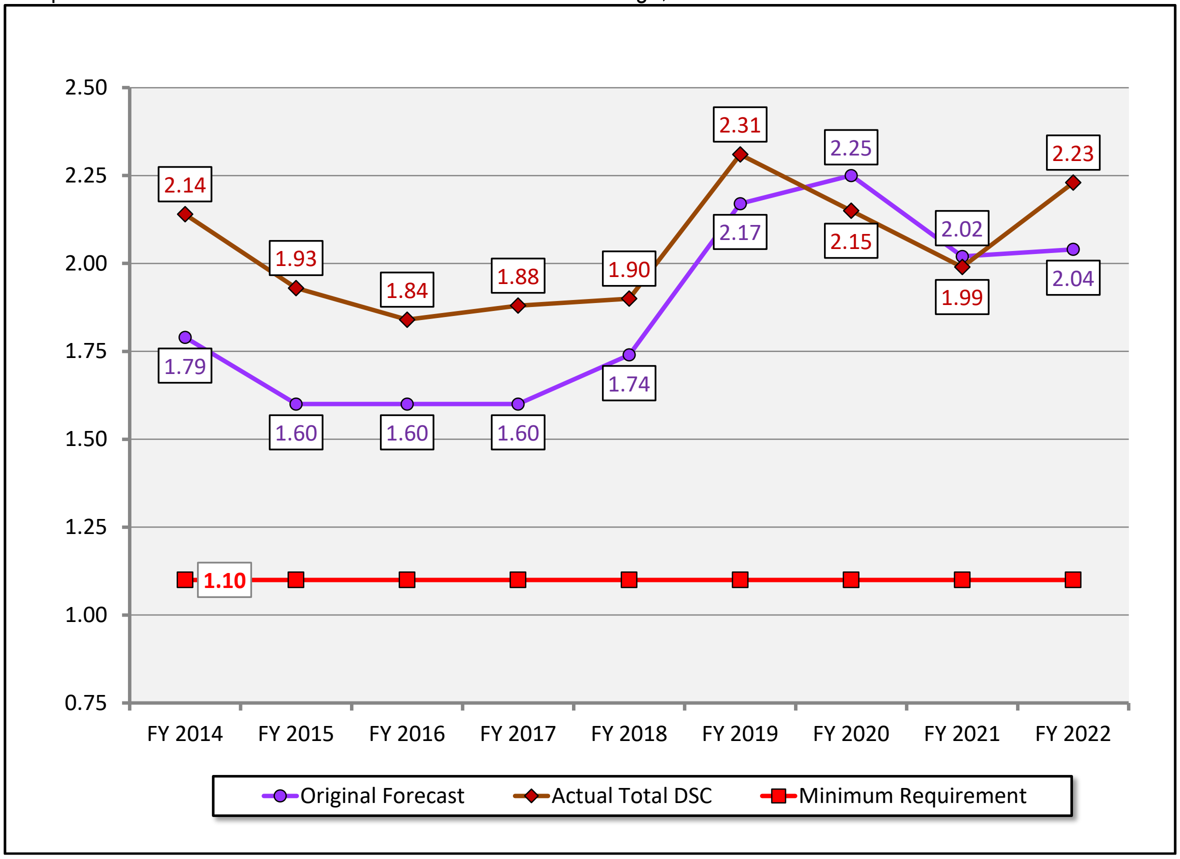
FIGURE 5-4
Comparison of Actual to Forecasted System Revenues, FY 2013-2022



5.5 Financial Performance – Debt Service Coverage

As outlined, the System has emerged from bankruptcy in a stronger financial position than anticipated and is positioned to meet its service, regulatory, and debt service obligations. Figure 5-5 compares the County's historical total debt service coverage to expectations for the same metric presented in the 2013 Feasibility Study. The Department's actual total debt service coverage was above forecasted levels in every year except for FY 2020 and FY 2021, which were impacted by the COVID-19 pandemic and significantly higher billing services expense. Total annual debt service coverage has averaged 2.04x, higher than the anticipated average of 1.87x over the same time period and much higher than the 2013 Sewer Warrants' 1.10x indenture requirement for total debt service.

FIGURE 5-5
Comparison of Actual to Forecasted Total Debt Service Coverage, FY 2013-2022



5.6 Summary

The sewer system's financial performance following approval of the bankruptcy Plan of Adjustment has exceeded expectations.

- System revenue generation, stronger than projected before the pandemic, was sufficiently robust to enable the Department to weather revenue loss and maintain compliance with financial performance targets despite estimated revenue loss associated with the pandemic.
- Operating expenses have been rigorously managed, resulting in spending that is approximately 0.5 percent above 2013 Feasibility Study forecasts despite contracted billing service expenses that were over 95 percent higher than forecast.
- Capital improvement project expenditures were approximately $305.8 million lower than previously forecasted for the FY 2013 to FY 2022 period. During this time, the Department has collected system condition data and implemented improved asset management systems, added project controls, and revised capital project costing and delivery protocols. The Department is positioned to make adjustments to its capital plan, if necessary, to address financial considerations.

- The County's actual debt service coverage has exceeded performance targets in each year subsequent to the issuance of its 2013 Sewer Warrants and was above 2013 forecasted values in all years prior to pandemic-induced revenue losses. On average, coverage averaged 0.17x higher than prior forecasts over the reporting period.

The sewer system has emerged from bankruptcy in a stronger position than anticipated under the Plan of Adjustment. While prospective financial performance will require continued active financial management – including careful monitoring of revenue performance, resolution of billing service expense issues, and disciplined capital program management — the County has now established a ten-year track record of sound sewer system management.

6.0 Operations & Maintenance Expenses

6.1 Operations Overview

The Department is responsible for the proper operations and maintenance of its wastewater assets comprised of both collection system assets and wastewater treatment plants.

6.1.1 Collection Systems

Leading up to the 1996 Consent Decree, the incidence of SSOs in the County and adjacent service areas was approximately 500 SSOs per year. Additionally, the various collection systems included five automatic bypass locations that resulted in sewage bypasses of approximately 500 million gallons each year. At that time, the peak wet weather to average daily flow ratio at the various treatment plants was around 10:1, indicating a system that carried large quantities of rain derived inflow and infiltration (RDII).

Collection system work required under the Consent Decree included approximately $700 million for repair (lining) and replacement of sewers and manholes. Additional sewers and pumping capacity at plants and pump stations was estimated to cost an additional $200 million. In addition to the capital improvements constructed as part of Consent Decree compliance, the County developed and received EPA approval for a Capacity, Management, Operation and Maintenance Program. This program is an ongoing strategy to reduce SSOs and achieve termination of the Consent Decree. To date, five of the System's nine basins meet the operational requirements of the EPA. For these basins, all milestones required under the Consent Decree have been met and performance has been proven. Consent Decree requirements for those basins have been terminated. In the remaining basins, County assessments of prevailing causes of continuing SSOs indicate that roughly 80 percent of SSOs can be addressed through enhanced maintenance and the remaining 20 percent will require targeted capacity restoration. This will involve comprehensive rehabilitation and limited capacity improvements of existing infrastructure with larger or parallel sewers as indicated through hydraulic modeling and is discussed in Section 7. The County's integrated strategy of enhanced maintenance and targeted capital improvements has proven effective to date. Preventable SSO performance (excluding SSOs from greater than two-year storm events) improved from 206 incidents in CY 2017 to 129 incidents for CY 2022.

The County, working with an asset management consultant, has advanced efforts to further reduce SSOs related to system blockages. Department crews clean sewers to prevent blockages from grease, roots and debris accumulations. These efforts are targeted to locations in the system that are prone to blockages and recurring SSOs.

6.1.2 Pump Stations

Pump stations are an integral part of the wastewater collection system. Pump stations are necessary to lift wastewater to higher elevations so that it can continue to flow by gravity to one of the System's treatment plants for processing. The maintenance and operation of these facilities require the combined work of mechanical and electrical technicians to assure that pumps are available to handle increased wet weather flows when necessary. The Department's pump station operations staff is able to monitor the stations by critical alarms which allow for prompt dispatching of staff to address problems. To date, operational practices and capital replacements have enabled these pump stations to operate effectively.

6.1.3 Treatment Plants

As described in Section 3, the County operates nine WRFs. All are secondary treatment plants with most designed for, or practicing, nutrient removal. All meet their permit discharge standards with a combination of biological (activated sludge) and physical/chemical treatment. With the exception of Turkey Creek and the older treatment train at Village Creek, all are designed with sand filtration. All facilities meet their individual bacteriological standards with either UV disinfection or chlorination followed by de-chlorination. Effluent quality (visual) ranges from excellent to exceptional.

Solids treatment is, generally, by aerobic digestion, with the larger facilities using anaerobic digestion. Methane produced in the anaerobic process is used to heat the digestion process. When this process produces insufficient methane, digester heating is accomplished with natural gas as a supplemental fuel that has to be considered in the operational costs of the facility.

The smaller plants (less than 10.0 MGD dry weather capacity) are oxidation ditch systems, are “younger” than the major plants (constructed within the last 20 to 25 years) and have no “legacy” treatment processes or equipment. All plants thicken and/or dewater treated sludge and dispose of it by land application.

The Department has an agreement, currently renewed every five years, with the landowner of former strip-mine sites. These sites are permitted for land application and incorporation of treated sludge.

Heavy maintenance (Mechanical/Electrical/I&C) is centralized at the larger plants and serves all facilities, including pump stations, on an “as-needed” basis, generally for repairs and replacements. Major maintenance projects are typically contracted.

6.2 Staffing

The Department recognizes staffing challenges arising from an aging internal workforce, limited external labor supply, and increasingly demanding technology skills. The Department is addressing these challenges through a combination of trade apprenticeship programs, recruitment, additional training, and increased automation.

The Department has focused on expanding and improving the capability, reliability and technology at its WRFs and pump stations. Those improvements have also led to significant changes in the number and capabilities of its Operations and Maintenance workforce. For example, treatment staffing numbers have been reduced from a peak of 286 in FY 2007 to 241 budgeted positions for FY 2023. Along with those changes, the Department has strengthened its requirements for operator education and experience, making operator certification mandatory for all future hires and creating a career path based on work experience and levels of certification.

In projecting operating expenses, it is anticipated that significant changes in the mix of workforce skills – migrating from a focus on facility operations to asset maintenance and management – will be required. The Department will rely on its asset management programs to improve preventive and predictive maintenance with the goal of protecting assets and extending their service lives.

6.3 Operating Budgets

The Department operating budget is broken down into twelve categories:

1. Personnel
2. Legal & Professional Services
3. Utilities
4. Parts, Supplies, and Miscellaneous Equipment
5. Billing Services
6. Functional Support Services
7. Contractual Operations and Maintenance Support
8. Penalties
9. TVI and Point Repairs
10. Chemicals
11. Customer Assistance Program
12. Other

The following is a discussion of each budgetary area and the drivers that affect projected costs and prospective cost trends.

6.3.1 Personnel

The Personnel budget consists of various forms of compensation to Department employees including salaries, overtime, and various employer-supplied benefits including insurance and pension. Personnel budgets in the industry are typically affected by local workforce availability, medical insurance costs, pension benefits and other post-employment benefits (OPEB). Like most utilities, the Department's largest operational cost is labor. Following substantial labor reductions over the past years, the labor budget represents approximately 35 percent of total operations-related costs. Current staffing levels in terms of total numbers are reasonable for a wastewater utility of the size and scope of the System.

As the Department's assets continue to age, staffing to maintain mechanical and electrical systems in the treatment plants is likely to be a concern. The substantial capital investment in treatment facilities implemented under the Consent Decree will impose increased maintenance requirements. Maintenance activities in the collection system will also require increased attention. In order to operate and maintain its assets and provide good customer service efficiently in the future, the Department will continue to leverage advanced analytics, real-time monitoring, and best-practice training strategies.

The Department presently has a considerable number of budgeted, yet unfilled positions shown in Table 2-1. The County has historically lagged in filling vacant positions. For this reason, the budget estimates assume a ten-year period (FY 2023 to FY 2032) to achieve full staffing.

6.3.2 Legal and Professional Services

Utilities normally incur legal expenses for claims and actions that are similar to any large utility operations. The County can incur legal costs associated with right-of-way acquisition for construction activities, and other actions related to the operation of their infrastructure. In addition, the amount of legal service expense incurred in any particular year is related to work that is contracted to outside counsel due to volume and scope considerations as opposed to being handled by County staff. Other professional service expenses include audit services and engineering services outside the capital program.

6.3.3 Utilities

Pumping and treatment of wastewater requires significant electrical use, typically making wastewater utilities among the largest customers of a power utility. For the County's system, electrical requirements are potentially more substantial than for other similarly sized systems. The Department is required to provide advanced treatment at many of its facilities, which requires more treatment stages and processes than for many utilities not subject to similarly stringent treatment requirements. Moreover, due to the size of the service area, the way it was developed over time and the need to move wastewater from numerous sub-basins to regional treatment facilities, pumping requirements are more pronounced than smaller systems with fewer sub-basin service areas. In addition, several System facilities are operating significantly below their permitted capacities with average day influent flows well below that anticipated in plant design. This situation can negatively impact the efficiency of these facilities unless growth in the area contributes increased flows.

In addition to electrical consumption, the Department purchases water from local water providers, natural gas for some facilities, and communications services for telephones, computer networks, and other System assets. While these utility costs are substantially lower than electricity, they are necessary to properly operate equipment, heat buildings, and allow for communications between staff and facilities. The department has made capital investments in methane recovery systems at the Valley and Village WRFs to reduce reliance on natural gas for heating anaerobic digesters, thereby reducing these annual operating costs.

6.3.4 Parts, Supplies and Miscellaneous Equipment

This budget category provides for purchases of materials, spare parts, and supplies necessary to operate the utility. Spare parts are required to be stocked or readily available from local providers to ensure that the facilities continue to operate in conformance with their discharge permits. This category also includes lubricants, fuels, paint, safety equipment, cleaning supplies, and administrative supplies. The Department's operation of a large number of unique treatment facilities adds to the scale of the part supply budget. The nine facilities, each designed with equipment of different manufacturers, models, and capacities, require an appropriate level of spare parts to be on hand for proper operation. The County's facilities have spare equipment to assure continuous operations as is typical for these facilities.

6.3.5 Billing Services

Billing services include the cost of operating and maintaining systems to collect water usage data, generate bills, mail services, and services for collecting payments. Currently, these services are rendered through three billing entities – BWWB, Bessemer and the County. BWWB charges for billing services increased substantially under a contract that became effective in FY 2018 and renegotiated in 2023. These charges were and remain well above industry norms and have precipitated inclusion of funding for an independent audit in the Department's O&M expense forecast, While billing services costs may be reduced in latter years of the forecast period through managerial decisions and business process redesigns[20], potentially including implementation of an independent billing solution,[21] billing services expenses forecasted herein assume escalation at assumed inflation rates as discussed in Section 6.4.5 below.

6.3.6 Functional Support Services

Utilities that are part of larger public organizations often obtain numerous services from other departments. For the Department, the County's Human Resources, Finance, Information Technology, Legal and other departments provide these services. These General Fund-supported departments are then reimbursed for these services by the Department. This is a normal practice in the industry where a user fee-supported utility receives services from an associated department of the same organization that is tax-supported. It recognizes that the utility's rates should capture all the costs of operations, and that the tax-supported portion of the public entity should not subsidize the utility. The County Finance Department uses a double-step down allocation methodology to allocate these costs.[22]

6.3.7 Contractual Operations/Maintenance Support

Like all utilities, the Department contracts out certain work that it chooses not to self-perform. This strategy recognizes that, in select circumstances, an outside contractor can deliver certain work necessary for successful utility operations at a better combination of quality and cost. Examples of these services include collection system maintenance services like root control, flow monitoring, television inspection, grounds maintenance, hauling and disposal of screenings from the plants, and certain types of maintenance related services such as machine shop work. This strategy has allowed for a staff focus on core activities and includes contracted services that are required on an infrequent basis and/or of a specialized nature where there is no economic justification to self-perform. The Personnel Board of Jefferson County has authority to determine if contracted services are permissible for the Jefferson County Commission and all municipalities within its jurisdiction; therefore, cost savings is not the sole factor used to identify which services should be contracted.

As mentioned in Section 4, there is a substantial risk to the County in not continuing to make progress in the reduction of SSOs. Expediting improvements in the System can be greatly facilitated by increased sewer system maintenance activities such as pipe cleaning and inspection. The County currently both self-performs and contracts for these services. An effective approach used by many utilities is to contract sewer system maintenance services to augment "in-house" efforts.

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[20] These managerial decisions may include measures to reduce BWWB's overall billing services expenses as well as the allocation of cost shares to the County; business process redesigns may involve reconfiguration of account and billable volume reporting to facilitate trend analysis and revenue reporting. Use of an independent billing process for residential accounts, that does not require metered potable water demand data, is also a potential expedient to limit billing service expenses within industry norms.

[21] Risk inherent in implementing new information systems and establishing new relationships with vendors for lockbox processing may make staying with the current arrangement with BWWB more feasible, though it is anticipated that some cost savings may be realized in any event through more proactive management of billing service costs.

[22] The double-step down methodology requires an initial sequencing of allocating departments. In the first step of the double-step methodology, allowable costs from central service departments are allocated in the sequence selected to all County departments, divisions and funds; including to other central service departments. The second step in the double-step down methodology is made to fully account for the cross support provided between central service departments. Central service departments are closed after the second step in the double-step down allocation methodology.

These contractual service efforts are aligned with asset management planning efforts and will enable improved System performance. The asset management efforts are designed to determine key areas that must be addressed to improve System performance. This includes identifying problem areas that require inspection and, when problems are identified, executing remedial actions.

6.3.8 Penalties

The Department has anticipated that the County's accrued liability associated with stipulated penalties under the Consent Decree would become payable prior to, or concurrent with, a demand for payment if received prior to termination of the Decree. Accordingly, the Department records these expenses on a quarterly basis, though the cash payment has not yet been required. For forecast purposes, the Department's beginning Revenue Account balance has been reduced by the $3.6 million accrued liability in anticipation of that payment. Prospectively, limited penalties are anticipated due to the lower incidence of SSOs and observed System performance.

6.3.9 TVI and Point Repairs

The Department currently maintains over 3,100 miles of gravity sewer lines and roughly 83,000 active manholes.[23] Maintaining these assets also includes periodic outsourced closed-circuit television inspection (CCTV or TVI), short segments of pipe repairs called "point" repairs, and performing immediate priority sewer replacements, pump station repairs or WRF repairs. The County also self-performs sewer line repairs and CCTV inspections on pipes less than 24-inch diameter; however, all internal labor and material costs related to these activities are generally captured in personnel and parts and supplies categories.

These sewer line television inspection expenses include contracted sewer line CCTV for both large and small diameter pipes, service lateral inspections, manhole inspections, smoke testing, and other condition assessment activities associated with the System. These assessments provide valuable data that is used to determine the best methods for managing these assets.

The County has effectively utilized as-needed construction contracts to respond to unplanned repairs on gravity and force main pipe, pump stations, and WRF assets that are beyond the capabilities and work capacity of the internal construction division.

6.3.10 Chemicals

Prior to 2013, chemical expenses were a relatively small portion of O&M expenses and not tracked as a separate category. With almost all WRFs now actively reducing TP through chemical addition, chemical costs are more significant than in the past. Chemical costs are additionally driven by odor control, corrosion control, and solids dewatering.

6.3.11 Customer Assistance Program

Recognizing that System rate increases over the last decade have amplified water affordability concerns, the County has initiated planning for a low-income customer assistance program (CAP). This program will complement the County's progressive inclining block rate design that has a lower volumetric rate for billable volumes required to meet basic human health and sanitary needs. The CAP is a to-be-budgeted operating expense, not a differential rate. While the specific attributes of the CAP

[23] TVI and Point Repair activities are focused primarily on gravity mains, rather than force mains.

are yet to be defined, potential components may include alternative forms of bill assistance, water audits, and/or plumbing leak repair assistance for income-eligible households. Like other water and wastewater utilities nationally, the County anticipates working with community social service providers as well as other water and energy service entities to render assistance to economically disadvantaged households in the service area. The County's CAP implementation, structure and funding levels are at the discretion of the County and will be budgeted as an annual O&M expense. These types of expenses have not provided the foundation for successful rate challenges but rather have been identified as appropriate components of System revenue requirements by water industry associations. Most recently, this type of affordability program was identified as a key policy alternative by EPA in their 2023 Financial Capability Assessment guidance.

6.3.12 Other

This category of expense provides for budgeting of one-time or unusual expenses that may not be appropriately included in the above-listed expenses categories or are special initiatives for which separate budgeting and expense tracking is warranted. For the FY 2023 to FY 2032 forecast period, a single such expense is included providing funding for an independent billing systems performance audit. In addition to exceptional billing services expenses imposed since FY 2018 as noted above, various billing services related issues have arisen ranging from inadequate and irreconcilable revenue reporting to incidences of lost or unbilled accounts. Though a key objective of this planned review will be to help ensure that accounts are billed, and billed properly, no additional revenue generation from these efforts is incorporated into the financial forecast.

6.4 O&M Expense Projection, FY 2023 to FY 2032

Projected operating expenses referenced the Department's actual expense information from FY 2019 to FY 2022, its FY 2023 budget, and prior projections of prospective operating expenses. Constant dollar projections for each cost category are reflected in Table 6-1 (at the end of this section). Table 6-2 provides the cost escalation factors applied to each category of O&M expense to develop the nominal (escalated) expense forecast summarized by category in Table 6-3.

The Department's escalation rate assumptions reflect expectations related to individual expense categories, informed in part by recent price escalations. For example, personnel expenses are escalated throughout the forecast period 0.5 percent above the general, long-term escalation rate of 3.0 percent; chemicals expenses are escalated at that rate for the next four years. The TVI and Point Repairs and Parts, Supplies and Miscellaneous Equipment cost categories are escalated at 4.0 percent for 2024; Functional Support Services are escalated at 2.0 percent over the forecast period (given an increase in FY 2021 of over 30 percent). Most importantly, as evidenced by its performance over the FY 2013 to FY 2022 historical period (reported in Section 5), the Department monitors its O&M expenses on a monthly basis and is practiced at managing expenses to ensure that O&M expenses, in aggregate, are within forecasted values. A discussion of each of the constant dollar projections follows.

6.4.1 Personnel Services

The Department's Personnel expense forecast assumes a gradual increase in baseline (constant dollar) expenses from the FY 2023 estimate of $33.5 million to $49.8 million in FY 2032.[24] This gradual increase is to enable reconfiguration and marginal increasing in staffing to address evolving regulatory and service delivery requirements. Given the various items that make up the personnel budget and the trends in those costs in recent years, the assumed annual escalation rate of 3.5 percent for personnel services in the County's long-term financial projection is reasonable and was employed for purposes of the projection presented in the Financial Plan delineated in Section 8.

6.4.2 Legal and Professional Services

For the System, the normal level of legal and professional services is estimated to be approximately $0.725 million (current dollars). The annual escalation rate for legal expenses is assumed to be three percent throughout the forecast period and is consistent with the experience of other utilities. This assumption in the County's long-term financial projection appears to be reasonable and was employed for purposes of the forecast presented in the Financial Plan delineated in Section 8.

6.4.3 Utilities

Utilities expenses have been relatively stable for several years indicating a consistent and repeatable level of use. The most likely influence on year-over-year differences in expenses relate to variances in pumping costs due to weather (where expenses increase in relatively wet years). The assumed annual escalation rate of three percent for utilities expenses in the County's long-term financial projection appears to be reasonable and was employed for purposes of the projection presented in the Financial Plan delineated in Section 8. Increased treatment requirements, particularly in larger facilities, could influence that rate in outlying years if additional treatment limits are imposed.

6.4.4 Parts, Supplies, and Miscellaneous Equipment

In order to ensure that the appropriate supplies and parts are on hand when needed, an adequate budget must be established for these purchases. The base FY 2023 budget of $5.5 million for this category reflects recent historical experiences and appears reasonable. The County has estimated the escalation rate of these costs to be 4 percent for FY 2024 to reflect recent inflationary experience and then a return to typical 3 percent per annum escalation for the remainder of the forecast period. As with contractual services discussed below, there are a very large number of spare parts and supply purchases in this category. The escalation rate schedule appears to be a reasonable assumption in attempting to forecast this budget category.

6.4.5 Billing Services

Budgeted FY 2023 billing services costs are $17.5 million but, based on renegotiated BWWB contract terms, the financial forecast assumes declining (current dollar) level of expense from FY 2024 to FY 2027 and leveling off in current dollar terms at $12.3 million for the remainder of the forecast period. Expenses for Billing Services are escalated at 2.78 percent per annum through FY 2025 to reflect BWWB contract terms that impose charges based on revenue collections, and 3.0 percent per annum thereafter.

[24] These reported expense estimates account for a 5 percent reduction in *budgeted* personnel expense to recognize the fact that not all budgeted and open positions will be filled at the beginning of the fiscal year.

6.4.6 Functional Support Services

The County's FY 2023 budget estimate of $8.5 million for these services is anticipated to increase over the forecast period as the County's General Fund support departments return to full staffing. A value of $8.5 million (constant dollars) for FY 2024 to FY 2032 is incorporated in the financial forecast as is an assumed escalation rate of 2 percent per annum.

6.4.7 Contractual Operations and Maintenance Support

Funds are required for outsourcing of sewer system maintenance and condition inspection activities. These services are necessary to augment the County's staffing to reduce SSOs in the System. The FY 2023 budget for these expenses is $8.0 million and cost estimates are held at $8 million per annum in constant dollar terms over the forecast period. These expenses are subject to a 3 percent per annum escalation rate. Although there are a wide variety of services included in this budgetary category, and they may have different escalation rates, these escalation assumptions appear to be appropriate. Attempting to estimate various escalation rates for such a diverse assortment of contractual services would be impractical.

6.4.8 Penalties

The forecast for penalty payments reflects a conservative assumption that the County will be subject to penalties of $100,000 per annum over the forecast period. This reduction in penalties from historical levels may be reasonably anticipated with improved performance with respect to SSOs and ultimate termination of the County's Consent Decree.

6.4.9 TVI and Point Repairs

Supplemental contracted CCTV is prioritized by a defect ranking system based on the Pipeline Assessment Certification Program (PACP) grading system standardized by National Association of Sewer Service Companies (NASSCO). PACP assigns scores for defects within the sewer pipe from 1 to 5, with 1 being least severe and 5 being most severe for structural defects (i.e., fractures or broken) and O&M defects (i.e., roots or grease). Pipe defects with structural scores 3 and greater, or O&M scores 4 and greater, are reviewed and assigned for rehabilitation, repair, or replacement as deemed appropriate by engineering judgment. This pipeline work is then scheduled and performed as a capital improvement described in 7.4.4 and 7.4.5.

While some pipes have been inspected multiple times throughout the years for various reasons, the County has recently completed first-time inspections of all remaining gravity sewer main (large and small diameter). It is assumed that all defects with scores 4 and 5 will be repaired, rehabilitated, or replaced within a three-year window. Pipes with scores less than 4 and those not addressed within the three-year window will be scheduled for reinspection. The reinspection frequency depends on the most recent TVI inspection defect scoring and ranges from reinspection in three to seven years for scores greater than or equal to 3 to up to 10 to 15 years for pipes with less severe defects. Annual CCTV contracts are budgeted throughout this projection period for these repeat inspections on small diameter (less than or equal to 24-inch diameter) gravity mains; these annual contracts also include a selection of point repairs deemed to be necessary from prior inspections. Periodic inspection contracts are also budgeted to allow for repeat assessments of the larger diameter trunk sewers and for service lateral inspections prior to planned comprehensive sewer rehabilitation. Supplemental services to address unexpected or unplanned non-capitalized system repairs are also budgeted in this cost category. In aggregate, this cost category is budgeted at $9.9 million in FY 2023, at $7.3 million in FY 2024 and ranges from $8.8 million in FY 2025 to $5.5 million in FY 2032 (constant dollars).

6.4.10 Chemicals

Chemical expenses are forecast to be generally consistent with current expenditures escalated at three percent per annum. Additional discharge limitations for nutrients or other requirements could significantly increase expenses.

6.4.11 Other

Operating expenses for the County's CAP, to be implemented in FY 2024 to enable appropriate planning and community partner engagement, are included in two components – CAP administrative expenses and CAP delivered assistance – in the Other expense category. Administrative expenses are forecast at $500,000 in FY 2024 to accommodate start-up requirements and $250,000 per annum thereafter in constant dollar terms. Administrative expenses are escalated at three percent per annum. The CAP delivered assistance is forecasted to reach 0.75 percent of service revenues over a 3-year ramp-up period, or roughly $2.0 million by FY 2026.

This expense category also includes the anticipated $0.5 million billing services audit expense as well as costs to conduct a cost-of-service rate study—both scheduled for FY 2024.

TABLE 6-1
Projected O&M Expenses, FY 2023 – FY 2032 (Constant Dollars)

Cost Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Personnel	$ 33.5	$ 33.8	$ 34.2	$ 34.5	$ 34.9	$ 35.2	$ 35.5	$ 35.9	$ 36.6	$ 36.6
Legal & Professional Services	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Utilities	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
Parts, Supplies, and Misc. Equipment	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Billing Services	17.5	14.8	13.9	13.0	13.0	12.3	12.3	12.3	12.3	12.3
Functional Support Services[1]	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Contractual Oper/Maint. Support	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Penalties	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-
TVI and Point Repairs	9.9	7.3	8.8	8.0	8.0	8.0	8.0	7.0	5.5	5.5
Chemicals	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7
Other Expense[2]	-	1.9	1.5	2.2	2.3	2.4	2.4	2.5	2.6	2.7
TOTAL	**$ 95.8**	**$ 92.7**	**$ 93.3**	**$ 92.7**	**$ 93.2**	**$ 92.9**	**$ 93.3**	**$ 92.7**	**$ 91.9**	**$ 92.0**

1 - Payments to the General Fund to reimburse the County for various Human Resources, Finance, and Information Technology services provided to the Department

2 - Includes administration expense and bill assistance payments associated with the County's Customer Assistance Program; costs of a proposed billing system audit

TABLE 6-2
Assumed O&M Escalation Rates by Category

	FY 2024[1]	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Personnel	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Legal & Professional Services	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Utilities	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Parts, Supplies, and Misc. Equipment[2]	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Billing Services[3]	2.78%	2.78%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Functional Support Services	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Contractual Oper/Maint. Support	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Penalties	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TVI and Point Repairs[2]	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Chemicals	3.50%	3.50%	3.50%	3.50%	3.00%	3.00%	3.00%	3.00%	3.00%
Other Expense[4]	*varies*	*varies*	*varies*	*varies*	*varies*	*varies*	*varies*	*varies*	*varies*

1 - FY 2023 expense estimates are already in current dollars

2 - These categories assume higher escalation rates persist over the next year (through FY 2024)

3 - Based on existing contractual arrangements with BWWB, the majority of billing services expense increases at the pace of assumed rate revenue increases until FY 2026 (see Section 6.4.5)

4 - Customer bill assistance payments associated with the County's Customer Assistance Program are calculated as a percentage of rate revenues and thus, already inflated; all other expenses are escalated between 3.0% and 3.5%

TABLE 6-3
Projected O&M Expenses, FY 2023 – FY 2032 (Nominal Dollars)

Cost Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Personnel	$ 33.5	$ 35.0	$ 36.6	$ 38.3	$ 40.0	$ 41.8	$ 43.7	$ 45.7	$ 48.2	$ 49.8
Legal & Professional Services	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Utilities	10.5	10.8	11.1	11.5	11.8	12.2	12.5	12.9	13.3	13.7
Parts, Supplies, and Misc. Equipment	5.5	5.7	5.9	6.1	6.3	6.4	6.6	6.8	7.0	7.2
Billing Services	17.5	15.3	14.7	14.2	14.6	14.2	14.7	15.1	15.5	16.0
Functional Support Services[1]	8.5	8.7	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2
Contractual Oper/Maint. Support	8.0	8.2	8.5	8.7	9.0	9.3	9.6	9.8	10.1	10.4
Penalties	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-
TVI and Point Repairs	9.9	7.5	9.3	8.7	9.0	9.3	9.6	8.6	7.0	7.2
Chemicals	1.6	1.7	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.2
Other Expense[2]	-	1.9	1.5	2.3	2.3	2.4	2.5	2.6	2.7	2.7
TOTAL	**$ 95.8**	**$ 95.6**	**$ 99.1**	**$ 101.4**	**$ 105.0**	**$ 107.9**	**$ 111.7**	**$ 114.4**	**$ 116.8**	**$ 120.5**

1 - Payments to the General Fund to reimburse the County for various Human Resources, Finance, and Information Technology services provided to the Department

2 - Includes administration expense and bill assistance payments associated with the County's Customer Assistance Program; costs of a proposed billing system audit

7.0 Capital Project Expenditures

7.1 Overview

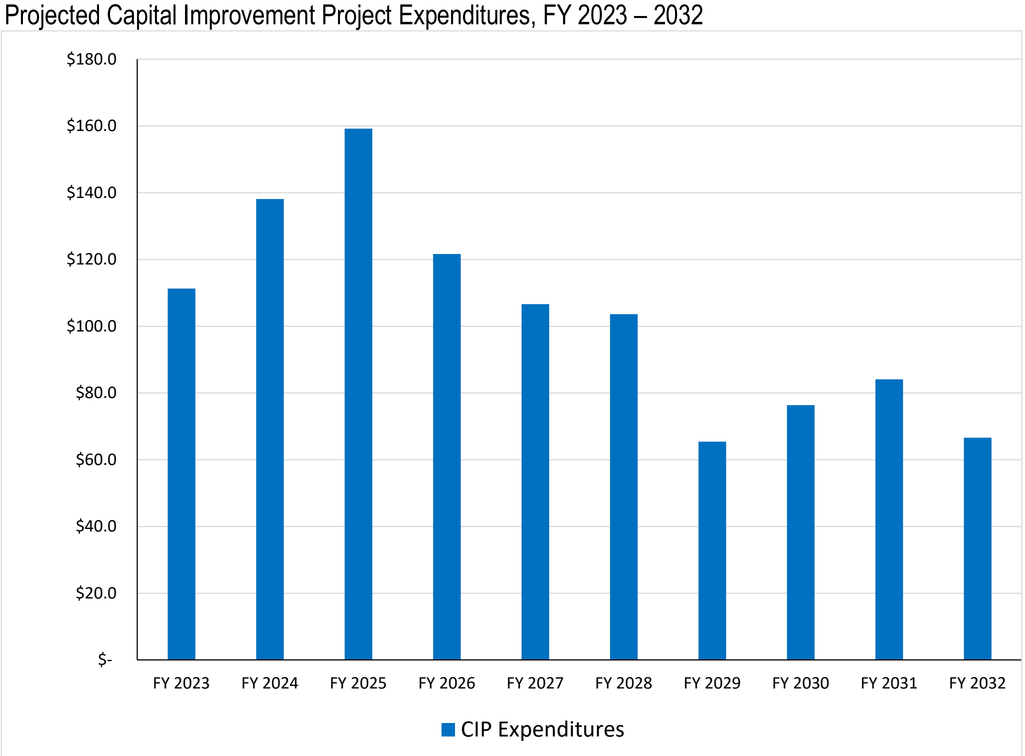
Expenditures are defined as capital under the County's capitalization policy if they meet one of the following criteria:

- Costs related to the addition or replacement of a component of a fixed asset.
- The asset has a value greater than $15,000 for capital equipment.
- The asset has a value greater than $250,000 for projects and real property.
- The asset has an estimated useful life greater than one year.
- The asset can be tracked and accounted for independently in the fixed asset records.

Fleet expenditures, software and information technology infrastructure, and process expenditures are included.

The Department's capital improvement plan (CIP) is continually reevaluated and updated. At present, the CIP contemplates annual average capital expenditures of $103.3 million (in nominal dollars) over the 10-year planning horizon as shown in Figure 7-1.

FIGURE 7-1
Projected Capital Improvement Project Expenditures, FY 2023 – 2032



7.2 Asset Management Program

Asset management systems have been put into place to help prioritize asset repair, rehabilitation and replacement based on asset criticality and consequences of failure. These systems, in contrast to practices during the Consent Decree, work, collect and leverage all available information to make informed decisions. For example, the County uses extensive data from its flow-monitoring network to prioritize and evaluate capital project requirements.

Based on industry statistics,[25] well-conceived asset management programs can help reduce ongoing utility operating costs in the range of 15 percent to 40 percent without significant changes in capital expenditures. The Department's asset management program is expected to extend the life of critical assets with a corresponding reduction in utility costs. Another primary benefit already being realized from the asset management program is the transition from mostly corrective maintenance to preventative maintenance, which has provided better asset performance and higher levels of customer service by reducing interruptions or failures.

7.2.1 Methodology

Continued significant investment in the System will be required to maintain the goal of a sustainable utility. The Department is committed to having its capital improvements planned, designed and constructed in a rational, methodical, defensible, and prioritized manner. To accomplish this, the Department established a comprehensive asset management system for its wastewater collection system and is nearing completion of an asset management program for the WRF assets. Asset management programs are oriented to minimize the life-cycle costs of assets at acceptable levels of performance and risk. This is done through a disciplined approach to assessing project needs based on prevailing risks and prioritizing asset investments accordingly. Asset management additionally provides for better operations and maintenance performance as well as increased accuracy in forecasting future capital needs.

7.2.2 Inventory

In order to properly maintain an asset, its existence, location and condition must be known. For WRF assets, the asset management program will migrate existing equipment inventory and maintenance histories to provide a comprehensive maintenance history as well as aid in scheduling the proper maintenance to extend the life of these assets. All significant assets in the collection system are inventoried in the Department's computerized maintenance management system. A program has been established for these assets to standardize asset risk scoring and condition assessments.

7.2.3 EPA Consent Decree Compliance

As described in Section 4, the Department has complied with all milestone requirements of the Consent Decree and is in the process of demonstrating levels of performance in the remaining four sewersheds remaining under the Consent Decree. One of the short-term goals of the CIP is therefore to fund projects and other capital expenditures needed to achieve complete termination of the Consent Decree.

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[25] 2004 US Government Accountability Office (GAO) Report to the Ranking Minority Member, Committee on Environment and Public Works, U.S. Senate, WATER INFRASTRUCTURE Comprehensive Asset Management Has Potential to Help Utilities Better Identify Needs and Plan Future Investments GAO-04-461

One of the primary measures of EPA-demonstrated compliance is the ability to manage the number and severity of SSOs. The CIP therefore reflects project prioritization and the capital expenditures needed to further reduce preventable SSOs.

7.3 Capital Improvement Program Development Process

Future expenditure (and related encumbrance) requirements for capital projects are based on projections developed by the Department, consulting design engineers, and the Program Management consultant (Hazen). These forecasted requirements are developed on a per-project basis using standard procedures for cost estimation and scheduling for:

- Remedial Measures Plans for each sewer basin as developed from the hydraulic models, capacity assessment, and prioritization and optimization processes described in 7.3.1 through 7.3.3 below;
- Large diameter (≥24” diameter) sewer rehabilitation and replacement projects deemed to be needed as a result of Large Diameter Sanitary Sewer Condition Assessments (LDSSCA) and pipe core sampling and testing;
- Pump station and force main capital improvement plans resulting from recent PS assessments, risk analyses and prioritization considering the criticality of the assets;
- Major capital equipment, computer hardware and software needs; and
- WRF capital improvement projects due to necessary repairs or replacement of process equipment, or due to improvements needed to meet new regulatory compliance limits.

In FY 2023, these projections were updated by Hazen in close collaboration with the Department. The projections presented herein serve as the basis for analysis of the feasibility of the 2023 Sewer Warrants.

7.3.1 Hydraulic Model & Capacity Assurance Support

Comprehensive hydraulic models of the sanitary sewer system have been developed using County Geographic Information System (GIS) data, infrastructure survey data, flow monitoring data, and Department records. These models reflect the physical characteristics of the collection system and WRF operations and are used to identify existing and future system dry weather and wet weather-related capacity deficiencies. The models are then used to inform specific areas of focus to address inflow/infiltration (I/I) issues and SSOs, develop RMPs to address capacity deficiencies, evaluate future flow conditions to support a capacity assurance program, and evaluate and enhance operational strategies.

During initial development, the hydraulic models are calibrated to ensure model accuracy with respect to actual system conditions in accordance with calibration criteria established by industry guidelines. The models are updated regularly to incorporate system infrastructure and operational changes and recalibrated at five-year intervals to provide continual refinement of the models. The Department has completed collection system hydraulic modeling for all nine sewersheds.

Following the development of the sanitary sewer system hydraulic models, a capacity assessment is performed on the collection system to assess existing and future system conditions and to identify areas within the system that have capacity limitations based on the target two-year Level of Service

(LOS). The level of service contemplates no SSOs or customer backups in the system for dry-weather flows and for a specified wet-weather event with a two-year return frequency. This assessment focuses on the performance of gravity and pumping conveyance infrastructure for existing and future system conditions. Design storms with lower return periods (i.e., one-year) are also utilized to identify chronic SSO locations and prioritize remedial efforts.

7.3.2 Remedial Measures Plan Development

As described above, historic SSO data and capacity assessments are used in the hydraulic models to identify areas in the system that lack the capacity required to provide a two-year LOS. Remedial measures are then developed to address those system deficiencies. The following technologies are typically evaluated to determine a recommended remedial measures solution for each deficient area:

- Source reduction of rainfall-dependent inflow and infiltration (RDII) through comprehensive sewer rehabilitation.
- Additional conveyance capacity of gravity sewers and force mains through pipe upsizing or parallel sewers.
- Additional pumping capacity.
- Flow storage facilities (in-line and off-line).

7.3.3 Optimization

The Department also retained a firm to help optimize, refine, and prioritize the recommended RMP solutions utilizing Optimatics software. This software utilizes intelligent algorithm optimization technology to link the sewer hydraulic model to detailed life-cycle cost data and evaluate various RMP alternatives (capacity improvements, rehabilitation, pump improvements, and storage). In a single analysis, cloud computing is used to evaluate hundreds of thousands of possible remedial measures solution configurations to identify those solutions that meet the two-year level of service at least cost. This optimization process is estimated to save the Department approximately $840 million in projected capital costs over the capacity improvement/upsizing alternative.

Following optimization, the proposed improvements were then prioritized to determine a preliminary sequence of RMP project implementation that would provide maximum return on investment (ROI). These remedial measures projects have been entered into the Department's scheduling software in accordance with this prioritization process.

7.4 Capital Improvement Program, FY 2023 - FY 2032

The Department's CIP is designed to meet specific utility needs, provide operational reliability, achieve Consent Decree compliance and termination, provide a platform for long-term sustainability, and help ensure compliance with the Clean Water Act, the Alabama Water Pollution Control Act, the County's NPDES permits and other regulatory and customer service requirements. The capital program categories presented below are consistent with the Department's operational structure and support an asset management approach. These categories are further described in sections 7.4.1 through 7.4.8.

Anticipated CIP expenditures are presented in Table 7-1 in constant dollar terms and in Table 7-2 in nominal dollar terms. The utility construction market experienced historic increases from 2021 to

2022 due to supply and labor shortages and increasing costs of materials and fuel. These cost increases are reflected in baseline (current dollars) cost estimates for FY 2023. A construction cost escalation rate of 3 percent per annum is assumed for the remainder of the forecast period. Capital expenditures are expected to total $925.2 million in current dollars and $1,033.0 million in nominal dollars from FY 2023 through FY 2032.

7.4.1 WRF Repair, Replacement & Renewal Projects

Many of the WRF equipment assets constructed under the Consent Decree will require significant and sustained investment in replacement equipment and infrastructure over the ten-year forecast period. As a part of the Department's expanded WRF (Vertical) Asset Management effort, the WRF assets are currently being inspected and a condition score assigned to each asset to develop the overall risk score for each asset with the respective consequence of failure and likelihood of failure score components. The asset management findings will guide the future replacement and renewal plans.

The WRF Repair, Replacement & Renewal CIP for FY 2023 through FY 2032 is $358.4 million (nominal dollars) and is based largely on historical project needs and already identified projects but may be modified after full implementation of the WRF Asset Management Program.

7.4.2 WRF Regulatory Compliance Projects

The WRF regulatory compliance projects include improvements at the WRF's required (or anticipated to be required) to comply with new federal, state, or regional regulations and permit requirements.

Previously, the two largest drivers of the CIP budget for WRF regulatory compliance over the planning horizon were the total phosphorus limits scheduled for the Cahaba and Trussville WRFs. The County has since expended considerable effort and expense to significantly reduce TP point-source loads to the Cahaba River and has been a responsible partner in achieving instream TP goals. As discussed in Section 4.4.1, the County believes that sustained in-stream TP compliance demonstrates that the objectives of the TMDL have been met and Phase III limits are not necessary. Accordingly, no additional capital funds are planned for total phosphorous reductions at these facilities.

The Five Mile Creek, Village Creek, Prudes Creek, Warrior, and Turkey Creek facilities have also been required to implement higher levels of treatment for effluent phosphorus. All capital improvements have been completed, and no additional capital funds are planned for total phosphorous reductions at these facilities. The Leeds and Valley Creek WRFs are the only remaining facilities without recent nutrient removal additions. The Leeds plant has had total phosphorous limitations for many years and no changes are anticipated. Discussions with ADEM staff have indicated a high likelihood that Valley Creek will be subject to nutrient reductions in the near future. The Department has plans to initiate total phosphorous reductions at the facility, with preliminary design work beginning in September 2023. A total of $9.3 million (nominal dollars) is estimated for design and construction of this work.

7.4.3 SSO Abatement & Capacity Improvement Projects

SSO abatement and capacity improvement projects include work focused on further eliminating recurring wet-weather sanitary sewer overflows and capacity upgrades for sewers lacking adequate capacity for existing wet weather flows. These remedial measures projects were identified through hydraulic modeling and capacity assessment analysis described in 7.3.1.

TABLE 7-1
Projected Capital Expenditures, FY 2023 – FY 2032 (Constant Dollars)

Project Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
WRF Repair, Replacement & Renewal	$ 48.9	$ 44.9	$ 64.1	$ 19.9	$ 28.5	$ 34.6	$ 16.1	$ 23.9	$ 24.0	$ 17.0
WRF Regulatory Compliance	-	0.0	0.2	0.5	1.3	4.5	-	-	-	-
SSO Abatement & Capacity Improvement	10.1	22.4	29.7	31.8	10.1	13.5	0.8	-	-	0.2
Sanitary Sewer Repair & Replacement	8.5	2.4	6.2	6.7	8.1	5.0	5.0	5.0	5.4	5.0
Collection System Rehabilitation	22.3	32.2	20.6	12.3	13.9	13.6	15.4	14.2	16.0	13.0
Pump Station Upgrades	5.8	18.5	16.9	27.4	21.8	7.0	6.3	5.9	7.0	5.0
Capital Equipment[1]	5.2	5.5	4.5	4.5	4.5	4.5	5.0	6.0	6.0	4.6
Professional & Engineering Services[2]	10.5	8.1	7.9	8.3	6.7	6.7	6.1	7.2	8.0	6.3
TOTAL	**$ 111.3**	**$ 134.1**	**$ 150.0**	**$ 111.3**	**$ 94.8**	**$ 89.4**	**$ 54.8**	**$ 62.1**	**$ 66.4**	**$ 51.1**

1 - Includes limited capitalized right-of-way (ROW) acquisition expenditures

2 - Includes expenditures for information technology infrastructure and hydraulic modeling support and services

TABLE 7-2
Capital Escalation Rates and Projected Capital Expenditures, FY 2023 – FY 2032 (Nominal Dollars)

Project Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Annual Capital Escalation Rate		*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*
WRF Repair, Replacement & Renewal	$ 48.9	$ 46.3	$ 68.1	$ 21.8	$ 32.0	$ 40.1	$ 19.2	$ 29.4	$ 30.4	$ 22.2
WRF Regulatory Compliance	-	0.0	0.2	0.5	1.5	5.2	-	-	-	-
SSO Abatement & Capacity Improvement	10.1	23.0	31.5	34.7	11.3	15.6	1.0	-	-	0.2
Sanitary Sewer Repair & Replacement	8.5	2.5	6.5	7.3	9.1	5.8	6.0	6.1	6.8	6.5
Collection System Rehabilitation	22.3	33.2	21.9	13.4	15.6	15.7	18.4	17.4	20.3	17.0
Pump Station Upgrades	5.8	19.1	17.9	29.9	24.5	8.2	7.5	7.2	8.9	6.5
Capital Equipment[1]	5.2	5.7	4.8	4.9	5.1	5.2	6.0	7.4	7.6	6.0
Professional & Engineering Services[2]	10.5	8.3	8.3	9.0	7.5	7.8	7.3	8.8	10.1	8.2
TOTAL	**$ 111.3**	**$ 138.1**	**$ 159.2**	**$ 121.6**	**$ 106.6**	**$ 103.6**	**$ 65.4**	**$ 76.4**	**$ 84.1**	**$ 66.6**

1 - Includes limited capitalized right-of-way (ROW) acquisition expenditures

2 - Includes expenditures for information technology infrastructure and hydraulic modeling support and services

Based on the on-going asset management program work, a significant number of high-priority capacity improvement projects have been identified that are intended to mitigate historical SSOs. The Department has established a capital project expenditure budget of approximately $127.5 million (nominal dollars) to address these capacity-related collection system projects. Projected expenditures and related encumbrances vary based on specifically identified remedial measures projects.

7.4.4 Sanitary Sewer Repair and Replacement

Sanitary sewer and manhole repair and replacement expenditures primarily include open cut replacement construction for failed or severely deteriorated gravity sewers, force mains, and manholes. This category also includes short segments of pipe repairs, called "point" repairs, which are required to be made prior to rehabilitation of the entire sewer segment via cured-in-place pipe (CIPP) liner installation from manhole to manhole.

Based on historical Departmental information and current projections for future needs, approximately 15 percent of gravity sewers require replacement versus 85 percent that can be rehabilitated. Accordingly, annual repair and replacement contracts are developed and budgeted at approximately $5.7 million per year (average in current dollars) to address these repairs and replacements. In nominal dollars, the Department expects expenditures in this category to total $65.2 million over the forecast period.

Emergency collection system point repairs are specifically excluded from the CIP because they are not considered sufficient to substantially increase asset life and are accounted for in the operating budgets.

7.4.5 Collection System Rehabilitation

If a pipe or asset is not badly deteriorated, its life can typically be extended more economically through rehabilitation. In the case of a pipe, a CIPP liner can be placed inside the existing pipe, stabilizing the cracks in the original pipe and significantly extending the life of the asset. CIPP is also used to rehabilitate sewers that require multiple repairs and/or pipes with heavy root intrusion. Specialty smaller diameter CIPP is used to rehabilitate a portion (typically 15 ft) of the customer's service lateral in areas where significant amounts of groundwater enter the sewer system through these laterals.

Manholes, pipe-to-manhole connections, and pump station wet wells can also be sources of groundwater infiltration, thereby reducing available sewer capacity. Various methods are employed to rehabilitate these assets and keep this extraneous water from entering the sewer system.

From 2015 through 2022, approximately 74 percent of the pipeline work involved rehabilitation rather than replacement. Over the last three years, rehabilitation has been 85 percent of the work on a per foot basis. The Department expects this ratio to continue at 85 percent over the next 10-year period using the RMPs to reduce sanitary sewer I/I, free up sewer capacity, and reduce SSOs. Over the FY 2023 to 2032 period, a total of $195.2 million or an annual average of $19.5 million (nominal dollars) in expenditures is included in the CIP.

7.4.6 Pump Station Upgrades

Pump station upgrades include all wastewater pump stations except those inside WRFs or managed directly by WRF operations staff. This category includes pumping equipment, associated infrastructure such as wet wells, piping and valves, and includes emergency generators for those locations having emergency power capabilities.

From 2015 to 2017, a comprehensive condition assessment was conducted for 170 pump stations. In 2019, a Pump Station Risk-Based Prioritization report was completed and included an evaluation of the likelihood of failure (based on variables such as pump age and historical maintenance issues) and consequence of failure (based on variables such as pumping capacity and geographical location) for each pump station. The Department has used the pump station condition assessments, Prioritization report and maintenance staff input to select and group pump station improvements and upgrades into a series of yearly design and construction packages. A total of 60 pump station upgrades are currently either under design or in construction and include all pump stations that were ranked as a high priority for criticality in the Prioritization report.

Pump station upgrades will continue to be prioritized based on condition assessment results and maintenance staff input, with the focus now shifting to those that ranked as medium priority for criticality. These pump station project expenditures are forecast to average almost $23 million (nominal dollars) between FY 2024 and FY 2027 and range between $6.5 million and $8.9 million (nominal dollars) during the remainder of the forecast period. In total, pump station expenditures are forecast to be $135.5 million (nominal dollars) from FY 2023 through FY 2032. It is expected that roughly 70 pump stations will be upgraded during this timeframe, with the investment focus placed on larger pump stations during the first half of the forecast period.

7.4.7 Capital Equipment

This cost category includes fleet equipment, software and information technology infrastructure, and equipment that exceeds the capital threshold used in both the County's WRFs and collection system facilities. Budgeted expenditures for this category also reflect periodic allowances for software upgrades. The Department's planned capital equipment expenditure budget of $57.8 million (nominal dollars) is reasonable based on historical expenditure patterns and forecasted System needs.

7.4.8 Professional & Engineering Services

Professional engineering services—for the purposes of this category—include Program Management, Asset Management (including hydraulic modeling), and other System-wide professional services. Near-term costs also include capitalized costs to replace the current sewer billing software system.

The Department will need to continue the current project delivery methods in order to successfully execute the CIP over the ten-year planning horizon. For the purposes of this CIP, it is assumed that the Department will continue with a program management firm to provide the resources necessary to administer the proposed CIP. Anticipated expenditure requirements total $86.0 million over the forecast period (nominal dollars).

7.5 Projected Capital Project Expenditures, FY 2023 – FY 2032

The Department has developed its capital improvement program to effectively prioritize System capital investments in light of prevailing financial constraints as described in Section 8. Based on the current financial circumstances surrounding the County, the Department's capital finance plan must rely on current revenues ("Pay-As-You-Go"), existing reserves, and limited federal grant funding (as outlined in Section 8) to fund the Department's Capital Improvement Plan (CIP) over the forecast period. No additional debt is currently anticipated to fund the County's capital program. Revisions to the Department's capital program have been instituted to ensure compliance with applicable environmental regulations, provide for efficient delivery of sewer services, and preserve and enhance the sewer system.

Table 7-3 presents planned sources and uses of capital project expenditures for the reporting period FY 2023 to FY 2032 in nominal dollars. These projections are based on the following goals:

- Continue applying sound engineering and asset management principles to achieve maximum return on investment while further reducing SSOs.
- Terminate the remaining basins from the EPA Consent Decree.
- Proactively manage repairs, replacements and rehabilitation of the sanitary sewer collection system, pump stations, and water reclamation facilities.

TABLE 7-3
Total CIP Nominal Expenditures, Sources and Uses of Funds

	Total FY 2023-2032	Percent of Total
Uses of Funds		
WRF Repair, Replacement & Renewal	$ 358,351,159	34.7%
WRF Regulatory Compliance	7,437,698	0.7%
SSO Abatement & Capacity Improvement	127,502,140	12.3%
Sanitary Sewer Repair & Replacement	65,229,212	6.3%
Collection System Rehabilitation	195,188,081	18.9%
Pump Station Upgrades	135,502,021	13.1%
Capital Equipment	57,804,590	5.6%
Professional & Engineering Services	85,995,666	8.3%
Total Uses of Funds	**$1,033,010,567**	**100.0%**
Sources of Funds		
Existing Capital Reserves[1]	$ 336,010,567	32.5%
PAYGO Financing	667,000,000	64.6%
Future Sewer Warrant Proceeds	-	0.0%
ARPA Funds	30,000,000	2.9%
Total Uses of Funds	**$1,033,010,567**	**100.0%**

1 - Excludes $10.3 million in unused reserves that will remain in the Construction Fund at the end of FY 2032

8.0 Financial Performance

8.1 Overview

This section summarizes historical financial performance, utility rate adjustments and bill comparisons, and projected System financial performance for the period FY 2023 through FY 2032.[26,27] Historical results and forecasted performance both reflect impacts from prescribed rate adjustments outlined in the County's 2013 Plan of Adjustment. Projections have been developed using a combination of financial planning and revenue forecasting models designed to represent utility cash flows under alternative assumptions related to projected operations and maintenance expenses, capital expenditures and assumed debt repayment schedules. Prospectively, the County continues to face challenges associated with increasingly stringent regulatory requirements, System renewal and rehabilitation needs, and efficient and effective utility service delivery typical of large wastewater systems.

8.2 Historical Performance

Table 8-1 presents a brief overview of audited financial performance of the Department for the most recent eight-year period, FY 2015 through FY 2022.[28]

Operating revenues increased 5.1 percent on a compounded annual basis over the reporting period, from $188.7 million in FY 2015 to $267.5 million in FY 2022. The increase in operating revenues can be attributed primarily to proposed rate adjustments outlined in the County's 2013 Plan of Adjustment. However, increased impact fee revenues as well as modest customer account growth have also contributed to higher revenues. The County's revenue performance also reflects the economic impact of the COVID-19 pandemic and other trends such as adoption of water conservation practices that result in reduced billable wastewater flows per account over time.

In FY 2021, the County's auditors re-classified certain revenue categories from Service Revenue to Other Operating Revenue. Service Revenue includes rates and user charges, industrial pre-treatment revenues[29], and other sewer charges of the System. Sewer rates and user charge revenues totaled $238.4 million in FY 2022 and other service revenues in this category totaled $5.2 million. Other Operating Revenue includes impact fees, septage revenues, grease control permits, investment income, and other miscellaneous revenues or revenue adjustments (such as offsetting bad debt charges) of the System. In FY 2022, the two largest components of Other Operating Revenue were impact fees ($13.2 million) and investment income ($7.1 million).

Over the same reporting period, O&M expenses of the System increased 9.4 percent on a compounded annual basis, from $50.2 million in FY 2015 to $94.1 million in FY 2022. Personnel expense increased $7.5 million over this period (4.2 percent on a compounded annual basis) as the Department filled

[26] The County's fiscal year runs from October 1 through September 30.

[27] The forecast period includes the current fiscal year (FY 2023) plus nine years.

[28] Jefferson County FY 2022 Annual Comprehensive Financial Report, page 156, with adjustments to FY 2022 data as noted in footnote #7 to Table 8-1.

[29] For FY 2021 only, a share of industrial pre-treatment revenues was allocated to Other Operating Revenue by the auditors.

vacant staff positions, modified the process for contracting maintenance activities, and implemented a WRF Operator Apprentice program to replace retiring certified wastewater operators. Increased billing services expense and the Department's allocation of indirect costs (human resources, finance, law, and information technology) are two other primary reasons for rising O&M expense. The cost of billing services, which include the Department's payment to BWWB for customer billing support, has more than tripled since FY 2014 (see Sections 6.3.5 and 6.4.5). Finally, some of the expense increase can be attributed to certain pipeline inspection and maintenance activities that were re-classified from capital expenditures to O&M by the County's auditors. TV inspection, on-call construction services, and root control costs were not reported as an operating expense in the FY 2014 financial statement but contributed $8.2 million to the FY 2022 O&M total presented in Table 8-1.

TABLE 8-1
Historical Financial Performance

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022[7]
Total Service Revenue[1]	$ 186.8	$ 193.4	$ 210.7	$ 223.8	$ 229.9	$ 227.4	$ 222.7	$ 243.6
Other Operating Revenue[2]	1.9	4.1	5.3	6.5	8.1	8.1	18.8	23.9
Total Operating Revenue[3]	$ 188.7	$ 197.5	$ 216.0	$ 230.3	$ 238.0	$ 235.5	$ 241.5	$ 267.5
Operating Expenses	50.2	56.6	63.1	73.9	81.3	91.2	91.2	94.1
- Tax Revenue[4]	(6.0)	(5.7)	(6.3)	(6.4)	(6.6)	(7.2)	(7.5)	(7.6)
Total Operating Expense	$ 44.3	$ 50.8	$ 56.8	$ 67.5	$ 74.7	$ 84.0	$ 83.8	$ 86.6
Net Revenue for Debt Service	**$ 144.5**	**$ 146.6**	**$ 159.3**	**$ 162.8**	**$ 163.2**	**$ 151.4**	**$ 157.7**	**$ 181.0**
Total Debt Service[5]	74.5	79.4	84.7	85.3	70.4	70.4	79.1	80.9
Total Debt Service Coverage[6]	**1.93**	**1.84**	**1.88**	**1.90**	**2.31**	**2.15**	**1.99**	**2.23**

1 - All numbers in millions of dollars, slight calculation discrepancies may exist due to rounding

2 - The County's auditor re-classified certain items from Service Revenue to Other Operating Revenue for FY 2021 and beyond

3 - Tax Revenue and Intergovernmental Revenue are excluded from pledged revenues

4 - Tax Revenue is excluded from operating revenues but may be included as an offset to System operating expenses

5 - Represents total senior lien and subordinate debt service payments in bond year dollars as prescribed in the County's indenture

6 - Debt service coverage metrics rounded down to two decimal places

7 - Consistent with prior years, calculated coverage for FY 2022 includes certain items that may be considered pledged revenues (such as investment income and miscellaneous revenues) that are included under the indenture definition of operating revenues, but differ from GASB standards. For this reason, coverage shown in this 2023 Feasibility Consultant's Report, which is consistent with the indenture, may differ from that which is shown in the County's ACFR.

These revenue and expense trends have resulted in a 3.3 percent compound annual growth rate of net revenues available for debt service, from $144.5 million in FY 2015 to $181.0 million in FY 2022.

The Department's minimum parity debt service coverage requirement was 1.10x during the reporting period. Total debt service coverage has varied between 1.84x in FY 2016 and 2.31x in FY 2019, with a metric of 2.23x in the most recently concluded fiscal year (FY 2022).

8.3 Fund Structure

The 2023 Indenture, prepared concurrently with the issuance of the County's 2023 Sewer Warrants, establishes various funds and accounts, the principal ones of which are outlined below. Capitalized terms used and not otherwise defined herein or elsewhere in this report shall have the meaning given to them in the 2023 Indenture.

8.3.1 Revenue Account

The County, under the Indenture, maintains the Revenue Account in its own name for the deposit and disbursement of System Revenues. All System Revenues are deposited in the Revenue Account promptly as received by the County. The County pays all Operating Expenses, when due, from the Revenue Account. Each calendar month, the County may make payments and transfers from the Revenue Account as summarized below.

8.3.2 Debt Service Fund

The Trustee holds the Debt Service Fund for the benefit of the Holders of the 2023 Sewer Warrants (as defined in the Indenture) to which such fund relates. Money in the Debt Service Fund is applied by the Trustee to pay Debt Service on the 2023 Sewer Warrants. Deposits are made in the Debt Service Fund from the Revenue Account, as set forth and described in the Indenture.

8.3.3 Operating Reserve Fund

The Trustee shall be the depository, custodian and sole disbursing agent for the Operating Reserve Fund. On or before the twenty-fifth day of each month, the Trustee shall transfer money to the Operating Reserve Fund from the Revenue Account in an amount, if any, required to make the balance in the Operating Reserve Fund equal to the Required Operating Reserve, which is specified as 1/3 (roughly 120 days) of the System's annual operating budget. The money in the Operating Reserve Fund will be used solely for the payment of Operating Expenses.

8.3.4 Capital Improvement Fund

The Capital Improvement Fund is maintained by the County in its own name with a bank or financial institution selected by the County. After paying Operating Expense and making deposits to the Debt Service Fund and Operating Reserve Fund, remaining revenues in the Revenue Account may be transferred to the Capital Improvement Fund. Money in the Capital Improvement Fund may be used for the following purposes:

1. If no Indenture Default exists, the County may withdraw money from the Capital Improvement Fund from time to time for the purpose of paying (A) costs of Capital Improvements to the System, (B) amounts necessary to defease, redeem or purchase all or any portion of the Warrants, (C) amounts payable on Unsecured Obligations or (D) amounts necessary to pay Rebate Liability.
2. If money on deposit with the Trustee in the related Debt Service Fund is not sufficient for the timely payment of Debt Service due on Warrants, the County shall transfer money from the Capital Improvement Fund to the Trustee for deposit in the related Debt Service Fund to the extent necessary for payment of such Debt Service.
3. If money on deposit in the Operating Reserve Fund is not sufficient for the timely payment of Operating Expenses, the County may transfer money from the Capital Improvement Fund to the Operating Reserve Fund for the payment of Operating Expenses.

8.4 Flow of Funds

System Revenues in the Revenue Account, after payment of all operating expenses (and assuming the Revenue Account reserve requirement is met), are applied in each calendar month as follows, in the order of priority indicated:

1. First, the Trustee deposits in the Debt Service Fund the amount required for the payment of debt service on the 2023 Sewer Warrants.
2. Second, the Trustee pays fees and expenses of the Trustee and, at the direction of the County, pays Credit Facility Fees and other fees to remarketing agents or entities performing similar functions with respect to Warrants. If money available in the Revenue Account (after making deposits with priority) is not sufficient to make all payments required by this paragraph, such payments are made on a proportionate basis.
3. Third, the Trustee deposits in the Operating Reserve Fund the amount required to make the balance in the Operating Reserve Fund equal to the Required Operating Reserve.
4. Fourth, the Trustee shall deposit in each Reserve Fund the amount required by the Supplemental Indenture establishing such Reserve Fund to accumulate, maintain or restore the required balance in such Reserve Fund. If money available in the Revenue Account (after making deposits with higher priority) is not sufficient to make all deposits required by this paragraph, deposits to each Reserve Fund shall be made on a proportionate basis.
5. Fifth, on or before the twenty-fifth day of each month, the County may set aside amounts due for Rebate Liability.
6. Sixth, on or before the twenty-fifth day of each month, the County may set aside amounts to pay debt service on subordinate debt.
7. Seventh, the County shall transfer the entire amount remaining in the Revenue Account to the Capital Improvement Fund.

8.5 Historical and Current Rates

In November 2012, the Jefferson County Commission approved several modifications to the Department's then uniform volume rate structure designed to enhance revenue generation and stability, more equitably distribute cost responsibilities, assure the affordability of low-volume usage, and encourage efficient use of water resources. The structural modifications included:

- Replacement of the minimum charge with a monthly base charge scaled by meter size and applicable to all users (both residential and non-residential) irrespective of their volume of monthly billable flows.
- Implementation of a 2.7 percent increase to the volumetric rate charged to non-residential accounts, from $7.40 to $7.60 per CCF.

- Implementation of an inclining block volumetric rate structure for residential accounts. Rates for billable flow[30] from 0 - 3 CCF were set to $4.50 per CCF, from 4 - 6 CCF a rate of $7.00 per CCF was applied, and rates for billable flow of 7 CCF and above were set at $8.00 per CCF.

The modification to the County's sewer rate structure[31], which was effective through FY 2014[32], resulted in a 1.4 percent increase to the monthly bill for residential accounts with billable flows of 5 CCF.[33] At the time, these modifications were atypical though not unprecedented[34] for wastewater utilities. Over the last decade, inclining volumetric rate blocks have been increasingly recognized as a rate design measure to address low-income water affordability concerns (as well as advance water conservation objectives). This type of rate design, as well as low-income customer assistance programs as discussed in Section 6, are included among EPA's "Financial Alternatives Analysis" checklist as important options for wastewater system permittees to consider and document in financial capability assessment filings.[35]

As part of the County's Plan of Adjustment, the County adopted sewer rate increases to generate sufficient revenues to meet its financial obligations, including payment of debt service associated with the 2013 Sewer Warrants. The adopted rate plan called for 7.89 percent annual rate increases for four years, from FY 2015 through FY 2018, then 3.49 percent annual rate increases through termination of the 2013 Sewer Warrants (FY 2053). Table 8-2 presents the County's historical sewer rates and residential bill for a 5 CCF user[36] from FY 2014 through the current fiscal year (FY 2023).

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30 The County's rate structure provides for a 15 percent reduction in metered water use for its determination of residential billable sewer flows to account for the fact that some water use does not result in return flows to the System.

31 See Jefferson County Sewer Use Charge Ordinance Adopted November 6, 2012, Amended and Restated by Resolution Dated September 23, 2013, Effective November 1, 2013

32 The next sewer rate adjustment occurred on November 1, 2013, one month into FY 2014.

33 Assumes 5/8-inch meter.

34 As part of its strategy for financing the Clean Water Atlanta program, the City of Atlanta adopted a rate structure that features meter size differentiated base charges and inclining block volumetric rates. Atlanta has retained that rate design since its implementation in FY 2004.

35 2023 Clean Water Act Financial Capability Assessment Guidance, EPA Office of Water, 800b21001, February 2023, Appendix C.

36 A residential bill based on 5 CCF of billable flows is provided to facilitate comparisons to other sewer systems using available national surveys. Unadjusted billable flow among the System's residential users averaged 5.7 CCF per month across all three billing entities in FY 2022.

TABLE 8-2
Historical and Current Sewer Rates and Residential Bills

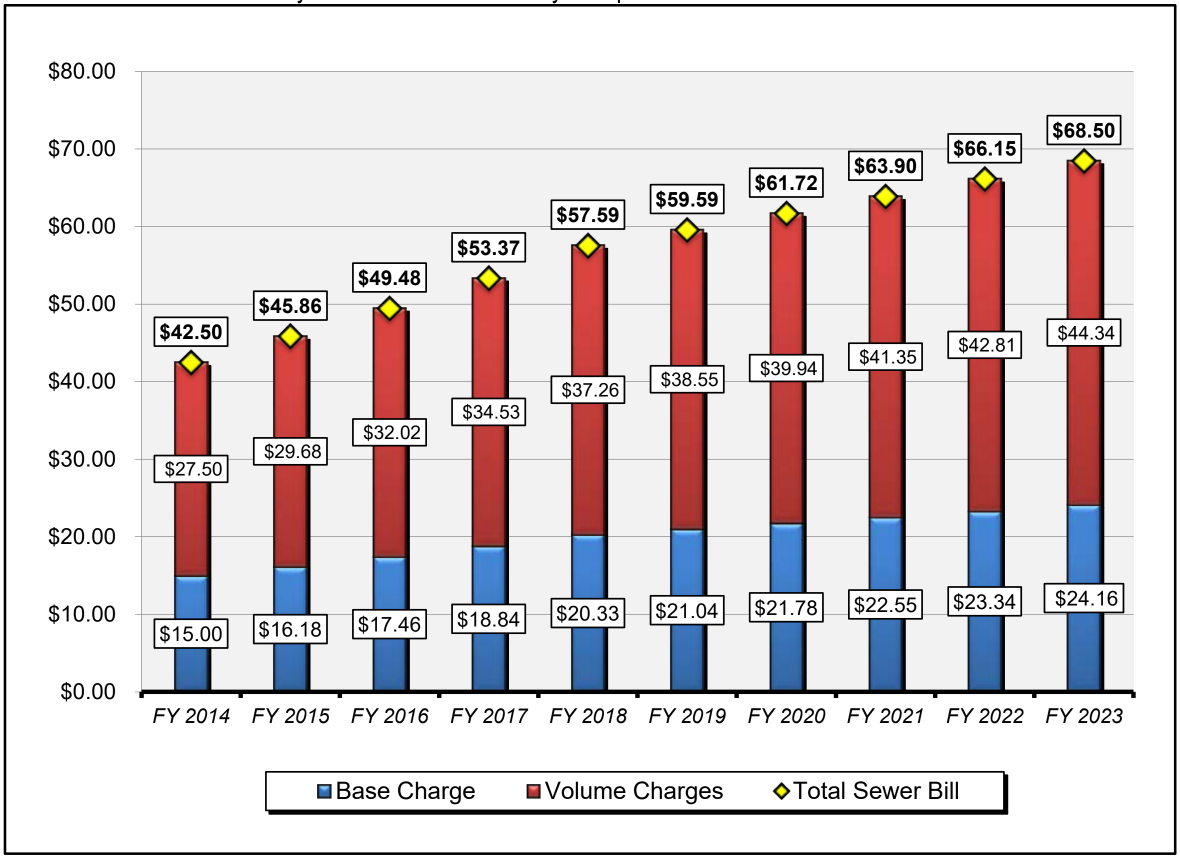
	FY 2014[1]	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Base Charge										
5/8 inch meter	$ 15.00	$ 16.18	$ 17.46	$ 18.84	$ 20.33	$ 21.04	$ 21.78	$ 22.55	$ 23.34	$ 24.16
3/4 inch meter	16.50	17.80	19.21	20.73	22.37	23.15	23.96	24.80	25.67	26.57
1 inch meter	21.00	22.66	24.44	26.37	28.45	29.44	30.47	31.54	32.65	33.79
1 1/2 inch meter	27.00	29.13	31.43	33.91	36.59	37.87	39.20	40.57	41.99	43.46
2 inch meter	43.50	46.93	50.64	54.64	58.95	61.01	63.14	65.35	67.64	70.00
3 inch meter	165.00	178.02	192.06	207.21	223.56	231.36	239.44	247.80	256.45	265.40
4 inch meter	210.00	226.57	244.45	263.74	284.55	294.48	304.76	315.40	326.41	337.81
6 inch meter	315.00	339.85	366.67	395.60	426.81	441.71	457.13	473.09	489.61	506.70
8 inch meter	435.00	469.32	506.35	546.30	589.40	609.97	631.26	653.30	676.11	699.71
10 inch meter	555.00	598.79	646.03	697.00	751.99	778.23	805.40	833.51	862.60	892.71
Residential Volume Charge, per CCF										
0 - 3 CCF	$ 4.50	$ 4.86	$ 5.24	$ 5.65	$ 6.10	$ 6.31	$ 6.54	$ 6.77	$ 7.01	$ 7.26
4 - 6 CCF	7.00	7.55	8.15	8.79	9.48	9.81	10.16	10.52	10.89	11.28
7 CCF & Above	8.00	8.63	9.31	10.04	10.83	11.21	11.61	12.02	12.44	12.88
Non-Residential Volume Charge, per CCF										
All CCF	$ 7.87	$ 8.49	$ 9.16	$ 9.88	$ 10.66	$ 11.03	$ 11.42	$ 11.82	$ 12.24	$ 12.67
Residential Bill[2]	***$ 42.50***	***$ 45.86***	***$ 49.48***	***$ 53.37***	***$ 57.59***	***$ 59.59***	***$ 61.72***	***$ 63.90***	***$ 66.15***	***$ 68.50***
Bill increase	*13.3%*	*7.9%*	*7.9%*	*7.9%*	*7.9%*	*3.5%*	*3.6%*	*3.5%*	*3.5%*	*3.6%*

1 - Rates effective on November 1 for FY 2014, FY 2015, and FY 2016; on October 1 (beginning of FY) for subsequent years
2 - The monthly bill for residential accounts of the System with billable flows of 5 CCF and a 5/8 inch meter

Figure 8-1 presents the sewer bill, by component, from FY 2014 through FY 2023. Bill calculations are based on billable sewer flows of 5 CCF per month for residential accounts with a 5/8-inch meter. The monthly sewer bill increased 61.2 percent from FY 2014 to FY 2023, from $42.50 in FY 2014 to $68.50 in FY 2023.[37] The Department's current and projected rates reflect recovery of Department revenue requirements consistent with State of Alabama law.

37 This equates to a 5.4 percent (compounded) annual increase in the average residential sewer bill from FY 2014 through FY 2023.

FIGURE 8-1
Historical and Current Monthly Residential Sewer Bill by Component



8.6 2023 Sewer Bill Comparisons

Two national rate surveys of water and sewer bills demonstrate that the County's sewer rates are among the highest in the United States among major metropolitan communities. Table 8-3 presents respondent data for selected metropolitan areas for residential users of 5 CCF and commercial users of 500 CCF (billable flows) from the American Water Works Association's Water and Wastewater Rate Survey.[38] Similarly, Figure 8-2 presents basic use water and sewer bill data on the 50 largest cities (by population) in the United States, the majority of whom—like the County—have experienced significant increases to their cost structures occasioned by Consent Decree compliance requirements or other factors.[39] This data further demonstrates that the County's rates are relatively high though not an outlier.

[38] Published with Raftelis Financial Consulting at https://ellio.raftelis.com/AWWA (subscription required); accessed between August 20 and August 23, 2023.

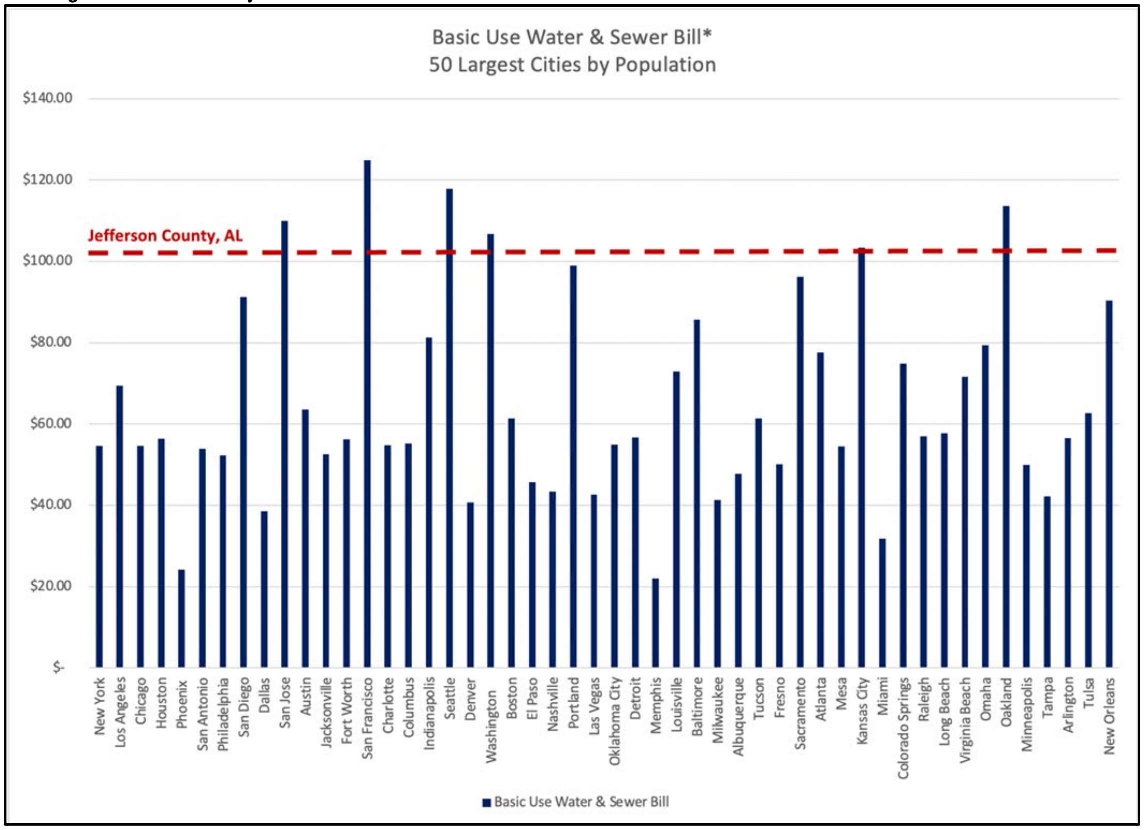
[39] 50 Largest Cities Water and Wastewater Report, 2021, published by Black & Veatch. Basic water use is defined as 50 gallons per person per day times the number of persons per household as provided by US Census data.

TABLE 8-3
Monthly Sewer Bill Comparisons by Service Provider

	Wastewater Charges	
Service Provider[1]	**5 CCF[2]**	**500 CCF[3]**
Honolulu	$94.87	NR[4]
San Francisco	$85.06	NR
Seattle	$85.05	NR
Kansas City	$76.57	NR
Jefferson County, AL	$68.50	$6,405.01
Cleveland (NEORSD)	$65.60	NR
Atlanta	$63.06	NR
Portland (OR)	$61.75	NR
Portland (ME)	$59.00	NR
New York City (Water Board)	$57.84	NR
New Orleans (SWBNO)	$57.26	$3,374.66
Indianapolis (Citizens Energy)	$53.90	NR
Cincinnati (MSDGC)	$50.88	$2,561.34
Toledo	$48.95	$2,845.12
Corpus Christi	$45.80	NR
Tulsa MUA	$43.81	$3,530.44
Charlotte Water	$41.34	$2,805.24
Asotin County PUD	$40.00	NR
San Diego	$38.39	NR
Austin	$37.86	NR
Gwinnett County	$37.57	NR
Houston	$33.33	$3,035.15
Jacksonville (JEA)	$32.58	$2,420.84
East Bay MUD	$29.93	NR
Fort Worth	$27.70	$1,213.75
Oklahoma City	$25.96	NR
Salt Lake City	$25.65	NR
Sacramento	$25.60	NR
Dallas	$25.06	$1,734.35
San Antonio	$21.59	$1,586.03
Miami-Dade County	$20.83	$3,530.26
Milwaukee Water Works	$16.54	$1,034.19
Albuquerque - Bernallilo Cty	$11.39	$902.62
Philadelphia Water	$8.89	$204.72

1 - Table sorted by 5 CCF bill
2 - Assumes residential customer with a 5/8 inch meter
3 - Assumes commercial customer with a 2 inch meter
4 - Information not reported

FIGURE 8-2
50 Largest Cities Monthly Basic Use Water and Sewer Bills



Similar conclusions may be drawn by reference to rates for sewer utilities in the State of Alabama. Based on rates effective in 2019, bills for 5,000 gallons of water use in Jefferson County were not the highest but also well above the median value for other communities in the State.[40] While the County's rates generate customer bills that are relatively high compared to other major metropolitan U.S cities and Alabama communities, bill levels are comparable to other providers, and the County's adopted rate structure meets applicable criteria defined by State law and industry guidance.

8.7 Water Affordability

The County's relatively high sewer rates amplify general water affordability concerns that have gained national attention as water and wastewater rate increases have been at roughly double the rate of inflation for over a decade and are expected to continue to do so.[41] These concerns are reflected in recent EPA financial capability assessment guidance, federal legislation authorizing a low-income water customer assistance program, and various water and wastewater industry initiatives and

[40] See Alabama Water and Wastewater Rates Dashboard, Rates as of January 1, 2019 provided by the Alabama Department of Environmental Management and University of North Carolina Environmental Finance Center (https://dashboards.efc.sog.unc.edu/al - accessed August 22, 2023)

[41] 2021 AWWA Water and Wastewater Rate Survey, p. 9.

publications.[42] Water affordability metrics are also used by credit rating agencies to gauge credit quality.[43]

A 2021 monthly 5 CCF bill of $63.90 represented 1.31 percent of the County's 2021 Median Household Income of $58,330 and represented 3.35 percent of the Lowest Quintile Household Income of $22,589[44]. These claims on household incomes are not outliers from a national and state-wide perspective and reflect the County's cost structure. Nevertheless, water affordability challenges are likely to be exacerbated as required rate increases are implemented over the forecast period.

Importantly, the County's current rate structure is already an established measure to address affordability.[45] It prices billable flows required to meet basic health and sanitary needs at relatively low volumetric rates and imposes fixed charges below those imposed for water services. The County plans to supplement its affordability-oriented rate design with a customer assistance program (as discussed in Section 6) that will provide additional support for low-income customers facing water affordability challenges.

8.8 Capital Financing

The Department's CIP contemplates expenditure requirements of $1,033.0 million in nominal dollars between FY 2023 and FY 2032. Table 8-4 identifies projected capital project expenditures by major program element and matching sources of funds. Capital requirements will be funded through three sources: existing reserves in the Capital Improvement Fund (33.2 percent); net operating revenues transferred to the Department's Capital Improvement Fund from its Revenue Account—commonly referred to pay-as-you go or PAYGO funding (63.9 percent); and funds from the ARPA allocated to the Department from the County and ADEM (2.9 percent). The Department's financial plan for FY 2023 through FY 2032 does not contemplate issuance of additional sewer warrants at this time.

Available reserves in the Capital Improvement Fund will be used to fund capital projects in the amount of $346.3 million.[46] It is anticipated that the Department will rely on annual transfers from its Revenue Account to its Capital Improvement Fund totaling $667.0 million for PAYGO funding of capital expenditure requirements.[47] Of this amount, $111.7 million is generated from impact fees and other capital contributions established to recover capacity-increasing costs necessary to serve new development. The remaining $555.3 million will largely be available from rate revenues as a

[42] Drinking Water and Wastewater Infrastructure Funding Act of 2021, Sec. 50108. Needs Assessment for Nationwide Rural and Urban Low-Income Community Water Assistance., Sec. 50109. Rural And Low-Income Water Assistance Pilot Program., $225 million in reconciliation bill to establish permanent program administered by EPA. Example articles include: Measuring Household Affordability for Water and Sewer Utilities by Manuel P. Teodoro, Journal AWWA, January 2018, pp. 13-24; Affordability and Equity Considerations for Rate-Setting, by Eric Rothstein, Stacey Isaac Berahzer, Joe Crea, and Michael Matichich, Journal AWWA, September 2021, pp. 32-43.

[43] See, for example, S&P Global Ratings, U.S. Public Finance Waterworks, Sanitary Sewer, And Drainage Utility Systems: Rating Methodology and Assumptions, January 2016

[44] 2021 Median Household Income reported in US Census Quickfacts; 2021 Household Income Quintile Upper Limit income reported in US Census Table B19080, both 2017-2021 5 Year estimates,

[45] Teodoro M. 2018. Inoculation & Therapy: Why Rate Structures, Not Assistance Programs, Offer the Most Promising Path to Water Affordability. https://mannyteodoro.com/?p=610

[46] Available reserves for capital projects are conservatively established as the Capital Improvement Fund balance as of 9/30/22 ($393.8 million) minus a Fair Market Value (FMV) adjustment of these invested funds (-$47.4 million) as of the same date.

[47] After making PAYGO transfers from the Department's Revenue Account, approximately $10.3 million will remain (unused balance) in the Capital Improvement Fund to pay for capital projects beyond the forecast period.

TABLE 8-4
Capital Expenditure Requirements by Project Category and Matching Sources of Funds

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	TOTAL	Percent
CIP Requirements by Category [1]												
WRF Repair, Replacement & Renewal	$ 48.9	$ 46.3	$ 68.1	$ 21.8	$ 32.0	$ 40.1	$ 19.2	$ 29.4	$ 30.4	$ 22.2	$ 358.4	34.7%
WRF Regulatory Compliance	-	0.0	0.2	0.5	1.5	5.2	-	-	-	-	7.4	0.7%
SSO Abatement & Capacity Improvement	10.1	23.0	31.5	34.7	11.3	15.6	1.0	-	-	0.2	127.5	12.3%
Sanitary Sewer Repair & Replacement	8.5	2.5	6.5	7.3	9.1	5.8	6.0	6.1	6.8	6.5	65.2	6.3%
Collection System Rehabilitation	22.3	33.2	21.9	13.4	15.6	15.7	18.4	17.4	20.3	17.0	195.2	18.9%
Pump Station Upgrades	5.8	19.1	17.9	29.9	24.5	8.2	7.5	7.2	8.9	6.5	135.5	13.1%
Capital Equipment[2]	5.2	5.7	4.8	4.9	5.1	5.2	6.0	7.4	7.6	6.0	57.8	5.6%
Professional & Engineering Services[3]	10.5	8.3	8.3	9.0	7.5	7.8	7.3	8.8	10.1	8.2	86.0	8.3%
Total Sewer CIP	**$ 111.3**	**$ 138.1**	**$ 159.2**	**$ 121.6**	**$ 106.6**	**$ 103.6**	**$ 65.4**	**$ 76.4**	**$ 84.1**	**$ 66.6**	**$ 1,033.0**	**100.0%**
CIP Funding Sources												
Existing Capital Reserves	346.3	-	-	-	-	-	-	-	-	-	346.3	33.2%
PAYGO Financing	75.0	75.0	75.0	75.0	65.0	56.0	56.0	59.0	63.0	68.0	667.0	63.9%
Future Sewer Warrant Proceeds	-	-	-	-	-	-	-	-	-	-	-	0.0%
ARPA Funds	-	10.0	10.0	10.0	-	-	-	-	-	-	30.0	2.9%
Used (Unused) Reserves[4]	(310.0)	53.1	74.2	36.6	41.6	47.6	9.4	17.4	21.1	(1.4)	(10.3)	
Total Funds	**$ 111.3**	**$ 138.1**	**$ 159.2**	**$ 121.6**	**$ 106.6**	**$ 103.6**	**$ 65.4**	**$ 76.4**	**$ 84.1**	**$ 66.6**	**$ 1,033.0**	**100.0%**

1 - Numbers in millions; slight calculation discrepancies may exist due to rounding

2 - Includes limited capitalized right-of-way (ROW) acquisition expenditures

3 - Includes IT infrastructure and hydraulic modeling support

4 - At the end of FY 2032, approximately $10.3 million remains in the Capital Improvement Fund for future capital projects consequence of the multi-year rate adjustment schedule delineated in the County's bankruptcy Plan of Adjustment as well as operational efficiencies realized through the Department's cost control efforts. Finally, the Department expects to receive $30 million of ARPA funds from both the County and ADEM during the first three years of the forecast period to meet various infrastructure needs of the System.

The Department's capital improvement plan is subject to frequent review and modification based on new or updated information regarding asset conditions, evolving regulatory requirements, and changing System function. To the extent that actual expenditures are less than projected, the Department will re-program or reschedule applications of accrued Capital Improvement Funds or further defer the issuance of new debt. In the event that new requirements place unanticipated claims on available Capital Improvement Funds that exceed reasonable funding capacity limits, the Department will prioritize projects or seek additional capital funding in the form of grants or principal forgiveness loans, or new money warrant issues, to manage infrastructure investment within prevailing financial constraints.

8.9 Historical and Forecasted Billing Determinants

The Department's sewer service revenue forecasts are based upon billing data trends from FY 2018 through June 2023, as summarized from billing reports provided by the Department.[48] Approximately 90 percent of the Department's customers are billed for sewer service by BWWB and Bessemer, while the other 10 percent are billed directly by the County. Billing system data includes number of accounts by meter size, revenues by account, bill adjustments, and volume billed by increment (per CCF) by customer class. This information is delineated for residential and non-residential customer classes.[49]

8.9.1 Historical Account and Flow Data

Table 8-5 presents historical billing determinants for the County, including number of customer accounts, annual billable flows, and estimated billable flows per account for both residential and non-residential classes. Between FY 2018 and FY 2022, the Department experienced declines in annual billed sewer volumes and billable flows per customer account. The observed decline in billed sewer volumes was approximately 2.2 percent per year over this time period, from 18.2 million CCF in FY 2018 to 16.6 million CCF in FY 2022. The estimated billable volume in FY 2012 was 19.5 million[50], representing an approximate 1.5 percent decline per annum in billed volume over the last ten years. The total number of customer accounts increased from a monthly average of 140,581 in FY 2018 to an average of 145,396 in FY 2022, a compounded annual average increase of 0.8 percent. Despite this modest System growth, billable flows have decreased as a result of continued implementation of water conservation practices or devices and corresponding reductions to billable flows per customer account. Both residential and non-residential flows per account have decreased more than customer account growth, significantly dampening revenue increases associated with the annual 3.5 percent rate increases.

[48] Trend analysis prior to FY 2018 is challenged by data irregularities attributed to a change in BWWB's billing software vendor. Billing anomalies, to be investigated as outlined in Section 6.3.13, may also contribute to decreases in reported billable flows.

[49] BWWB billing information divides these two primary classes into various sub-categories of accounts such as single-family homes, apartments, commercial, industrial, motels, etc.

[50] Based on historical data as collected and summarized by the Department, see Table 8-5 in the 2013 Feasibility Study.

TABLE 8-5
Historical Billing Determinants, FY 2018 through FY 2022

Summary Billing Statistics[1]	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022[2]	CAGR[3]
Monthly Residential Accounts[4]	128,324	128,970	130,079	131,499	133,181	0.9%
Billed Flows (CCF)	10,071,466	10,021,728	9,616,353	9,139,839	9,124,190	-2.4%
Residential Flows per Acct (CCF)	**6.54**	**6.48**	**6.16**	**5.79**	**5.71**	**-3.3%**
Monthly Non-Residential Accounts[4]	12,257	12,154	12,149	12,158	12,215	-0.1%
Billed Flows (CCF)	8,124,049	8,284,817	6,568,817	7,046,286	7,512,488	-1.9%
Non-Residential Flows per Acct (CCF)	**55.23**	**56.80**	**45.06**	**48.30**	**51.25**	**-1.9%**
Total Monthly Accounts[4]	140,581	141,124	142,228	143,657	145,396	0.8%
Total Billed Flows (CCF)	18,195,515	18,306,545	16,185,170	16,186,125	16,636,678	-2.2%

1 - Based on historical data collected and summarized by the Department

2 - Includes reductions for anomolous residential and non-residential billed flows during a single month for one of the County's billing services providers

3 - Compounded annual growth rate from FY 2018 through FY 2022

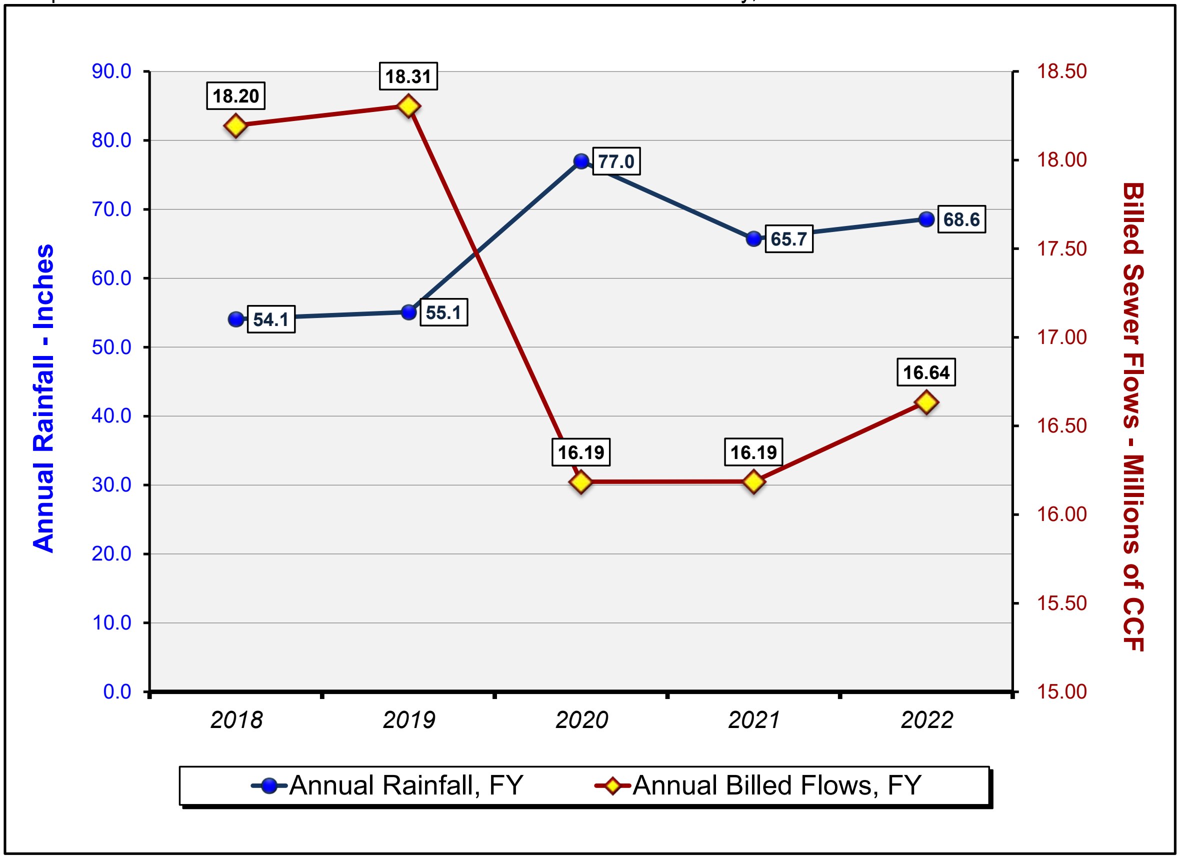
4 - The average number of total accounts billed

Historical billing determinant trends were influenced by the abnormal economic conditions imposed by the COVID-19 pandemic. During related lockdowns, many non-residential customers were forced to close or significantly alter business practices. As shown in Table 8-5, growth for this customer class was stagnant from FY 2019 through FY 2021, with a single year decrease in flows per non-residential account of more than 20 percent from FY 2019 to FY 2020. Other factors contributing to decreased billable volumes include price responses to both water and sewer rate increases.[51] Unlike flat monthly service rates, tiered volumetric rate structures like those employed by the Department for sewer service—or by BWWB for water service—provide a mechanism for customers to reduce monthly utility bills by reducing water consumption.

Weather-related factors may also significantly impact water demand and billed sewer volumes. Figure 8-3 juxtaposes annual rainfall patterns with billed sewer volumes in Jefferson County for the most recent five-year period, FY 2018 to FY 2022, to demonstrate this relationship. The data indicates a moderate correlation between annual rainfall and billed sewer flows, which are based on measured water demand. Higher rainfall tends to dampen water demand, which may lead to a decrease in the corresponding billable flow totals and the County's sewer rate revenues.

51 BWWB rates have increased annually by 4.9 percent in 2013, by 3.9 percent in 2014 and in 2015, by 4.9 percent in 2016, by 3.9 percent in 2017, by 2.9 percent in 2018, and by 3.9 percent in 2019, 2020 and 2022 (no rate increase was imposed in 2021) as reported in The Water Works Board of The City of Birmingham, Senior Taxable Water Revenue Refunding Bonds, Series 2021, Official Statement dated July 14, 2021, p. 30, and https://www.bwwb.org/WaterRates - accessed August 22, 2023.

FIGURE 8-3
Comparison of Annual Rainfall and Billed Sewer Flows in Jefferson County, FY 2018 – 2022

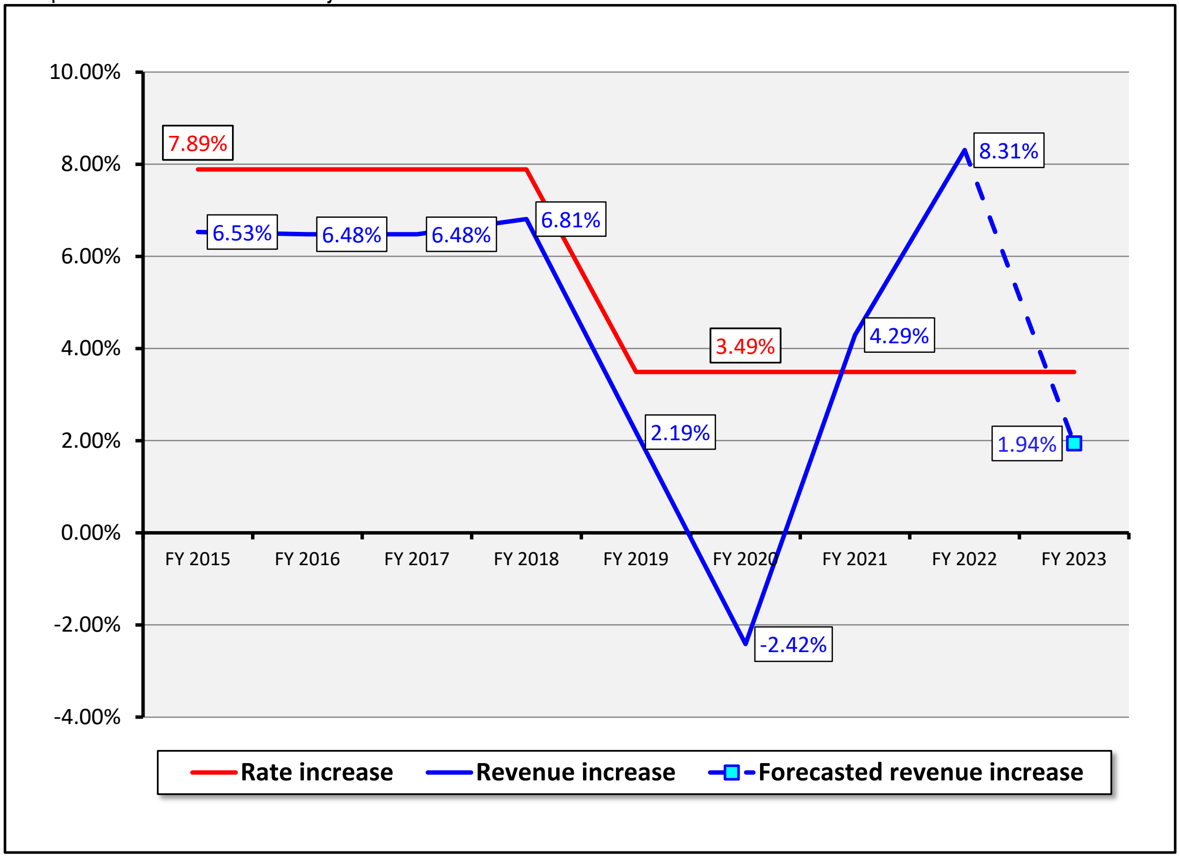


8.9.2 Historical Revenue Response to Rate Increases

Because of the varied influences and uncertainties regarding the rate revenue forecast, the Department has employed various revenue forecasting tools to understand the impact of billing trends on forecasted financial performance. Since 2013, the Department has regularly analyzed billing data to track and refine forecast assumptions. Customers' response to the pandemic and questions surrounding the permanence of changes in customer usage patterns or growth trends impose continuing uncertainties. Figure 8-4 provides a comparison of the County's adopted nominal rate increase percentages to annual rate *revenue* increases since FY 2015, the initial year of rate increases under the Plan of Adjustment.[52]

[52] To eliminate the impacts of certain end-of-year revenue reporting activities, the average of the combined revenue increase percentages for FY 2016 and FY 2017 is used for the comparison.

FIGURE 8-4
Comparison of Nominal Rate Adjustments with Actual Rate Revenue Increases



As indicated, observed annual revenue increases have been less than the nominal rate increase percentage in all historical years with the exception of the two most recent fiscal years (FY 2021 and FY 2022). This result is consistent with the Department's forecasts presented in the 2013 Feasibility Study, which reduced expected rate revenue levels to account for the elasticity of demand response to future rate increases, reduced flows per customer account, and other billing trends documented earlier in this section. Clearly, rate revenue levels in FY 2020—which decreased 2.4 percent despite a 3.5 percent rate increase—were affected by lockdowns and the associated macro-economic impacts of the pandemic. Extrapolating reported FY 2023 year-to-date rate revenues using the average monthly historical revenue generation pattern suggests that current year revenue performance will be about 3.7 percent higher than FY 2022, but FY 2023 rate revenue forecasts have been reduced to roughly 2 percent to account for the significantly higher increase in the most recently completed fiscal year and the overall variability of rate revenue increases in recent years (see Section 8.10.1.1).[53]

8.9.3 Projected Billing Determinants

Analysis of historical data trends and corresponding revenue impacts provides a basis for future projections of these same values. Table 8-6 summarizes various inputs used to establish billing determinants (accounts and billed sewer volumes) over the forecast period. Inputs are specified for

[53] Based on rate revenues reported through June 2023.

the first four years and the last six years of the forecast period, with estimates of the corresponding billing determinants reported at those same intervals.

TABLE 8-6
Projected Billing Determinants and Related Assumptions

	FY 2022 Actuals	*Annual FY23-26 Inputs*	FY 2026 Estimate	*Annual FY27-32 Inputs*	FY 2032 Estimate
Customer Accounts					
Residential	133,181	*1.00%*	138,589	*1.00%*	147,115
Non-Residential	12,215	*0.25%*	12,338	*0.25%*	12,524
Subtotal	145,396		150,926		159,639
Flows per Account (CCF)					
Residential	5.71	*-2.00%*	5.27	*0.00%*	5.27
Non-Residential	51.25	*-1.00%*	49.23	*-1.00%*	46.35
Elasticity of Demand Impacts					
Residential		*0.00%*		*0.00%*	
Non-Residential		*-0.35%*	48.54	*-0.35%*	44.74
Billed Sewer Flows (CCF)					
Residential	9,124,190		8,757,580		9,296,348
Non-Residential	7,512,488		7,186,663		6,724,229
Subtotal	**16,636,678**		**15,944,243**		**16,020,577**

Existing numbers of accounts by class (residential and non-residential) were drawn from billing data provided by the Department for each billing party. FY 2022 and billing data through June 2023 was used as the basis for the Department's forecasts of service revenues.[54] Consistent with historical account trends shown in Table 8-5, residential customer accounts are assumed to grow at 1 percent per year. Non-residential accounts are assumed to increase by 0.25 percent per year to reflect a return to pre-pandemic economic conditions for most commercial customers.

Flows per customer account for both residential and non-residential customers have seen rather significant annual changes. Declining water use per account is consistent with a nationwide trend among other utilities and can be attributed to the increased adoption of programs to conserve water and, to some degree, customers' response to increasing water and sewer rates. These recent historical statistics also reflect abnormal economic conditions caused by the pandemic.

Average billable residential flow per account in FY 2022 was 5.71 CCF (about 4,270 gallons) per month. This corresponds to monthly water use of approximately 5,000 gallons.[55] The Department's forecast assumes that residential water demand (and thereby flows per account) will continue to decline over the first half of the forecast period at 2 percent per year. However, this financial plan also

[54] There is an identified disruption in customer account trends associated with the implementation of new billing software at BWWB approximately five years ago. However, more recent historical billing data, presented in Table 8-5, provides several years of consistent reporting.

[55] The County's rate structure provides for a 15 percent reduction in metered water use for its determination of residential billable sewer flows to account for the fact that some water use does not result in return flows to the System.

recognizes that already-low average monthly water demands can only drop so much further before they reach minimum levels required for basic health and sanitary needs (a concept sometimes referred to as "demand hardening" in the water industry). It is therefore assumed that billable flows per account will reach an effective floor near 5.24 CCF—equivalent to roughly 4,600 gallons of water demand per month.[56]

For non-residential customers, flows per account are assumed to decrease at one percent per annum to reflect continuing price-independent water conservation efforts. Water consumption levels will also decline as commercial customers respond to approved sewer rate increases (an effect known as price elasticity of demand). A price elasticity of demand factor measures the incremental change in consumption given a certain change in the price level (sewer rates). Price elasticity factors of -1.00 for non-residential customers were applied based on projected increases of annual sewer rates. The price elasticity factor can be interpreted as the anticipated percent reduction in water use per account for every 10 percent increase in sewer rates. Adopted rate increases of 3.5 percent therefore yield an anticipated annual decline in non-residential flows per account of 0.35 percent.

8.9.4 Billed Sewer Flows

Forecasts of billed sewer volumes reflect the countervailing impacts of customer growth and decreasing water consumption per account. Billed sewer flows are anticipated to decrease 3.7 percent over the forecast period (-0.38 percent on a compounded annual basis), from 16.6 million CCF in FY 2022 to 16.02 million CCF in FY 2032. This metric exhibits a steeper decline in the first five years of the forecast period, reaching 15.94 million CCF in FY 2026, before estimated billable flows per residential account stabilize at assumed minimum levels of water demand.

8.10 Forecasted Operating Results

Table 8-7 presents cash flow projections for the System. A viable financial plan is developed to ensure compliance with the Department's policy to maintain minimum operating reserve balances of 150 days of annual operating expense[57], to achieve minimum 1.30x covenanted debt service coverage, and to finance projected capital expenditure requirements through revenue transfers to the Capital Improvement Fund (termed herein "PAYGO Financing of CIP").[58]

8.10.1 Revenues

Revenue forecasts include sewer rate revenues (including base charge and volumetric components), industrial waste surcharge revenues, grease and septage revenues, tax revenues, intergovernmental revenues, and other operating revenues.

[56] This 4.6 kgals per month is roughly 20 percent above the 50 gpcd usage level associated with requirements to meet basic health and sanitary needs, and roughly 2/3 the average daily indoor water usage in the U.S. (See US EPA website: "How We Use Water")

[57] Includes a 120 day minimum fund balance requirement in the Operating Reserve Fund and 30 day balance in the Revenue Account, as specified in the 2023 Indenture.

[58] These financial planning protocols have been employed across the forecast period to determine net revenues available for debt service under the proposed annual rate adjustment schedule, forecasted billing determinants, and O&M expense assumptions outlined in Section 6.

TABLE 8-7
Projected Sources and Uses of Cash

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Beginning Cash Balance [1]	*$ 116.3*	*$ 136.9*	*$ 112.3*	*$ 87.1*	*$ 62.9*	*$ 50.3*	*$ 49.0*	*$ 49.9*	*$ 51.6*	*$ 53.4*
Source of Funds										
Rate Revenues[2]	243.0	250.0	257.1	264.4	273.4	282.5	292.0	301.8	312.0	322.5
IWG&S Revenues	6.4	6.6	6.8	7.0	7.3	7.6	7.8	8.1	8.4	8.7
Taxes	7.3	7.5	7.6	7.8	7.9	8.1	8.3	8.4	8.6	8.8
Intergovernmental	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other Revenues[3]	18.8	18.0	16.6	15.5	14.8	14.0	13.5	13.4	13.2	13.2
Total Sources	**$ 275.6**	**$ 282.1**	**$ 288.3**	**$ 294.9**	**$ 303.5**	**$ 312.2**	**$ 321.7**	**$ 331.8**	**$ 342.2**	**$ 353.2**
Uses of Funds										
Operating Expenses	$ 95.8	$ 95.6	$ 99.1	$ 101.4	$ 105.0	$ 107.9	$ 111.7	$ 114.4	$ 116.8	$ 120.5
2013 Warrants Debt Service[4]	84.2	-	-	-	-	-	-	-	-	-
2023 Warrants Debt Service[5]	-	136.1	139.4	142.7	146.1	149.6	153.1	156.8	160.5	164.3
Additional Warrants Debt Service[6]	-	-	-	-	-	-	-	-	-	-
PAYGO Financing of CIP[7]	75.0	75.0	75.0	75.0	65.0	56.0	56.0	59.0	63.0	68.0
Total Uses	**$ 255.0**	**$ 306.7**	**$ 313.5**	**$ 319.1**	**$ 316.1**	**$ 313.5**	**$ 320.8**	**$ 330.2**	**$ 340.4**	**$ 352.8**
Ending Cash Balance	*$ 136.9*	*$ 112.3*	*$ 87.1*	*$ 62.9*	*$ 50.3*	*$ 49.0*	*$ 49.9*	*$ 51.6*	*$ 53.4*	*$ 53.8*

1 - In millions of dollars; some calculation discrepancies may occur due to rounding
2 - Gross billed revenues
3 - Includes impact fees, investment income, bad debt charges, and other miscellaneous revenue sources
4 - In bond year dollars; reflects the impact of the 2023 refunding
5 - The projected debt service (in bond year dollars) on the Series 2023 Warrants, which will refund the Series 2013 Warrants (see Section 8.10.3)
6 - At this time, the Department's capital financing plan does not anticipate the issuance of additional sewer warrants during the forecast period (see Section 8.8)
7 - Net operating revenues of the System that are not used to pay O&M or debt service are transferred to the Capital Improvement Fund to fund projects

8.10.1.1. Rate Revenues

Rate revenue projections anticipate that sewer customers will continue to reduce water consumption over the forecast period given continuing economic dynamics, national trends, and lasting responses to approved rate increases. Billable flows are reduced based on price-independent and price elasticity of demand factors, as described earlier in this section and summarized in Table 8-6. Along with the sewer rate adjustments[59], these assumptions provide the basis for rate revenue forecasts.

In particular, categorical increases are estimated for the four primary components of rate revenues based on the response of each revenue category to billing determinant assumptions. The Department's rate revenues are estimated to be comprised of residential base revenues (14.8 percent), residential volumetric revenues (27.1 percent), non-residential base revenues (3.0 percent), and non-residential volumetric revenues (55.1 percent). Residential and non-residential base charge revenues are not impacted by elasticity of demand or price-independent assumptions of billable flows per customer account. These two categories are therefore anticipated to increase at the pace of customer growth plus the assumed 3.49 percent annual rate increase. For residential customers' accounts, which are expected to grow at 1 percent per year, the resulting increase in base charge revenues is 4.49 percent as shown in Table 8-8. Non-residential customers are expected to grow at 0.25 percent per year which yields an expected 3.74 percent annual base charge revenue increase for that customer class.

TABLE 8-8
Assumed Growth Rates of System Rate Revenue Components

Rate Revenue Category	Categorical Share of Rate Revenues	Estimated Annual Change (FY 2024-26)	Estimated Annual Change (FY 2027-32)
Residential base charges	14.8%	4.49%	4.49%
Residential volumetric charges	27.1%	2.49%	4.49%
Non-Residential base charges	3.0%	3.74%	3.74%
Non-Residential volumetric charges	55.1%	2.39%	2.39%
System Subtotal[1]	**100.0%**	**2.78%**	**3.35%**

1 - Displays the system-wide CAGR based on the contribution of each rate revenue component

For volumetric rate categories, customer growth assumptions are offset by assumed declines in billable flows per account. For example, residential volumetric charges would be expected to increase 2.49 percent during the first five years of the forecast period which is a combination of customer growth (1 percent), rate adjustments (3.49 percent), and reductions in billable flows per account (-2 percent). Further reductions in billable flows per account are not included for residential customers in the final five years of the forecast period for the reasons described earlier (see Section 8.9.3).

Volumetric revenues from non-residential customers, by far the largest component of the Department's rate revenues, are expected to increase 2.39 percent per year during the forecast period. This factor reflects annual growth (0.25 percent), rate adjustments (3.49 percent), price-independent reductions in billable flows per account (-1 percent), and price elasticity impacts (-0.35

59 Planned sewer rate adjustments align to those delineated in the rate resolution adopted in conjunction with the County's bankruptcy Plan of Adjustment (see Section 8.5).

percent). Together, the individual growth factors for each rate revenue component result in an estimated compounded growth rate of 2.78 percent for System rate revenues from FY 2024 through FY 2026 and 3.35 percent through the remainder of the forecast period.

The Department continually monitors billing reports and analyzes revenue performance during the fiscal year to compare actual to anticipated totals. Through June 2023 (the first nine months of the current fiscal year), unadjusted rate revenue billings have totaled $179.0 million. Extrapolating this value to an annual total for FY 2023 results in a rate revenue estimate of approximately $246.5 million. This revenue total would represent a 3.7 percent increase over FY 2022 billed rate revenue levels, but this financial plan instead incorporates a 1.94 percent rate revenue increase for FY 2023 ($243.0 million) to reflect forecasting uncertainties associated with recent rate revenue performance (see Figure 8-4) and ongoing recovery of pandemic-related economic challenges.

As a result of the proposed rate increase schedule and billing determinant assumptions, annual rate revenues are forecast to increase from $243.0 million in FY 2023 to $322.5 million in FY 2032, an increase of 32.7 percent.

8.10.1.2. Industrial Waste, Grease and Septage Charges

Industrial Waste surcharge revenues are projected based on assumptions that contributed loadings (e.g., pounds of BOD, TSS, FOG, and other parameters)[60] will remain constant over the forecast period. This assumption reflects potentially countervailing impacts of general, though limited, commercial growth and responses to surcharge level increases. Industrial Waste surcharges (by constituent) and grease and septage charges (IWG&S) are subject to annual sewer rate adjustments. IWG&S revenues are projected to increase from $6.4 million to $8.7 million over the forecast period.

8.10.1.3. Taxes and Intergovernmental Revenues

Other revenue categories include ad valorem property and motor vehicle taxes as well as the Department's share of a business privilege tax collected by the County.[61] Ad valorem tax revenues are projected to increase 2 percent per year, from $7.3 to $8.8 million over the forecast period. Intergovernmental revenues were approximately $112,000 in FY 2022 and are expected to increase 0.75 percent per annum.

8.10.1.4. Other Revenues

Other revenues of the Department consist primarily of impact fee revenues but also include other revenue items such as grease control permits, investment income, offsetting charges for bad debt, reimbursements, and various other miscellaneous revenues. Impact fees are designed to recover the costs to extend service or provide capacity to new customers of the System and were approximately $9.4 million in FY 2021 and $13.2 million in FY 2022. For forecasting purposes, FY 2023 impact fees were assumed to be $10.2 million and escalated at two percent per annum thereafter. Other than investment income and charges for bad debt, the forecast basis for other revenue categories is typically the arithmetic average of actual results for prior fiscal years—with adjustments for data outliers (if necessary). These other revenue categories are assumed to increase at two percent per year during the forecast period.

[60] Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), Fats, Oils and Grease (FOG)

[61] This latter revenue stream is classified as Intergovernmental Revenue.

Investment income has ranged from $4.5 million (FY 2021) to $7.5 million (FY 2020) over the last five fiscal years. Investment income is estimated to be $7.9 million in FY 2023 and is forecast based on the beginning and ending balances of available reserves within the Department's Capital Improvement Fund. Projections of investment income are less than $1 million annually beyond FY 2029 to reflect the Department's use of a significant amount of reserves to meet capital requirements early in the forecast period.

Charges for bad debt, which are now classified as other revenues,[62] are based on projected rate revenues and an assumed level of revenue collections. These charges are also based on assumptions regarding the contractual responsibility for collections that is specified in the billing services agreement with BWWB. Under the recently negotiated arrangement, BWWB charges the Department a varying percent of gross rate revenues for billing services but also accepts the collection risk for billed accounts as part of this payment. The Department's collection risk is therefore limited to sewer service revenues that are billed directly by the County or those that are billed by Bessemer. For forecasting purposes, this is conservatively assumed to be 20 percent of total projected billed revenues through the forecast period.[63]

The Department estimates that the rate of uncollectible accounts will be 2.0 percent per year, which is consistent with historical (pre-pandemic) experience and anticipated future collection efforts of the Department. Charges for bad debt are expected to range from $0.97 million (FY 2023) to $1.29 million (FY 2032) over the forecast period. Though some reduction may be anticipated, no adjustment of projected bad debt expense has been incorporated to reflect impacts of the County's planned customer assistance program.

Other revenue items are expected to decrease from $18.8 million in FY 2023 to $13.2 million in FY 2032, a change of -29.8 percent. The decrease can be attributed to increasing charges for bad debt as well as reductions in forecasted investment income. In FY 2032, other revenues consist of $12.2 million of impact fee revenues, -$1.3 million for bad debt charges, and $2.3 million in other miscellaneous revenue categories. Investment income is not anticipated to be a significant revenue source by the end of the forecast period.

8.10.1.5. Total System Revenues

In FY 2032, projected total System revenues of $322.5 million are comprised of sewer rate revenues (90.1 percent), IWG&S revenues (2.4 percent), taxes (2.6 percent), intergovernmental charges (less than 0.1 percent), and other revenues (4.9 percent). Total System revenues, under the customer growth and billable flow assumptions delineated above, are projected to increase 28.1 percent, from $275.6 million in FY 2023 to $353.2 million in FY 2032.

8.10.2 Operating Expenses

System operating expenses are grouped into various categories as described in Section 6. Combined operating and maintenance expense for the System is projected to increase 25.7 percent, from $95.8 million in FY 2023 to $120.5 million by FY 2032. This increase reflects the application of cost escalation factors by budget category, development and implementation of a low-income customer assistance program, and achievement of operational efficiencies as discussed in Section 6.

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62 Beginning in FY 2021, the County's auditors reclassified this revenue category—among several others—from Service Revenues to Other Operating Revenues.

63 Over the last four fiscal years, non-BWWB billed revenues has ranged from 15 percent to 18 percent of total billed rate revenues.

8.10.3 Debt Service

Debt service on the 2023 Sewer Warrants is projected to range from $84.2 million in FY 2023 to $164.3 million in FY 2032. Debt service projections for the 2023 Sewer Warrants assume market rates as of August 11, 2023, plus an additional conservative amount of basis points and a maturity in 2053—matching the final maturity of the existing 2013 Sewer Warrants. Annual debt service begins principal amortization in the first year of the debt service period, increases gradually over the first 14 years, and levels at $189.2 million thereafter (FY 2038 and beyond).

With the issuance of the refunding 2023 Sewer Warrants, senior lien debt service is expected to increase from $84.2 million in FY 2023 to $164.3 million in FY 2032, an increase of 95.3 percent. Notably, the debt service structure of the existing 2013 Sewer Warrants required a $99.7 million increase (roughly 118 percent) in annual debt service over the same time period.

8.10.4 Current Revenue Financing of Capital Improvements

As shown in Table 8-4, the financing plan assumes that $667 million will be transferred from the Department's Revenue Account to the Capital Improvement Fund over the forecast period to fund future capital expenditures between FY 2023 and FY 2032 (after exhaustion of available capital reserves). Current revenue financing amounts vary by year based on the projected performance of the Revenue Account (including minimum balance requirements) but are expected to range between $56 million and $75 million. The Department's capital financing plan provides for achievement of debt service coverage and fund balances in excess of established performance targets.

8.10.5 Minimum Balance Requirement

To provide adequate working capital for the Department's operations, the 2023 Indenture provides for the Operating Reserve Fund to maintain minimum cash balances equal to 120 days of annual operating expense and the Revenue Account to maintain minimum cash balances equal to 30 days of annual operating expense (150 days on a combined fund basis). At the beginning of FY 2023, the combined minimum fund balance requirement would have been $39.2 million based on 150 days of O&M and actual FY 2022 O&M expense of $94.1 million. The actual combined cash balance of the System at the beginning of FY 2023 was $116.3 million, or approximately 445 days of O&M.

The projected ending cash balance for the Department, on a combined basis[64], ranges from $49.0 million to $136.9 million over the forecast period and reflects the effect of the County's planned rate increases, implementation and funding of a customer assistance program, and debt service attributed to refunding of the 2013 Sewer Warrants.

8.11 Projected Debt Service Coverage

Table 8-9 presents the projected performance of the Department relative to its targeted debt service coverage metrics, including projected net operating revenues, expenses, debt service, and debt service coverage through FY 2032.

Adjustments are made to total revenues to exclude tax and intergovernmental revenue that are not pledged revenues of the System. However, tax revenues may be used to offset operating expenses for

64 Includes balances of the Revenue Account and Operating Reserve Fund.

purposes of establishing debt service coverage. Annual net operating revenues available to pay debt service increase 29.4 percent, from $179.7 million in FY 2023 to $232.6 million in FY 2032.

Debt service coverage is evaluated in terms of cash flows of the System Revenue Fund. For new debt issues, the County's 2023 Indenture has a minimum parity coverage requirement of 1.30x average annual debt service for the 2023 Sewer Warrants and parity debt. Debt service coverage is projected to range from 2.13x in FY 2023, to 1.35x (FY 2025 – FY 2027) and increase gradually to 1.41x by FY 2032. The projected coverage ratio demonstrates that the Department's capital financing plan will meet minimum operating fund balance requirements and exceed covenanted debt service coverage levels. Per the County's informal financial planning protocol, the forecast contemplates sustaining a minimum 1.35x debt service coverage over the forecast period.

8.12 Post-FY 2032 Capital Requirements

Tables 8-7 and 8-9 demonstrate that the projected flow of funds will be adequate to meet debt service obligations, fund projected operating expenses, and finance capital improvement requirements over the FY 2023 to FY 2032 forecast period. Like other large sewer systems in the U.S., substantial capital improvement requirements are expected beyond FY 2032 to address regulatory requirements and continue System renewal and rehabilitation. Additional rate increase requirements above the approved 3.49 percent per annum increases planned for the forecast period, modifications to the Department's capital program, securing additional capital funding through grants or principal forgiveness loans, issuance of new money sewer warrants, or implementation of stricter cost control measures may be needed beyond FY 2032 to enable financing of prospective capital improvement requirements.

8.13 Forecast Conservatisms

The financial performance forecast presented herein consistently employs conservative assumptions to reinforce our fundamental conclusions regarding the feasibility of the County's 2023 Sewer Warrants. These conservatisms impact each major forecast component including service revenues, operating expenses, capital improvement project requirements, and debt service requirements as outlined below:

- *Service Revenues*. Forecasting service revenues proved particularly challenging due to acute uncertainties related to economic recovery from the pandemic, peculiarities in billing data, and exhibited atypical declines of per account billable flows for both residential and non-residential customers. Despite planned rate increases of 3.49 percent throughout the forecast period, rate revenues are assumed to increase 2.78 percent from FY 2024 through FY 2026 to reflect tepid non-residential account growth and continuing declines of billable flows per account for all customers. These assumptions are particularly conservative insofar as account growth may be positively influenced by both economic growth and remediation of billing anomalies. Billable volumes are already relatively low such that a more pronounced degree of demand hardening than incorporated in the forecast may be expected.

TABLE 8-9
Projected Debt Service Coverage

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Total Service Revenue[1]	$ 249.4	$ 256.6	$ 263.9	$ 271.4	$ 280.7	$ 290.0	$ 299.8	$ 309.9	$ 320.3	$ 331.1
Other Operating Revenue	18.8	18.0	16.6	15.5	14.8	14.0	13.5	13.4	13.2	13.2
Total Operating Revenue[2]	$ 268.2	$ 274.5	$ 280.6	$ 287.0	$ 295.5	$ 304.0	$ 313.3	$ 323.3	$ 333.5	$ 344.3
Operating Expenses	95.8	95.6	99.1	101.4	105.0	107.9	111.7	114.4	116.8	120.5
- Tax Revenue[3]	(7.3)	(7.5)	(7.6)	(7.8)	(7.9)	(8.1)	(8.3)	(8.4)	(8.6)	(8.8)
Total Operating Expense	$ 88.5	$ 88.1	$ 91.5	$ 93.6	$ 97.1	$ 99.8	$ 103.4	$ 105.9	$ 108.2	$ 111.7
Net Revenue Available for DS	**$ 179.7**	**$ 186.4**	**$ 189.1**	**$ 193.4**	**$ 198.4**	**$ 204.2**	**$ 209.9**	**$ 217.3**	**$ 225.3**	**$ 232.6**
2013 Sewer Warrants Debt Service[4]	84.2	-	-	-	-	-	-	-	-	-
2023 Sewer Warrants Debt Service[5]	-	136.1	139.4	142.7	146.1	149.6	153.1	156.8	160.5	164.3
Additional Sewer Warrants Debt Service[6]	-	-	-	-	-	-	-	-	-	-
Total Debt Service[7]	84.2	136.1	139.4	142.7	146.1	149.6	153.1	156.8	160.5	164.3
Projected Debt Service Coverage[8]	**2.13**	**1.36**	**1.35**	**1.35**	**1.35**	**1.36**	**1.37**	**1.38**	**1.40**	**1.41**

1 - All numbers in millions of dollars; slight calculation discrepancies may exist due to rounding

2 - Tax Revenue and Intergovernmental Revenue are excluded from pledged revenues

3 - Tax Revenue may not be included as pledged revenues to establish debt service coverage but may be shown as an offset to System operating expenses

4 - In bond year dollars; reflects the impact of the 2023 refunding

5 - The projected debt service (in bond year dollars) on the Series 2023 Warrants, which will refund the Series 2013 Warrants (see Section 8.10.3)

6 - At this time, the Department's capital financing plan does not anticipate the issuance of additional sewer warrants during the forecast period (see Section 8.8)

7 - Debt service coverage presented in bond year dollars, reflects the impact of refunding the Series 2013 Sewer Warrants

8 - Debt service coverage metrics rounded down to the second significant digit

- *Operating Expenses*. The Department's operating expense forecast assumes continuation of billing service expense levels above industry norms throughout the forecast period. Significant billing costs were well above those contemplated during the County's exit from bankruptcy in 2013. While the County and BWWB have completed contract renegotiations to extend the terms of service through FY 2028, latter year billing services expenses may decline relative to that forecasted in this financial plan either through re-negotiated services or the County's implementation of less expensive billing solutions.
- *Capital Project Expenditure Requirements*. The financial forecast provides funding for approximately $1.033 billion in capital improvement program expenditure from FY 2023 through FY 2032. Though these expenditures are necessary to meet the County's identified infrastructure needs, actual capital project spending may lag because of project delivery constraints caused by various factors like recent atypical construction market conditions. While the Department's planned accelerated pace of project delivery may be practical with recent staffing and program management additions, there is the potential for actual capital spending to lag forecasted spending due to post-pandemic construction market conditions beyond the Department's control.
- *Debt Service Requirements*. The refunding of the 2013 Sewer Warrants is assumed to be executed through a current refunding transaction priced at interest rates 35 basis points above market rates as of August 2023. In the event that market rates are below this conservative assumption, debt service requirements will be lower than that forecast.

In the event that actual results related to these conservatisms are better than those assumed, projected financial performance (fund balances, debt service coverage, and capital financing capacity) will be stronger—all else being equal—than that presented herein, reinforcing the financial feasibility of the County's 2023 Sewer Warrants.

8.14 Financial Projection Summary

Projections of revenues, expenses, debt service, and debt service coverage indicate the financial feasibility of the Department's projected operating expenses and ten-year capital improvement plan, including its funding of Consent Order projects and needed investments in System operational efficiency and reliability. The projection of the financial performance of the System for FY 2023 through FY 2032 is summarized as follows:

- The County has demonstrated a strong commitment to the rate adjustment schedule outlined in its Plan of Adjustment. The resulting net revenues of the System, whether in the form of existing reserves or future PAYGO financing amounts, enable financing of the Department's capital investment requirements. The monthly bill of a residential customer[65] of the System with billable sewer flows of 5 CCF per month will increase from $68.50 in FY 2023 to $93.66 in FY 2032, an increase of 36.7 percent.
- Total System revenues are projected to increase 28.1 percent, from $275.6 to $353.2 million between FY 2023 and FY 2032 primarily as a result of contemplated sewer rate increases and

[65] Assumes a residential customer with a 5/8-inch meter.

despite billing determinant trends that result in forecasted per annum rate revenue increases that are lower than nominal rate increase percentages.

- The Department's O&M expenses, reflecting application of cost escalation factors by budget category and implementation of a customer assistance program, are projected to increase 25.7 percent over the forecast period, from $95.8 million in FY 2023 to $120.5 million by FY 2032.
- Total annual expenses, including debt service associated with the County's 2023 Sewer Warrants are projected to increase by 58.2 percent, from $180.0 million in FY 2023 to $284.8 million in FY 2032.
- The Department expects to generate a total of $667 million in net operating revenues that may be used to finance capital requirements during the forecast period, with annual PAYGO transfers ranging between $56 and $75 million.
- The Department's capital improvement program reflects priority needs of the System and, after adjusting for inflation, is expected to require expenditures of $1,033.0 million between FY 2023 and FY 2032. These capital requirements will be funded from existing reserves ($346.3 million, 33.2 percent); current revenues transferred to the Department's Capital Improvement Fund ($667.0 million, 63.9 percent); and ARPA funds grants ($30.0 million, 2.9 percent).[66]
- Net revenues of the Department are projected to be sufficient to meet future debt service obligations, including a 1.30x parity coverage requirement. Debt service coverage is projected to range from 2.13x in FY 2023, to 1.35x (FY 2025 – FY 2027) and increase gradually to 1.41x by FY 2032. The projected coverage ratio demonstrates that the Department's capital financing plan will meet minimum operating fund balance requirements and exceed covenanted debt service coverage levels.

The Department is forecasted to meet or exceed financial performance targets even though the financial plan consistently employs conservative assumptions. In the event that actual results are better than these conservatisms, projected financial performance (fund balances, debt service coverage, and capital financing capacity) will be stronger than that presented herein.

[66] After making the specified PAYGO transfers from the Department's Revenue Fund, approximately $10.3 million will remain in the Capital Improvement Fund at the end of FY 2032 to fund capital projects beyond the forecast period.

9.0 Findings and Conclusions

Galardi Rothstein Group, using information provided by the County and the Department's program management consultant, have conducted a detailed review of the System and its historical financial performance and developed projections of revenues, operating expenses, and capital project expenditures for the forecast period FY 2023 through FY 2032. These projections have been used to evaluate the financial feasibility of the 2023 Sewer Warrants and project the financial performance of the System with their issuance. These projections result in the following general findings and conclusions:

1. Though the County's service rates are among the highest in the United States among major metropolitan areas, they are reasonable and adequate to recover System revenue requirements. Planned 3.5 percent annual rate increases over the forecast period will exacerbate the burden imposed on County ratepayers. The County's rate design and planned customer assistance program will mitigate resultant water affordability challenges.
2. Conservatively projected revenue generation is dampened by limited growth in the numbers of accounts served, along with continuing declines in per account water consumption due to both price-induced and non-price factors impacting consumption patterns.
3. The Department made significant efforts to manage O&M expenses and staffing over the historical reporting period, from FY 2014 through FY 2022. Significantly increased external Billing Services expenses due to BWWB contract terms account for the entirety of expense levels above those forecasted in the 2013 Feasibility Study. The Department's projected O&M expenses reflect application of cost escalation factors by budget category and implementation of the customer assistance program.
4. Capital improvement program spending from FY 2013 through FY 2022 averaged $46.0 million and was $305.8 million less than projected in the 2013 Feasibility Study due both to initial delays in installing project delivery capacity and, most significantly, negotiated deferrals of WRF upgrade requirements. Forecasted funding of project expenditures average more than $103 million per annum over the FY 2023 to FY 2032 forecast period, representing substantial yet manageable increases in expenditures. These expenditures are to be funded nearly entirely from existing capital reserves and PAYGO funding; no additional senior lien new money debt is currently anticipated.
5. Projected cash-flows provide for maintenance of combined operating reserves equal to 150 days of O&M expense[67] and achievement of required debt service coverage of 1.30x.
6. Given that the 2023 Sewer Warrants debt service schedule contemplates increasing requirements that will consume a substantial share of System revenues, notwithstanding conservative forecast assumptions, additional rate increases beyond those contemplated in this Feasibility Study may be required to finance prospective capital improvement requirements beyond FY 2032.

[67] Includes a 120 day minimum fund balance requirement in the Operating Reserve Fund and 30 day balance in the Revenue Account, as specified in the 2023 Indenture.

7. The financial projections reported herein demonstrate that the County can support the 2023 Sewer Warrants throughout the forecast period from net operating revenues of the System. Debt service coverage is projected to average 1.45x over the forecast period, ranging from 1.35x to 2.13x. By the final year of the forecast period, the County is projected to achieve coverage of 1.41x, above the minimum 1.30x requirement set forth in the 2023 Indenture.
8. The financial performance forecast presented herein employs many conservative assumptions to reinforce fundamental conclusions regarding the feasibility of the 2023 Sewer Warrants. In the event that actual results are better than these conservatisms, projected financial performance (fund balances, debt service coverage, and capital financing capacity) will be stronger than that presented herein.

Appendix: Projected Rate Schedule

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Base Charge									
5/8 inch meter	$ 25.01	$ 25.89	$ 26.80	$ 27.74	$ 28.71	$ 29.72	$ 30.76	$ 31.84	$ 32.96
3/4 inch meter	27.50	28.46	29.46	30.49	31.56	32.67	33.82	35.01	36.24
1 inch meter	34.97	36.20	37.47	38.78	40.14	41.55	43.01	44.52	46.08
1 1/2 inch meter	44.98	46.55	48.18	49.87	51.62	53.43	55.30	57.23	59.23
2 inch meter	72.46	74.99	77.61	80.32	83.13	86.04	89.05	92.16	95.38
3 inch meter	274.68	284.27	294.20	304.47	315.10	326.10	337.49	349.27	361.46
4 inch meter	349.60	361.81	374.44	387.51	401.04	415.04	429.53	444.53	460.05
6 inch meter	524.39	542.70	561.65	581.26	601.55	622.55	644.28	666.77	690.05
8 inch meter	724.13	749.41	775.57	802.64	830.66	859.66	889.67	920.72	952.86
10 inch meter	923.87	956.12	989.49	1,024.03	1,059.77	1,096.76	1,135.04	1,174.66	1,215.66
Residential Volume Charge, per CCF									
0 - 3 CCF	$ 7.52	$ 7.79	$ 8.07	$ 8.36	$ 8.66	$ 8.97	$ 9.29	$ 9.62	$ 9.96
4 - 6 CCF	11.68	12.09	12.52	12.96	13.42	13.89	14.38	14.89	15.41
7 CCF & Above	13.33	13.80	14.29	14.79	15.31	15.85	16.41	16.99	17.59
Non-Residential Volume Charge, per CCF									
All CCF	13.12	13.58	14.06	14.56	15.07	15.60	16.15	16.72	17.31
Residential Bill[1]	***$ 70.93***	***$ 73.44***	***$ 76.05***	***$ 78.74***	***$ 81.53***	***$ 84.41***	***$ 87.39***	***$ 90.48***	***$ 93.66***
Rate Increase	*3.49%*	*3.49%*	*3.49%*	*3.49%*	*3.49%*	*3.49%*	*3.49%*	*3.49%*	*3.49%*

1 - The monthly bill for residential accounts of the System with billable flows of 5 CCF and a 5/8 inch meter

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APPENDIX F
FORM OF APPROVAL OPINION OF BOND COUNSEL TO THE COUNTY

(Letterhead of Balch & Bingham LLP, Bond Counsel)

___________ __, 2024

Holders of the Warrants referred to below

Re: $______________Sewer Revenue Warrants, Series 2024, issued by Jefferson County, Alabama

Ladies and Gentlemen:

We have acted as bond counsel to Jefferson County, Alabama, a political subdivision of the State of Alabama (the "Issuer"), in connection with the issuance of $_______________ aggregate principal amount of Sewer Revenue Warrants, Series 2024 (the "Warrants"). In such capacity, we have examined such law and such certified proceedings, certifications, and other documents as we have deemed necessary to render this opinion.

The Warrants are issued pursuant to Title 11, Chapter 28 of the Code of Alabama 1975 (the "Enabling Law") and that certain Trust Indenture dated January __, 2024 between the Issuer and Regions Bank, as trustee (the "Indenture"). Pursuant to the Indenture, the Issuer has pledged the Annual Net Income (as such term is defined in the Indenture) collected from the ownership or operation of the sanitary sewer system owned and operated by the Issuer as well as other funds provided for in the Indenture for the payment of principal of, premium (if any) and interest on the Warrants when due.

Regarding questions of fact material to our opinion, we have relied on the representations of the Issuer contained in the Indenture, and in the certified proceedings and other certifications of public officials and others furnished to us, without undertaking to verify the same by independent investigation.

Based on the foregoing, we are of the opinion that, under existing law:

1. The Issuer is validly existing as a political subdivision of the State of Alabama with the power to enter into the Indenture, perform the agreements on its part contained therein, and issue the Warrants.

2. The Indenture has been duly authorized by the Issuer and constitutes a valid and binding obligation of the Issuer enforceable against the Issuer in accordance with its terms.

3. The Warrants have been duly authorized and executed by the Issuer, and are valid and binding limited obligations of the Issuer, payable solely from Annual Net Income (as such term is defined in the Indenture) and other funds provided therefor in the Indenture.

4. Interest on the Warrants is excludable from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations; however, as a result of amendments to the Internal Revenue Code (the "Code") enacted pursuant to the Inflation Reduction Act of 2022, interest on the Warrants may be taken into account for purposes of the alternative minimum tax imposed by Section 55(b)(2) of the Code on "applicable corporations", as defined in Section 59(k) of the Code. The opinion set forth in the preceding sentence is subject to the condition that the Issuer complies with all requirements of the Internal Revenue Code of 1986, as amended, that must be satisfied subsequent to the issuance of the Warrants in order that the interest thereon be, and continue to be, excludable from gross income for federal income tax purposes. The Issuer has covenanted to comply with all such requirements. Failure to comply with certain of such requirements may cause interest on the Warrants to be included in gross income for federal income tax purposes retroactively to the date of issuance of the Warrants.

5. Interest on the Warrants is exempt from income taxation in the State of Alabama.

The rights of the owners of the Warrants and the enforceability of the Warrants and the Indenture are limited by bankruptcy, insolvency, reorganization, moratorium, and other similar laws affecting creditors' rights generally, and by equitable principles, whether considered at law or in equity.

We express no opinion herein regarding the accuracy, adequacy, or completeness of the Preliminary Official Statement or the Official Statement relating to the Warrants (other than the form of our legal opinion set forth in Appendix F) or regarding any federal bankruptcy court proceedings involving the Issuer. Further, we express no opinion regarding tax consequences arising with respect to the Warrants other than as expressly set forth herein.

This opinion is limited to the matters stated herein, and no opinion may be implied or inferred beyond the matters expressly stated herein. This opinion is given as of the date hereof, and we assume no obligation to update or supplement this opinion to reflect any facts or circumstances which may change or which may hereafter come to our attention or to reflect any changes in the law that may hereafter occur.

Very truly yours,

APPENDIX G
FORM OF CONTINUING DISCLOSURE AGREEMENT

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DISCLOSURE DISSEMINATION AGENT AGREEMENT

This Disclosure Dissemination Agent Agreement (the "Disclosure Agreement"), dated ______ __, 2024, is executed and delivered by Jefferson County, Alabama (the "County") and Digital Assurance Certification, L.L.C., as exclusive Disclosure Dissemination Agent (the "Disclosure Dissemination Agent" or "DAC") for the benefit of the Holders (hereinafter defined) of the Warrants (hereinafter defined) and in order to assist the County in processing certain continuing disclosure with respect to the Warrants in accordance with Rule 15c2-12 of the United States Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time (the "Rule").

The services provided under this Disclosure Agreement solely relate to the execution of instructions received from the County through use of the DAC system and do not constitute "advice" within the meaning of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Act"). DAC will not provide any advice or recommendation to the County or anyone on the County's behalf regarding the "issuance of municipal securities" or any "municipal financial product" as defined in the Act and nothing in this Disclosure Agreement shall be interpreted to the contrary. DAC is not a "Municipal Advisor" as such term is defined in Section 15B of the Securities Exchange Act of 1934, as amended, and related rules.

SECTION 1. Definitions. Capitalized terms not otherwise defined in this Disclosure Agreement shall have the meaning assigned in the Rule or, to the extent not in conflict with the Rule, in the Official Statement (hereinafter defined). The capitalized terms shall have the following meanings:

"Annual Filing Date" means the date, set in Sections 2(a) and 2(f) hereof, by which the Annual Report is to be filed with the MSRB.

"Annual Financial Information" means annual financial information as such term is used in paragraph (b)(5)(i) of the Rule and specified in Section 3(a) of this Disclosure Agreement.

"Annual Report" means an Annual Report containing Annual Financial Information described in and consistent with Section 3 of this Disclosure Agreement.

"Audited Financial Statements" means the annual financial statements of the County for the prior fiscal year, certified by an independent auditor as prepared in accordance with generally accepted accounting principles or otherwise, as such term is used in paragraph (b)(5)(i)(B) of the Rule and specified in Section 3(b) of this Disclosure Agreement.

"Certification" means a written certification of compliance signed by the Disclosure Representative stating that the Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure delivered to the Disclosure Dissemination Agent is the Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure required to be submitted to the MSRB under this Disclosure Agreement. A Certification shall accompany each such document submitted to the Disclosure Dissemination Agent by the County and include the full name of the Warrants and the 9-digit CUSIP numbers for all Warrants to which the document applies.

"Disclosure Dissemination Agent" means Digital Assurance Certification, L.L.C, acting in its capacity as Disclosure Dissemination Agent hereunder, or any successor Disclosure Dissemination Agent designated in writing by the County pursuant to Section 9 hereof.

"Disclosure Representative" means the Chief Financial Officer or the Director of Finance of the County or his or her designee, or such other person as the County shall designate in writing to the Disclosure Dissemination Agent from time to time as the person responsible for providing Information to the Disclosure Dissemination Agent.

"Failure to File Event" means the County's failure to file an Annual Report on or before the Annual Filing Date.

"Financial Obligation" as used in this Disclosure Agreement is defined in the Rule, as may be amended, as (i) a debt obligation; (ii) derivative instrument entered into in connection with, or pledged as a security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term "Financial Obligation" shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

"Force Majeure Event" means: (i) acts of God, war, or terrorist action; (ii) failure or shut-down of the Electronic Municipal Market Access system maintained by the MSRB; or (iii) to the extent beyond the Disclosure Dissemination Agent's reasonable control, interruptions in telecommunications or utilities services, failure, malfunction or error of any telecommunications, computer or other electrical, mechanical or technological application, service or system, computer virus, interruptions in Internet service or telephone service (including due to a virus, electrical delivery problem or similar occurrence) that affect Internet users generally, or in the local area in which the Disclosure Dissemination Agent or the MSRB is located, or acts of any government, regulatory or any other competent authority the effect of which is to prohibit the Disclosure Dissemination Agent from performance of its obligations under this Disclosure Agreement.

"Holder" means any person (a) having the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Warrants (including persons holding Warrants through nominees, depositories or other intermediaries) or (b) treated as the owner of any Warrants for federal income tax purposes.

"Information" means, collectively, the Annual Reports, the Audited Financial Statements, the Notice Event notices, the Failure to File Event notices, the Voluntary Event Disclosures and the Voluntary Financial Disclosures.

"MSRB" means the Municipal Securities Rulemaking Board, or any successor thereto, established pursuant to Section 15B(b)(1) of the Securities Exchange Act of 1934.

"Notice Event" means any of the events enumerated in paragraph (b)(5)(i)(C) of the Rule and listed in Section 4(a) of this Disclosure Agreement.

"Obligated Person" means the County.

"Official Statement" means that Official Statement prepared by the County in connection with the Warrants, as listed in Exhibit A.

"Trustee" means the institution, if any, identified as such in the document under which the Warrants were issued.

"Voluntary Event Disclosure" means information of the category specified in any of subsections (e)(vi)(1) through (e)(vi)(10) of Section 2 of this Disclosure Agreement that is accompanied by a Certification of the Disclosure Representative containing the information prescribed by Section 7(a) of this Disclosure Agreement.

"Voluntary Financial Disclosure" means information of the category specified in any of subsections (e)(vii)(1) through (e)(vii)(9) of Section 2 of this Disclosure Agreement that is accompanied by a Certification of the Disclosure Representative containing the information prescribed by Section 7(b) of this Disclosure Agreement.

"Warrants" means the Warrants as listed on the attached Exhibit A, with the 9-digit CUSIP numbers relating thereto.

SECTION 2. Provision of Annual Reports.

(a) The County shall provide, annually, an electronic copy of its Annual Report and Certification to the Disclosure Dissemination Agent, not later than the Annual Filing Date. Promptly upon receipt of an electronic copy of the Annual Report and the Certification, the Disclosure Dissemination Agent shall provide an Annual Report to the MSRB not later than 270 days after the end of each fiscal year of the County, commencing with the fiscal year ending September 30, 2023. Such date and each anniversary thereof is the Annual Filing Date. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in Section 3 of this Disclosure Agreement.

(b) If on the fifteenth (15th) day prior to the Annual Filing Date, the Disclosure Dissemination Agent has not received a copy of the Annual Report and Certification, the Disclosure Dissemination Agent shall contact the Disclosure Representative by telephone and in writing (which may be by e-mail) to remind the County of its undertaking to provide the Annual Report pursuant to Section 2(a). Upon such reminder, the Disclosure Representative shall either (i) provide the Disclosure Dissemination Agent with an electronic copy of the Annual Report and the Certification no later than two (2) business days prior to the Annual Filing Date, or (ii) instruct the Disclosure Dissemination Agent in writing that the County will not be able to file the Annual Report within the time required under this Disclosure Agreement, state the date by which the Annual Report for such year will be provided and instruct the Disclosure Dissemination Agent to immediately send a Failure to File Event notice to the MSRB in substantially the form attached as Exhibit B, which may be accompanied by a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-1.

(c) If the Disclosure Dissemination Agent has not received an Annual Report and Certification by 6:00 p.m. Eastern time on the Annual Filing Date (or, if such Annual Filing Date falls on a Saturday, Sunday or holiday, then the first business day thereafter) for the Annual

Report, a Failure to File Event shall have occurred and the County irrevocably directs the Disclosure Dissemination Agent to immediately send a Failure to File Event notice to the MSRB in substantially the form attached as Exhibit B without reference to the anticipated filing date for the Annual Report, which may be accompanied by a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-1.

(d) If Audited Financial Statements of the County are prepared but not available prior to the Annual Filing Date, the County shall, when the Audited Financial Statements are available, provide at such time an electronic copy to the Disclosure Dissemination Agent, accompanied by a Certification for filing with the MSRB.

(e) The Disclosure Dissemination Agent shall:

(i) verify the filing specifications of the MSRB each year prior to the Annual Filing Date;

(ii) upon receipt, promptly file each Annual Report received under Sections 2(a) and 2(b) hereof with the MSRB;

(iii) upon receipt, promptly file each Audited Financial Statement received under Section 2(d) hereof with the MSRB;

(iv) upon receipt, promptly file the text of each Notice Event received under Sections 4(a) and 4(b)(ii) hereof with the MSRB, identifying the Notice Event as instructed by the County pursuant to Section 4(a) or 4(b)(ii) hereof (being any of the categories set forth below) when filing pursuant to Section 4(c) of this Disclosure Agreement:

1. "Principal and interest payment delinquencies;"

2. "Non-Payment related defaults, if material;"

3. "Unscheduled draws on debt service reserves reflecting financial difficulties;"

4. "Unscheduled draws on credit enhancements reflecting financial difficulties;"

5. "Substitution of credit or liquidity providers, or their failure to perform;"

6. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Warrants, or other material events affecting the tax status of the Warrants;

7. "Modifications to rights of securities holders, if material;"

8. "Bond calls, if material, and tender offers;"

9. “Defeasances;”

10. “Release, substitution, or sale of property securing repayment of the securities, if material;”

11. “Rating changes;”

12. “Bankruptcy, insolvency, receivership or similar event of the obligated person;”

13. The consummation of a merger, consolidation, or acquisition involving an Obligated Person or the sale of all or substantially all of the assets of the Obligated Person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

14. “Appointment of a successor or additional trustee, or the change of name of a trustee, if material;”

15. “Incurrence of a Financial Obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the obligated person, any of which affect security holders, if material;” and

16. “Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the obligated person, any of which reflect financial difficulties.”

(v) upon receipt (or irrevocable direction pursuant to Section 2(c) of this Disclosure Agreement, as applicable), promptly file a completed copy of Exhibit B to this Disclosure Agreement with the MSRB, identifying the filing as “Failure to provide annual financial information as required” when filing pursuant to Section 2(b)(ii) or Section 2(c) of this Disclosure Agreement;

(vi) upon receipt, promptly file the text of each Voluntary Event Disclosure received under Section 7(a) hereof with the MSRB, identifying the Voluntary Event Disclosure as instructed by the County pursuant to Section 7(a) (being any of the categories set forth below) when filing pursuant to Section 7(a) of this Disclosure Agreement:

1. “amendment to continuing disclosure undertaking;”

2. “change in obligated person;”

3. “notice to investors pursuant to bond documents;”

4. “certain communications from the Internal Revenue Service;”other than those communications included in the Rule;

5. “secondary market purchases;”

6. “bid for auction rate or other securities;”

7. “capital or other financing plan;”

8. “litigation/enforcement action;”

9. “change of tender agent, remarketing agent, or other on-going party;” and

10. “other event-based disclosures.”

(vii) upon receipt, promptly file the text of each Voluntary Financial Disclosure received under Section 7(b) hereof with the MSRB, identifying the Voluntary Financial Disclosure as instructed by the County pursuant to Section 7(b) (being any of the categories set forth below) when filing pursuant to Section 7(b) of this Disclosure Agreement:

1. “quarterly/monthly financial information;”

2. “change in fiscal year/timing of annual disclosure;”

3. “change in accounting standard;”

4. “interim/additional financial information/operating data;”

5. “budget;”

6. “investment/debt/financial policy;”

7. “information provided to rating agency, credit/liquidity provider or other third party;”

8. “consultant reports;” and

9. “other financial/operating data.”

(viii) provide the County evidence of the filings of each of the above when made, which shall be by means of the DAC system, for so long as DAC is the Disclosure Dissemination Agent under this Disclosure Agreement.

(f) The County may adjust the Annual Filing Date upon change of its fiscal year by providing written notice of such change and the new Annual Filing Date to the Disclosure Dissemination Agent, Trustee (if any) and the MSRB, provided that the period between the existing Annual Filing Date and new Annual Filing Date shall not exceed one year.

(g) Anything in this Disclosure Agreement to the contrary notwithstanding, any Information received by the Disclosure Dissemination Agent before 6:00 p.m. Eastern time on any business day that it is required to file with the MSRB pursuant to the terms of this Disclosure Agreement and that is accompanied by a Certification and all other information required by the terms of this Disclosure Agreement will be filed by the Disclosure Dissemination Agent with the MSRB no later than 11:59 p.m. Eastern time on the same business day; provided, however, the Disclosure Dissemination Agent shall have no liability for any delay in filing with the MSRB if such delay is caused by a Force Majeure Event provided that the Disclosure Dissemination Agent uses reasonable efforts to make any such filing as soon as possible.

SECTION 3. Content of Annual Reports.

(a) Each Annual Report shall contain Annual Financial Information with respect to the most recently completed fiscal year of the County, including the financial and operating data (as such term is used in the Rule) provided in the Official Statement under the following captions (in each case, to the extent not included in the Audited Financial Statements for such most recently completed fiscal year): in APPENDIX C of the Official Statement under the headings: "Description of the System—*Water Providers to Users of the System*," "—*Residential and Non-Residential Accounts,"* and "—*Utilization Data,*" "Capital Improvement Program" (with respect to the capital project expenditures for the most recently completed fiscal year), "Major Accounts," "Sewer Tax" (with respect to the revenues derived from the Sewer Tax for the most recently completed fiscal year), "Certain Financial Information Concerning the System—*Summary of Results of Operations,*" "—*Summary of Revenues and Expenditures—Audited,*" "—*Summary of Balance Sheet-Audited,*" and "—*Summary of Cash Flows-Audited"* (in each case, for the most recently completed fiscal year) and in APPENDIX D of the Official Statement under the headings: "County Revenues and Expenditures—*Summary of General Fund Revenues and Expenditures – General Fund,*" "—*General Sales and Use Tax Revenues,*" and "—*Special Sales and Use Tax Revenues*" (with respect to the described revenues for the most recently completed fiscal year), "Ad Valorem Taxes—*Assessed Valuation*," "–*Principal Ad Valorem Taxpayers,*" and "—*Ad Valorem Tax Collections*," "Employee Retirement Plan—*Defined Benefit Pension Plan*" (solely an update to the tables captioned "Trend Information" and "Schedule of Funding Progress"), "—*Other Post-Employment Benefits (OPEB)*" (solely the table captioned "Schedule of Funding Progress"), and "Debt Management—*Annual Debt Service Requirements on and respecting all County Warrants, the 2018 Funding Agreement, the Cooper Green Authority Bonds and the 2023 Funding Agreement*."

(b) Audited Financial Statements as described in the Official Statement will be included in the Annual Report. If audited financial statements are not available, then unaudited financial statements, prepared in accordance with Generally Accepted Accounting Principles as described in the Official Statement will be included in the Annual Report. In such event, Audited Financial Statements (if any) will be provided pursuant to Section 2(d).

Any or all of the items listed above may be included by specific reference from other documents, including official statements of debt issues with respect to which the County is an "obligated person" (as defined by the Rule), which have been previously filed with the Securities and Exchange Commission or available on the MSRB Internet Website. If the document incorporated by reference is a final official statement, it must be available from the MSRB. The County will clearly identify each such document so incorporated by reference.

If the Annual Financial Information contains modified operating data or financial information different from the Annual Financial Information agreed to in the continuing disclosure undertaking related to the Warrants, the County is required to explain, in narrative form, the reasons for the modification and the impact of the change in the type of operating data or financial information being provided.

SECTION 4. Reporting of Notice Events.

(a) The occurrence of any of the following events with respect to the Warrants constitutes a Notice Event:

1. Principal and interest payment delinquencies;

2. Non-payment related defaults, if material;

3. Unscheduled draws on debt service reserves reflecting financial difficulties;

4. Unscheduled draws on credit enhancements reflecting financial difficulties;

5. Substitution of credit or liquidity providers, or their failure to perform;

6. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Warrants, or other material events affecting the tax status of the Warrants;

7. Modifications to rights of Bond holders, if material;

8. Bond calls, if material, and tender offers;

9. Defeasances;

10. Release, substitution, or sale of property securing repayment of the Warrants, if material;

11. Rating changes;

12. Bankruptcy, insolvency, receivership or similar event of the Obligated Person;

    Note to subsection (a)(12) of this Section 4: For the purposes of the event described in subsection (a)(12) of this Section 4, the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for an Obligated Person in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Obligated

Person, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Obligated Person.

13. The consummation of a merger, consolidation, or acquisition involving an Obligated Person or the sale of all or substantially all of the assets of the Obligated Person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

14. Appointment of a successor or additional trustee or the change of name of a trustee, if material;

15. Incurrence of a Financial Obligation of an Obligated Person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of an Obligated Person, any of which affect security holders, if material; and

16. Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of an Obligated Person, any of which reflect financial difficulties.

The County shall, in a timely manner not in excess of ten (10) business days after its occurrence, notify the Disclosure Dissemination Agent in writing of the occurrence of a Notice Event. Such notice shall instruct the Disclosure Dissemination Agent to report the occurrence pursuant to subsection (c) and shall be accompanied by a Certification. Such notice or Certification shall identify the Notice Event that has occurred (which shall be any of the categories set forth in Section 2(e)(iv) of this Disclosure Agreement), include the text of the disclosure that the County desires to make, contain the written authorization of the County for the Disclosure Dissemination Agent to disseminate such information, and identify the date the County desires for the Disclosure Dissemination Agent to disseminate the information (provided that such date is not later than the tenth business day after the occurrence of the Notice Event).

(b) The Disclosure Dissemination Agent is under no obligation to notify the County or the Disclosure Representative of an event that may constitute a Notice Event. In the event the Disclosure Dissemination Agent so notifies the Disclosure Representative, the Disclosure Representative will within two business days of receipt of such notice (but in any event not later than the tenth business day after the occurrence of the Notice Event, if the County determines that a Notice Event has occurred), instruct the Disclosure Dissemination Agent that either (i) a Notice Event has not occurred and no filing is to be made or (ii) a Notice Event has occurred and the Disclosure Dissemination Agent is to report the occurrence pursuant to subsection (c) of this Section 4, together with a Certification. Such Certification shall identify the Notice Event that has occurred (which shall be any of the categories set forth in Section 2(e)(iv) of this Disclosure Agreement), include the text of the disclosure that the County desires to make, contain the written authorization of the County for the Disclosure Dissemination Agent to disseminate such information, and identify the date the County desires for the Disclosure Dissemination Agent to disseminate the information (provided that such date is not later than the tenth business day after the occurrence of the Notice Event).

(c) If the Disclosure Dissemination Agent has been instructed by the County as prescribed in subsection (a) or (b)(ii) of this Section 4 to report the occurrence of a Notice Event, the Disclosure Dissemination Agent shall promptly file a notice of such occurrence with MSRB in accordance with Section 2 (e)(iv) hereof. This notice may be filed with a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-1.

SECTION 5. CUSIP Numbers. The County will provide the Dissemination Agent with the CUSIP numbers for (i) new Warrants at such time as they are issued or become subject to the Rule and (ii) any Warrants to which new CUSIP numbers are assigned in substitution for the CUSIP numbers previously assigned to such Warrants.

SECTION 6. Additional Disclosure Obligations. The County acknowledges and understands that other state and federal laws, including but not limited to the Securities Act of 1933 and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, may apply to the County, and that the duties and responsibilities of the Disclosure Dissemination Agent under this Disclosure Agreement do not extend to providing legal advice regarding such laws. The County acknowledges and understands that the duties of the Disclosure Dissemination Agent relate exclusively to execution of the mechanical tasks of disseminating information as described in this Disclosure Agreement.

SECTION 7. Voluntary Filing.

(a) The County may instruct the Disclosure Dissemination Agent to file a Voluntary Event Disclosure with the MSRB from time to time pursuant to a Certification of the Disclosure Representative. Such Certification shall identify the Voluntary Event Disclosure (which shall be any of the categories set forth in Section 2(e)(vi) of this Disclosure Agreement), include the text of the disclosure that the County desires to make, contain the written authorization of the County for the Disclosure Dissemination Agent to disseminate such information, and identify the date the County desires for the Disclosure Dissemination Agent to disseminate the information. If the Disclosure Dissemination Agent has been instructed by the County as prescribed in this Section 7(a) to file a Voluntary Event Disclosure, the Disclosure Dissemination Agent shall promptly file such Voluntary Event Disclosure with the MSRB in accordance with Section 2(e)(vi) hereof. This notice may be filed with a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-2.

(b) The County may instruct the Disclosure Dissemination Agent to file a Voluntary Financial Disclosure with the MSRB from time to time pursuant to a Certification of the Disclosure Representative. Such Certification shall identify the Voluntary Financial Disclosure (which shall be any of the categories set forth in Section 2(e)(vii) of this Disclosure Agreement), include the text of the disclosure that the County desires to make, contain the written authorization of the County for the Disclosure Dissemination Agent to disseminate such information, and identify the date the County desires for the Disclosure Dissemination Agent to disseminate the information. If the Disclosure Dissemination Agent has been instructed by the County as prescribed in this Section 7(b) hereof to file a Voluntary Financial Disclosure, the

Disclosure Dissemination Agent shall promptly file such Voluntary Financial Disclosure with the MSRB in accordance with Section 2(e)(vii) hereof. This notice may be filed with a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-3.

(b) The parties hereto acknowledge that the County is not obligated pursuant to the terms of this Disclosure Agreement to file any Voluntary Event Disclosure pursuant to Section 7(a) hereof or any Voluntary Financial Disclosure pursuant to Section 7(b) hereof.

(c) Nothing in this Disclosure Agreement shall be deemed to prevent the County from disseminating any other information through the Disclosure Dissemination Agent using the means of dissemination set forth in this Disclosure Agreement or including any other information in any Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure, in addition to that required by this Disclosure Agreement. If the County chooses to include any information in any Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure in addition to that which is specifically required by this Disclosure Agreement, the County shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure.

SECTION 8. Termination of Reporting Obligation. The obligations of the County and the Disclosure Dissemination Agent under this Disclosure Agreement shall terminate with respect to the Warrants upon the legal defeasance, prior redemption or payment in full of all of the Warrants, when the County is no longer an obligated person with respect to the Warrants, or upon delivery by the Disclosure Representative to the Disclosure Dissemination Agent of an opinion of counsel expert in federal securities laws to the effect that continuing disclosure is no longer required.

SECTION 9. Disclosure Dissemination Agent. The County has appointed Digital Assurance Certification, L.L.C. as exclusive Disclosure Dissemination Agent under this Disclosure Agreement. The County may, upon thirty days written notice to the Disclosure Dissemination Agent and the Trustee, replace or appoint a successor Disclosure Dissemination Agent. Upon termination of DAC's services as Disclosure Dissemination Agent, whether by notice of the County or DAC, the County agrees to appoint a successor Disclosure Dissemination Agent or, alternately, agrees to assume all responsibilities of Disclosure Dissemination Agent under this Disclosure Agreement for the benefit of the Holders of the Warrants. Notwithstanding any replacement or appointment of a successor, the County shall remain liable to the Disclosure Dissemination Agent until payment in full for any and all sums owed and payable to the Disclosure Dissemination Agent. The Disclosure Dissemination Agent may resign at any time by providing thirty days' prior written notice to the County.

SECTION 10. Remedies in Event of Default. In the event of a failure of the County or the Disclosure Dissemination Agent to comply with any provision of this Disclosure Agreement, the Holders' rights to enforce the provisions of this Agreement shall be limited solely to a right, by action in mandamus or for specific performance, to compel performance of the parties' obligation under this Disclosure Agreement. Any failure by a party to perform in accordance with this Disclosure Agreement shall not constitute a default on the Warrants or under any other document relating to the Warrants, and all rights and remedies shall be limited to those expressly stated herein.

SECTION 11. Duties, Immunities and Liabilities of Disclosure Dissemination Agent.

(a) The Disclosure Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement. The Disclosure Dissemination Agent's obligation to deliver the information at the times and with the contents described herein shall be limited to the extent the County has provided such information to the Disclosure Dissemination Agent as required by this Disclosure Agreement. The Disclosure Dissemination Agent shall have no duty with respect to the content of any disclosures or notice made pursuant to the terms hereof. The Disclosure Dissemination Agent shall have no duty or obligation to review or verify any Information or any other information, disclosures or notices provided to it by the County and shall not be deemed to be acting in any fiduciary capacity for the County, the Holders of the Warrants or any other party. The Disclosure Dissemination Agent shall have no responsibility for the County's failure to report to the Disclosure Dissemination Agent a Notice Event or a duty to determine the materiality thereof. The Disclosure Dissemination Agent shall have no duty to determine, or liability for failing to determine, whether the County has complied with this Disclosure Agreement. The Disclosure Dissemination Agent may conclusively rely upon Certifications of the County at all times. The obligations of the County under this Section shall survive resignation or removal of the Disclosure Dissemination Agent and defeasance, redemption or payment of the Warrants.

(b) The Disclosure Dissemination Agent may, from time to time, consult with legal counsel (either in-house or external) of its own choosing in the event of any disagreement or controversy, or question or doubt as to the construction of any of the provisions hereof or its respective duties hereunder, and shall not incur any liability and shall be fully protected in acting in good faith upon the advice of such legal counsel. The reasonable fees and expenses of such counsel shall be payable by the County.

(c) All documents, reports, notices, statements, information and other materials provided to the MSRB under this Agreement shall be provided in an electronic format and accompanied by identifying information as prescribed by the MSRB.

SECTION 12. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the County and the Disclosure Dissemination Agent may amend this Disclosure Agreement and any provision of this Disclosure Agreement may be waived, if such amendment or waiver is supported by an opinion of counsel expert in federal securities laws acceptable to both the County and the Disclosure Dissemination Agent to the effect that such amendment or waiver does not materially impair the interests of Holders of the Warrants and would not, in and of itself, cause the undertakings herein to violate the Rule if such amendment or waiver had been effective on the date hereof but taking into account any subsequent change in or official interpretation of the Rule; provided neither the County or the Disclosure Dissemination Agent shall be obligated to agree to any amendment modifying their respective duties or obligations without their consent thereto.

Notwithstanding the preceding paragraph, the Disclosure Dissemination Agent shall have the right to adopt amendments to this Disclosure Agreement necessary to comply with modifications to and interpretations of the provisions of the Rule as announced by the Securities and Exchange Commission from time to time by giving not less than 20 days written notice of the intent to do so together with a copy of the proposed amendment to the County. No such amendment shall become effective if the County shall, within 10 days following the giving of such notice, send a notice to the Disclosure Dissemination Agent in writing that it objects to such amendment.

SECTION 13. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the County, the Trustee, if any, for the Warrants, the Disclosure Dissemination Agent, the underwriter, and the Holders from time to time of the Warrants, and shall create no rights in any other person or entity.

SECTION 14. Governing Law. This Disclosure Agreement shall be governed by the laws of the State of Alabama (other than with respect to conflicts of laws).

SECTION 15. Counterparts. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

[Remainder of page intentionally left blank.]

The Disclosure Dissemination Agent and the County have caused this Continuing Disclosure Agreement to be executed, on the date first written above, by their respective officers duly authorized.

DIGITAL ASSURANCE CERTIFICATION, L.L.C.,
as Disclosure Dissemination Agent

By:______________________________________
Name:____________________________________
Title:_____________________________________

JEFFERSON COUNTY, ALABAMA,
as County

By:______________________________________
Name:____________________________________
Title:_____________________________________

EXHIBIT A

NAME AND CUSIP NUMBERS OF WARRANTS

Name of Issuer	Jefferson County, Alabama
Name of Bond Issue:	Sewer Revenue Warrants, Series 2024
Date of Issuance:	______ __, 2024
Date of Official Statement	______ __, 2024

CUSIP Number:		CUSIP Number:	______________
CUSIP Number:	______________	CUSIP Number:	______________
CUSIP Number:	______________	CUSIP Number:	______________
CUSIP Number:	______________	CUSIP Number:	______________
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CUSIP Number:	______________	CUSIP Number:	______________
CUSIP Number:	______________	CUSIP Number:	______________
CUSIP Number:	______________	CUSIP Number:	______________

EXHIBIT B

NOTICE TO MSRB OF FAILURE TO FILE ANNUAL REPORT

Issuer:	Jefferson County, Alabama
Name(s) of Bond Issue(s):	Sewer Revenue Warrants, Series 2024
Date(s) of Issuance:	______ __, 2024
Date(s) of Disclosure Agreement:	______ __, 2024
CUSIP Number:	472682

NOTICE IS HEREBY GIVEN that the County has not provided an Annual Report with respect to the above-named Warrants as required by the Disclosure Agreement between the County and Digital Assurance Certification, L.L.C., as Disclosure Dissemination Agent. [The County has notified the Disclosure Dissemination Agent that it anticipates that the Annual Report will be filed by ______________].

Dated: ______________________________

Digital Assurance Certification, L.L.C., as
Disclosure Dissemination Agent, on behalf of the
County

____

cc:

EXHIBIT C-1
EVENT NOTICE COVER SHEET

This cover sheet and accompanying "event notice" may be sent to the MSRB, pursuant to Securities and Exchange Commission Rule 15c2-12(b)(5)(i)(C) and (D).

Issuer's and/or Other Obligated Person's Name:

Jefferson County, Alabama

Issuer's Six-Digit CUSIP Number:

472682

or Nine-Digit CUSIP Number(s) of the Warrants to which this event notice relates:

____

Number of pages attached: _____

____ Description of Notice Events (Check One):

1.______"Principal and interest payment delinquencies;"
2.______"Non-Payment related defaults, if material;"
3.______"Unscheduled draws on debt service reserves reflecting financial difficulties;"
4.______"Unscheduled draws on credit enhancements reflecting financial difficulties;"
5.______"Substitution of credit or liquidity providers, or their failure to perform;"
6.______"Adverse tax opinions, IRS notices or events affecting the tax status of the security;"
7.______"Modifications to rights of securities holders, if material;"
8.______"Bond calls, if material;" Tender offers;
9.______"Defeasances;"
10._____"Release, substitution, or sale of property securing repayment of the securities, if material;"
11._____"Rating changes;"
12._____"Bankruptcy, insolvency, receivership or similar event of the obligated person;"
13._____"Merger, consolidation, or acquisition of the obligated person, if material;"
14._____"Appointment of a successor or additional trustee, or the change of name of a trustee, if material;"
15._____"Incurrence of a Financial Obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the obligated person, any of which affect security holders, if material;" and
16._____"Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the obligated person, any of which reflect financial difficulties."

____ Failure to provide annual financial information as required.

I hereby represent that I am authorized by the County or its agent to distribute this information publicly:

Signature:

____

Name: ____________________________________ Title: ____

Digital Assurance Certification, L.L.C.
315 E. Robinson Street, Suite 300
Orlando, FL 32801
407-515-1100

Date:

EXHIBIT C-2
VOLUNTARY EVENT DISCLOSURE COVER SHEET

This cover sheet and accompanying "voluntary event disclosure" may be sent to the MSRB, pursuant to the Disclosure Dissemination Agent Agreement dated as of _____ between the County and DAC.

Issuer's and/or Other Obligated Person's Name:

Jefferson County, Alabama

Issuer's Six-Digit CUSIP Number:

472682

or Nine-Digit CUSIP Number(s) of the Warrants to which this notice relates:

____

Number of pages attached: _____

____ Description of Voluntary Event Disclosure (Check One):

1.______"amendment to continuing disclosure undertaking;"
2.______"change in obligated person;"
3.______"notice to investors pursuant to bond documents;"
4.______"certain communications from the Internal Revenue Service;"
5.______"secondary market purchases;"
6.______"bid for auction rate or other securities;"
7.______"capital or other financing plan;"
8.______"litigation/enforcement action;"
9.______"change of tender agent, remarketing agent, or other on-going party; and"
10._____"other event-based disclosures."

I hereby represent that I am authorized by the County or its agent to distribute this information publicly:

Signature:

____

Name: ____________________________________ Title: ____

Digital Assurance Certification, L.L.C.
315 E. Robinson Street
Suite 300
Orlando, FL 32801
407-515-1100

Date:

EXHIBIT C-3
VOLUNTARY FINANCIAL DISCLOSURE COVER SHEET

This cover sheet and accompanying "voluntary financial disclosure" may be sent to the MSRB, pursuant to the Disclosure Dissemination Agent Agreement dated as of _____ between the County and DAC.

Issuer's and/or Other Obligated Person's Name:

Jefferson County, Alabama

Issuer's Six-Digit CUSIP Number:

472682

or Nine-Digit CUSIP Number(s) of the Warrants to which this notice relates:

____

Number of pages attached: _____

____ Description of Voluntary Financial Disclosure (Check One):

1.______"quarterly/monthly financial information;"
2.______"change in fiscal year/timing of annual disclosure;"
3.______"change in accounting standard;"
4.______"interim/additional financial information/operating data;"
5.______"budget;"
6.______"investment/debt/financial policy;"
7.______"information provided to rating agency, credit/liquidity provider or other third party;"
8.______"consultant reports;" and
9.______"other financial/operating data."

I hereby represent that I am authorized by the County or its agent to distribute this information publicly:

Signature:

____

Name: ____________________________Title: ____________________________________

Digital Assurance Certification, L.L.C.
315 E. Robinson Street
Suite 300
Orlando, FL 32801
407-515-1100

Date:

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APPENDIX H
AUDITED FINANCIAL STATEMENTS OF THE COUNTY
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

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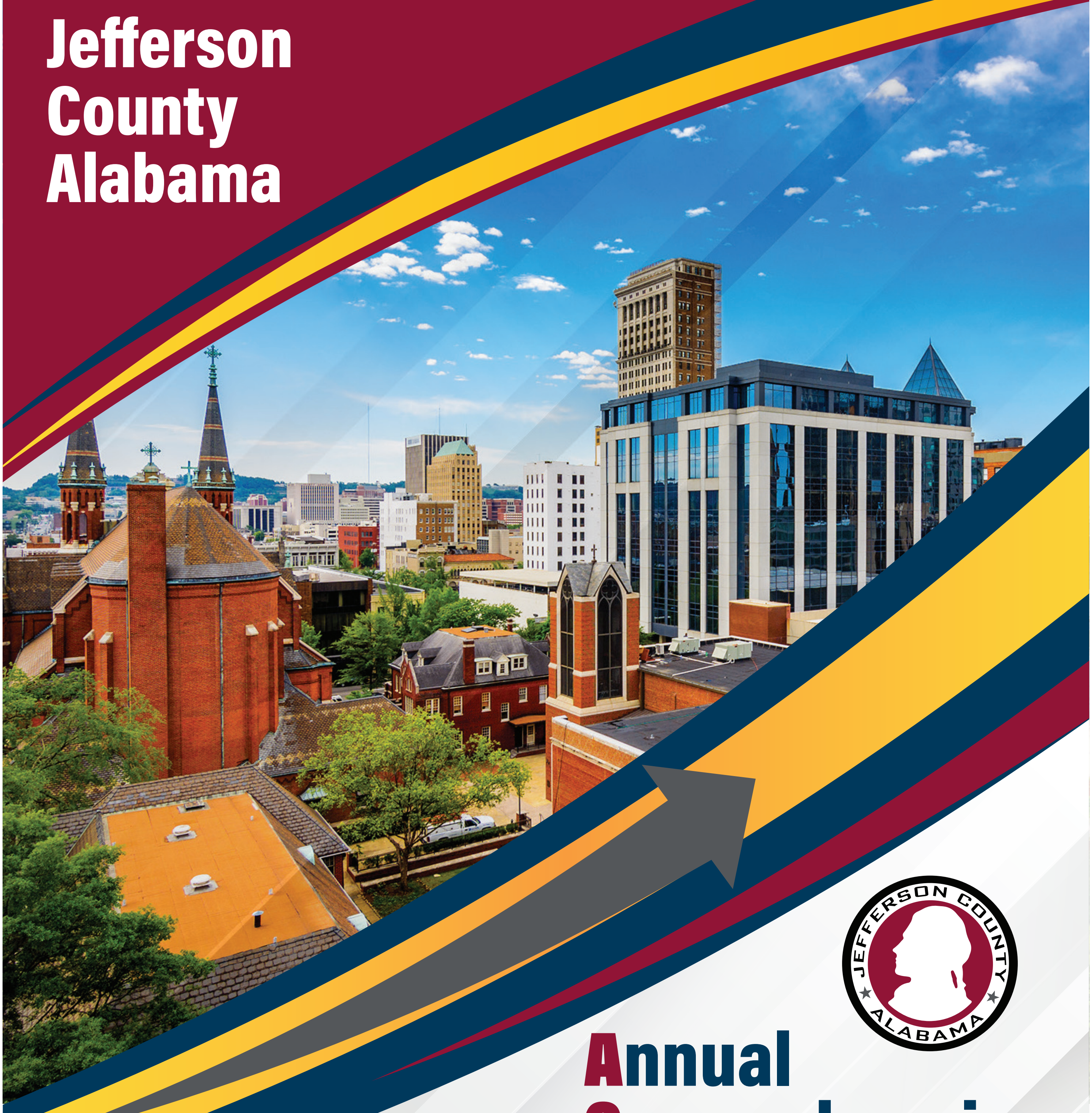
Jefferson County Alabama



Annual Comprehensive Financial Report

For Fiscal Year Ended September 30, 2022

Chief Financial Officer

ANGELA DIXON

Jefferson County Alabama

Annual Comprehensive Financial Report

For Fiscal Year Ended September 30, 2022

Chief Financial Officer
ANGELA DIXON

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Jefferson County, Alabama
Annual Comprehensive Financial Report
For the Fiscal Year Ended
September 30, 2022

INTRODUCTION SECTION

FINANCE SECTION

Basic Financial Statements

Required Supplementary Information

Supplementary Information

Supplementary Information *(continued)*

STATISTICAL SECTION

Financial Trends

Revenue Capacity

INTRODUCTION SECTION

JEFFERSON COUNTY COMMISSION

JAMES A. (JIMMIE) STEPHENS - President
LASHUNDA SCALES - President Pro-Tempore
STEVE AMMONS
JOE KNIGHT
SHEILA TYSON

Cal Markert
County Manager

FINANCE DEPARTMENT
ANGELA M. DIXON, CPA
Chief Financial Officer
716 Richard Arrington, Jr. Blvd. N.
Birmingham, Alabama 35203

March 31, 2023

To the Jefferson County Commissioners and the Citizens of Jefferson County:

Jefferson County's Annual Comprehensive Financial Report (ACFR) for the fiscal year ended September 30, 2022 represents the official comprehensive publication of the County's financial position as of September 30, 2022. The County has prepared the Annual Comprehensive Financial report in accordance with generally accepted accounting principles in the U.S. (GAAP). This report is submitted as required by Alabama State Law.

The Jefferson County Finance Department is responsible for the accuracy of data, including disclosures, along with the Management of Jefferson County. Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal controls that has been established for this purpose. Because the cost of internal controls should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. The basis of reliance for the financial statements is based on internal controls that are also outlined within the audited financial report.

The submitted statements were subjected to an independent audit by Mauldin & Jenkins, LLC. The firm has issued an unmodified opinion on Jefferson County's financial statements for the fiscal year ended September 30, 2022. Mauldin and Jenkins' report is included in the Finance section of this ACFR. Mauldin & Jenkins has also issued a separate Report of Independent Certified Public Accountants in Accordance with *Government Auditing Standards,* which is not included in this ACFR.

The fiscal year 2022 Single Audit was completed by Warren Averett LLC, which issued a separate report that is also not contained in this ACFR. The Single Audit was performed in accordance with Government Auditing Standards and represents the fair presentation of expenditures of federal rewards in the County's financial statements for the fiscal year ending September 30, 2022. Internal controls over financial reporting were also tested for compliance with certain provisions of laws, regulations, contracts, and grant agreements related to the Single Audit, but an opinion on internal controls was not provided.

Following the audit report letter is the County's Management Discussion and Analysis (MD&A), which provides a narrative, an introduction, overview, and analysis of the basic financial statements. This letter of transmittal is complemented by the MD&A (pages 16-27) and should be read in conjunction with the letter of transmittal.

County Overview

Founded in 1819, Jefferson County is the most populous county in the State of Alabama (according to the 2020 US Census Bureau population data for Jefferson County, 674,721 residents). The County covers approximately 1,124 square miles and is divided into two divisions – the Birmingham and Bessemer Divisions, each having their own judicial district, courthouse, and county offices.

Jefferson County is home to 34 municipalities within its boundaries and five more that partly extend into the County for a total of 39, the most of any county in the State and one of the highest numbers in the nation. While the Commission has no oversight over the municipalities, the Commissioners do act as liaisons between the cities and towns in their districts and the Commission as a whole. There are five elected Commissioners who serve four-year terms.

Jefferson County Roads and Transportation division is responsible for the maintenance of more than 1,800 miles of paved roads, 11,500 drainage crossings, and 296 bridges. They have 5,100 acres of roadside to mow, clear and maintain, more than 41,500 traffic signs and 434 traffic signals.

The Environmental Services Department manages nine water reclamation facilities, serving twenty-three of the municipalities within the County, along with small portions of neighboring Shelby County and St. Clair County. Those facilities treat an average of one hundred million gallons of wastewater per day.

The Community Services Department offers the community a wealth of information and opportunity. This department provides senior programs and services to those in need across the County. In addition, this department works with the community on housing and community grant programs, as well as cities with opportunities to collaborate on building storm shelters, community centers and other grant projects. The department has also been managing the partner non-profits providing rental assistance through the state-provided federal COVID funding.

The Development Services Department facilitates investment in the County and promotes orderly growth and environmental quality to create a balanced, sustainable community that enhances the quality of life and protects the health, safety, and welfare of residents, business owners and visitors.

Form of Government

In 2011, Jefferson County adopted the County Manager form of government. Under the County Manager form of government, the Commission is responsible for legislative functions such as establishing policy, passing local ordinances, and developing a vision of the organization, and the County Manager is responsible for managing operations in conjunction with the department heads. (See organization chart included in this Introduction Section.)

The accompanying financial statements present the activities of the Jefferson County Commission's primary government and its component units. Note 1A on page 39 to the Financial Statements provide additional guidance on these representations.

The Commission is required to adopt an initial annual budget no later than its first regular meeting in October. This annual budget serves as a foundation for Jefferson County's financial planning and control. The proposed budget appropriation must not exceed the total revenue available for appropriation. The budget is organized by department and departments may transfer certain resources within a departmental budget without Commission approval. However, transfers between departments and unexpected budget needs (including personnel changes) must receive approval from the Commission before adjustments can be made.

Local Economy

The World Paid Us A Visit
In 2022 Jefferson County and the Birmingham Metro-Area hosted The World Games and in 2025 will be host for the World Police and Fire Games. The World Games drew a diverse international crowd of athletes, fans, and media to our community. Visitors enjoyed sporting events at a variety of venues including the newly renovated Birmingham-Jefferson Civic Center and adjoining Protective Stadium. Both venues received significant financial support from the County, and tremendous accolades from the community.

World Games fans enter Protective Stadium for the opening of the games.

Growing Business
The Jefferson County Commission is committed to the economic growth and development of the County and surrounding areas. To achieve this objective the County Commission has elected to invest $10 million annually along with tax abatements as an incentive to spur economic growth. The goal is to attract new companies, assist existing companies with growth and create new jobs, all of which increases the County's tax base and overall gross domestic product (GDP).

The County Commission created an Economic Development Committee to oversee the abatement and job incentive process. The Commissioners are responsible for reviewing and approving applicants on behalf of the County. The Commission collaborates with management, municipalities, the State of Alabama Department of Commerce, the Birmingham Business Alliance, and other economic development entities to recruit and evaluate potential companies and economic development projects. A cost/benefit analysis is conducted by the Birmingham Business Alliance to determine if the project meets the objectives of the Commission and will achieve the goal of the Commission.

Groundbreaking on new Cooper Green Mercy Health Services clinic for Jefferson County indigent population.

The County's abatement policy and procedures are developed in accordance with Alabama State statute. Many of the abatements are tied to the number of jobs created and how much those jobs pay. The Tax Assessor is responsible for tracking the abatements and the Budget Management Office is responsible for tracking the annual $10 million allocated by the Commission for economic incentives for prospective businesses. The Economic Development Committee works collaboratively with Jefferson County's legal team to ensure recipients follow abatement agreements and meet agreed-upon performance targets. All entities approved for abatements or job incentives are required to create and maintain a minimum of 50 new jobs. (See Note 13, page 89, Tax Abatements).

In 2022, the Commission approved abatements for the following projects:

- HarbinsonWalker International, a manufacturing company with a capital investment of $25 million and 50 jobs.
- The expansion of Evonik Industries, a life sciences company providing an additional 27 jobs and a $2.8 million dollar investment.
- Kratos Defense and Security Solutions, an aerospace firm providing 189 jobs and a $8.6 million dollar capital investment.
- Expansion of Chester's International foods with 17 additional jobs and a $5 million dollar investment.
- Expansion of The John R. White Company foods with 10 additional jobs and a $1.7 million dollar investment.
- Boise Cascade Building Materials Distribution Company expanded and created an additional 5 jobs with an additional $8 million dollar investment.
- O'Neal Steel, a manufacturing company, expanded with a $2.6 million dollar investment creating 6 new jobs.
- Energy Pipe & Supply, a distribution and logistics company created 10 additional jobs with a $1 million dollar expansion.

Jefferson County is continuing to watch the construction progress of the J.M. Smucker Company in the McCalla community as it builds its first production facility in the Southeast. A new hospital is also being built in this community and the County is working on planned road and sewer infrastructure projects in this community that will support this economic growth.

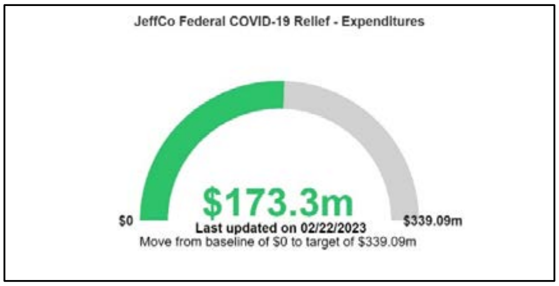
Distribution of Federal COVID Relief Funds

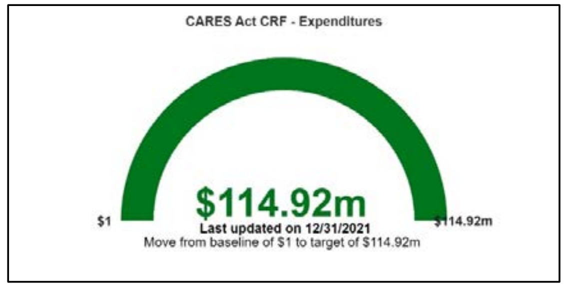
The Coronavirus Aid, Relief, and Economic Security Act (CARES), and American Rescue Plan Act, as well as other federal pieces of budgeting legislation have resulted in $339,085,936 of COVID-relief aid being provided directly to the Jefferson County Commission.

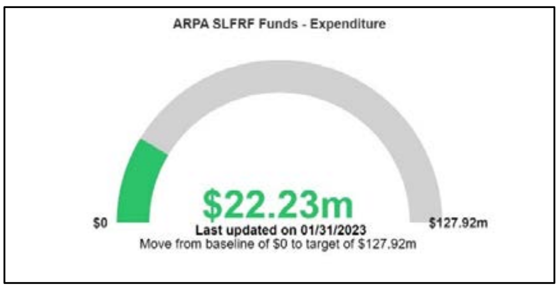
The County Manager's Office, along with the Department of Finance and Department of Community Services, continues to work with the Witt O'Brien's consulting firm – leaders in global risk management and emergency response - to ensure distribution of this funding is conducted in a manner consistent with federal rules and guidelines. To date, over $173 million of this aid has been distributed directly to citizens in need and organizations serving Jefferson County.

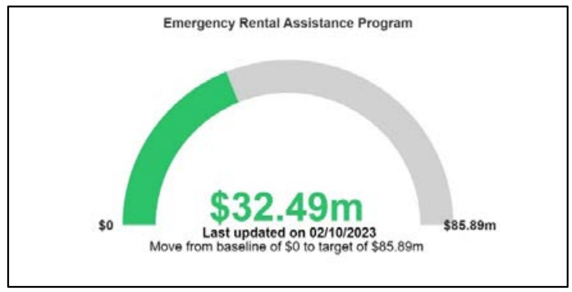
With these funds, the County has supported food insecurity mitigation, supported rental and utility assistance programs, and helped to mitigate the negative economic impacts of the pandemic for organizations that needed it most. The success of our rental and utility assistance program has led to the County receiving additional allocations of funds for residents in need.

While the CARES Act Coronavirus Relief Fund program has been closed, several other programs are still active and continuing to serve the needs of the citizens of Jefferson County.









Long-Term Financial Planning and Major Initiatives

JeffCo Way

In his first year as County Manager, Cal Markert, has introduced to, and trained his leadership team on, lean principles and has created the JeffCo Way. The JeffCo Way is the County's internal guiding principle. It's how the County Manager and his leadership team make decisions, based on providing long-term value to the customer – the citizens of Jefferson County. The JeffCo Way is also empowering the County's employees to raise their hands when they see issues, so those issues can be identified and fixed. Now that the leadership team has been trained, the JeffCo Way will be rolled out over the coming year to mid-level managers and employees to put into practice.

The JeffCo Way

- Incorporation of Lean principles making up the JeffCo Way in all departments under the County Manager and setting an example to encourage their use system-wide.
- Improvement Boards, Plan-Do-Check-Act, Visual Management and Standardization.
- Creating an empowering work environment that encourages responsibility and decision making at all organizational levels.

Leveraging Information Technology

- Using the best available technology to creatively improve efficiency, manage and improve the citizen and employee experience.
- Providing the best IT support enterprise wide – where needed, when needed.

Customer Service

- Utilization of customer service standards with a focus on customer satisfaction and priority in the design and efficient delivery of County services.

Telling Our Story

- Employing various communication methods, including social media, to ensure transparency and to tell the story of local government services and performance.
- Strategically supplementing the organization's communication tools to provide the most effective outreach opportunities.

Top Talent

- Engage staff utilizing the JeffCo Way to improve processes and deliver quality services.
- Management taking responsibility for the development, performance, and success of employees throughout the organization and providing them a sense of direction and purpose.
- Utilizing coaching and mentoring to provide direction, support, and feedback to enable others to meet their full potential.
- Maintaining a positive atmosphere where interactions are based in respect and professionalism.

Strategic Plan

In November 2020, based on the development of mission and vision statements, Jefferson County published a five-year strategic plan. The four main goals of the plan have key initiatives and specific measurable objectives. This plan can be found on the County's website along with performance indicators that are updated quarterly, so the public can see how the County is making progress. https://performance.jccal.org/

The County is currently updating that strategic plan; however, the core strategic anchors remain the same:

1. Promote a citizen-focused culture that strives for accountability and consistent, efficient, delivery of service.
2. Create a quality, sustainable infrastructure that is efficient and serves the community.
3. Attract, select, develop, and retain a skilled and diverse workforce.
4. Build the economic stability of the county and continue to create a culture of trust and financial transparency.

By publicly sharing the goals and objectives with citizens and demonstrating accountability, the hope is to continue to build trust with the Jefferson County community. Major initiatives that are currently being implemented to facilitate community trust are as follows:

- Leverage technology to decrease wait times by 20% in both our sewer billing and revenue departments.
- Improve customer service satisfaction 20% over four years based on initial customer survey completed in 2023.
- Complete 80% of the County's five-year capital plan over four years.
- Improve the mobility of citizens and goods through Jefferson County by providing a public road system that achieves an inspection rating of "good" or higher on county-maintained roads.

- Preserve and protect a clean water supply by replacing or rehabilitating 60% of deteriorated sewer lines by 2026.
- Provide best-in-class facilities for the public to conduct business in and for employees to work in, by averaging 80% of preventative maintenance work orders completed on-time over four years.
- Improve the overall safety and provide a higher quality of life in our communities by demolishing 200 blighted and abandoned structures over four years.
- Maximize the investment made in human capital by achieving a 2-year retention rate of 75% for employees.
- Create defined talent development tracks for the five largest job groups in the County, providing employees a career path option to encourage long-term commitment.
- Maintain or improve the current bond ratings of the County's outstanding long-term debt.
- Increase the County's Budget Stabilization, Catastrophic, and Uncertainty Reserve Funds to 16% of the General Fund's annual expenditures (See *Relevant Financial Policies*).

Relevant Financial Policies

Jefferson County is committed to ensuring that fiscal stability is maintained in order to increase citizens' access to essential services. Jefferson County maintains a significant General Fund balance. Additionally, to ensure the long-term financial health of the County, Jefferson County has established three separate reserve funds (Economic Uncertainty Fund, Budget Stabilization Fund, and Catastrophic Event Fund). As of September 30, 2022, the County's total cash reserve balance in these three emergency reserve accounts was approximately $60.2 million. County leadership is committed to increasing the County's reserve balance from the excess of revenues over expenditures on an annual basis.

Jefferson County has an important responsibility to its citizens to carefully account for public funds, to wisely manage these funds, and to plan the adequate funding of services the public considers necessary. The County has taken great steps to ensure that necessary government services are fully funded and provided to the community. The scope of the policies developed to ensure this accountability spans the general budget, revenue, debt, investment, reserve, financial reporting, transfer, asset inventory and long-range strategic policies.

Award

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Distinguished Budget Presentation Award for the Commission's annual budget document dated for the period beginning October 1, 2021. To qualify for the Distinguished Budget Presentation Award, the Commission's budget document had to be judged proficient as a policy document, a financial plan, an operations guide, and a communications device.

Acknowledgement

The preparation of this document could not have been accomplished without the dedicated efforts of the staff of the Finance Department and County Administration. Appreciation is expressed to all members of the County government for assisting and contributing to the preparation of this report.

Respectfully submitted,

Cal Markert
County Manager

Angela M. Dixon, CPA
Chief Financial Officer

Jefferson County Commissioners

As Of September 30, 2022

Commissioner Joe Knight District 4	Commissioner Lashunda Scales District 1	Commissioner James Stephens District 3	Commissioner Sheila Tyson District 2	Commissioner Steve Ammons District 5

Jefferson County, Alabama Organizational Chart - September 30, 2022

*County Manager is appointing authority for merit employees in these departments.

GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

Jefferson County
Alabama

For the Fiscal Year Beginning

October 01, 2021

Christopher P. Morrill

Executive Director

FINANCE SECTION

MAULDIN & JENKINS
CPAs & ADVISORS

INDEPENDENT AUDITORS' REPORT

To the Commissioners
of Jefferson County, Alabama
Birmingham, Alabama

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of **Jefferson County, Alabama** (the "County"), as of and for the fiscal year ended September 30, 2022, and the related notes to the financial statements, which collectively comprise the County's basic financial statements as listed in the table of contents.

In our opinion, based on our audit and the reports of the other auditors, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the County, as of September 30, 2022, and the respective changes in financial position, and, where applicable, cash flows thereof for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

We did not audit the financial statements of the Jefferson County Economic and Industrial Development Authority, which represents 51 percent, 321 percent, and negative 2 percent, respectively, of the assets and deferred outflows of resources, deficit net position, and revenues of the aggregate discretely presented component units. We also did not audit the financial statements of the General Retirement System for Employees of Jefferson County. Those statements were audited by other auditors whose reports have been furnished to us, and our opinions, insofar as they relate to the amounts included for the Jefferson County Economic and Industrial Development Authority and the General Retirement System for Employees of Jefferson County, are based solely on the reports of the other auditors.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States *(Government Auditing Standards)*. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the County and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions. The financial statements of the General Retirement System for Employees of Jefferson County were not audited in accordance with *Government Auditing Standards*.

Emphasis of Matter – Change in Accounting Principle

As discussed in Note 8, the County implemented Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*, as of October 1, 2021. This standard significantly changed the accounting for the County's lease activities. Our opinions are not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the County's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the County's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the County's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, the budgetary comparison schedules for the General Fund, the Special Sales Tax Revenue Fund, the Indigent Care Fund, and the American Rescue Plan Fund, the schedule of changes in the County's total OPEB liability and related ratios, the schedule of changes in the County's net pension liability and related ratios, the schedule of County contributions, and the schedule of pension investment returns, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the County's basic financial statements. The accompanying combining and individual fund financial statements and schedules, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining and individual fund financial statements and schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introduction and statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated March 31, 2023 on our consideration of the County's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the County's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the County's internal control over financial reporting and compliance.

Mauldin & Jenkins, LLC

Birmingham, Alabama
March 31, 2023

Jefferson County, Alabama
Management's Discussion and Analysis
September 30, 2022

As management of Jefferson County, Alabama (the "County"), we offer readers of the County's financial statements this narrative overview and analysis of the financial activities of the County for the fiscal year ended September 30, 2022. This discussion is intended to: (1) assist the reader in understanding significant financial issues; (2) provide an overview of the County's financial activities; (3) identify changes in the County's financial position; (4) identify material deviations from the County's original budget; and (5) identify individual fund issues or concerns. This discussion has been prepared by management along with the financial statements and related note disclosures, and should be read in conjunction with the financial statements and notes. The financial statements, notes, required supplementary information, and this discussion are the responsibility of management.

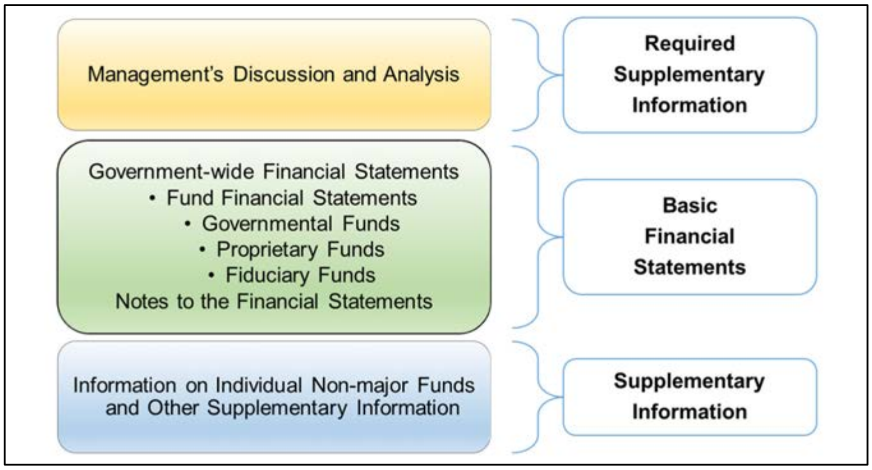
Financial Highlights

The following are the County's financial highlights for the fiscal year ending September 30, 2022:

- As of September 30, 2022, the County's total net position was $532 million, a decrease of $20.6 million from net position as of September 30, 2021.
- Combined revenue totaled approximately $799 million of which governmental activities totaled $565 million and business-type activities totaled approximately $234 million.
- Overall expenses totaled $819 million of which governmental activities totaled approximately $428 million and business-type activities totaled approximately $392 million.
- Assets and deferred outflows of resources of the County exceeded its liabilities and deferred inflows of resources at the close of the most recent fiscal year by $532 million (net position). The unrestricted net position, which represents the amounts available to meet the County's ongoing obligations to citizens and creditors, was a deficit of approximately $148 million.
- At the close of the current fiscal year, the County's governmental funds reported combined balances of $493 million, an increase of $143 million in comparison with the prior fiscal year. Of this amount, $203 million is available for spending at the government's discretion (unassigned fund balance).
- At the end of the current fiscal year, unrestricted fund balance (the total of the assigned and unassigned components of fund balance) for the General Fund was approximately $296 million.

Overview of the Financial Statements

The following illustration is provided as a guide for the financial statements:



The discussion and analysis provided here are intended to serve as an introduction to the County's basic financial statements. The County's basic audited financial statements are comprised of three components: 1) government-wide financial statements, 2) fund financial statements, and 3) the notes to the financial statements. This section also includes supplementary information intended to furnish additional detail to support the basic financial statements themselves.

Government-wide financial statements:
The government-wide financial statements are designed to provide readers with a broad overview of the County's finances in a manner similar to private-sector business reporting. All governmental and business-type activities are combined to arrive at a total for the primary government. There are two government wide statements, the statement of net position and the statement of activities, which are produced using the accrual basis of accounting. Additional information on the accrual basis of accounting can be found in Note 1 Section C on page 41 of this report.

The *statement of net position* presents financial information on all of the County's assets, liabilities, and deferred inflows/outflows of resources, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the County is improving or deteriorating.

The *statement of activities* presents information showing how the County's net position changed during the most recent fiscal year. The format of this statement is very different from a traditional "income statement". The format is intended to portray the extent to which governmental activities are funded by taxes and the extent to which business-type activities are supported by the revenues they generate. The statement presents all underlying events giving rise to the changes in net position, regardless of the timing of related cash flows. Thus, revenues and expenses reported for some items will only result in cash flows in future fiscal periods (e.g., uncollected taxes, and earned but unused vacation leave).

Each of the government-wide financial statements distinguish functions of the County that are principally supported by taxes and intergovernmental revenues (governmental activities) from other functions that are intended to recover all or a significant portion of the costs through user fees and charges (business type activities). The governmental activities of the County include general government, public safety, law library operations, highway and roads, health and welfare, and community development. The business-type activities of the County include sanitary operations, landfill operations, and economic development (Hallmark Farms).

The government-wide financial statements include the County itself (known as the primary government), the Jefferson County Personnel Board, Emergency Management Agency, and Jefferson County Economic and Industrial Development Authority. These legally separate entities are reported as component units of the County due to the significance of their operational or financial relationships with the County. Financial information for these component units is reported separately from the financial information presented for the primary government itself.

The government-wide financial statements can be found on pages 28 through 29.

Fund financial statements

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The County, like other state and local governments, uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. All of the funds of the County can be divided into three categories: governmental funds, proprietary funds, and fiduciary funds.

Governmental Funds

Governmental funds are used to account for essentially the same functions reported as governmental activities in the government-wide financial statements. However, unlike the government-wide financial statements, governmental fund financial statements focus on near-term inflows and outflows of spendable resources, as well as on balances of spendable resources available at the end of the fiscal year. Such information may be useful in evaluating a government's near-term financing requirements.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the government's near-term financing decisions. The governmental fund balance sheet and the governmental fund statement of revenues, expenditures, and changes in fund balances provide a reconciliation to facilitate this comparison between governmental funds and governmental activities (in the government wide financial statements).

The County maintains separate governmental funds to account for the following activities: primary government (General Fund), special revenues, capital projects, and debt service. Information is presented separately in the governmental funds balance sheet and in the governmental funds statement of revenues, expenditures, and changes in fund balances for each of the major governmental funds. Data from the other (non-major) governmental funds are combined into a single, aggregated column.

The basic governmental fund financial statements can be found on pages 30 through 33.

The County adopts an annual appropriated budget for its various governmental activities. A budgetary comparison is included in this report for the individual non-major funds and for the following major funds: General Fund, Special Sales Tax Revenue, Indigent Care, and American Rescue Plan. These statements and schedules for the County's major funds are found on pages 94 through 100.

Governmental funds are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Information regarding the measurement focus and basis of accounting can be found in Note 1. C. on page 41 of this report.

Proprietary funds
The County maintains one type of proprietary fund: enterprise funds. The enterprise funds are used to account for quasi-business functions where revenues typically come from charges or fees (sanitary usage) rather than taxes. The County uses enterprise funds to account for its sanitary sewer systems, landfill, and economic development activities.

The County adopts an annual budget for management purposes for its enterprise funds. Proprietary fund financial statements provide the same type of information as the government-wide financial statements, only in more detail. The proprietary fund financial statements provide separate information for Sanitary Operations, which is considered to be a major fund of the County. Data from the other (non-major) enterprise funds are combined into a single, aggregated column: Landfill Operations and Hallmark Farms Cooperative District (blended component unit). These statements are found on pages 124 through126.

Proprietary funds are reported using the economic resources measurement focus and the accrual basis of accounting. Information regarding the measurement focus and basis of accounting can be found in Note 1. C. on page 41 of this report.

Fiduciary funds
Fiduciary funds are used to account for resources held for the benefit of parties outside the government. Fiduciary funds are not reflected in the government-wide financial statements because the resources of those funds are not owned by or available to support the County's own programs. The accounting used for fiduciary funds is much like that used for proprietary funds, and their financial statements are reported on the accrual basis of accounting as well. The County maintains seven fiduciary funds: The Pension Trust Fund, Tax Collector Fund, Department of Revenue Fund, Treasurer's Trust Fund, Sheriff Fund, Family Court Fund, and Probate Court Fund. The details associated with the Pension Trust Fund are included in Note 9 (Defined Benefit Pension Plan) on pages 78 through 83. These fiduciary funds are aggregated and presented on pages 127 through 128.

Fiduciary funds are reported using the economic resources measurement focus and the accrual basis of accounting. Information regarding the measurement focus and basis of accounting can be found in Note 1. C. on page 41 of this report.

Notes to the financial statements
The financial statements also include notes that explain the information in the financial statements and provide more detailed data. The statements are followed by a section of required supplementary information that further explains and supports the information in the financial statements. This information begins on page 39 of the audited financial statements.

Government-wide Financial Analysis of the Commission

As noted earlier, over time net position may serve as a useful indicator of a government's financial position. The County's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $532.2 million as of September 30, 2022, resulting in a deficit of unrestricted net position of approximately ($148) million as of September 30, 2022. The County's net position decreased 4% from the previous fiscal year. This was primarily due to an increase in investment losses reported in the Sanitary Operation Fund of approximately $42.6 million in fiscal year 2022 compared to reporting investment earnings of $3.3 million in the prior fiscal year.

Total Primary Government

The County's combined net position (governmental and business-type activities) decreased 4% between the fiscal years 2022 and 2021 by $20.6 million to $532.2 million. This is largely associated with the decrease in the net position for business-type activities of $157 million.

The following table presents financial information for governmental and business-type activities for the fiscal year ended September 30, 2022, with comparative data for the fiscal year ended September 30, 2021.

Table A-1
Jefferson County Commission's Net Position
(In thousands of dollars)

	Governmental Activities				Business-Type Activities				Totals			
	2022	2021, Restated	Change	Percent Change	2022	2021	Change	Percent Change	2022	2021, Restated	Change	Percent Change
Current and Other Assets	$ 1,054,756	$ 756,194	$ 298,562	39%	$ 608,610	$ 576,493	$ 32,117	6%	$ 1,663,366	$ 1,332,687	$ 330,679	25%
Capital Assets (Net)	382,985	372,515	10,470	3%	1,897,477	1,979,388	(81,911)	-4%	2,280,462	2,351,903	(71,441)	-3%
Total Assets	1,437,741	1,128,709	309,032	27%	2,506,087	2,555,881	(49,794)	-2%	3,943,828	3,684,590	259,238	7%
Deferred Outflows of Resources	50,456	40,396	10,060	25%	11,839	8,148	3,691	45%	62,295	48,544	13,751	28%
Current Liabilities	197,112	149,186	47,926	32%	62,697	55,160	7,537	14%	259,809	204,346	55,463	27%
Other Liabilities	599,966	560,810	39,156	7%	2,300,590	2,228,345	72,245	3%	2,900,556	2,789,155	111,401	4%
Total Liabilities	797,078	709,996	87,082	12%	2,363,287	2,283,505	79,782	3%	3,160,365	2,993,501	166,864	6%
Deferred Inflows of Resources	276,382	180,436	95,946	53%	37,159	6,377	30,782	483%	313,541	186,813	126,728	68%
Net Position:												
Net Investment in Capital Assets	(19,809)	(58,408)	38,599	-66%	164,383	235,654	(71,271)	-30%	144,574	177,246	(32,672)	-18%
Restricted	69,088	150,430	(81,342)	-54%	466,193	471,373	(5,180)	-1%	535,281	621,803	(86,522)	-14%
Unrestricted	365,458	186,651	178,807	96%	(513,096)	(432,880)	(80,216)	19%	(147,638)	(246,229)	98,591	-40%
Total Net Position	$ 414,737	$ 278,673	$ 136,064	49%	$ 117,480	$ 274,147	$ (156,667)	-57%	$ 532,217	$ 552,820	$ (20,603)	-4%

The restricted net position totaling $535 million on September 30, 2022, represents resources subject to external restrictions, constitutional provisions, or enabling legislation on how they can be used. The County presents restricted net position for Grant Programs ($9.4 million), Tax Assessor Operations (approximately $1.8 million), Public Works (approximately $15.2 million), Public Safety ($6.0 million), Law Library Operations (approximately $986 thousand), Equalization Operations ($868 thousand), Community Development (approximately $3.3 million), Health and Welfare ($11.1 million), Debt Service ($8.3 million), Landfill Assurance (approximately $6.8 million), Unsecured Claims ($5.3 million), and Capital Improvements and Debt Service ($466 million) associated with the County's Sanitary Operations.

Governmental Activities

As can be seen in Table A-2, the change in net position for fiscal year 2022 for governmental type activities totaled $136 million, an approximately $15.8 million increase (13%) from fiscal year 2021. This change is largely associated with the increase in sales taxes related to Simplified Sellers Tax which is a tax for online purchases which increased significantly during the global pandemic.

Business-Type Activities

As of September 30, 2022, the County's business-type activities (major and non-major) reported a net position of $117.4 million, a decrease of approximately $157 million from net position as of September 30, 2021. The net position decrease can be attributed to an increase in investment losses reported in the Sanitary Operation Fund of approximately $42.6 million in fiscal year 2022 compared to reporting investment earnings of $3.3 million in fiscal year 2021 due to the increasing interest rates across the economy.

The following condensed financial information was derived from the government-wide statement of activities and reflects how the County's net position changed during the fiscal year:

Table A-2
Changes in Jefferson County Commission's Net Position
(In thousands of dollars)

	Governmental Activities				Business-Type Activities				Total			
	2022	2021	Change	Total Percentage Change	2022	2021	Change	Total Percentage Change	2022	2021	Change	Total Percentage Change
Revenues												
Program Revenues:												
Charges for Services	$ 65,675	$ 53,414	$ 12,261	23%	$ 260,622	$ 237,989	$ 22,633	10%	$ 326,297	$ 291,403	$ 34,894	12%
Operating Grants and Contributions	60,054	74,099	(14,045)	-19%	-	-	-	0%	60,054	74,099	(14,045)	-19%
Capital Grants and Contributions	4,388	4,732	(344)	-7%	6,287	6,826	(539)	-8%	10,675	11,558	(883)	-8%
General revenues:												
Property Taxes	130,600	129,152	1,448	1%	7,571	7,567	4	0%	138,171	136,719	1,452	1%
Sales Taxes	287,104	260,694	26,410	10%	-	-	-	-	287,104	260,694	26,410	10%
Other Taxes	11,529	11,591	(62)	-1%	-	-	-	-	11,529	11,591	(62)	-1%
Unrestricted Investment Earnings	2,014	458	1,556	340%	(42,253)	3,303	(45,556)	-1379%	(40,239)	3,761	(44,000)	-1170%
Miscellaneous	3,717	9,695	(5,978)	-62%	1,298	675	623	92%	5,015	10,370	(5,355)	-52%
Gain on Sale of Capital Assets	-	1,768	(1,768)	-100%	193	345	(152)	100%	193	2,113	(1,920)	-91%
Total Revenues	565,081	545,603	19,478	4%	233,718	256,705	(22,987)	-9%	798,799	802,308	(3,509)	0%
Expenses												
General Government	169,336	156,361	12,975	8%	-	-	-	-	169,336	156,361	12,975	8%
Public Safety	99,434	88,795	10,639	12%	-	-	-	-	99,434	88,795	10,639	12%
Law Library Operations	180	268	(88)	100%	-	-	-	-	180	268	(88)	100%
Highways and Roads	48,824	40,503	8,321	21%	-	-	-	-	48,824	40,503	8,321	21%
Health and Welfare	85,329	110,993	(25,664)	-23%	-	-	-	-	85,329	110,993	(25,664)	-23%
Community Development	10,864	13,529	(2,665)	-20%	-	-	-	-	10,864	13,529	(2,665)	-20%
Interest and Fiscal Charges	13,832	13,646	186	1%	-	-	-	-	13,832	13,646	186	1%
Hallmark Farms Cooperative	-	-	-	-	516	672	(156)	100%	516	672	(156)	-23%
Economic and Industrial Development	-	-	-	-	-	-	-		-	-	-	100%
Landfill Operations	-	-	-	-	4,114	2,750	1,364	50%	4,114	2,750	1,364	50%
Sanitary Operations	-	-	-	-	386,973	380,446	6,527	2%	386,973	380,446	6,527	2%
Total Expenses	427,799	424,095	3,704	1%	391,603	383,868	7,735	2%	819,402	807,963	11,439	1%
Increase (decrease) in net position before transfers	137,282	121,508	15,774	13%	(157,885)	(127,163)	(30,722)	24%	(20,603)	(5,655)	(14,948)	264%
Transfers:	(1,218)	(1,204)	(14)	1%	1,218	1,204	14	1%	-	-	-	0%
Change in Net Position	136,064	120,304	15,760	13%	(156,667)	(125,959)	(30,708)	24%	(20,603)	(5,655)	(14,948)	264%
Net Position - Beginning	278,673	163,285	115,388		274,147	400,106	(125,959)		552,820	563,391	(10,571)	
Restatement (Note 15)	-	(4,916)	4,916		-	-	-		-	(4,916)	4,916	
Net Position - ending	$ 414,737	$ 278,673	$ 136,064	49%	$ 117,480	$ 274,147	$ (156,667)	-57%	$ 532,217	$ 552,820	$ (20,603)	-4%

Financial Analysis of Governmental Funds

As noted earlier, the County uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements.

Governmental Funds
The focus of the County's governmental funds is to provide information on near-term inflows, outflows, and balances of spendable resources. Such information is useful in assessing the County's financing requirements. In particular, unassigned fund balance may serve as a useful measure of a government's net resources available for discretionary use as they represent the portion of fund balance which has not yet been limited to use for a particular purpose by either an external party, the County itself, or a group or individual that has been delegated authority to assign resources for use for particular purposes by the County Commission.

As of September 30, 2022, the County's governmental funds reported combined fund balances of $493.4 million, an increase of approximately $143.5 million in comparison with the prior fiscal year. Of this amount, $203 million constitutes unassigned fund balance, which is available for spending at the County's discretion. The remainder of the fund balance is either non-spendable, restricted, committed, or assigned.

Assigned fund balance represents the intentional constraints placed on resources within fund balance either by the governing board or appointees. The County present assigned fund balance for Uncertainty Reserve ($20.1 million), Catastrophic Reserve ($20.1 million), and Economic Development ($32.3 million), and Budget Reserve ($20 million).

The following is an analysis of significant balances and transactions of individual major governmental funds:

- The General Fund is the County's primary operating fund and accounts for the majority of the County's expenditures for general government administration. Tax revenues served as the largest own source revenue to support the operations of the County. Property and Sales taxes combined increased from approximately $126 million in fiscal year 2021 to $134 million during fiscal year 2022, primarily due to the COVID pandemic forcing shoppers to turn to online retail sales, and consumer price increase (inflation). The other substantial increase was due to revaluation of property taxes.
- The County's Special Sales Tax Revenue fund accounts for the special revenue sales tax collected and used for the payment of the County's principal and interest on certain governmental bonds. Sales tax collections (revenue) increased to $134.6 million in fiscal year 2022 from $122.8 million in fiscal year 2021, primarily due to the rebounding of the Special Sales Tax due to COVID restrictions being lifted.
- The Indigent Care Fund accounts for the receipt of alcohol beverage and sales taxes designated for indigent residents of the County. Tax revenues increased from approximately $63.5 million in fiscal year 2021 to $69.9 million in fiscal year 2022, primarily due to significant increases in alcohol beverage sales.
- The American Rescue Plan Fund, or ARPA, Fund is a major fund that accounts for the financial resources provided to the County by the U.S. Department of the Treasury. Under the American Rescue Plan Act, the County recognized $14.5 million in revenues and $14 million in expenditures for the current fiscal year for projects approved by the Commission. The infusion of federal funding for COVID relief received by the County during fiscal years 2022 and prior is recorded in this fund, with fund balance resulting from interest income being restricted for grant programs. Current appropriations of funds are allocated by the County Commission based on a priority list and include projects for roads, food distribution, tourism, and housing assistance.

Financial Analysis of the County's Sanitary Operation Fund

Net position of the Sanitary Operation Fund decreased by approximately $155 million, from $279 million in the prior fiscal year to $124 million at September 30, 2022. This change is principally associated with the increase in accreted interest expense reflected in the Sanitary Operation Fund's unrestricted net position classification. The County is currently evaluating a refinancing of its Series 2013 Sewer Revenue Warrants through which the County's Capital Appreciation Warrants and Convertible Capital Appreciation Warrants would likely be refinanced with current interest warrants.

Sewer sales revenue increased by 9.4% from $222.7 million in the prior fiscal year to $243.6 million in fiscal year 2022. This is attributed to the expected rate increase of 3.49% annually, along with an increase in nonresidential consumption as commercial activities resume post-pandemic with COVID-19 restrictions being lifted. The increase in operating revenues and a slight increase in operating expenses of less than 1% led to an overall operating income of approximately $21.4 million in fiscal year 2022 compared to $7.5 million in fiscal year 2021.

General Fund Budgetary Highlights

On September 16, 2021, the County Commission approved the fiscal year 2022 Operating Budget for the County, including estimated revenues of approximately $185 million and operating appropriations of $231 million for the County's General Fund. The County's revenues in the General Fund were higher than its final, amended budget by $21 million during 2022 primarily due to the Simplified Sellers Tax, regular sales tax, and Special Sales Tax. The Simplified Sellers Tax is a tax for online purchases which increased significantly during the global pandemic and continues to grow. The Special Sales Tax increased due to progress made in the fight against COVID-19 and citizens resuming their shopping activities. Ad Valorem Tax showed modest growth.

Throughout the fiscal year, the County Commission's original budget is amended to reflect changes in funding needs. The County Commission has established policies and procedures for such amendments. The Budgetary Comparison Schedule for the General Fund can be found on pages 94 through 97.

General Fund Revenue and Expenditure Budget Variances

The most significant budget amendments affecting revenues are summarized as follows:

	Original	Final	Actual	Variance Final Budget
Revenue Source				
Sales taxes	$61,802,115	$61,802,115	$71,225,128	$9,423,013
License and permits	11,499,563	11,499,563	16,138,200	4,638,637
Intergovernmental	5,391,751	5,750,461	9,526,129	3,775,668
Charges for services	40,624,077	40,624,077	43,865,313	3,241,236

The County conservatively budgeted that estimated sales taxes would grow by 2.5% which is in line with historical growth trends. However, the County's actual growth for fiscal year 2022 was a 9% increase over the prior year. The significant increase can be attributable to numerous factors including hosting the World Games, the opening of Protective Stadium while hosting the USFL Football League, results from other economic development projects, and the higher-than-usual rate of inflation experienced in fiscal year 2022. Licenses and permits exceeded the original budget amount due to increased construction in unincorporated Jefferson County. One of the largest construction projects that began in November 2021 was the construction of Medical West Hospital Authority, an affiliate of UAB Health System. There was also an increase in state and federal grants that accounts for the increase in intergovernmental revenue of approximately $4.1 million over the original budget. Actual revenue for charges for services was approximately $3.2 million more than the original budget due to an unexpected increase in the financial excise tax that was received from the state.

The most significant budget amendments affecting expenditures are summarized as follows:

General Government

- The final budget for Commission Support grant expenditures was increased by approximately $10.6 million to create a grant program to improve the quality of life for the citizens in collaboration with approved community partners that include non-profits, municipalities, school districts, etc.
- The operating cost for the county attorney's office exceeded the approved budget by approximately $0.5 million due to an increase in consulting and attorney costs related to the sewer refinancing activities.
- The Fleet Management departmental original budget was increased due to an anticipated increase in fuel costs as well as a delay in the completion of vehicle maintenance due to supply chain challenges.

Public safety

- The Sheriff's department personnel cost budget exceeded the final budget amount by approximately $3.3 million due to increased overtime that was attributable to the hosting of the World Games.

Capital Assets and Debt Administration

As of September 30, 2022, the County had invested approximately $2.3 billion, net of accumulated depreciation, in a broad range of capital assets (see table below). This investment was comparable to the approximately $2.4 billion reported as of September 30, 2021.

Table A-3

Capital Assets

(net of depreciation in thousands of dollars)

	Governmental Activities		Business-Type Activities		Total		2022 Versus 2021	
	2022	2021	2022	2021	2022	2021	Change	Percent Change
Land	$ 26,059	$ 22,232	$ 35,553	$ 35,553	$ 61,612	$ 57,785	3,827	7%
Construction in Progress	88,873	69,687	91,958	79,298	180,831	148,985	31,846	21%
Buildings and Improvements	231,639	245,568	474,349	496,929	705,988	742,497	(36,509)	-5%
Equipment and Vehicles	32,379	33,327	12,773	13,502	45,152	46,829	(1,677)	-4%
Furniture and Fixtures	873	844	-	-	873	844	29	3%
Software	171	857	-	-	171	857	(686)	-80%
Right-to-use Leased Assets	2,990	-	-	-	2,990	-	2,990	0%
Infrastructure and Other Improvements	-	-	1,282,844	1,354,106	1,282,844	1,354,106	(71,262)	-5%
	$ 382,984	$ 372,515	$ 1,897,477	$ 1,979,388	$ 2,280,461	$ 2,351,903	$ (71,442)	-3%

	Governmental Activities 2022	Governmental Activities 2021	Business-Type Activities 2022	Business-Type Activities 2021	Total 2022	Total 2021	Change	Percent Change
Depreciable assets, net	$ 268,052	$ 280,596	$ 1,769,966	$ 1,864,537	$ 2,038,018	$ 2,145,133	(107,115)	-5%
Nondepreciable assets	114,932	91,919	127,511	114,851	242,443	206,770	35,673	17%
Total	$ 382,984	$ 372,515	$ 1,897,477	$ 1,979,388	$ 2,280,461	$ 2,351,903	$ (71,442)	-3%

Governmental Activities

Governmental activities capital assets as of September 30, 2022 were approximately $383 million, which was an overall increase from the $372.5 million as of September 30, 2021. The increase is largely associated with increases in construction in progress of approximately $19.2 million during the fiscal year. Along with a net disposal of approximately $2.1 million, approximately $11.5 million in assets (other than construction in progress) were purchased during the fiscal year with approximately $3.4 million in donated assets, largely associated with miscellaneous equipment and the motor vehicle fleet.

Major capital assets acquired, projects completed or in progress during the fiscal year ended September 30, 2022, included the following:

- $19.2 million in additional construction in progress largely for road construction.
- Approximately $2 million in miscellaneous equipment purchases for Public Safety.
- Approximately $2.8 million in vehicle purchases for Roads and Transportation, Public Safety and General Governmental Activities.

Business-Type Activities
Business-type activities capital assets as of September 30, 2022, were approximately $1.9 billion, a decrease of $81.9 million over the prior fiscal year. This decrease is associated with increased accumulated depreciation for infrastructure totaling approximately $119.4 million as well as building depreciation totaling approximately $22.6 million. Capital purchases (excluding construction in progress) amounted to approximately $14.6 million, and approximately $36.4 million in sanitation construction projects were completed and transferred to depreciable asset categories.

Major capital assets acquired, projects completed or in progress during the fiscal year ended September 30, 2022, included the following:

- Approximately $49 million in additional construction in progress projects involving improvements to the County's sanitation infrastructure.
- Approximately $6.3 million in donated infrastructure for sanitary operations.
- Purchases of construction equipment, regular equipment, and vehicles totaled approximately $2.9 million for the fiscal year.

For additional details on Capital Assets see Note 5, page 61.

Long-Term Debt

As of September 30, 2022, the County had total bonded debt of approximately $2.7 billion, largely associated with revenue warrants in business-type activities reported at $2.2 billion. The County issued its Limited Obligation Warrant, Series 2022, to the Alabama Transportation Infrastructure Bank to evidence a loan in the amount of $66,335,000. The proceeds of the loan will be used to pay costs of road and bridge improvements within the County.

Long-Term Debt Activities
The County's total bonded debt as of September 30, 2022, was approximately $2.7 billion, an approximately $107.9 million increase from the September 30, 2021 total of approximately $2.6 billion.

Total primary government long-term obligations, including amounts due within one fiscal year, were approximately $2.9 billion as of September 30, 2022, an increase of approximately $111.4 million from September 30, 2021. A summary of the most significant sources of the County's debt are shown in Table A-4:

Table A-4
Long-Term Debt
(In thousands of dollars)

	Governmental Activities		Business-Type Activities		Total		2022 Versus 2021	
	2022	2021	2022	2021	2022	2021	Change	Percent Change
General Obligation Warrants (backed by the County)	$ 67,939	$ 87,766	$ -	$ -	$ 67,939	$ 87,766	$ (19,827)	-23%
Limited Obligation Warrants (backed by sales tax)	383,385	328,080	-	-	383,385	328,080	55,305	17%
Revenue Warrants (backed by Sewer fees)	-	-	2,230,563	2,161,385	2,230,563	2,161,385	69,178	3%
BJCC Bonds (backed by the County)	16,428	16,793	-	-	16,428	16,793	(365)	-2%
Hallmark Bonds (backed by the County)	-	-	11,953	12,792	11,953	12,792	(839)	-7%
	$ 467,752	$ 432,639	$ 2,242,516	$ 2,174,177	$ 2,710,268	$ 2,606,816	$ 103,452	-11%

Accreted interest grew by approximately $77 million, resulting in the increased long-term debt for the fiscal year.

For additional details on Long-Term Debt see Note 8, page 67.

The County's credit ratings on its bonded debt as of September 30, 2022, were:

General Obligation Warrants:	
Moody's Investors Service, Inc.	A3/Stable
S&P Global Ratings	AA-/Stable
Fitch Ratings	AA-/Stable
Limited Obligation Warrants:	
S&P Global Ratings	AA/Stable
Fitch Ratings	AA-/Stable
Sewer Warrants:	
Senior:	
S&P Global Ratings	BBB+/Stable
Fitch Ratings	BB+/Stable
Subordinate:	
S&P Global Ratings	BBB/Stable
Fitch Ratings	BB/Stable

The County's credit ratings were above investment grade, primarily due to strength in the economic base relative to peers. An impact of the County's credit ratings above investment grade status comes in the form of lower borrowing costs.

Economic Factors and Next Year's Budget and Rates

The area's economy was originally based on steel production but has diversified over the past several decades as healthcare, banking and professional services emerged to become leading industries in the metro area. Heavy industry continues to be an important component of the local economy. Automotive manufacturing has become prominent in the greater metro area, as several auto assembly plants and related suppliers have established manufacturing facilities in North and Central Alabama in the last two decades. The County Commission has maintained its commitment to improve economic conditions throughout the County. The County Commission partnered with the State of Alabama and the City of Birmingham to attract Landing to locate its headquarters in downtown Birmingham, bringing with it 816 full-time jobs. The County has been able to bounce back from the pandemic as its unemployment rate has fallen to pre-pandemic levels. This is due to resilient consumer behavior and a diversified economy including healthcare, finance, telecommunications, and education. Part of the County's economic strength results from being less dependent on tourism and hospitality industries than some other areas throughout the State.

The University of Alabama Birmingham (UAB) is the County's primary driver of economic activity in the healthcare sector by being an internationally renowned research hospital, a first choice for education and healthcare. In 2020, the UAB Hospital, a 1,157-bed primary and tertiary care medical facility, was ranked eighth among the nation's top 50 hospitals by U.S. News and World Report's "Best Hospitals" special edition issue, and six of the specialties offered at UAB hospital were among the top 25. The UAB Hospital is the flagship facility of the UAB Health System and is the primary teaching hospital for the University of Alabama School of Medicine. During this same time span, UAB recorded research awards totaling $638 million, marking the most successful five-year period of research funding, an increase of $190 million (42 percent) from 2015 to 2020. It was determined that one in four Birmingham residents are UAB employees (23,791 as of Fall 2019), students (23,517 as of Fall 2019), or patients (50,579 discharges in 2020). Other healthcare services that contribute to economic impact that are headquartered in Birmingham are St. Vincent's Health System, Children's Health System, and Brookwood Baptist Health.

Banking and finance also contribute significantly to the region's economic base. Birmingham is the Southeast's largest banking center outside Charlotte, North Carolina, and is headquarters to one of the nation's top fifty largest banks, Regions Financial Corporation. With banking subsidiaries operating as "Regions Bank" in 16 states in the Southern and Midwestern United States, Regions Bank operates 1,454 branches and 1,952 automated teller machines producing $4 billion in revenue in 2021. The purchase of BBVA Compass, previously headquartered in Birmingham, and the U.S. subsidiary of Banco Bilbao Vizcaya Argentaria, S.A., Spain's second largest bank, was finalized by PNC Financial Services in 2021.

Mercedes-Benz, Honda, and Hyundai have major automobile assembly facilities within an eighty-five-mile radius of the County. These three facilities were joined by a new Toyota/Mazda plant in Huntsville, Alabama making another $830 million investment in Alabama to incorporate new cutting-edge manufacturing technology within the same radius. This new industry has created up to 4,000 new jobs for Alabama. The region's economy has benefited from its proximity to these major manufacturing facilities, as several automotive suppliers have established businesses in the area.

With the increases in economic development in the greater Jefferson County community, Alabama Power, being a subsidiary of Southern Company, is the principal taxpayer for the County reporting an assessed value of $763,124,500, 6.67 % of total property taxes for the County. Being the supplier of electric power in the County and serving 1.3 million homes, businesses, and industries over the southern two-thirds of Alabama provides an economic foundation for continued development in the County.

The County maintains a conservative approach to revenue estimates in order to avoid the negative consequences that arise when anticipated revenue collections fail to materialize. County revenues are affected by a variety of factors such as population growth, unemployment, inflation, and increases or decreases in real disposable income. The Budget Management Office uses trend analysis to forecast its revenues for upcoming years. Revenue forecasts for fiscal year 2023 reflect a slight increase in property tax revenue, increases in the general sales tax, a significant increase in the Simplified Sellers Tax and a major increase in Special Sales Tax revenue.

Contacting The Commission's Financial Management

The financial report is designed to provide the County's citizens, taxpayers, customers, investors, and creditors with a general overview of the County's finances and to show the County Commission's accountability for the money it receives. If you have questions about this report or need additional financial information, please contact the Office of the Chief Financial Officer, 716 Richard Arrington, Jr. Boulevard North, Suite 810, Birmingham, Alabama 35203.

JEFFERSON COUNTY, ALABAMA

STATEMENT OF NET POSITION
SEPTEMBER 30, 2022

	Primary Government			Component Units		
ASSETS	Governmental Activities	Business-type Activities	Total	Personnel Board	Emergency Management Agency	Jefferson County Economic and Industrial Development Authority
Cash and cash equivalents	$ 515,174,995	$ 14,733,831	$ 529,908,826	$ 370,511	$ 797,252	$ 2,685,359
Investments	52,893,152	-	52,893,152	-	-	1,730,447
Receivables (net of allowance for uncollectibles)	13,684,794	35,988,360	49,673,154	6,384,522	178,451	-
Taxes receivable	197,211,521	6,957,753	204,169,274	-	-	-
Intergovernmental receivables	2,695,263	2,984,587	5,679,850	-	-	-
Lease receivables	2,090,192	10,025,515	12,115,707	-	-	-
Interest receivable	262,614	-	262,614	-	-	-
Prepaid items	278,637	-	278,637	-	-	-
Internal balances	2,871,682	(2,871,682)	-	-	-	-
Other assets	-	-	-	-	-	4,433
Restricted assets:						
Restricted cash and cash equivalents	6,124,077	120,392,783	126,516,860	-	-	1,831
Investments	5,947,407	346,325,588	352,272,995	-	-	-
Prepaid bond insurance costs, net	-	28,208,644	28,208,644	-	-	-
Loan receivable from component unit	28,819,142	-	28,819,142	-	-	-
Loan receivables, net	7,464,708	-	7,464,708	-	-	-
Net pension asset	219,238,559	45,864,263	265,102,822	10,773,178	-	-
Land held for resale	-	-	-	-	-	16,939,553
Capital assets, nondepreciable	114,932,891	127,510,899	242,443,790	-	-	-
Capital assets, depreciable, net of accumulated depreciation	268,051,525	1,769,965,973	2,038,017,498	55,090	151,053	-
Total assets	1,437,741,159	2,506,086,514	3,943,827,673	17,583,301	1,126,756	21,361,623
DEFERRED OUTFLOWS OF RESOURCES						
Deferred charges on refunding	-	46,333	46,333	-	-	-
Pension related items	39,118,888	8,183,593	47,302,481	1,922,265	-	-
OPEB related items	11,336,780	3,609,173	14,945,953	246,954	7,707	-
Total deferred outflows of resources	50,455,668	11,839,099	62,294,767	2,169,219	7,707	-
LIABILITIES						
Accounts payable	36,048,313	17,240,739	53,289,052	6,453,380	20,489	11,027
Retainage payable	681,108	2,518,442	3,199,550	-	-	-
Accrued interest	3,179,502	35,056,188	38,235,690	-	-	81,693
Due to other governments	34,788,045	-	34,788,045	-	-	-
Accrued payroll	5,968,947	597,978	6,566,925	195,638	22,713	-
Unearned revenue	116,445,977	7,283,562	123,729,539	-	-	-
Noncurrent liabilities due within one fiscal year						
Compensated absences payable	13,463,316	1,902,793	15,366,109	185,275	39,800	-
Lease liabilities	484,212	-	484,212	-	-	-
Claims payable	1,483,074	435,500	1,918,574	-	5,773	-
Financed purchases payable	1,925,766	-	1,925,766	-	-	-
Warrants payable	33,655,000	10,980,000	44,635,000	-	-	-
Bonds payable	379,313	863,802	1,243,115	-	-	-
Noncurrent liabilities due in more than one fiscal year						
Compensated absences payable	8,505,837	2,339,012	10,844,849	989,043	41,530	-
Lease liabilities	2,571,955	-	2,571,955	-	-	-
Loans payable to primary government	-	-	-	-	-	28,819,142
Financed purchases payable	3,613,645	-	3,613,645	-	-	-
Claims payable	5,217,389	1,539,759	6,757,148	-	20,410	-
Litigation liability	5,695,397	4,047,000	9,742,397	-	-	-
Total OPEB liability	89,253,593	28,414,741	117,668,334	1,944,248	60,679	-
Landfill closure and postclosure	-	19,394,310	19,394,310	-	-	-
Warrants payable	417,669,199	2,219,583,177	2,637,252,376	-	-	-
Bonds payable	16,048,485	11,089,448	27,137,933	-	-	-
Total liabilities	797,078,073	2,363,286,451	3,160,364,524	9,767,584	211,394	28,911,862
DEFERRED INFLOWS OF RESOURCES						
Deferred revenues - property taxes	146,062,352	-	146,062,352	-	-	-
Lease arrangements	2,083,357	9,911,061	11,994,418	-	-	-
Deferred gain on refunding	4,904,257	-	4,904,257	-	-	-
Pension related items	110,069,080	23,026,229	133,095,309	5,408,691	-	-
OPEB related items	13,262,743	4,222,322	17,485,065	288,908	9,017	-
Total deferred inflows of resources	276,381,789	37,159,612	313,541,401	5,697,599	9,017	-
NET POSITION						
Net investment in capital assets	(19,808,792)	164,382,613	144,573,821	55,090	151,053	-
Restricted for:						
Grant programs	9,410,534	-	9,410,534	-	-	-
Tax assessor operations	1,778,930	-	1,778,930	-	-	-
Public works	15,173,668	-	15,173,668	-	-	-
Public safety	6,042,335	-	6,042,335	-	-	-
Law library operations	985,977	-	985,977	-	-	-
Equalization operations	868,341	-	868,341	-	-	-
Community development	3,259,456	-	3,259,456	-	-	-
Health and welfare	11,125,536	-	11,125,536	-	-	-
Debt service	8,349,018	-	8,349,018	-	-	-
Capital improvements and debt service	-	466,193,306	466,193,306	-	-	-
Landfill assurance	6,786,866	-	6,786,866	-	-	-
Unsecured claims	5,306,897	-	5,306,897	-	-	-
Unrestricted	365,458,199	(513,096,369)	(147,638,170)	4,232,247	762,999	(7,550,239)
Total net position	$ 414,736,965	$ 117,479,550	$ 532,216,515	$ 4,287,337	$ 914,052	$ (7,550,239)

The accompanying notes are an integral part of these financial statements.

JEFFERSON COUNTY, ALABAMA

STATEMENT OF ACTIVITIES
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

		Program Revenues		
Functions/Programs	**Expenses**	**Charges for Services**	**Operating Grants and Contributions**	**Capital Grants and Contributions**
Primary government:				
Governmental activities:				
General government	$ 169,335,585	$ 59,121,493	$ 12,733,518	$ 4,357,238
Public safety	99,433,649	1,647,678	4,649,799	30,325
Law library operations	180,259	275,846	-	-
Highway and roads	48,823,561	4,629,633	333,462	-
Health and welfare	85,328,982	-	31,051,025	-
Community development	10,864,412	-	11,286,830	-
Interest and fiscal charges	13,832,455	-	-	-
Total governmental activities	427,798,903	65,674,650	60,054,634	4,387,563
Business-type activities:				
Sanitary operations	386,972,645	259,238,193	-	6,287,004
Landfill operations	4,114,383	1,384,037	-	-
Hallmark Farms	516,451	-	-	-
Total business-type activities	391,603,479	260,622,230	-	6,287,004
Total primary government	$ 819,402,382	$ 326,296,880	$ 60,054,634	$ 10,674,567
Component units:				
Personnel Board	$ 7,929,015	$ 9,181,048	$ -	$ -
Emergency Management Board	1,662,179	892,799	232,018	-
Jefferson County Economic and Industrial Development Authority	4,028,845	45,379	-	-
Total component units	$ 13,620,039	$ 10,119,226	$ 232,018	$ -

General revenues:
- Property taxes
- Sales and use taxes
- Other taxes
- Unrestricted investment earnings (losses)
- Miscellaneous
- Gain on sale of capital assets

Transfers

Total general revenues and transfers

Change in net position

Net position, beginning of fiscal year, as restated

Net position, end of fiscal year

The accompanying notes are an integral part of these financial statements

Net (Expense) Revenue and Changes in Net Position					
Primary Government			Component Units		
Governmental Activities	Business-type Activities	Total	Personnel Board	Emergency Management Agency	Jefferson County Economic and Industrial Development Authority
$ (93,123,336)	$ -	$ (93,123,336)	$ -	$ -	$ -
(93,105,847)	-	(93,105,847)	-	-	-
95,587	-	95,587			
(43,860,466)	-	(43,860,466)	-	-	-
(54,277,957)	-	(54,277,957)	-	-	-
422,418	-	422,418	-	-	-
(13,832,455)	-	(13,832,455)	-	-	-
(297,682,056)	-	(297,682,056)	-	-	-
-	(121,447,448)	(121,447,448)	-	-	-
-	(2,730,346)	(2,730,346)	-	-	-
-	(516,451)	(516,451)	-	-	-
-	(124,694,245)	(124,694,245)	-	-	-
$ (297,682,056)	$ (124,694,245)	$ (422,376,301)	$ -	$ -	$ -
$ -	$ -	$ -	$ 1,252,033	$ -	$ -
-	-	-	-	(537,362)	-
-	-	-	-	-	(3,983,466)
$ -	$ -	$ -	$ 1,252,033	$ (537,362)	$ (3,983,466)
$ 130,599,721	$ 7,571,089	$ 138,170,810	$ -	$ -	$ -
287,104,082	-	287,104,082	-	-	-
11,529,098	-	11,529,098	-	-	-
2,013,921	(42,253,112)	(40,239,191)	-	1,108	(201,553)
3,717,380	1,298,064	5,015,444	1,013	358,410	(6,000)
-	193,326	193,326	-	-	-
(1,217,983)	1,217,983	-	-	-	-
433,746,219	(31,972,650)	401,773,569	1,013	359,518	(207,553)
136,064,163	(156,666,895)	(20,602,732)	1,253,046	(177,844)	(4,191,019)
278,672,802	274,146,445	552,819,247	3,034,291	1,091,896	(3,359,220)
$ 414,736,965	$ 117,479,550	$ 532,216,515	$ 4,287,337	$ 914,052	$ (7,550,239)

JEFFERSON COUNTY, ALABAMA

BALANCE SHEET
GOVERNMENTAL FUNDS
SEPTEMBER 30, 2022

ASSETS	General	Special Sales Tax Revenue	Indigent Care	American Rescue Plan	Nonmajor Governmental Funds	Total
Cash and cash equivalents	$ 178,479,327	$ 57,105,402	$ 10,625,537	$ 118,502,448	$ 150,462,281	$ 515,174,995
Investments	52,893,152	-	-	-	-	52,893,152
Accounts receivable, net	8,895,584	-	-	1,971,094	2,818,116	13,684,794
Taxes receivable	86,454,024	22,673,141	11,743,216	-	76,341,140	197,211,521
Intergovernmental receivables	2,695,263	-	-	-	-	2,695,263
Leases receivable	2,090,192	-	-	-	-	2,090,192
Interest receivable	262,614	-	-	-	-	262,614
Advances to other funds	-	-	-	-	2,871,682	2,871,682
Due from other funds	53,790,812	-	-	-	11,438,919	65,229,731
Prepaid items	278,637	-	-	-	-	278,637
Restricted assets:						
Cash	6,124,077	-	-	-	-	6,124,077
Investments	5,947,407	-	-	-	-	5,947,407
Loan receivable from component unit	28,819,142	-	-	-	-	28,819,142
Loan receivables, net	-	-	-	-	7,464,708	7,464,708
Total assets	$ 426,730,231	$ 79,778,543	$ 22,368,753	$ 120,473,542	$ 251,396,846	$ 900,747,915
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES						
LIABILITIES						
Accounts payable	$ 5,157,627	$ 3,600,000	$ 11,243,217	$ 6,230,696	$ 9,816,773	$ 36,048,313
Retainage payable	20,028	-	-	-	661,080	681,108
Due to other funds	-	58,178,543	-	-	7,051,188	65,229,731
Due to other governments	8,060,570	18,000,000	-	-	8,727,475	34,788,045
Accrued payroll and benefits	5,439,937	-	-	-	529,010	5,968,947
Unearned grant revenue - intergovernmental	-	-	-	113,710,102	2,735,875	116,445,977
Total liabilities	18,678,162	79,778,543	11,243,217	119,940,798	29,521,401	259,162,121
DEFERRED INFLOWS OF RESOURCES						
Deferred revenue - property taxes	69,094,296	-	-	-	76,968,056	146,062,352
Lease arrangements	2,083,357	-	-	-	-	2,083,357
Total deferred inflows of resources	71,177,653	-	-	-	76,968,056	148,145,709
FUND BALANCES						
Fund balances:						
Nonspendable:						
Leases	6,835	-	-	-	-	6,835
Prepaid items	278,637	-	-	-	-	278,637
Loan receivable from component unit	28,819,142	-	-	-	-	28,819,142
Restricted:						
Grant programs	-	-	-	532,744	8,877,790	9,410,534
Tax assessor operations	-	-	-	-	1,778,930	1,778,930
Public works	-	-	-	-	15,173,668	15,173,668
Public safety	-	-	-	-	6,042,335	6,042,335
Law library operations	-	-	-	-	985,977	985,977
Equalization operations	-	-	-	-	868,341	868,341
Community development	-	-	-	-	3,259,456	3,259,456
Health and welfare	-	-	11,125,536	-	-	11,125,536
Debt service	-	-	-	-	11,528,520	11,528,520
Landfill assurance	6,786,866	-	-	-	-	6,786,866
Unsecured claims	5,306,897	-	-	-	-	5,306,897
Assigned:						
Capital projects	-	-	-	-	96,392,372	96,392,372
Budget reserve	20,037,696	-	-	-	-	20,037,696
Uncertainty reserve	20,112,020	-	-	-	-	20,112,020
Catastrophic reserve	20,069,070	-	-	-	-	20,069,070
Economic development	32,388,771	-	-	-	-	32,388,771
Unassigned	203,068,482	-	-	-	-	203,068,482
Total fund balances	336,874,416	-	11,125,536	532,744	144,907,389	493,440,085
Total liabilities, deferred inflows of resources and fund balances	$ 426,730,231	$ 79,778,543	$ 22,368,753	$ 120,473,542	$ 251,396,846	$ 900,747,915

The accompanying notes are an integral part of these financial statements.

JEFFERSON COUNTY, ALABAMA
RECONCILIATION OF THE BALANCE SHEET OF GOVERNMENTAL FUNDS TO THE STATEMENT OF NET POSITION
SEPTEMBER 30, 2022

Amounts reported for governmental activities in the statement of net position are different because:

Fund balances - total governmental funds			$	493,440,085
Capital assets used in governmental activities are not current financial resources and, therefore, are not reported in the governmental funds.				
Cost	$	952,400,650		
Less accumulated depreciation		(569,416,234)		382,984,416
Long-term liabilities are not due and payable in the current period and, therefore, are not reported in the governmental funds.				
Warrants payable	$	(416,805,000)		
Bonds payable		(16,427,798)		
Unamortized premiums and discounts		(34,519,199)		
Deferred gain on refunding		(4,904,257)		
Financed purchases payable		(5,539,411)		
Lease liabilities		(3,056,167)		
Compensated absences payable		(21,969,153)		
Liability claims payable		(6,700,463)		
Accrued interest		(3,179,502)		
Litigation liability		(5,695,397)		(518,796,347)
The net pension asset, deferred inflows of resources, and deferred outflows of resources related to the County's defined benefit pension plan are not expected to be liquidated with expendable available financial resources and, therefore, are not reported in the governmental funds.				
Net pension asset	$	219,238,559		
Deferred inflows of resources - pension items		(110,069,080)		
Deferred outflows of resources - pension items		39,118,888		148,288,367
The total OPEB liability and related deferred outflows and deferred inflows of resources are not expected to be liquidated with expendable available financial resources and, therefore, are not reported in the governmental funds.				
Total OPEB liability	$	(89,253,593)		
Deferred inflows of resources - OPEB items		(13,262,743)		
Deferred outflows of resources - OPEB items		11,336,780		(91,179,556)
Net position - governmental activities			$	414,736,965

The accompanying notes are an integral part of these financial statements.

JEFFERSON COUNTY, ALABAMA

STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES GOVERNMENTAL FUNDS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	General	Special Sales Tax Revenue	Indigent Care	American Rescue Plan	Nonmajor Governmental Funds	Total
Revenues:						
Taxes	$ 134,237,100	$ 134,635,109	$ 69,926,457	$ -	$ 90,434,234	$ 429,232,900
Licenses and permits	16,138,200	-	-	-	827,443	16,965,643
Fines and forfeitures	-	-	-	-	1,034,356	1,034,356
Intergovernmental	9,526,129	-	-	14,057,034	38,339,999	61,923,162
Charges for services	43,865,313	-	-	-	3,809,338	47,674,651
Contributions and donations	-	-	-	-	3,396,961	3,396,961
Interest income (loss)	362,306	163,016	471,869	528,054	488,676	2,013,921
Miscellaneous	2,508,196	-	-	-	1,209,184	3,717,380
Total revenues	206,637,244	134,798,125	70,398,326	14,585,088	139,540,191	565,958,974
Expenditures:						
Current:						
General government	126,322,984	24,100,000	-	12,312,492	16,758,527	179,494,003
Public safety	91,723,031	-	-	-	5,531,420	97,254,451
Law library operations	-	-	-	-	180,259	180,259
Highway and roads	-	-	-	-	38,535,907	38,535,907
Health and welfare	929,546	-	68,111,127	-	16,993,991	86,034,664
Community development	-	-	-	-	10,864,412	10,864,412
Capital outlay:						
General government	-	-	-	-	3,761,462	3,761,462
Public safety	-	-	-	1,744,542	2,226,621	3,971,163
Highway and roads	-	-	-	-	19,172,428	19,172,428
Debt service:						
Principal	711,085	-	-	-	32,341,320	33,052,405
Interest	730,464	-	-	-	18,675,791	19,406,255
Issuance costs	-	-	-	-	1,286,267	1,286,267
Total expenditures	220,417,110	24,100,000	68,111,127	14,057,034	166,328,405	493,013,676
Excess (deficiency) of revenues over (under) expenditures	(13,779,866)	110,698,125	2,287,199	528,054	(26,788,214)	72,945,298
Other financing sources (uses):						
Sale of capital assets	384,456	-	-	-	604,821	989,277
Issuance of bonds	-	-	-	-	66,335,000	66,335,000
Premium on bonds	-	-	-	-	4,447,245	4,447,245
Transfers in	90,226,160	-	-	-	105,040,907	195,267,067
Transfers out	(26,707,606)	(110,698,125)	(4,291,466)	-	(54,787,853)	(196,485,050)
Total other financing sources (uses)	63,903,010	(110,698,125)	(4,291,466)	-	121,640,120	70,553,539
Net change in fund balances	50,123,144	-	(2,004,267)	528,054	94,851,906	143,498,837
Fund balances, beginning of fiscal year, as restated	286,751,272	-	13,129,803	4,690	50,055,483	349,941,248
Fund balances, end of fiscal year	$ 336,874,416	$ -	$ 11,125,536	$ 532,744	$ 144,907,389	$ 493,440,085

The accompanying notes are an integral part of these financial statements.

JEFFERSON COUNTY, ALABAMA
RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS TO THE STATEMENT OF ACTIVITIES
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

Amounts reported for governmental activities in the statement of activities are different because:

Net change in fund balances - total governmental funds			$ 143,498,837
Governmental funds report capital outlays as expenditures. However, in the statement of activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which capital outlay exceeded depreciation expense in the current period.			
Capital outlay	$	30,720,858	
Depreciation expense		(25,062,200)	5,658,658
The net effect of various miscellaneous transactions involving capital assets (i.e., sales, trade-ins, and donations) is to increase net position.			
Net book value of capital assets disposed	$	(2,094,196)	
Donations of capital assets		3,372,075	1,277,879
Payments received on long-term receivables are reported as revenues in the governmental funds. However, the statement of activities does not report revenue from payments on long-term receivables. This is the net effect of payments and adjustments to the carrying value of long-term loans receivable.			(8,106,264)
The issuance of long-term debt provides current financial resources to governmental funds, while the repayment of the principal of long-term debt consumes the current financial resources of governmental funds. Neither transaction, however, has any effect on net position. This amount is the net effect of these differences in the treatment of long-term debt and related items.			
Proceeds from bond issuance	$	(66,335,000)	
Proceeds from bond issuance - premium		(4,447,245)	
Principal repayments on warrants payable		30,360,000	
Principal repayments on lease liabilities		476,866	
Principal repayments on bonds payable		365,300	
Principal repayments on financed purchases		1,850,239	(37,729,840)
Some expenses reported in the statement of activities do not require the use of current financial resources and, therefore, are not reported as expenditures in governmental funds.			
Compensated absences	$	(987,467)	
Change in OPEB expense		(1,749,115)	
Change in pension expense		27,684,389	
Change in litigation payable		132,500	
Change in claims payable		(475,481)	
Amortization		6,993,382	
Accrued interest		(133,315)	31,464,893
Change in net position - governmental activities			$ 136,064,163

The accompanying notes are an integral part of these financial statements.

JEFFERSON COUNTY, ALABAMA

STATEMENT OF NET POSITION
PROPRIETARY FUNDS
SEPTEMBER 30, 2022

ASSETS	Sanitary Operation	Nonmajor Enterprise	Total
Current assets:			
Cash and cash equivalents	$ 9,747,165	$ 4,986,666	$ 14,733,831
Receivables, net	35,702,989	285,371	35,988,360
Taxes receivable	6,957,753	-	6,957,753
Intergovernmental receivables	2,984,587	-	2,984,587
Leases receivables	-	10,025,515	10,025,515
Restricted assets:			
Cash	119,867,718	525,065	120,392,783
Investments	346,325,588	-	346,325,588
Total current assets	521,585,800	15,822,617	537,408,417
Noncurrent assets:			
Net pension asset	45,864,263	-	45,864,263
Prepaid bond insurance costs, net	28,208,644	-	28,208,644
Capital assets:			
Capital assets, not being depreciated	113,399,861	14,111,038	127,510,899
Capital assets, being depreciated	4,915,496,498	53,265,341	4,968,761,839
Less accumulated depreciation	(3,153,079,048)	(45,716,818)	(3,198,795,866)
Total capital assets, net of accumulated depreciation	1,875,817,311	21,659,561	1,897,476,872
Total noncurrent assets	1,949,890,218	21,659,561	1,971,549,779
Total assets	2,471,476,018	37,482,178	2,508,958,196
DEFERRED OUTFLOWS OF RESOURCES			
Pension related items	8,183,593	-	8,183,593
OPEB related items	3,609,173	-	3,609,173
Deferred charges on refunding	-	46,333	46,333
Total deferred outflows of resources	11,792,766	46,333	11,839,099
LIABILITIES			
Current liabilities:			
Accounts payable	17,230,426	10,313	17,240,739
Accrued interest	34,964,600	91,588	35,056,188
Retainage payable	2,518,442	-	2,518,442
Accrued payroll	597,978	-	597,978
Unearned revenue	7,283,562	-	7,283,562
Claims payable	435,500	-	435,500
Compensated absences - current	1,902,793	-	1,902,793
Warrants payable - current	10,980,000	-	10,980,000
Bonds payable - current	-	863,802	863,802
Total current liabilities	75,913,301	965,703	76,879,004
Long-term liabilities:			
Litigation payable	4,047,000	-	4,047,000
Claims payable	1,539,759	-	1,539,759
Advances from other funds	-	2,871,682	2,871,682
Compensated absences	2,339,012	-	2,339,012
Landfill closure and postclosure	-	19,394,310	19,394,310
Warrants payable	2,219,583,177	-	2,219,583,177
Bonds payable	-	11,089,448	11,089,448
Total OPEB Liability	28,414,741	-	28,414,741
Total long-term liabilities	2,255,923,689	33,355,440	2,289,279,129
Total liabilities	2,331,836,990	34,321,143	2,366,158,133
DEFERRED INFLOWS OF RESOURCES			
Pension related items	23,026,229	-	23,026,229
OPEB related items	4,222,322	-	4,222,322
Lease arrangements	-	9,911,061	9,911,061
Total deferred outflows of resources	27,248,551	9,911,061	37,159,612
NET POSITION (DEFICIT)			
Net investment in capital assets	150,556,677	13,825,936	164,382,613
Restricted for capital improvements and debt service	466,193,306	-	466,193,306
Unrestricted (deficit)	(492,566,740)	(20,529,629)	(513,096,369)
Total net position (deficit)	$ 124,183,243	$ (6,703,693)	$ 117,479,550

The accompanying notes are an integral part of these financial statements.

JEFFERSON COUNTY, ALABAMA

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
PROPRIETARY FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Sanitary Operation	Nonmajor Enterprise	Total
OPERATING REVENUES			
Charges for services:			
Sewer sales	$ 243,639,030	$ -	$ 243,639,030
Other	15,599,163	1,384,037	16,983,200
Total operating revenues	259,238,193	1,384,037	260,622,230
OPERATING EXPENSES			
Salaries and benefits	29,694,620	-	29,694,620
Maintenance and operating expenses	14,827,389	2,431,194	17,258,583
Office expenses	1,226,876	-	1,226,876
Materials and supplies	7,795,873	-	7,795,873
Utilities	10,465,353	-	10,465,353
Other operating expenses	30,138,530	-	30,138,530
Depreciation and amortization expense	143,716,325	1,822,557	145,538,882
Total operating expenses	237,864,966	4,253,751	242,118,717
Operating income (loss)	21,373,227	(2,869,714)	18,503,513
NONOPERATING REVENUE (EXPENSES)			
Property tax revenue	7,571,089	-	7,571,089
Investment earnings (losses)	(42,563,461)	310,349	(42,253,112)
Miscellaneous revenue	1,298,064	-	1,298,064
Gain on disposal of capital assets	193,326	-	193,326
Interest and amortization expense	(149,107,679)	(377,083)	(149,484,762)
Total nonoperating revenues (expenses)	(182,608,661)	(66,734)	(182,675,395)
LOSS BEFORE CAPITAL CONTRIBUTIONS AND TRANSFERS	(161,235,434)	(2,936,448)	(164,171,882)
Capital contributions	6,287,004	-	6,287,004
Transfers in	-	1,217,983	1,217,983
Total capital contributions and transfers	6,287,004	1,217,983	7,504,987
Change in net position	(154,948,430)	(1,718,465)	(156,666,895)
NET POSITION, beginning of fiscal year	279,131,673	(4,985,228)	274,146,445
NET POSITION, end of fiscal year	$ 124,183,243	$ (6,703,693)	$ 117,479,550

The accompanying notes are an integral part of these financial statements.

JEFFERSON COUNTY, ALABAMA

STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Sanitary Operation	Nonmajor Enterprise	Total
CASH FLOWS FROM OPERATING ACTIVITIES			
Receipts from customers	$ 253,365,250	$ 3,000	$ 253,368,250
Lease receipts from landfill operator	-	633,551	633,551
Other receipts from landfill operator	-	634,773	634,773
Payments to suppliers and service providers	(55,672,922)	(93,929)	(55,766,851)
Payments to employees	(37,556,713)	-	(37,556,713)
Net cash provided by operating activities	160,135,615	1,177,395	161,313,010
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES			
Property taxes	7,571,089	-	7,571,089
Transfers in	-	1,217,983	1,217,983
Net cash provided by noncapital financing activities	7,571,089	1,217,983	8,789,072
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES			
Purchases of capital assets	(57,340,633)	(60,387)	(57,401,020)
Proceeds from sale of capital assets	193,326	-	193,326
Principal payments on bonds	-	(838,650)	(838,650)
Principal payments on warrants	(9,583,643)	-	(9,583,643)
Repayment of interfund advance	-	(717,921)	(717,921)
Interest and fiscal charges paid	(68,266,921)	(379,566)	(68,646,487)
Net cash used in capital and related financing activities	(134,997,871)	(1,996,524)	(136,994,395)
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchases of investments	45,495,746	-	45,495,746
Interest received	(42,563,461)	310,349	(42,253,112)
Net cash provided by investing activities	2,932,285	310,349	3,242,634
Net increase in cash and cash equivalents	35,641,118	709,203	36,350,321
Cash and cash equivalents:			
Beginning of fiscal year	93,973,765	4,802,528	98,776,293
End of fiscal year	$ 129,614,883	$ 5,511,731	$ 135,126,614
Classified as:			
Cash and cash equivalents	$ 9,747,165	$ 4,986,666	$ 14,733,831
Restricted cash and cash equivalents	119,867,718	525,065	120,392,783
Total	$ 129,614,883	$ 5,511,731	$ 135,126,614
Reconciliation of operating income (loss) to net cash provided by operating activities:			
Operating income (loss)	$ 21,373,227	$ (2,869,714)	$ 18,503,513
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:			
Depreciation and amortization	143,716,325	1,822,557	145,538,882
Amortization of deferred inflows - lease arrangements	-	(114,454)	(114,454)
Miscellaneous revenue	1,298,064	-	1,298,064
Changes in assets, deferred outflows of resources, liabilities, and deferred inflows of resources:			
(Increase) decrease in accounts receivable	(6,264,332)	1,741	(6,262,591)
Increase in taxes receivables	(67,367)	-	(67,367)
Increase in intergovernmental receivables	(839,308)	-	(839,308)
Increase in net pension asset	(25,448,335)	-	(25,448,335)
Increase in deferred outflows from pension	(2,908,953)	-	(2,908,953)
Increase in deferred outflows from OPEB	(786,039)	-	(786,039)
Increase in accounts payable	7,674,582	8,597	7,683,179
Increase in retainage payable	881,034	-	881,034
Decrease in accrued payroll	(940,456)	-	(940,456)
Decrease in health claims payable	(3,174)	-	(3,174)
Increase in litigation liability	185,000	-	185,000
Increase in liability claims payable	40,483	-	40,483
Increase in compensated absences	265,334	-	265,334
Increase in total OPEB liability	1,088,423	-	1,088,423
Increase in deferred inflows from pension	21,583,352	-	21,583,352
Decrease in deferred inflows from OPEB	(712,245)	-	(712,245)
Increase in landfill postclosure care costs	-	2,328,668	2,328,668
Net cash provided by operating activities	$ 160,135,615	$ 1,177,395	$ 161,313,010
NONCASH CAPITAL AND RELATED FINANCING ACTIVITIES			
Capital contributions	$ 6,287,004	$ -	$ 6,287,004
Total noncash capital and related financing activities	$ 6,287,004	$ -	$ 6,287,004

The accompanying notes are an integral part of these financial statements.

JEFFERSON COUNTY, ALABAMA

STATEMENT OF FIDUCIARY NET POSITION
FIDUCIARY FUNDS
SEPTEMBER 30, 2022

ASSETS	Custodial Funds	Pension Trust Fund
Cash and cash equivalents	$ 109,105,122	$ 56,703,186
Investments		
Equities	-	473,653,305
Corporate fixed income	-	93,575,964
U.S. government securities	-	171,072,756
Foreign bonds	-	67,985,467
Mutual funds	-	192,459,701
Municipal bonds	-	7,187,254
Partnerships	-	136,951,174
Other investments	-	279,000
Other receivable	-	3,088,609
Total assets	109,105,122	1,202,956,416
LIABILITIES		
Accounts payable	-	625,708
Due to broker for investments purchased	-	17,396,803
Due to others	64,036,882	-
Total liabilities	64,036,882	18,022,511
NET POSITION		
Restricted:		
Pension benefits	-	1,184,933,905
Individuals, organizations, and other governments	45,068,240	-
Total net position	$ 45,068,240	$ 1,184,933,905

The accompanying notes are an integral part of these financial statements.

JEFFERSON COUNTY, ALABAMA
STATEMENT OF CHANGES IN
FIDUCIARY NET POSITION
FIDUCIARY FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Custodial Funds	Pension Trust Fund
ADDITIONS		
Employer contributions	$ -	$ 9,502,211
Member contributions	-	9,450,273
Total contributions	-	18,952,484
Investment income:		
Investment income	-	19,392,077
Net decrease in fair value of investments	-	(216,581,286)
Less investment expense	-	(2,848,254)
Net investment income (loss)	-	(200,037,463)
Taxes	1,086,907,574	-
Fines and fees	85,585,843	-
Criminal and civil bonds	423,615	-
Other	25,795	372,506
Total additions, net	1,172,942,827	(180,712,473)
DEDUCTIONS		
Benefit payments, including refunds of member contributions	-	77,433,406
Taxes and fees paid to other governments	1,078,537,053	-
Fines and fees disbursed	82,713,177	-
Administrative expenses	-	1,846,550
Other custodial disbursements	22,575	129,124
Total deductions	1,161,272,805	79,409,080
Change in fiduciary net position	11,670,022	(260,121,553)
NET POSITION, beginning of fiscal year, as restated	33,398,218	1,445,055,458
NET POSITION, end of fiscal year	$ 45,068,240	$ 1,184,933,905

The accompanying notes are an integral part of these financial statements.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of Jefferson County, Alabama (the “County”) have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to government units. The Governmental Accounting Standards Board (GASB) is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The more significant of the County's accounting policies are described below.

A. Reporting Entity

Jefferson County operates under a commissioner-manager form of government under which a five-member Board of Commissioners is elected to serve as the legislative body for the County. The commissioners are elected by voters in the geographical districts in which they reside, then the Board members elect a chairman. The Commissioners appoint the County Manager. The County provides the following services: general government, public safety, highway and roads, health and welfare, community development, and general administrative services in addition to sanitation services, landfill operations, and economic development.

As required by accounting principles generally accepted in the United States of America, the financial statements of the reporting entity include those of the County and its component units. The component units discussed below are included in the County’s reporting entity because of the significance of their operational or financial relationship with the County. Blended component units, although legally separate entities are, in substance, part of the government’s operations. Each discretely presented component unit is reported in a separate column in the government-wide financial statements to emphasize that it is legally separate from the government.

Blended Component Unit

The Hallmark Farms Cooperative District (“District”) is part of a cooperative agreement with the City of Warrior, Alabama in which the County agreed to purchase 565 acres in northern Jefferson County for a landmark property that is proposed to be a mixed-use business development. The District’s governing body is substantially the same as the governing body of Jefferson County, and the District creates a financial burden for the County, as the debt issued by the District is secured through an intergovernmental agreement with the County and will be repaid with County resources. The District is reported as an enterprise fund. No separate financial statements are issued for this component unit.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

A. Reporting Entity (Continued)

Discretely Presented Component Units

The Jefferson County Personnel Board ("Board") is a human resources organization established by the legislature of the State of Alabama in 1935 to administer the County's Civil Service System. The Civil Service System is designed to assure a degree of job security and equitable treatment to employees of governmental entities as a means of protecting them from the vagaries of the political environment. The Board has three members that are appointed by a Citizens Supervisory Commission. The Board provides services to all jurisdictions within the County and approximately thirty percent of services relate directly to the County. The Board is reliant on the County's General Fund to pay for expenditures incurred and collect reimbursements from underlying municipalities, and the County is legally obligated for the expenses of the Personnel Board. The Board does not issue separate, stand-alone financial statements.

The Jefferson County Emergency Management Agency ("EMA") is the first line of official public responsibility for emergency management activity in Jefferson County. As such, the EMA is charged with planning efforts for the County. This includes developing and maintaining an ongoing program of mitigation, preparedness, response, and recovery. The Jefferson County EMA works with local governments, nonprofit organizations, and private sector companies in Jefferson County to develop plans and capabilities to respond to hazards which seriously threaten the County. The EMA is governed by a council of local mayors, with a Jefferson County Commissioner having representation on that Council. The EMA's budget is built on dues paid by the Jefferson County Commission and local municipalities. As a result, the Agency is fiscally dependent on the County. The EMA does not issue separate, stand-alone financial statements.

The Jefferson County Economic and Industrial Development Authority ("Authority") is a public corporation whose primary purpose is the promotion of industry, industrial development, and other concerns to induce such enterprises to locate, expand, improve their operations, or remain in Jefferson County, Alabama. The Authority was established by Jefferson County in 1995. The Authority is governed by eleven directors appointed by the County Commission. It is authorized to acquire, own, lease, and dispose of properties to the end that such activities may promote industry and develop trade by inducing enterprises to locate and remain in Jefferson County. The Authority is also authorized to issue debt to support these activities.

The Authority's financial statements can be obtained by writing to the Jefferson County Economic and Industrial Development Authority, 2 Metroplex Drive Suite 240, Birmingham, Alabama 35209.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

B. Government-wide and Fund Financial Statements

The government-wide financial statements (i.e., the statement of net position and the statement of activities) report information on all of the non-fiduciary activities of the primary government and its component units. For the most part, the effect of interfund activity has been removed from these statements. *Governmental activities*, which normally are supported by taxes, charges for services and intergovernmental revenues, are reported separately from *business-type activities*, which rely to a significant extent on fees and charges for support as well as property taxes. Likewise, the *primary government* is reported separately from certain legally separate *component units* for which the primary government is financially accountable.

The statement of activities demonstrates the degree to which the direct expenses of a given function or segment is offset by program revenues. *Direct expenses* are those that are clearly identifiable with a specific function or segment. *Program revenues* include 1) charges to customers or applicants who purchase, use, or directly benefit from goods, services, or privileges provided by a given function or segment and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Taxes and other items not properly included among program revenues are reported instead as *general revenues*.

Separate financial statements are provided for governmental funds, proprietary funds, and fiduciary funds, even though the latter are excluded from the government-wide financial statements. Major individual governmental funds and major individual enterprise funds are reported as separate columns in the fund financial statements.

C. Measurement Focus, Basis of Accounting, and Basis of Presentation

The government-wide financial statements are reported using the *economic resources measurement focus* and the *accrual basis of accounting*, as are the proprietary fund and the fiduciary fund financial statements. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows. Property taxes are recognized as revenues in the year for which they are levied. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

C. Measurement Focus, Basis of Accounting, and Basis of Presentation (Continued)

Governmental fund financial statements are reported using the *current financial resources measurement focus* and the *modified accrual basis of accounting*. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be *available* when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the County considers property taxes to be available if they are collected within sixty (60) days of the end of the current fiscal period for which they are levied. Other revenues susceptible to accrual are also considered available if they are collected within ninety (90) days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred, as under accrual accounting. However, debt service expenditures, as well as expenditures related to compensated absences and claims and judgments, are recorded only when payment is due.

Property taxes, sales taxes, charges for services, intergovernmental grants, and interest income and other miscellaneous receipts associated with the current fiscal period are all considered to be susceptible to accrual and so have been recognized as revenues of the current fiscal period. All other revenue items are considered to be measurable and available only when cash is received by the County.

The County reports the following major governmental funds:

The ***General Fund*** is the County's primary operating fund. It accounts for all financial resources of the general government, except those required to be accounted for in another fund.

The ***Special Sales Tax Revenue Fund*** accounts for the special revenue sales tax collected and used for the payment of the County's principal and interest on certain governmental bonds and distributed in accordance with Article 9 of the trust indenture dated July 1, 2017.

The ***Indigent Care Fund*** accounts for the receipt of beverage and sales taxes designated for indigent residents of Jefferson County.

The ***American Rescue Plan Fund*** accounts for grant funding received by the County under the American Rescue Plan Act of 2021.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

C. Measurement Focus, Basis of Accounting, and Basis of Presentation (Continued)

The County reports the following major proprietary fund:

The ***Sanitary Operations Fund*** accounts for the operations of the County's sanitary sewer systems. Revenues are generated primarily through user charges, impact fees and designated ad valorem taxes.

Additionally, the County reports the following fund types:

The ***special revenue funds*** account for revenue sources that are restricted or committed to expenditure for specific purposes.

The ***capital projects funds*** are used to account for capital projects and improvements expended throughout the County.

The ***debt service funds*** are used to account for the accumulation of resources and payment of principal and interest on long-term debt.

The ***custodial funds*** are used to account for the collection and disbursement of monies by the County on behalf of other governments and individuals, such as cash bonds, traffic fines, support payments and ad valorem and property taxes.

The ***pension trust fund*** is accounted for in essentially the same manner as the proprietary funds, using the same measurement focus and basis of accounting. The pension trust fund accounts for the assets of the government's employee pension plan.

The ***enterprise funds*** are used to account for the activities of the County's landfill operations and the Hallmark Farms Cooperative.

As a general rule, the effect of interfund activity has been eliminated from the government-wide financial statements. However, interfund services provided and used have not been eliminated in this process.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

C. Measurement Focus, Basis of Accounting, and Basis of Presentation (Continued)

Amounts reported as *program revenues* include 1) charges to customers or applicants for goods, services, or privileges provided, 2) operating grants and contributions, and 3) capital grants and contributions. Internally dedicated resources are reported as *general revenues* rather than as program revenues. Likewise, general revenues include all taxes.

Proprietary funds distinguish *operating* revenues and expenses from *non-operating* items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund’s principal ongoing operations. The principal operating revenue of the enterprise fund are charges to customers for sales and services provided. Operating expenses for the enterprise fund include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

D. Deposits and Investments

The County’s cash and cash equivalents are considered to be cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

The County’s nonparticipating interest-earning investment contracts are recorded at cost. The remaining investments are recorded at fair value. Increases or decreases in the fair value during the year are recognized as a component of interest income. The County’s primary investment objective is safety and preservation of capital.

The County has certain investments that are held for debt service, capital improvement, or other purposes generally managed under a trust. The trust indentures usually specify that funds (other than operating accounts) shall be invested or reinvested in qualified investments, in accordance with the instructions of the County. In the absence of such instructions, investments are made in qualified investments, specified in the related agreement, which comply with the County’s investment policy.

Investments are reported at fair value. Money market accounts and short-term investment funds are reported at cost, which approximates fair value.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

E. Receivables and Payables

Activity between funds that are representative of lending/borrowing arrangements outstanding at the end of the fiscal year as well as all other outstanding balances between funds are reported as “due to/from other funds.” Any residual balances outstanding between the governmental activities and business-type activities are reported in the government-wide financial statements as “internal balances.”

Advances between funds, as reported in the fund financial statements, represent long-term borrowing arrangements with established repayment schedules, and are offset by non-spendable fund balance in applicable governmental funds to indicate that they are not available for appropriation and are not expendable available financial resources.

F. Prepaid Items

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items in both government-wide and fund financial statements. These items are accounted for using the consumption method.

G. Restricted Assets

Cash and investments that must be used for restricted purposes, are reported as “Restricted Assets” in the government-wide financial statements of net position and fund financial statements balance sheets. Also, some restricted cash and investments are held by one fund but will be expended in other fund, which creates an interfund payable/receivable. These amounts are reported as “Restricted Assets” and “Liabilities Payable from Restricted Assets” in the affected fund financial statements. These interfund transactions are eliminated in the government-wide statements.

H. Capital Assets

Capital assets, which include property, plant, equipment, intangible assets, and infrastructure assets (e.g., roads, bridges, sidewalks, and similar items), are reported in the applicable governmental or business-type activities columns in the government-wide financial statements. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at estimated acquisition value at the date of donation. The County has elected to capitalize all general infrastructure assets regardless of the acquisition date and has used the estimated historical cost to value these assets.

The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend useful lives are expensed as incurred.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

H. Capital Assets (Continued)

Capital assets, including right-to-use lease assets, of the primary government are capitalized at the following thresholds based on the asset type and depreciated or amortized using the straight-line method over the following useful lives:

Asset Category	Capitalization Threshold	Years
Buildings and improvements	$100,000	40
Improvements other than building	100,000	15-40
Maintenance equipment	15,000	5-10
Motor vehicle fleet	15,000	5-10
Equipment under financed purchase	15,000	5-10
Miscellaneous equipment	15,000	5-10
Office furniture and fixtures	15,000	5-10
Software	15,000	3
Right-to-use lease assets - buildings	100,000	5-15
Right-to-use lease assets - equipment	15,000	4

Capital assets are reviewed for impairment in accordance with the methodology prescribed in GASB Statement No. 42, *Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries*. Asset impairment, as defined by this standard, is a significant, unexpected decline in the service utility of a capital asset and is not a function of the recoverability of the carrying amount of the asset. Service utility is the usable capacity of the asset that was expected to be used at the time of acquisition and is not related to the level of actual utilization, but the capacity for utilization. Indicators that the service utility of an asset has significantly declined include: (a) evidence of physical damage; (b) changes in legal or environmental circumstances; (c) technological development or evidence of obsolescence; (d) a change in the manner or expected duration of use of the asset; and (e) construction stoppage. The County has determined that no capital asset impairment exists at September 30, 2022.

I. Leases

Lessee

The County is a lessee for noncancelable building and land improvement leases. The County recognizes a lease liability and an intangible right-to-use lease asset in the government-wide financial statements. The County recognizes lease liabilities with an initial, individual value of $15,000 or more for equipment and $100,000 or more for buildings.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

I. Leases (Continued)

At the commencement of a lease, the County initially measures the lease liability at the present value of payments expected to be paid during the lease term. Subsequently, the lease liability is reduced by the principal portion of the lease payments made. The lease asset is initially measured as the initial amount of the lease liability, adjusted for lease payments made at or before the lease commencement date, plus certain initial direct costs. Subsequently, the lease asset is amortized on a straight-line basis over the shorter of the useful life of the asset or the lease term.

Key estimates and judgments related to leases include how the County determines (1) the discount rate it uses to discount the expected lease payments to present value, (2) lease term, and (3) lease payments:

- The County uses the interest rate charged by the lessor as the discount rate. When the interest rate charged by the lessor is not provided, the County generally uses its estimated incremental borrowing rate as the discount rate for leases.
- The lease term includes the noncancellable period of the lease. Lease payments included in the measurement of the lease liability are composed of fixed payments and purchase option prices that the County is reasonably certain to exercise.

The County monitors changes in circumstances that would require a remeasurement of its leases and will remeasure the lease assets and liabilities if certain changes occur that are expected to significantly affect the amount of the lease liabilities.

Lease assets are reported with other capital assets and lease liabilities are reported with long-term debt on the statement of net position.

Lessor

The County is a lessor for noncancellable property leases, including its landfill. The County recognizes leases receivable and deferred inflows of resources at both the fund level and government-wide level of reporting. The County recognizes lease receivables with an initial, individual value of $50,000 or more.

At the commencement of a lease, the County initially measures the lease receivable at the present value of payments expected to be received during the lease term. Subsequently, the lease receivable is reduced by the principal portion of lease payments received. The deferred inflow of resources is initially measured as the initial amount of the lease receivable, adjusted for lease payments received at or before the lease commencement. Subsequently, the deferred inflow of resources is recognized as revenue over the life of the lease term.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

I. Leases (Continued)

Key estimates and judgments related to leases receivable include how the County determines (1) the discount rate it uses to discount the expected lease payments to present value, (2) lease term, and (3) lease payment:

- The County uses the interest rate charged as the discount rate. When the interest rate charged is not specified, the County generally uses its estimated incremental leasing rate as the discount rate for leases.
- The lease term includes the noncancellable period of the lease. Lease payments included in the measurement of the lease receivable are composed of fixed payments due to the County over the term of the lease and residual value guarantee payments that are fixed in substance.

The County monitors changes in circumstances that would require a remeasurement of its lease and will remeasure the lease receivable and deferred inflows of resources if certain changes occur that are expected to significantly affect the amount of the lease receivable and deferred inflows of resources.

J. Deferred Outflows/Inflows of Resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net assets that applies to a future period(s) and so will not be recognized as an outflow of resources (expenses/expenditures) until then. One item that qualifies for reporting in this category is the deferred charge on refunding reported in the proprietary fund statements of net position. A deferred charge on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded debt or the refunding debt.

In addition to liabilities, the financial statements will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net assets that applies to future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The County reports deferred inflows of resources in both its governmental funds balance sheet and its governmental activities statement of net position.

The government wide statement of net position reports a deferred inflow of resources for a gain on refunding. The County reports a gain on refunding from debt refunding transactions on outstanding County warrants payable.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

J. Deferred Outflows/Inflows of Resources (Continued)

The governmental funds balance sheet and the governmental activities statement of net position will report deferred inflows of resources for deferred revenues. The County reports deferred revenues from property taxes which are received or reported as a receivable before the period for which the taxes have been levied.

The County also reports as deferred inflows of resources items that arise from lease arrangements where the County is a lessor. Lease-related amounts are recognized at inception of leases in which the County is a lessor and are recorded at an amount equal to the corresponding lease receivable, plus certain additional amounts received from the lessee at or before the commencement of the lease term that relate to future periods, less any lease incentives paid to, or on behalf of, the lessee at or before the commencement of the lease term. The deferred inflows of resources is recognized as revenue in a systemic and rational manner over the term of the lease.

The County also has deferred inflows and outflows related to the recording of changes in its net pension asset and total OPEB liability. Certain changes in the net pension asset and total OPEB liability are recognized as pension and/or OPEB expense over time instead of all being recognized in the year of occurrence. Experience gains or losses result from periodic studies by the County’s actuary which adjust the net pension asset and total OPEB liability for actual experience for certain trend information that was previously assumed, for example the assumed dates of retirement of plan members. These experience gains or losses are recorded as deferred outflows of resources or deferred inflows of resources and are amortized into pension and/or OPEB expense over the expected remaining service lives of plan members. Changes in actuarial assumptions which adjust the net pension asset and total OPEB liability are also recorded as deferred outflows of resources or deferred inflows of resources and are amortized into pension and/or OPEB expense over the expected remaining service lives of plan members. The difference between projected investment return on pension and/or OPEB investments and actual return on those investments is also deferred and amortized against pension expense over a five-year period. Additionally, any contributions made by the County to the plans before year end but subsequent to the measurement date of the County’s net pension asset and total OPEB liability plans are reported as deferred outflows of resources. These contributions will reduce the County’s total OPEB liability and increase the net pension asset in the next fiscal period.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

K. Compensated Absences

The County has a standard leave policy for its full-time employees with regards to sick and vacation leave. Vacation earned but not used during the calendar year may be accumulated up to a maximum of 40 days. Vacation leave earned in excess of the maximum accumulation must be used by December 31 of each year, or it is forfeited. A permanent employee, in good standing, terminating from County service shall be compensated for unused earned vacation not to exceed 40 days.

L. Claims Liabilities

The County establishes claims liabilities for health insurance, general, automotive, and workers' compensation self-insured activities based on estimates of the ultimate cost of claims (including future claims adjustment expenses) that have been reported but not settled, and of claims that have been incurred but not reported. Estimated amounts of reinsurance recoverable on unpaid claims are deducted from the claims liabilities.

M. Long-Term Obligations

In the government-wide financial statements, and proprietary fund types in the fund financial statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities, business-type activities, or proprietary fund type statement of net position. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are expensed in the fiscal year of issuance.

In the fund financial statements, governmental fund types recognize bond premiums and discounts during the current period. The face amount of debt issued and any related premiums are reported as other financing sources while discounts on debt issuances are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, are reported as debt service expenditures.

N. Fund Equity

Fund equity at the governmental fund financial reporting level is classified as "fund balance." Fund equity for all other reporting is classified as "net position."

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

N. Fund Equity (Continued)

Fund Balance – Generally, fund balance represents the difference between the assets and liabilities and deferred inflows of resources under the current financial resources management focus of accounting. In the fund financial statements, governmental funds report fund balance classifications that comprise a hierarchy based primarily on the extent to which the County is bound to honor constraints on the specific purpose for which amounts in those funds can be spent.

Fund balances are classified as follows:

Nonspendable – Fund balances are reported as nonspendable when amounts cannot be spent because they are either (a) not in spendable form (i.e., items that are not expected to be converted to cash) or (b) legally or contractually required to be maintained intact.

Restricted – Fund balances are reported as restricted when they include amounts that can be spent only for the specific purposes stipulated by the constitution, external resource providers, or through enabling legislation.

Committed – Fund balances are reported as committed when they include amounts that can be used only for the specific purposes determined by a formal action of the County Commissioners by passage of a resolution and the commitment can only be removed by a resolution of the Commission.

Assigned – Fund balances are reported as assigned when they include amounts intended to be used by the County for specific purposes but do not meet the criteria to be classified as restricted or committed. In governmental funds other than the general fund, assigned fund balance represents the remaining amount that is not restricted or committed. The Commissioners have delegated, through resolution, the Chief Financial Officer the authority to assign amounts to be used for specific purposes. Included in assigned fund balances are reserves for future budget deficits, economic uncertainties, and catastrophic events. These reserves were established by a County resolution and are funded annually in conjunction with the preparation of the County's financial statements. The funds are available to be spent during economic downturns, to recover from a major economic or environmental disaster, or as temporary support for the County as needed.

Unassigned – Fund balances are reported as unassigned as the residual classification for the County's general fund and includes all spendable amounts not contained in the other classifications. The General Fund is the only fund that can report a positive unassigned fund balance; any fund of the County reporting a deficit fund balance at fiscal year-end will report that balance as unassigned.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

N. Fund Equity (Continued)

Flow Assumptions – When both restricted and unrestricted amounts of fund balance are available for use for expenditures incurred, it is the County's policy to use restricted amounts first and then unrestricted amounts as they are needed. For unrestricted amounts of fund balance, it is the County's policy to use fund balance in the following order: (1) Committed, (2) Assigned, and (3) Unassigned.

Net Position – Net position represents the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources in reporting which utilizes the economic resources measurement focus. Net investment in capital assets, consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any borrowing used (i.e., the amount that the County has spent) for the acquisition, construction, or improvement of those assets. Net position is reported as restricted using the same definition as used for restricted fund balance as described in the section above. All other net position is reported as unrestricted.

The County applies restricted resources first when an expense is incurred for purposes for which both restricted and unrestricted net position is available.

O. Management Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows of resources, liabilities, and deferred inflows of resources and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures/expenses during the reporting period. Actual results could differ from these estimates.

P. Pension and OPEB

The General Retirement System for Employees of Jefferson County, Alabama uses a single fiduciary fund to maintain its financial records. The fiduciary fund is accounted for on a flow of economic resources measurement focus. Revenues are recognized when earned and expenses are recognized at the time they are incurred. Employer contributions are recognized when legally due. Benefit payments are recognized when due and payable in accordance with the terms of the Plan. Investments are reported at fair value.

The County also maintains a Defined Benefit Other Post-Employment Benefits (OPEB) Liability, which was initially approved by the County Commissioners in 1990. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

NOTE 2. LEGAL COMPLIANCE – BUDGETS

Budgets and Budgetary Accounting

The State Legislature enacted the County Financial Control Act of 1935, which is the present statutory basis for County budgeting operations. Under the terms of the County Financial Control Act, the County Commission, at a meeting in September of each fiscal year but in any event not later than the first meeting in October, must estimate the County's revenues and expenditures and appropriate for the various purposes the respective amounts that are to be used for each purpose. The budget is prepared by department. The County's budgets must be approved by the County Commission. The appropriations must not exceed the total revenues available for appropriation. Expenditures may not legally exceed appropriations. Departments may transfer certain resources within a departmental budget. However, transfers between departments and transfers between personnel costs and other operating costs within a department must receive approval from the Commission before adjustments can be made.

Annual budgets are adopted on a basis consistent with accounting principles generally accepted in the United States of America for all governmental funds. All annual appropriations lapse at fiscal year-end.

Budgets may be adjusted during the fiscal year when approved by the County Commission. Any changes must be within the revenues and reserves estimated to be available.

For the fiscal year ended September 30, 2022, the General Fund had the following excesses of actual expenditures over appropriations:

General Fund:		
General government:		
Board of equalization - personnel costs	$	7,874
County attorney - other operating costs		486,448
Family court - personnel costs		233,492
Tax assessor - Bessemer - personnel costs		9,312
Tax assessor - Birmingham - personnel costs		27,051
Tax collector - Birmingham - personnel costs		28,097
Treasurer - other operating costs		287
Non-departmental - personnel costs		969,454
Public safety		
Coroner - personnel costs		85,655
Sheriff - personnel costs		3,282,746
Youth detention - personnel costs		85,880
Transfers out		1,217,983

NOTE 2. LEGAL COMPLIANCE – BUDGETS (CONTINUED)

Budgets and Budgetary Accounting, Continued

For the fiscal year ended September 30, 2022, the County's other governmental funds had excesses of actual expenditures over appropriations, as follows:

Indigent Care Fund		
Health and welfare		
Indigent care - other operating costs	$	445,660
Home Grant Fund		
Community development		
Home grant - personnel costs	$	90,123

Deficit Fund Balance and Net Position

The Landfill Operations Fund has a deficit net position of $7,572,439 at September 30, 2022. Management of the County is currently evaluating its operations for potential cost savings. At September 30, 2022, the Landfill Operations Fund has a liability of $2,871,682 due to the Debt Service Fund. As this liability is paid down in future years, management expects to see reductions in the deficit net position for the Landfill Operations Fund.

The Jefferson County Economic and Industrial Development Authority (JCEIDA) has a deficit net position of $7,550,239 at September 30, 2022. Management of JCEIDA is currently evaluating operations for potential cost savings. Management expects to see reductions in the deficit net position as properties are sold in future years.

NOTE 3. DEPOSITS AND INVESTMENTS

Credit risk. The State of Alabama authorizes the County to invest in obligations of the U.S. Treasury and federal agency securities along with certain pre-refunded obligations such as bonds or other obligations of any state of the United States of America or any agency, instrumentality or local governmental unit of any such state, provided that such investments are rated in the highest rating category of S&P Global, Inc. and Moody's Investors Service, Inc.

Operating funds of the County are currently invested in U.S. Treasury notes; municipal bonds; fixed income short-term investment mutual funds; mortgage-backed securities (MBS); certificates of deposit; or maintained in demand deposit, savings, and public funds money market accounts with financial institutions.

NOTE 3. DEPOSITS AND INVESTMENTS (CONTINUED)

Custodial credit risk. The investments maintained for the general use of the County are managed by the Jefferson County Treasurer or a bank on their behalf. Investments held in a trust for debt service or capital projects are managed by the bank holding the trust or a designated agent (another bank or investment firm). The County's fiscal agent or custodian provides the fair value of all intermediate maturity investments.

The SAFE Program was established by the Alabama Legislature and is governed by the provisions contained in the Code of Alabama 1975, Sections 41-14A-1 through 41-14A-14. Under the SAFE Program, all public funds are protected through a collateral pool administered by the Alabama State Treasurer's Office. Under this program, financial institutions holding deposits of public funds must pledge securities as collateral against those deposits. In the event of failure of a financial institution, securities pledged by that financial institution would be liquidated by the State Treasurer to replace the public deposits not covered by the FDIC. If the securities pledged fail to produce adequate funds, every institution participating in the pool would share the liability for the remaining balance.

Interest rate risk. The County's investment policy generally does not allow for an investment in any one issuer that is in excess of five percent of total cash and investments. County investments include $228,282,945 of GNMA pools, which represent pools of mortgages issued by GNMA, consisting of a multitude of underlying borrowers, generally with no concentrations. U.S. Treasury Securities also made up $58,840,559 of total County investments. Both types of securities are backed by the full faith and credit of the U.S. Government. There were no other concentrations of investments noted at September 30, 2022.

At September 30, 2022, information on the credit risk and interest rate risk related to the County's investments is disclosed as follows:

Investment	Weighted Average Maturity (Years)	Rating (S&P)	Fair Value
Certificates of deposit	0.28	N/A	$ 48,936,682
U.S. Treasury Bonds/Notes	0.52	AAA	58,840,559
Municipal Bonds	6.80	AAA	118,042,643
GNMA pools	9.84	AAA	228,282,945
		Total	$ 454,102,829

The County reports its holdings in the certificates of deposit as cash equivalents for financial reporting purposes.

NOTE 3. DEPOSITS AND INVESTMENTS (CONTINUED)

Fair Value Measurements. The County categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for the identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

The County has the following recurring fair value measurements as of September 30, 2022:

Investment	Level 1	Level 2	Fair Value
U.S. Treasury Bonds / Notes	$ 58,840,559	$ -	$ 58,840,559
Municipal Bonds	-	118,042,643	118,042,643
GNMA pools	-	228,282,945	228,282,945
Total investments measured at fair value	$ 58,840,559	$ 346,325,588	$ 405,166,147

The United States Treasury Bonds/Notes classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those investments. The Municipal Bonds and GNMA pools classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

The County's certificates of deposit are nonparticipating interest-earning investment contracts and are reported at cost.

Pension Plan

The Plan's policy in regard to investments, including the allocation of invested assets, is established and may be amended by the Pension Board by a majority vote of its members. It is the policy of the Pension Board to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The pension plan's investment policy discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans.

The Plan investment policy adopts the following asset allocation mix to achieve the lowest level of risk for the Plan: Domestic Equity securities - 50%; International Equity securities – 10%; Domestic Fixed Income securities – 25%; International Fixed Income securities – 5%; and Alternative securities – 10%.

NOTE 3. DEPOSITS AND INVESTMENTS (CONTINUED)

At September 30, 2022, the Plan had $1,143,164,621 invested in the following types of investments:

Investment	Fair Value
U.S. Government securities	$ 171,072,756
Mutual funds and trusts	192,459,701
Corporate bonds	93,575,964
Domestic stocks	440,144,930
Foreign stocks	33,508,375
Foreign bonds	67,985,467
Municipal bonds	7,187,254
Partnerships	136,951,174
Other investments	279,000
Total	$ 1,143,164,621

Credit Risk. Custodial credit risk is the risk that, in the event of the failure of the counterpart, the pension trust fund will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the plan, and are held by either: a) the counterparty or b) the counterparty's trust department or agent, but not in the Plan's name.

The Plan's investment policy does not limit investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. Interest rate risk is controlled through diversification of portfolio management styles.

Approved fixed income securities are to be selected from among the U.S. Government and Federal Agency obligations of foreign governments and agencies, and securities rates "BBB-" or better by one of the recognized bond rating services at the time of purchase. Asset-backed securities, mortgage-backed securities, and collateral mortgage obligations are to be rated "AAA" at the time of purchase.

Foreign Currency Risk. Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The Plan's investment policy limits the investment in international equity securities to 10% of total Plan assets, and investments in international fixed income securities is limited to 5% of total Plan assets. At September 30, 2022, the Plan has $33,508,375 or approximately 2.9% of total Plan assets invested in foreign stocks. At September 30, 2022, the Plan has $67,985,467 or approximately 5.9% of total Plan assets invested in foreign bonds.

Concentration. The General Retirement System for Employees of Jefferson County, Alabama does not have investments in any one issuer, which represents five percent or more of the total fair value of all investments.

NOTE 3. DEPOSITS AND INVESTMENTS (CONTINUED)

Pension Plan (Continued)

Fair Value Measurements. The County categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for the identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs. The County's pension plan has the following recurring fair value measurements as of September 30, 2022:

Investment	Level 1	Level 2	Level 3	Fair Value
U.S. government securities	$ -	$ 171,072,756	$ -	$ 171,072,756
Corporate bonds	-	93,575,964	-	93,575,964
Common stocks	440,144,930	-	-	440,144,930
Foreign stocks	33,508,375	-	-	33,508,375
Foreign bonds	-	67,985,467	-	67,985,467
Municipal bonds	-	7,187,254	-	7,187,254
Partnerships	-	-	136,951,174	136,951,174
Other investments	-	279,000	-	279,000
Total investments measured at fair value	$ 473,653,305	$ 340,100,441	$ 136,951,174	$ 950,704,920
Investments Measured at Net Asset Value (NAV)				
Mutual funds and trusts				192,459,701
Total investments at fair value				$ 1,143,164,621

The common and foreign stocks and U.S. government securities classified in Level 1 of the fair value hierarchy are valued using prices in active markets for those securities. The corporate and foreign bonds, municipal bonds, partnerships, and other investments classified in Level 2 of the fair value hierarchy are valued using inputs other than quoted prices that are observable. The mutual funds and partnerships comprised of pools of international equity securities managed by an investment company are classified as Net Asset Value, which is calculated by dividing the rate level market level, less management fees, by the number of participation units in the funds.

The partnership investments are privately owned investments and are pooled investment funds valued at fair market value and managed by an investment company. The fair market value is determined daily by taking the current market value of total assets, subtracting any liabilities, and dividing the result by the total number of shares (units) outstanding. Valuation inputs include trading volume and prices collected by third-party vendors, brokers, and market maker dealers on similar assets in markets that are not actively traded.

Rate of return. For the fiscal year ended September 30, 2022, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was (16.64) percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NOTE 4. RECEIVABLES

Loan Receivable from Component Unit. The County entered into funding agreements in which it has made loans to the Jefferson County Economic and Industrial Development Authority (the Authority) for certain debt obligations and land purchases. There is no scheduled amortization on the loans. The Authority makes payments on an as needed basis. As of September 30, 2022, the loan receivable due from the Authority was $28,819,142.

Receivables at September 30, 2022, for the County's individual major funds and nonmajor funds in the aggregate are as follows:

	General Fund	Special Sales Tax Revenue Fund	Indigent Care Fund	American Rescue Plan Fund
Receivables:				
Taxes	$ 86,454,024	$ 22,673,141	$ 11,743,216	$ -
Intergovernmental	2,695,263	-	-	-
Loans to Component Unit	28,819,142	-	-	-
Accounts	9,351,285	-	-	1,971,094
Leases	2,090,192	-	-	-
Interest	262,614	-	-	-
Gross receivables	129,672,520	22,673,141	11,743,216	1,971,094
Less allowance for uncollectibles	(455,701)	-	-	-
Net receivables	$ 129,216,819	$ 22,673,141	$ 11,743,216	$ 1,971,094

	Nonmajor Governmental Funds	Sanitary Operation Fund	Nonmajor Proprietary Funds
Receivables:			
Taxes	$ 76,341,140	$ 6,957,753	$ -
Intergovernmental	-	2,984,587	-
Leases	-	-	10,025,515
Loans	19,525,742	-	-
Accounts	2,884,132	65,862,844	285,371
Interest	-	1,456,752	-
Gross receivables	98,751,014	77,261,936	10,310,886
Less allowance for uncollectibles	(12,127,050)	(31,616,607)	-
Net receivables	$ 86,623,964	$ 45,645,329	$ 10,310,886

NOTE 4. RECEIVABLES (CONTINUED)

Millage rates for property taxes are levied at the first regular meeting of the County Commission in February of each year. Property taxes are assessed as of October 1 of the preceding fiscal year based on the millage rates established by the County Commission. Property taxes are due and payable the following October 1 and are delinquent after December 31. Amounts receivable, net of estimated refunds and estimated uncollectible amounts, are recorded for the property taxes levied in the current fiscal year. As these assessed amounts are budgeted for the subsequent fiscal year, the amounts are recorded as deferred revenue as of fiscal year-end.

Lease Receivable – Primary Government: The County has entered into lease agreements with various third parties whereby the County leases buildings. The County also has a long-term lease agreement with the operator of the County's landfill. The total amount of deferred inflows of resources, including lease revenue and interest revenue, recognized during the fiscal year ended September 30, 2022, was $975,838. At September 30, 2022, the County's receivable for lease payments was $12,115,707. Also, the County has a deferred inflow of resources in the amount of $11,994,418 associated with this lease that will be recognized over the initial lease terms that end on various dates through May of 2059.

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NOTE 5. CAPITAL ASSETS

A. Primary Government

Capital asset activity for the fiscal year ended September 30, 2022 was as follows:

	Beginning Balance	Increases	Decreases	Transfers	Ending Balance
Governmental Activities:					
Capital assets, not being depreciated:					
Land	$ 22,232,447	$ 3,852,400	$ (25,450)	$ -	$ 26,059,397
Construction in progress	69,687,459	19,186,035	-	-	88,873,494
Total capital assets, not being depreciated	91,919,906	23,038,435	(25,450)	-	114,932,891
Capital assets, being depreciated:					
Buildings and improvements	463,395,850	-	(3,235,964)	-	460,159,886
Improvements other than building	238,220,501	3,372,075	(2,110,853)	-	239,481,723
Maintenance equipment	13,661,156	364,804	(297,989)	-	13,727,971
Motor vehicle fleet	42,259,827	2,752,191	(1,426,665)	-	43,585,353
Equipment under financed purchase	30,993,065	-	(13,846,597)	-	17,146,468
Miscellaneous equipment	28,674,177	4,264,807	(188,457)	-	32,750,527
Office furniture and fixtures	21,455,177	300,621	(2,213,491)	-	19,542,307
Software	7,540,491	-	-	-	7,540,491
Total capital assets, being depreciated	846,200,244	11,054,498	(23,320,016)	-	833,934,726
Less accumulated depreciation for:					
Buildings and improvements	(303,071,880)	(7,002,282)	1,821,086	-	(308,253,076)
Improvements other than building	(152,977,852)	(8,252,881)	1,480,654	-	(159,750,079)
Maintenance equipment	(10,388,882)	(596,228)	282,956	-	(10,702,154)
Motor vehicle fleet	(34,782,959)	(3,091,159)	1,419,892	-	(36,454,226)
Equipment under financed purchase	(20,818,431)	(1,976,367)	13,846,597	-	(8,948,201)
Miscellaneous equipment	(16,270,671)	(2,642,456)	186,594	-	(18,726,533)
Office furniture and fixtures	(20,611,273)	(271,714)	2,213,491	-	(18,669,496)
Software	(6,683,356)	(685,687)	-	-	(7,369,043)
Total accumulated depreciation	(565,605,304)	(24,518,774)	21,251,270	-	(568,872,808)
Total capital assets, being depreciated, net	280,594,940	(13,464,276)	(2,068,746)	-	265,061,918
Governmental activities capital assets, net	$ 372,514,846	$ 9,574,159	$ (2,094,196)	$ -	$ 379,994,809
Leased assets (Note 6)					2,989,607
Total capital assets, net, as reported in the statement of net position					$ 382,984,416

NOTE 5. CAPITAL ASSETS (CONTINUED)

A. Primary Government (Continued)

	Beginning Balance	Increases	Decreases	Transfers	Ending Balance
Business-type Activities:					
Capital assets, not being depreciated:					
Land	$ 35,553,188	$ -	$ -	$ -	$ 35,553,188
Construction in progress	79,297,971	49,014,325	-	(36,354,585)	91,957,711
Total capital assets, not being depreciated	114,851,159	49,014,325	-	(36,354,585)	127,510,899
Capital assets, being depreciated:					
Buildings	1,025,683,754	-	-	-	1,025,683,754
Infrastructure and other improvements	3,848,317,364	11,752,699	-	36,354,585	3,896,424,648
Equipment	20,866,376	2,170,197	(12,179)	-	23,024,394
Motor vehicles	24,182,806	690,416	(1,244,175)	-	23,629,046
Total capital assets, being depreciated	4,919,050,300	14,613,312	(1,256,354)	36,354,585	4,968,761,842
Less accumulated depreciation for:					
Buildings	(528,754,485)	(22,579,991)	-	-	(551,334,479)
Infrastructure and other improvements	(2,494,211,853)	(119,368,774)	-	-	(2,613,580,627)
Equipment	(12,723,925)	(1,708,100)	12,179	-	(14,419,846)
Motor vehicles	(18,823,075)	(1,882,017)	1,244,175	-	(19,460,917)
Total accumulated depreciation	(3,054,513,338)	(145,538,882)	1,256,354	-	(3,198,795,869)
Total capital assets, being depreciated, net	1,864,536,962	(130,925,570)	-	36,354,585	1,769,965,973
Business-type activities capital assets, net	$ 1,979,388,121	$ (81,911,245)	$ -	$ -	$ 1,897,476,872

NOTE 5. CAPITAL ASSETS (CONTINUED)

A. Primary Government (Continued)

Depreciation expense was charged to functions/programs of the primary government as follows:

Governmental activities:	
General government	$ 10,714,658
Public safety	3,024,702
Highways and roads	10,097,709
Health and welfare	681,705
Total depreciation expense - governmental activities	$ 24,518,774
Business-type activities:	
Sanitary operations	$ 143,716,325
Landfill operations	1,761,978
Hallmark operations	60,579
Total depreciation expense - business-type activities	$ 145,538,882

B. Component Units

Capital asset activity for the Emergency Management Agency for the fiscal year ended September 30, 2022 was as follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets, being depreciated:				
Equipment	$ 1,127,641	$ -	$ (148,729)	$ 978,912
Motor vehicles	393,210	34,332	(38,430)	389,112
Total capital assets, being depreciated	1,520,851	34,332	(187,159)	1,368,024
Less accumulated depreciation for:				
Equipment	(1,108,939)	(4,879)	148,729	(965,089)
Motor vehicles	(248,626)	(41,686)	38,430	(251,882)
Total accumulated depreciation	(1,357,565)	(46,565)	187,159	(1,216,971)
Total capital assets, net	$ 163,286	$ (12,233)	$ -	$ 151,053

NOTE 5. CAPITAL ASSETS (CONTINUED)

B. Component Units (Continued)

Capital asset activity for the Personnel Board for the fiscal year ended September 30, 2022 was as follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets, being depreciated:				
Infrastructure and other improvements	$ 379,881	$ -	$ -	$ 379,881
Equipment	1,289,749	-	-	1,289,749
Total capital assets, being depreciated	1,669,630	-	-	1,669,630
Less accumulated depreciation for:				
Infrastructure and other improvements	(379,881)	-	-	(379,881)
Equipment	(1,214,690)	(19,969)	-	(1,234,659)
Total accumulated depreciation	(1,594,571)	(19,969)	-	(1,614,540)
Total capital assets, net	$ 75,059	$ (19,969)	$ -	$ 55,090

NOTE 6. LEASED ASSETS

A summary of leased asset activity for the fiscal year ended September 30, 2022, is as follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Governmental Activities				
Leased assets:				
Buildings	$ 2,636,669	$ -	$ -	$ 2,636,669
Land improvements	896,364	-	-	896,364
Total	3,533,033	-	-	3,533,033
Less accumulated amortization:				
Buildings	-	(318,004)	-	(318,004)
Land improvements	-	(225,422)	-	(225,422)
Total	-	(543,426)	-	(543,426)
Total leased assets, net	$ 3,533,033	$ (543,426)	$ -	$ 2,989,607

NOTE 6. LEASED ASSETS (CONTINUED)

Amortization expense was charged to functions/programs of the primary government as follows:

Governmental activities:		
General government	$	543,426

NOTE 7. INTERFUND RECEIVABLES, PAYABLES AND TRANSFERS

The composition of interfund balances as of September 30, 2022, was as follows:

Due to/from other funds:

Receivable Fund	Payable Fund		Amount
General Fund	Special Sales Tax Revenue Fund	$	46,739,624
General Fund	Nonmajor Governmental Funds		7,051,188
Nonmajor Governmental Funds	Special Sales Tax Revenue Fund		11,438,919
		$	65,229,731

These balances resulted from the time lag between the dates that (1) interfund goods and services are provided or reimbursable expenditures occur, and (2) transactions are recorded in the accounting system.

Advances to/from other funds:

Advance to	Advance from		Amount
Nonmajor Proprietary funds	Nonmajor Governmental funds	$	2,871,682

The amounts payable from the nonmajor proprietary funds relate to an advance of debt-related proceeds disbursed to the Landfill Operations Fund from the Debt Service Fund from an original issuance. The balance is expected to be repaid in annual installments, over the next several years, depending on available cash flows generated by the Landfill Fund’s operations.

NOTE 7. INTERFUND RECEIVABLES, PAYABLES AND TRANSFERS (CONTINUED)

Interfund transfers for the fiscal year ended September 30, 2022 were as follows:

Transfers In	Transfers Out	Amount
General Fund	Special Sales Tax Revenue Fund	$ 83,039,625
General Fund	Indigent Care Fund	4,291,466
General Fund	Nonmajor Governmental funds	2,895,069
		$ 90,226,160
Nonmajor Governmental funds	General Fund	$ 25,489,623
Nonmajor Governmental funds	Special Sales Tax Revenue Fund	27,658,500
Nonmajor Governmental funds	Nonmajor Governmental funds	51,892,784
		$ 105,040,907
Nonmajor Enterprise funds	General Fund	$ 1,217,983

Transfers are used to (1) move revenues from the fund that statute or budget requires to collect them to the fund that the statute or budget requires to expend them, to (2) move funds to supplement general operations, capital project expenditures and provide sales tax receipts to Hallmark Farms and to (3) service a portion of current fiscal year debt service requirements.

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NOTE 8. LONG-TERM DEBT

A. Primary Government

The following is a summary of long-term debt activity for the fiscal year ended September 30, 2022:

	Restated Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
Governmental Activities:					
Warrants payable	$ 380,830,000	$ 66,335,000	$ (30,360,000)	$ 416,805,000	$ 33,655,000
Plus: Premiums	35,016,092	4,447,245	(4,944,138)	34,519,199	-
Total warrants payable	415,846,092	70,782,245	(35,304,138)	451,324,199	33,655,000
Bonds payable	16,793,098	-	(365,300)	16,427,798	379,313
Financed purchases	7,389,650	-	(1,850,239)	5,539,411	1,925,766
Lease liabilities	3,533,033	-	(476,866)	3,056,167	484,212
Total OPEB liability	87,746,659	6,682,042	(5,175,108)	89,253,593	-
Compensated absences	20,981,686	10,078,865	(9,091,398)	21,969,153	13,463,316
Litigation Liability	5,827,897	60,000	(192,500)	5,695,397	-
Claims payable	6,224,982	2,000,440	(1,524,959)	6,700,463	1,483,074
Governmental activities long-term liabilities	$ 564,343,097	$ 89,603,592	$ (53,980,508)	$ 599,966,181	$ 51,390,681
Business-type Activities:					
Warrants payable	$ 1,748,646,522	$ -	$ (8,745,000)	$ 1,739,901,522	$ 10,980,000
Accreted interest on warrants	441,709,600	76,812,300	-	518,521,900	-
Less: Discounts	(28,971,628)	-	1,111,383	(27,860,245)	-
Total warrants payable	2,161,384,494	76,812,300	(7,633,617)	2,230,563,177	10,980,000
Bonds payable - direct placement	12,791,900	-	(838,650)	11,953,250	863,802
Landfill postclosure and postclosure costs liability	17,065,642	2,328,668	-	19,394,310	-
Litigation liability	3,862,000	185,000	-	4,047,000	-
Total OPEB liability	27,326,318	2,082,124	(993,701)	28,414,741	-
Compensated absences	3,976,471	2,959,614	(2,694,280)	4,241,805	1,902,793
Claims payable	1,937,950	524,034	(486,725)	1,975,259	435,500
Business-type activities long-term liabilities	$ 2,228,344,775	$ 84,891,740	$ (12,646,973)	$ 2,300,589,542	$ 14,182,095

During the fiscal year ended September 30, 2022, the County implemented Governmental Accounting Standards Statement No. 87, *Leases*, which changed the beginning balance of lease liabilities.

NOTE 8. LONG-TERM DEBT (CONTINUED)

A. Primary Government (Continued)

Warrants Payable – Governmental Activities. Warrants payable include obligations for warrants issued in the name of the Jefferson County Commission for the primary purpose of sewer capital projects and related improvements (Business - Type Activities – Sewer Revenue Warrants), for the primary purpose of general capital projects and related improvements (Governmental Activities – General Obligation Refunding Warrants), and for the primary purpose of school capital projects and related improvements (Governmental Activities – Limited Obligation Refunding Warrants). Warrants payable also include related amounts of premiums and discounts on the warrants, which are reported on the statement of net position as an adjustment to the carrying value of the related debt and amortized over the life of the warrants.

In 2017, the County issued refunding warrants (2017 Warrants) under a Trust Indenture dated July 1, 2017 (2017 Trust Indenture), between the County and Regions Bank, as Trustee, for the purpose of refunding the outstanding Limited Obligation School Warrants, Series 2004A and Series 2005A. The Limited Obligation School Warrants, Series 2005B (the 2005B Warrants) were fully redeemed pursuant to their terms on March 1, 2017. The 2017 Warrants are not general obligations of the County but represent limited obligations payable solely out of the Trust Estate established under the 2017 Trust Indenture, which includes a pledge of the gross proceeds of a new one-cent special revenue sales and use tax.

In 2018, the County issued two series of refunding warrants under a Trust Indenture dated May 1, 2018 (2018 Trust Indenture), between the County and Wilmington Trust, National Association, as Trustee. The first series of refunding warrants, Series 2018A, were issued for the purpose of refunding the General Obligation Warrants, Series 2003A and 2004A, and the Lease Revenue Warrants, Series 2006. The General Obligation Warrants, Series 2003A and 2004A, and the Lease Revenue Warrants, Series 2006, were defeased on May 31, 2018, and fully redeemed pursuant to their terms on July 2, 2018.

The second series of refunding warrants, Series 2018B, were issued for the purpose of partially refunding the General Obligation Warrants, Series 2013A and 2013C. The General Obligation Warrants, Series 2013A and 2013C, were partially defeased on September 17, 2018, and partially redeemed pursuant to their terms on December 3, 2018. The remaining outstanding Series 2013A and Series 2013C Warrants matured pursuant to their terms on April 1, 2019. The warrants issued under the 2018 Trust Indenture are general obligations of the County for the payment of which its full faith and credit is pledged. Payment of the warrants is secured by a pledge and assignment of the Trust Estate established under the 2018 Trust Indenture, which includes money in the funds and accounts designated as “Indenture Funds” under the 2018 Trust Indenture.

NOTE 8. LONG-TERM DEBT (CONTINUED)

A. Primary Government (Continued)

The Series 2017, 2018A, and 2018B refundings resulted in differences between the reacquisition prices and the net carrying amount of the old warrants, which is presented as a deferred inflow of resources on the statement of net position, net of accumulated amortization, of $4,904,257. The deferred inflow is recognized as a component of interest expense in a systematic manner over the remaining life of the new debt.

On July 1, 2022, the County entered into a loan agreement with the Alabama Transportation Infrastructure Bank (ATIB) whereby the County issued its Limited Obligation Warrant, Series 2022, to ATIB to evidence a loan of $66,335,000 to be used to pay costs of road and bridge improvements within the County. The Series 2022 warrant is a limited obligation of the County and is payable from and secured by a pledge of certain ad valorem tax revenues. The County is required to make semi-annual payments on the Series 2022 warrant on February 15 and August 15 of each year, beginning on February 15, 2023.

The outstanding balances for the governmental activities warrants as of September 30, 2022 are as follows:

Series 2017 Limited Obligation Refunding Warrants, with interest paid semiannually at fixed rates ranging from 3.00% to 5.00% and annual principal payments through 2042.	$	285,220,000
Series 2018A General Obligation Refunding Warrants, with interest paid semiannully at fixed rates ranging from 4.00% to 5.00% and annual principal payments through 2026.		65,250,000
Series 2022B Limited Obligation Warrant, with interest paid semiannully at fixed rates ranging from 4.125% to 5.00% and annual principal payments through 2042.		66,335,000
Total warrants payable - governmental activities	$	416,805,000

NOTE 8. LONG-TERM DEBT (CONTINUED)

A. Primary Government (Continued)

The debt service to maturity on the governmental activities warrants payable is as follows

	Principal	Interest	Total
Fiscal Year Ending September 30,			
2023	$ 33,655,000	$ 20,159,881	$ 53,814,881
2024	35,560,000	18,256,007	53,816,007
2025	29,120,000	16,478,007	45,598,007
2026	30,575,000	15,022,007	45,597,007
2027	18,015,000	13,493,257	31,508,257
2028-2032	104,400,000	53,135,658	157,535,658
2033-2037	132,800,000	24,727,995	157,527,995
2038-2042	32,680,000	4,079,007	36,759,007
Total	$ 416,805,000	$ 165,351,819	$ 582,156,819

Bonds Payable – Governmental Activities. On July 17, 2018, the County entered into a funding agreement with the Birmingham-Jefferson Civic Center Authority (BJCC) pursuant to which the County is obligated to make 60 semi-annual contributions of $500,000 on June 20 and December 20 of each fiscal year, beginning on December 20, 2018. The County's obligation to make such contributions under the funding agreement is a general obligation of the County for which the County's full faith and credit are pledged. The County's semi-annual contributions are pledged and assigned by the BJCC for payment of debt service on its Series 2018E revenue bonds. The proceeds of the bonds were used to finance improvements to the BJCC's civic center complex and to pay costs of issuance of the bonds. The remaining principal amount of these general obligation bonds at September 30, 2022, is $16,427,798.

The debt service to maturity on the governmental activities general obligation bonds is as follows:

	Principal	Interest	Total
Fiscal Year Ending September 30,			
2023	$ 379,313	$ 620,687	$ 1,000,000
2024	393,864	606,136	1,000,000
2025	408,973	591,027	1,000,000
2026	424,662	575,338	1,000,000
2027	440,952	559,048	1,000,000
2028-2032	2,471,848	2,528,152	5,000,000
2033-2037	2,983,758	2,016,242	5,000,000
2038-2042	3,601,683	1,398,317	5,000,000
2043-2047	4,347,578	652,422	5,000,000
2048	975,167	27,908	1,003,075
Total	$ 16,427,798	$ 9,575,277	$ 26,003,075

NOTE 8. LONG-TERM DEBT (CONTINUED)

B. Primary Government (Continued)

Warrants Payable – Business-Type Activities. The County entered into a Trust Indenture dated as of December 1, 2013 (2013 Trust Indenture), between the County and Wells Fargo Bank National Association as Trustee (the 2013 Sewer Trustee), as supplemented by the First Supplemental Indenture whereby the County issued its Senior Lien and Subordinate Lien Sewer Revenue Warrants, Series 2013A through Series 2013F, in the aggregate principal amount of $1,785,486,522 (the 2013 Sewer Warrants or Secured Obligations).

The proceeds of the Series 2013 Sewer Warrants were used to (i) retire the previously outstanding Sewer Warrants and pay certain claims under the County's 2013 Plan of Adjustment, (ii) pay the premium for a municipal bond insurance policy issued by Assured Guaranty Municipal Corporation and (iii) pay a portion of the costs of issuing the 2013 Sewer Warrants.

The 2013 Sewer Warrants are not general obligations of the County, but represent limited obligations of the County, and are payable solely out of and secured by a pledge and assignment of the revenues collected from the County's sewer system.

The Senior Lien Sewer Warrants Series 2013A are Current Interest Warrants, while the Senior Lien Sewer Warrants Series 2013B are Capital Appreciation Warrants and Senior Lien Sewer Warrants Series 2013C are Convertible Capital Appreciation Warrants. The Senior Lien Sewer Warrants Series 2013A, Series 2013B and Series 2013C (the Series 2013 Senior Lien Warrants) have a first priority lien with respect to the right of payment from the General Trust Estate established under the 2013 Trust Indenture and are additionally secured by funds and amounts held in the Series 2013 Senior Lien Reserve Fund and the Series 2013 Senior Lien Debt Service Fund.

The Subordinate Lien Sewer Warrants Series 2013D are Current Interest Warrants, while the Subordinate Lien Sewer Warrants Series 2013E are Capital Appreciation Warrants and Subordinate Lien Sewer Warrants Series 2013F are Convertible Capital Appreciation Warrants. The 2013 Subordinate Lien Sewer Warrants Series 2013D, Series 2013E and Series 2013F (the Series 2013 Subordinate Lien Warrants) have a second priority lien with respect to the right of payment from the General Trust Estate, subordinate to the Series 2013 Senior Lien Warrants and any additional senior lien obligations issued pursuant to the 2013 Indenture. The Series 2013 Subordinate Lien Warrants are additionally secured by funds and amounts held in the Series 2013 Subordinate Lien Reserve Fund and the Series 2013 Subordinate Lien Debt Service Fund.

NOTE 8. LONG-TERM DEBT (CONTINUED)

A. Primary Government (Continued)

There are termination events that change the timing of repayment of outstanding amounts to become immediately due if the following covenants and required coverage ratios are not met:

Senior debt ratio: Pledged net revenues during the fiscal year cannot be less than 125% of debt service due on the Series 2013 Senior Lien Warrants during the fiscal year.

All-in debt ratio: The County is also subject to another ratio, requiring pledged net revenues during the fiscal year to be at least 110% of combined debt service due on the Series 2013 Senior Lien Warrants and the Series 2013 Subordinate Lien Warrants in the same fiscal year.

Operating reserve: The County must maintain a reserve account equal to or greater than twenty-five percent (25%) of the total budgeted sanitary sewer operations costs in each fiscal year.

The outstanding balances for the business-type activities warrants as of September 30, 2022, are as follows:

Description:	
Series 2013A Senior Lien Sewer Revenue Current Interest Warrants, with interest paid semiannually at rates ranging from 5.00% to 5.50% and annual principal payments beginning October 2044 through October 2053.	$ 395,005,000
Series 2013B Senior Lien Sewer Capital Appreciation Warrants with interest accreting and compounding semiannually at fixed rates of 5.63% to 6.63%, with annual principal and accreted interest payments beginning October 2026 through October 2036.	54,999,964
Series 2013C Senior Lien Sewer Revenue Convertible Capital Appreciation Warrants, with interest accreting and compounding semiannually at fixed rates of 6.50% to 6.90% to October 2023, and thereafter interest paid semiannually with accreted principal and interest payments beginning October 2038 through 2050.	149,997,926
Series 2013D Subordinate Senior Lien Sewer Revenue Current Interest Warrants, with interest paid semiannually at fixed rates ranging from 5.00% to 7.00% and principal payments beginning October 2017 through October 2053.	765,330,000
Series 2013E Subordinate Senior Lien Revenue Capital Appreciation Warrants, with interest accreting and compounding semiannually at fixed rates of 7.50% to 8.00% until maturity, with accreted interest payments beginning October 2029 through October 2036.	50,271,496
Series 2013F Subordinate Senior Lien Sewer Revenue Convertible Capital Appreciation Warrants, with interest accreting and compounding semiannually at fixed rates of 7.50% to 7.90% to October 2023, and thereafter interest paid semiannually with accreted principal and interest payments beginning October 2037 through 2050.	324,297,136
Total warrants payable, business-type activities	$ 1,739,901,522

NOTE 8. LONG-TERM DEBT (CONTINUED)

A. Primary Government (Continued)

The debt service to maturity on the business-type activities warrants payable, including payments of accreted interest, is as follows:

Fiscal Year Ending September 30,	Principal	Interest	Total
2023	$ 10,980,000	$ 149,328,160	$ 160,308,160
2024	14,780,000	154,717,786	169,497,786
2025	-	156,715,110	156,715,110
2026	2,438,595	157,724,237	160,162,832
2027	4,567,584	158,522,625	163,090,209
2028-2032	42,366,544	793,073,262	835,439,806
2033-2037	67,960,687	746,461,541	814,422,228
2038-2042	295,551,202	624,685,433	920,236,635
2043-2047	288,208,629	493,156,756	781,365,385
2048-2052	558,253,281	289,098,663	847,351,944
2053-2055	454,795,000	29,116,113	483,911,113
Total	$ 1,739,901,522	$ 3,752,599,686	$ 5,492,501,208

Accreted Interest on Warrants. The Series 2013B, Series 2013C, Series 2013E and Series 2013F Sewer Warrants are either capital appreciation warrants or convertible capital appreciation warrants with combined accreted interest of $518,521,900 as of September 30, 2022. Accretion expense is recorded as a component of interest expense and totaled $76,812,298 for the fiscal year ended September 30, 2022.

Bonds Payable – Direct Placement. In April 2019, the County entered into a limited funding agreement with the Hallmark Farm Cooperative District of Jefferson County, Alabama (the District) and the City of Warrior, Alabama, for the purpose of issuing the District's Capital Improvement Bond, Series 2019 (Series 2019 Bond) in the amount of $13,000,000. The County is obligated to make sixty (60) quarterly payments of principal and interest on January 1, April 1, July 1, and October 1 of each year.

Interest payments made under the Jefferson County Limited Funding agreement began in October 2019, and principal payments began in July 2021. The proceeds of the Series 2019 Bond were used to make capital improvements to the District's property, located in Warrior, Alabama. The outstanding principal amount of the Series 2019 Bond as of September 30, 2022, was $11,953,250.

NOTE 8. LONG-TERM DEBT (CONTINUED)

A. Primary Government (Continued)

The County's debt service requirements for these direct placement bonds as of September 30, 2022, are as follows:

	Principal	Interest	Total
Fiscal Year Ending September 30,			
2023	$ 863,802	$ 353,843	$ 1,217,645
2024	889,716	328,164	1,217,880
2025	916,408	299,913	1,216,321
2026	943,900	271,729	1,215,629
2027	972,217	242,698	1,214,915
2028-2032	5,316,482	747,449	6,063,931
2033-2034	2,050,725	62,900	2,113,625
Total	$ 11,953,250	$ 2,306,696	$ 14,259,946

Financed Purchases Payable. The County has entered into various financed purchase agreements related to equipment and vehicles across all departments reported within governmental activities.

On July 1, 2017, the County entered into a purchase agreement to finance the acquisition of new equipment in the amount of $5,617,977. Annual principal and interest payments are required until maturity on January 1, 2025 at an interest rate of 3.79%.

On August 15, 2017, the County entered into a purchase agreement to finance the acquisition of new equipment in the amount of $5,889,446. Annual principal and interest payments are required until maturity on February 1, 2025 at an interest rate of 4.01%.

As of September 30, 2022, the County had $12,170,303 of equipment and vehicles, with associated accumulated depreciation of $5,301,130 financed under the financed purchase agreements.

Future minimum payments are as follows:

	Principal	Interest	Total
Fiscal Year Ending September 30,			
2023	$ 1,925,766	$ 221,008	$ 2,146,774
2024	1,771,920	142,366	1,914,286
2025	1,841,725	72,560	1,914,285
Total	$ 5,539,411	$ 435,934	$ 5,975,345

NOTE 8. LONG-TERM DEBT (CONTINUED)

A. Primary Government (Continued)

Landfill Closure and Postclosure. State and federal laws and regulations require that the County place a final cover on its landfills when closed and perform certain maintenance and monitoring functions at the landfill site for thirty (30) years after closure. In addition to operating expenses related to current activities of the landfills, an expense provision and related liability are being recognized based on the future closure and postclosure care costs that will be incurred near or after the date the landfills no longer accept waste. The recognition of these landfill closure and postclosure care costs is based on the amount of the landfills' capacities used during the fiscal year.

The County reported a liability for closure and postclosure care of its landfills of $19,394,310. County MSW Cells 1 and 2 are approximately 94% and 70% capacity as of fiscal year end, respectively. The MSW Subcell is approximately 93% capacity, but estimates will require modification as additional subcells are constructed over time. The County also reports a remaining liability for the Mt. Olive Sanitary and the Turkey Creek Sanitary Landfills, both of which were closed in 1997.

Lease Liabilities. During the fiscal year, the County had active noncancelable lease agreements as lessee. A description of those agreements and the related balances are as follows:

The County has a noncancelable lease agreement with a third party for parking deck use, terminating on September 30, 2025. As the lease does not contain a specified interest rate, the County has used its incremental borrowing rate for similar assets of 3.0% as the discount rate for the lease. Aggregate monthly payments range from $9,756 to $11,875 over the term of the agreement. At September 30, 2022, the County's outstanding balance on this lease agreement was $408,337.

The County has a noncancelable lease agreement with a third party for a radio tower, terminating in September of 2030. As the lease does not contain a specified interest rate, the County has used its incremental borrowing rate for similar assets of 3.0% as the discount rate for the lease. Aggregate monthly payments are $1,455 over the term of the agreement. At September 30, 2022, the County's outstanding balance on this lease agreement was $125,307.

The County has a noncancelable lease agreement with a third party for equipment towers, terminating on December 31, 2024. As the lease does not contain a specified interest rate, the County has used its incremental borrowing rate for similar assets of 3.0% as the discount rate for the lease. Aggregate monthly payments are $4,883 over the term of the agreement. At September 30, 2022, the County's outstanding balance on this lease agreement was $127,339.

NOTE 8. LONG-TERM DEBT (CONTINUED)

A. Primary Government (Continued)

The County has a noncancelable lease agreement with a third party for office space rental used as a satellite office for its Revenue Department, terminating in February of 2030. As the lease does not contain a specified interest rate, the County has used its incremental borrowing rate for similar assets of 3.0% as the discount rate for the lease. Aggregate monthly payments range from $10,069 to $10,571 over the term of the agreement. At September 30, 2022, the County's outstanding balance on this lease agreement was $832,867.

The County has a noncancelable lease agreement with a third party for office space rental used as a satellite office for its Revenue Department, terminating in September of 2036. As the lease does not contain a specified interest rate, the County has used its incremental borrowing rate for similar assets of 3.0% as the discount rate for the lease. Aggregate monthly payments range from $10,080 to $11,113 over the term of the agreement. At September 30, 2022, the County's outstanding balance on this lease agreement was $1,450,029.

The County has a noncancelable lease agreement with a third party for a property lease for a police substation, terminating in September of 2024. As the lease does not contain a specified interest rate, the County has used its incremental borrowing rate for similar assets of 3.0% as the discount rate for the lease. Aggregate monthly payments are $500 over the term of the agreement. At September 30, 2022, the County's outstanding balance on this lease agreement was $11,160.

The County has a noncancelable lease agreement with a third party for office space used by the County to operate the Workforce Innovation Opportunity Act Program, terminating in June of 2023. As the lease does not contain a specified interest rate, the County has used its incremental borrowing rate for similar assets of 3.0% as the discount rate for the lease. Aggregate monthly payments are $11,350 over the term of the agreement. At September 30, 2022, the County's outstanding balance on this lease agreement was $101,128.

NOTE 8. LONG-TERM DEBT (CONTINUED)

A. Primary Government (Continued)

Debt service to maturity on the County's outstanding lease liabilities is as follows:

Fiscal Year ending September 30,	Principal	Interest	Total
2023	$ 484,212	$ 84,503	$ 568,715
2024	394,535	71,791	466,326
2025	359,812	60,090	419,902
2026	213,829	51,441	265,270
2027	226,465	44,853	271,318
2028-2032	869,968	130,354	1,000,322
2033-2036	507,346	31,341	538,687
Total	$ 3,056,167	$ 474,373	$ 3,530,540

B. Discretely Presented Component Units

The following is a summary of long-term debt activity for the County's discretely-presented component units for the fiscal year ended September 30, 2022:

	Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
Personnel Board:					
Compensated absences	$ 1,232,303	$ 838,808	$ (896,793)	$ 1,174,318	$ 185,275
Personnel Board long-term liabilities	$ 1,232,303	$ 838,808	$ (896,793)	$ 1,174,318	$ 185,275
Emergency Management Agency					
Compensated absences	$ 78,041	$ 39,454	$ (36,165)	$ 81,330	$ 39,800
Claims payable	20,073	6,110	-	26,183	5,773
Emergency Management Agency long-term liabilities	$ 98,114	$ 45,564	$ (36,165)	$ 107,513	$ 45,573

NOTE 9. DEFINED BENEFIT PENSION PLAN

Plan Description. The General Retirement System for Employees of Jefferson County, Alabama (the Retirement System) is the administrator of a single-employer, defined benefit pension plan (the Pension Plan) covering substantially all employees of Jefferson County, Alabama, including the Jefferson County Personnel Board. The Retirement System was established by Act Number 497, Acts of Alabama 1965, page 717, as amended, and provides guidelines for benefits to retired and disabled employees of the County. The responsibility for making effective the provisions of Act 497 is vested in the Pension Board, which consists of five members.

The Pension Plan's financial statements are publicly available in the annual report of the General Retirement System for Employees of Jefferson County, Alabama for the fiscal year ended September 30, 2022. The report may be reviewed at the Jefferson County Courthouse, Room 430, Birmingham, Alabama.

Plan membership is mandatory for all classified full-time civil service employees upon commencement of employment. Employees whose employment is not subject to the civil service system or those who are officers may elect to join. As of October 1, 2021, the most recent actuarial valuation date, the plan membership included the following categories of participants:

Retirees and beneficiaries receiving benefits	2,447
Terminated vested participants	243
Active Members	2,527
	5,217

Benefits Provided. Plan benefits are determined by various criteria including, but not limited to, age, years of service and basic average salary. Basic average salary is defined as the average salary for the highest consecutive 36-month period of employment, excluding overtime and longevity pay. Benefits are limited to a maximum of 75% of a member's basic average salary and vest after 10 years of paid service. Benefits are received in monthly payments over the remaining life of the member. Vested members, upon termination, for reasons other than retirement, death, or disability, may elect to forego monthly benefit payments and receive a one-time payment of their retirement contributions and related interest.

NOTE 9. DEFINED BENEFIT PENSION PLAN (CONTINUED)

Benefits may be received under the following conditions:

Normal Retirement – A member may retire upon reaching age 55 with a total of 30 years of service of which at least 20 years are paid membership time with the County, or the member may retire regardless of age after completing 30 years of paid membership time with the County. Otherwise the member must have attained age 60 with a minimum of 10 years of paid service.

Early Retirement – Any member who has completed 30 years of service, including 10 years of paid membership service, may elect to receive a regular early retirement benefit reduced by a percentage according to the member's age on the birthday preceding retirement. Any member who has completed 25 years of paid membership service may elect to receive a 25-year early retirement benefit reduced by 7% for each year less than 30 years of paid membership.

Contributions. Employees of the County are required by statute to contribute 6% of their gross salary to the Plan. The County is required to contribute amounts equal to participant contributions. The Plan also receives from the County a percentage of the proceeds from the sale of pistol permits. Employee contributions to the Plan were approximately $9,450,000 for the fiscal year ended September 30, 2022. County contributions to the Plan were $9,431,746 for the fiscal year ended September 30, 2022. The County's contribution rate was 6.30% of covered payroll.

Net Pension Liability (Asset) of the County. The County's net pension liability (asset) was measured as of September 30, 2021, and the total pension liability used to calculate the net pension liability (asset) was determined by an actuarial valuation as of October 1, 2021. An expected total pension liability as of September 30, 2022 was determined using standard roll-forward techniques.

Actuarial Assumptions. The total pension liability in the September 30, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases, including inflation	4.25 – 6.75%, including inflation
Investment rate of return	6.50%, including inflation, net of investment expense

Mortality rates were based on the Pub-2010 Headcount-weighted Mortality Table for General Employees Below Median and projected generationally with scale MP-2018, adjusted by 105% for males and 110% for females for the period after service retirement and for dependent beneficiaries. The Pub-2010 Mortality Table for Non-Safety Disabled Retirees projected generationally with projection scale MP-2018, adjusted by 105% for males and 110% for females was used for the period after disability retirement.

NOTE 9. DEFINED BENEFIT PENSION PLAN (CONTINUED)

The actuarial assumptions used in the October 1, 2021 valuation were based on the results of an actuarial experience study for the period October 1, 2013 through September 30, 2018. The discount rate of 6.5% was adopted by the Board on January 27, 2022.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation), were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of September 30, 2022 are summarized in the following table:

Asset class	Target allocation	Long-term expected real rate of return
Domestic large cap	35.0%	8.40%
Domestic small/mid cap blend	15.0%	8.40
International equity	10.0%	8.90
Fixed income	25.0%	4.00
International fixed	5.0%	3.80
Hedge fund of funds	5.0%	5.80
Real estate	5.0%	6.80
Total	100%	

Discount rate. The discount rate used to measure the total pension liability (asset) at September 30, 2021, was the long-term investment rate of return, 6.50%, which was a decrease from the previous valuation of 6.75%. The projection of cash flows used to determine the discount rate assumed that member contributions and employer contributions will be made at the current contribution rates. Projected future benefit payments for all current plan members were projected through the year in which the last benefit payment will be made. Based on those assumptions, the Pension Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on the pension investments was applied to all periods of projected benefit payments to determine the total pension liability, and a municipal bond rate was not used in determining the discount rate.

NOTE 9. DEFINED BENEFIT PENSION PLAN (CONTINUED)

Changes in the Net Pension Liability (Asset) of the County. The changes in the components of the net pension liability (asset) ($ in thousands) of the County for the fiscal year ended September 30, 2022 were as follows:

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (Asset) (a) - (b)
Balances at 9/30/2021	$ 1,115,549	$ 1,242,597	$ (127,048)
Changes for the fiscal year:			
Service cost	26,741	-	26,741
Interest	72,815	-	72,815
Differences between expected and actual experience	(1,050)	-	(1,050)
Changes in assumptions	28,728	-	28,728
Contributions—employer	-	8,401	(8,401)
Contributions—employee	-	8,355	(8,355)
Net investment income	-	260,802	(260,802)
Benefit payments, including refunds of employee contributions	(73,604)	(73,604)	-
Benefit changes	-	(1,994)	1,994
Other expense	-	498	(498)
Administrative expense	-	-	-
Net changes	53,630	202,458	(148,828)
Balances at 9/30/2022	$ 1,169,179	$ 1,445,055	$ (275,876)

As of September 30, 2022, the Plan's net pension asset is reported on the statement of net position as follows ($ in thousands):

	Net Pension Asset
Primary Government	$ 265,103
Personnel Board	10,773
Total net pension asset	$ 275,876

As of September 30, 2022, the Plan's fiduciary net position as a percentage of the total pension liability is 123.6%.

The required schedule of changes in the County's net pension liability (asset) and related ratios immediately following the notes to the financial statements presents multiyear trend information about whether the value of plan assets is increasing or decreasing over time relative to the total pension liability.

NOTE 9. DEFINED BENEFIT PENSION PLAN (CONTINUED)

Sensitivity of the net pension liability (asset) to changes in the discount rate. The following table presents the net pension asset of the County, including the Jefferson County Personnel Board component unit ($ in thousands), calculated using the discount rate of 6.50%, as well as what the County's net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (5.50%) or 1-percentage-point higher (7.50%) than the current rate:

1% Decrease (5.50%)	Discount Rate (6.50%)	1% Increase (7.50%)
$ (148,227)	$ (275,876)	$ (383,986)

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Actuarial calculations reflect a long-term perspective. Calculations are based on the substantive plan in effect as of September 30, 2022 and the current sharing pattern of costs between employer and employee.

Pension Expense (Income) and Deferred Outflows of Resources Related to Pensions. For the fiscal year ended September 30, 2022, the County recognized ($ in thousands) pension expense (income) of $(26,557). At September 30, 2022, the County and the Personnel Board reported deferred outflows of resources related to pensions from the following sources ($ in thousands):

	Primary Government		Personnel Board	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ 3,785	$ -	$ 154
Changes in assumptions	38,237	1,978	1,555	81
Net difference between projected and actual earnings on pension plan investments	-	127,332	-	5,174
Employer contributions subsequent to the	9,065	-	367	-
Total	$ 47,302	$ 133,095	$ 1,922	$ 5,409

NOTE 9. DEFINED BENEFIT PENSION PLAN (CONTINUED)

County contributions of $9,431,746 subsequent to the measurement date will be recognized as a reduction (increase) of the net pension liability (asset) in the subsequent fiscal year. Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows ($ in thousands):

Fiscal Year ending September 30:		
2023	$	(26,943)
2024		(16,736)
2025		(26,514)
2026		(29,581)
2027		1,063
Total	$	(98,711)

NOTE 10. OTHER POSTEMPLOYMENT BENEFITS

Plan Administration and Benefits. The County, as authorized by the County Commission, administers a single-employer defined benefit Postemployment Welfare Benefits Plan (the “OPEB Plan”) which also covers employees of the Jefferson County Personnel Board and the Jefferson County Emergency Management Agency. The Plan is administered by the County management, under the direction of the County’s Board of Commissioners. The County pays an explicit subsidy equal to the difference between the claims incurred (for the Aetna plans) or the monthly premium charged by the insurance carrier (for the Kaiser and vision plans). The County subsidizes a portion of the retiree’s health care insurance premiums based on the total years of service and age at retirement. The County’s subsidy for each covered retired employee ranges from $209 to $1,807 per month, and total insurance premiums range from $726 to $2,165 per month. The OPEB Plan provides for medical insurance coverage to eligible retirees and their dependents as indicated below. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75 and a separate report was not issued for the OPEB Plan.

Benefits are generally available at the earliest of the following:

1. Age 60 and completion of 10 years of paid membership service,
2. 30 years of paid membership service or
3. Age 55 with 30 years of service of which 20 must be paid membership service.

NOTE 10. OTHER POSTEMPLOYMENT BENEFITS (CONTINUED)

Plan Membership. Membership of the Plan consisted of the following at January 1, 2021, the date of the latest actuarial valuation:

Active participants	2,458
Inactives and beneficiaries currently receiving benefits	424
Total	2,882

Contributions. The County has elected to fund the Plan on a "pay as you go" basis. Plan members, once retired, contribute to the plan based on number of years of creditable service. Per a County resolution, the County is required to contribute the current year benefit costs of the Plan, which are not paid by the retiree. For the fiscal year ended September 30, 2022, the County contributed $5,423,784 for the pay-as-you-go benefits for the Plan.

The County's total OPEB liability was measured as of September 30, 2021 and was determined by an actuarial valuation as of September 30, 2020.

Actuarial assumptions. The total OPEB liability in the September 30, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Discount Rate:	2.26%
Healthcare Cost Trend Rate:	7.00% - 4.75%, Ultimate Trend in 2029
Inflation Rate:	2.75%
Salary increase:	4.25% including inflation
Participation rate:	Not available

Mortality rates were based on the Pub-2010 Headcount-weighted Mortality Table for General Employees Below Median and projected generationally with scale MP-2018, adjusted by 105% for males and 110% for females for the period after service retirement and for dependent beneficiaries. The Pub-2010 Mortality Table for Non-Safety Disabled Retirees projected generationally with projection scale MP-2018, adjusted by 105% for males and 110% for females was used for the period after disability retirement.

The demographic actuarial assumptions for retirement, disability incidence, withdrawal, and salary increases used in the September 30, 2020 valuation were based on the results of an actuarial experience study for the period October 1, 2013 – September 30, 2018.

Discount rate. The discount rate used to measure the total OPEB liability was 2.26%, which was an increase from the prior rate of 2.21%. This rate is based on the return on the 20-Bond average General Obligation 20-year Municipal Bond Rate published at the end of the last week during the month of September by The Bond Buyer.

NOTE 10. OTHER POSTEMPLOYMENT BENEFITS (CONTINUED)

Changes in the Total OPEB Liability of the County. The changes in the total OPEB liability of the County for the fiscal year ended September 30, 2022, were as follows:

	Total OPEB Liability (a)
Balances at 9/30/21	$ 116,925,047
Changes for the fiscal year:	
Service cost	6,379,911
Interest	2,529,478
Experience differences	(673,967)
Assumption changes	(522,005)
Benefit payments	(4,965,203)
Net changes	2,748,214
Balances at 9/30/22	$ 119,673,261

As of September 30, 2022, the Plan's total OPEB liability is reported on the statement of net position as follows:

	Total OPEB Liability
Primary Government	$ 117,668,334
Personnel Board	1,944,248
Emergency Management Agency	60,679
Total OPEB Liability	$ 119,673,261

The required schedule of changes in the County's total OPEB liability and related ratios immediately following the notes to the financial statements presents multiyear trend information about the total OPEB liability.

Sensitivity of the total OPEB liability to changes in the discount rate. The following presents the total OPEB liability of the County (including the Jefferson County Personnel Board and Jefferson County Emergency Management Agency) as well as what the County's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (1.26%) or 1-percentage-point higher (3.26%) than the current discount rate:

	1% Decrease (1.26%)	Discount Rate (2.26%)	1% Increase (3.26%)
Total OPEB liability	$ 130,618,504	$ 119,673,261	$ 109,761,578

NOTE 10. OTHER POSTEMPLOYMENT BENEFITS (CONTINUED)

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates. The following presents the total OPEB liability of the County (including the Jefferson County Personnel Board and Jefferson County Emergency Management Agency), as well as what the County's total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (6% decreasing to 3.75%) or 1-percentage-point higher (8% decreasing to 5.75%) than the current healthcare cost trend rates:

	1% Decrease (6% decreasing to 3.75%)	Healthcare Rate (7% decreasing to 4.75%)	1% Increase (8% decreasing to 5.75%)
Total OPEB liability	$ 106,004,171	$ 119,673,261	$ 135,884,210

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and actuarially determined amounts are subject to continual revisions as results are compared to past expectations and new estimates are made about the future. Actuarial calculations reflect a long-term perspective. Calculations are based on the substantive plan in effect as of September 30, 2022 and the current sharing pattern of costs between employer and inactive employees.

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB. For the fiscal year ended September 30, 2022, the County recognized OPEB expense of $6,659,902. At September 30, 2022, the County reported deferred outflows of resources related to OPEB from the following sources:

	Primary Government		Personnel Board		Emergency Management Agency	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 343,504	$ 14,675,608	$ 5,375	$ 229,633	$ 140	$ 5,964
Changes in plan assumptions	9,264,361	2,809,457	158,053	59,275	5,397	3,053
Employer contributions subsequent to measurement date	5,338,088	-	83,526	-	2,170	-
Total	$ 14,945,953	$ 17,485,065	$ 246,954	$ 288,908	$ 7,707	$ 9,017

NOTE 10. OTHER POSTEMPLOYMENT BENEFITS (CONTINUED)

Contributions subsequent to the measurement date will be recognized as a reduction of the total OPEB liability in the fiscal year ending September 30, 2022. Amounts reported as deferred outflows of resources related to OPEB will be recognized in OPEB expense as follows:

Fiscal Year ending September 30:		
2022	$	(2,249,487)
2023		(2,249,487)
2024		(1,307,628)
2025		395,708
2026		(806,958)
Thereafter		(1,788,308)
Total	$	(8,006,160)

NOTE 11. RISK MANAGEMENT

The County is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; natural disasters; injuries to employees; and losses resulting from providing accident and health benefits to employees and their dependents. Settlements have not exceeded insurance coverage in each of the past three years.

Health Insurance

The County provides health coverage for its employees under a partial self-insurance plan in which excess coverage is provided through a commercial insurance provider. Under this plan, the County purchases specific reinsurance coverage with an unlimited benefit for each covered person, subject to a $250 deductible per covered person. Employees may obtain health care services through participation in the County's group health insurance plan. Risk management administers health insurance and negotiates with private providers to provide health, life, accidental death and dismemberment, vision and dental insurances for its employees and dependents. The County pays approximately 75 percent of health and 100 percent of basic life and accidental death and dismemberment, and the employees pay 100 percent of dental and vision insurance and other voluntary insurance plans. The County's risk financing activities associated with the County's group health insurance, such as the risks of loss related to medical and prescription drug claims, are administered through third parties on a paid-claims basis. The following describes the activity for the past two fiscal years:

Fiscal Year	Beginning of Year Claims Liability	Current Year Claims and Changes in Estimates	Claims Paid	End of Year Claims Liability
2022	$ 2,141,577	$ 37,907,491	$ (37,907,652)	$ 2,141,416
2021	1,804,000	27,101,095	(26,763,518)	2,141,577

NOTE 11. RISK MANAGEMENT (CONTINUED)

Workers' Compensation

The County provides workers' compensation coverage for its employees under a plan of partial self-insurance. Under this plan, the County is self-insured with a retention of $550,000. Claims expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated.

The County has purchased commercial insurance for claims in excess of coverage provided by the County. Liabilities include an amount for claims that have been incurred but not reported. Settled claims have not exceeded the County's additional coverage in any of the past three (3) periods.

The following describes the activity for the past two fiscal years:

Fiscal Year	Beginning of Year Claims Liability	Current Year Claims and Changes in Estimates	Claims Paid	End of Year Claims Liability
2022	$ 7,501,570	$ 717,096	$ (213,480)	$ 8,005,186
2021	6,781,000	1,051,752	(331,182)	7,501,570

General and Auto Liability

The County is self-insured with an established department to finance losses. The following describes the activity for the past two fiscal years:

Fiscal Year	Beginning of Year Claims Liability	Current Year Claims and Changes in Estimates	Claims Paid	End of Year Claims Liability
2022	$ 661,362	$ 308,602	$ (273,246)	$ 696,718
2021	909,000	$ (1,835)	(245,803)	661,362

NOTE 12. COMMITMENTS AND CONTINGENCIES

Construction Commitments

In addition to the liabilities enumerated in the balance sheet, at September 30, 2022, the County has construction commitments on uncompleted contracts of approximately $174,407,087.

NOTE 12. COMMITMENTS AND CONTINGENCIES (CONTINUED)

Litigation

The County is a defendant in certain legal actions in the nature of claims for alleged damages to persons and property and other similar types of actions arising in the course of County operations. The County consults with legal counsel regarding these lawsuits and claims and defend against them. As of September 30, 2022, the County has accrued estimated litigation payments in the accompanying statement of net position and has accrued a total liability of approximately $388,500.

Under the terms of a Consent Decree pertaining to violations of the federal Clean Water Act, the County is responsible for reporting to the United States Environmental Protection Agency (EPA) certain violations relating to the County's sanitation operations. These violations carry financial penalties which are due upon demand by the EPA. As of September 30, 2022, accumulated penalties included in the litigation liability on the County's statement of net position for business-type activities total $4,047,000.

Additionally, the County carries a liability related to lawsuits whereby the County was alleged to have improperly collected sales taxes on diesel fuel sold to certain companies in the railroad industry. As of September 30, 2022, resolution of this matter is pending in the Jefferson County Circuit Court pending the outcome of similar cases currently being heard in federal courts. It is the County's position that any unfavorable outcome in these cases would be limited to pro-rata payouts from the County's Unsecured Claims Fund, established as a result of the County's bankruptcy (Note 14). As such, the County has accrued the entirety of the Unsecured Claims Fund of $5,306,897 as a liability on the statement of net position for governmental activities at September 30, 2022.

Grant Contingencies

The County has received Federal and State grants for specific purposes that are subject to review and audit by the grantor agencies. Such audits could lead to the disallowance of certain expenditures previously reimbursed by those agencies. Based upon prior experience, County management believes such disallowances, if any, will not be significant.

NOTE 13. TAX ABATEMENTS

The County enters into property tax abatement agreements with local businesses under the Tax Incentive Reform Act of 1992, Section 40-9B-1 et seq., of the Code of Alabama. Under the Act, municipalities may grant property tax abatements on up to $3,000,000 of the assessed value of capital additions on a business' property tax bill for the purpose of attracting or retaining businesses within their jurisdictions. The abatements may be granted to any business located within or promising to relocate to the County. For the fiscal year ended September 30, 2022, Jefferson County abated property taxes totaling approximately $3.6 million under this program.

NOTE 13. TAX ABATEMENTS (CONTINUED)

The County also is subject to tax abatements granted by the Birmingham Industrial Development Board (BIDB), an entity created by the County and the City of Birmingham in 2016 under Chapter 94, Title 11 of the Code of Alabama. This authority has the stated purpose of developing any property on or near any navigable river for increasing business activity and employment in the County and the City. The BIDB issues abatements of ad valorem property taxes for economic development purposes to keep or attract businesses. For the fiscal year ended September 30, 2022, the BIDB abated property taxes totaling approximately $4.9 million.

NOTE 14. BANKRUPTCY SETTLEMENT AND CONFIRMATION

During the fiscal year ended September 30, 2009, the County received Notices of Events of Default from indenture trustees and certain banks for certain debt obligations and was unable to meet its accelerated debt service obligations as they became due. The County filed a petition for relief under Chapter 9 of the United States Bankruptcy Code on November 9, 2011, in the United States Bankruptcy Court for the Northern District of Alabama.

On November 6, 2013, the County filed with the Bankruptcy Court a modified Chapter 9 plan, which was titled the *Chapter 9 Plan of Adjustment for Jefferson County, Alabama (Dated November 6, 2013).* On November 22, 2013, after conclusion of a confirmation hearing, the Bankruptcy Court entered its order (the Confirmation Order) confirming the County's November 6, 2013 Plan of Adjustment.

The Plan of Adjustment set forth the manner in which the County proposed to adjust and treat all claims in the bankruptcy case. The Plan of Adjustment, the Confirmation Order, and the Disclosure Statement regarding the Plan of Adjustment (Disclosure Statement) are all public documents and available for review. For a complete understanding of the Plan of Adjustment and its terms, it should be read in conjunction with the Confirmation Order and the Disclosure Statement. These documents can be obtained from the County's website at:

https://www.jccal.org/Sites/Jefferson_County/Documents/Finance/Chapter%209%20Plan%20of%20Adjustment.pdf.

As of September 30, 2022, the County has recorded a liability of $5,306,897 related to unsecured claims, per order of the Bankruptcy Court (see Note 12).

NOTE 14. BANKRUPTCY SETTLEMENT AND CONFIRMATION (CONTINUED)

Post-Effective Date Events

On April 1, 2017, the County made final payment on the Series 2013B and 2013D Warrants.

On March 1, 2017, the Series 2005B Warrants were fully redeemed pursuant to their terms.

On July 31, 2017, the County issued the Series 2017 Warrants in order to redeem and retire the Series 2004A and 2005A Limited Obligation School Warrants.

On May 24, 2018, the County issued the Series 2018A General Obligation Refunding Warrants in order to redeem and retire the Series 2003A Warrants, the Series 2004A Warrants, and the Lease Revenue Warrants, Series 2006.

On August 16, 2018, the U.S. Eleventh Circuit Court of Appeals ordered the dismissal of an appeal from Jefferson County's Plan of Adjustment by ratepayers of the County's sewer system. There are no challenges outstanding to the Plan of Adjustment at September 30, 2022.

On September 17, 2018, the County issued the delayed delivery of the Series 2018B General Obligation Refunding Warrants in order to partially redeem and retire the General Obligation Series 2013A and 2013C Warrants.

On April 1, 2019, the County made final payment on the non-refunded portions of the Series 2013A and 2013C Warrants.

On April 1, 2021, the County made final payment on the Series 2018B Warrants.

Progress on Resolution of Unsecured Claims

The County has, at the order of the Bankruptcy Court, placed $5,306,897 into a restricted Unsecured Claims bank account. The largest of the unsettled, unsecured claims relate to ongoing litigation with various railroads involved in litigation around the state-wide collection of diesel fuel tax. Once all remaining unsecured creditors settle with the County, the entirety of this amount will be distributed on a pro-rata basis (see Note 12).

Current Impact on Sanitary Fund Operations

Under the Plan of Adjustment and Confirmation Order, the Bankruptcy Court has the ability to enforce rate increases set forth in the Approved Rate Structure (Rate Structure) validated by the Bankruptcy Court as part of the Plan of Adjustment. Pursuant to the Rate Structure, sewer rates will increase by a minimum of 3.49% annually in each fiscal year beginning October 1, 2018, across all categories of sewer charges. This rate requirement exists for as long as the Series 2013 Sewer Revenue Warrants remain outstanding.

NOTE 15. RESTATEMENTS

Management of the County has determined that a restatement to beginning fund balance of the General Fund is needed to correct an error in the prior fiscal year's financial statements pertaining to the County's contingent liability associated with its bankruptcy. In the prior fiscal years, the County reported a $5,306,897 liability in its statement of net position pertaining to unsecured claims associated with the County's bankruptcy (Note 14). Management identified that this liability was also reported in the County's General Fund, resulting in an overstatement of liabilities by $5,000,000.

Management also determined that a restatement to beginning fund balance of the Indigent Care Fund is necessary to correct an error in the prior fiscal year's financial statements where a liability in the amount of $9,916,226 was erroneously omitted. At September 30, 2021, the County recorded a receivable for sales taxes, a portion of which is due to Cooper Green – Mercy Health Services Authority. This amount due to Cooper Green – Mercy Health Services was not recorded and resulted in an understatement of expenditures and liabilities.

The impacts of these restatements on beginning fund balances for the General Fund and the Indigent Care Fund and beginning net position for governmental activities are as follows:

	General Fund
Beginning fund balance, as previously reported	$ 281,751,272
Effect of restatement - correction of error	5,000,000
Beginning fund balance, as restated	$ 286,751,272

	Indigent Care Fund
Beginning fund balance, as previously reported	$ 23,046,029
Effect of restatement - correction of error	(9,916,226)
Beginning fund balance, as restated	$ 13,129,803

	Governmental Activities
Beginning net position, as previously reported	$ 283,589,028
Effect of restatements - correction of errors	(4,916,226)
Beginning net position, as restated	$ 278,672,802

NOTE 15. RESTATEMENTS (CONTINUED)

Management of the County has also determined that a restatement to beginning net position of the Probate Court custodial fund is required due to the omission of the financial information related to the Bessemer Probate Court in the prior fiscal year. The impact of this restatement on beginning net position for the Probate Court custodial fund is as follows:

	Custodial Funds
Beginning net position, as previously reported	$ 31,533,043
Effect of restatement - correction of error	1,865,175
Beginning net position as restated	$ 33,398,218

REQUIRED SUPPLEMENTARY INFORMATION

JEFFERSON COUNTY, ALABAMA

GENERAL FUND
BUDGETARY COMPARISON SCHEDULE - GAAP BASIS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budgeted Amounts			Variance with Final
	Original	Final	Actual	Budget
Revenues:				
Property taxes	$ 52,358,718	$ 52,358,718	$ 52,633,605	$ 274,887
Sales taxes	61,802,115	61,802,115	71,225,128	9,423,013
Other taxes	10,648,309	10,648,309	10,378,367	(269,942)
Licenses and permits	11,499,563	11,499,563	16,138,200	4,638,637
Intergovernmental	5,391,751	5,750,461	9,526,129	3,775,668
Charges for services	40,624,077	40,624,077	43,865,313	3,241,236
Interest income	451,748	451,748	362,306	(89,442)
Miscellaneous	2,320,963	2,320,963	2,508,196	187,233
Total revenues	185,097,244	185,455,954	206,637,244	21,181,290
Expenditures:				
Current:				
General government				
Board of Equalization				
Personnel costs	274,806	274,806	282,680	(7,874)
Total Board of Equalization	274,806	274,806	282,680	(7,874)
Board of Registrars				
Personnel costs	944,069	944,069	899,059	45,010
Other operating costs	455,949	486,872	483,832	3,040
Total Board of Registrars	1,400,018	1,430,941	1,382,891	48,050
Commission				
Personnel costs	1,394,626	1,394,626	1,360,641	33,985
Total Commission	1,394,626	1,394,626	1,360,641	33,985
Commission support				
Other operating costs	570,000	578,138	549,516	28,622
Grant expenditures	2,895,069	13,569,755	6,163,863	7,405,892
Total Commission support	3,465,069	14,147,893	6,713,379	7,434,514
Community development				
Personnel costs	1,018,335	1,018,335	819,001	199,334
Other operating costs	73,350	81,572	50,747	30,825
Total community development	1,091,685	1,099,907	869,748	230,159
Compliance				
Personnel costs	1,238,654	1,238,654	989,988	248,666
Other operating costs	425,281	433,019	207,145	225,874
Total compliance	1,663,935	1,671,673	1,197,133	474,540
County attorney				
Personnel costs	1,322,009	1,322,009	1,316,216	5,793
Other operating costs	4,595,656	4,688,250	5,174,698	(486,448)
Total county attorney	5,917,665	6,010,259	6,490,914	(480,655)
County manager				
Personnel costs	845,292	845,292	817,998	27,294
Other operating costs	109,800	111,438	76,345	35,093
Total county manager	955,092	956,730	894,343	62,387
Development service				
Personnel costs	5,322,473	5,322,473	5,030,449	292,024
Other operating costs	849,626	872,531	869,637	2,894
Total development service	6,172,099	6,195,004	5,900,086	294,918

(Continued)

JEFFERSON COUNTY, ALABAMA

GENERAL FUND
BUDGETARY COMPARISON SCHEDULE - GAAP BASIS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budgeted Amounts			Variance with Final
	Original	Final	Actual	Budget
Expenditures (Continued):				
Current (Continued):				
General government (Continued)				
District attorney - Bessemer				
Personnel costs	2,755,748	2,755,748	2,656,594	99,154
Other operating costs	7,960	31,900	23,000	8,900
Total district attorney - Bessemer	2,763,708	2,787,648	2,679,594	108,054
District attorney - Birmingham				
Personnel costs	5,557,129	5,557,129	5,485,385	71,744
Other operating costs	240,350	282,498	270,250	12,248
Total district attorney - Birmingham	5,797,479	5,839,627	5,755,635	83,992
District attorney				
Other operating costs	161,417	166,299	116,940	49,359
Total district attorney	161,417	166,299	116,940	49,359
Economic development				
Other operating costs	10,000,000	10,000,000	1,941,100	8,058,900
Total economic development	10,000,000	10,000,000	1,941,100	8,058,900
Family court				
Personnel costs	6,626,705	6,626,705	6,860,197	(233,492)
Other operating costs	950,000	1,189,825	903,481	286,344
Total family court	7,576,705	7,816,530	7,763,678	52,852
Finance department				
Personnel costs	2,777,081	2,777,081	2,323,401	453,680
Other operating costs	1,113,314	1,382,954	900,479	482,475
Total finance department	3,890,395	4,160,035	3,223,880	936,155
Fleet management				
Personnel costs	2,464,041	2,464,041	2,430,189	33,852
Other operating costs	7,179,926	10,066,997	7,592,041	2,474,956
Total fleet management	9,643,967	12,531,038	10,022,230	2,508,808
General services				
Personnel costs	9,694,565	9,144,565	8,854,500	290,065
Other operating costs	14,241,714	17,060,963	11,807,324	5,253,639
Total general services	23,936,279	26,205,528	20,661,824	5,543,704
Human resources				
Personnel costs	3,754,534	3,706,870	3,284,419	422,451
Other operating costs	1,487,436	2,351,427	1,062,654	1,288,773
Total human resources	5,241,970	6,058,297	4,347,073	1,711,224
Information technology				
Personnel costs	5,551,210	5,551,210	5,107,361	443,849
Other operating costs	7,327,941	7,834,963	6,900,962	934,001
Total information technology	12,879,151	13,386,173	12,008,323	1,377,850
Law library				
Personnel costs	181,097	181,097	40,847	140,250
Other operating costs	400	400	-	400
Total law library	181,497	181,497	40,847	140,650

(Continued)

JEFFERSON COUNTY, ALABAMA

GENERAL FUND
BUDGETARY COMPARISON SCHEDULE - GAAP BASIS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budgeted Amounts			Variance with Final
	Original	Final	Actual	Budget
Expenditures (Continued):				
Current (Continued):				
General government (Continued)				
Probate court				
Personnel costs	6,762,396	6,878,714	5,558,056	1,320,658
Other operating costs	613,477	1,053,081	146,404	906,677
Total probate court	7,375,873	7,931,795	5,704,460	2,227,335
Public information				
Personnel costs	304,577	304,577	271,178	33,399
Other operating costs	280,500	374,557	271,370	103,187
Total public information	585,077	679,134	542,548	136,586
Revenue department				
Personnel costs	12,213,280	12,213,280	11,605,971	607,309
Other operating costs	1,369,158	1,554,515	1,207,068	347,447
Total revenue department	13,582,438	13,767,795	12,813,039	954,756
State court				
Personnel costs	1,650,484	1,650,484	1,553,138	97,346
Other operating costs	2,802,204	2,916,622	1,891,724	1,024,898
Total state court	4,452,688	4,567,106	3,444,862	1,122,244
Tax assessor - Bessemer				
Personnel costs	286,486	286,486	295,798	(9,312)
Other operating costs	20,130	20,714	18,333	2,381
Total tax assessor - Bessemer	306,616	307,200	314,131	(6,931)
Tax assessor - Birmingham				
Personnel costs	638,612	638,612	665,663	(27,051)
Other operating costs	50,000	50,723	45,134	5,589
Total tax assessor - Birmingham	688,612	689,335	710,797	(21,462)
Tax collector - Bessemer				
Personnel costs	743,412	743,412	741,872	1,540
Other operating costs	44,816	48,275	31,785	16,490
Total tax collector - Bessemer	788,228	791,687	773,657	18,030
Tax collector - Birmingham				
Personnel costs	2,572,614	2,572,614	2,600,711	(28,097)
Other operating costs	1,520,388	1,519,387	1,260,058	259,329
Total tax collector - Birmingham	4,093,002	4,092,001	3,860,769	231,232
Treasurer				
Personnel costs	455,711	455,711	443,156	12,555
Other operating costs	28,868	30,521	30,808	(287)
Total treasurer	484,579	486,232	473,964	12,268
Non-Departmental				
Personnel costs	103,280	103,280	1,072,734	(969,454)
Other operating costs	4,355,799	3,655,799	2,959,084	696,715
Total non-departmental	4,459,079	3,759,079	4,031,818	(272,739)
Total general government				
Personnel costs	77,453,226	76,971,880	73,367,202	3,604,678
Other operating costs	60,875,460	68,844,240	46,791,919	22,052,321
Grant expenditures	2,895,069	13,569,755	6,163,863	7,405,892
Total total general government	141,223,755	159,385,875	126,322,984	33,062,891

(Continued)

JEFFERSON COUNTY, ALABAMA

GENERAL FUND
BUDGETARY COMPARISON SCHEDULE - GAAP BASIS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budgeted Amounts			Variance with Final
	Original	**Final**	**Actual**	**Budget**
Expenditures (Continued):				
Current (Continued):				
Public safety				
Coroner				
Personnel costs	2,100,092	2,100,092	2,185,747	(85,655)
Other operating costs	2,400,307	2,440,659	2,262,115	178,544
Total coroner	4,500,399	4,540,751	4,447,862	92,889
Security				
Personnel costs	3,261,779	3,261,779	3,226,671	35,108
Other operating costs	152,788	192,344	74,922	117,422
Total security	3,414,567	3,454,123	3,301,593	152,530
Sheriff				
Personnel costs	57,724,444	57,724,444	61,007,190	(3,282,746)
Other operating costs	16,822,617	19,561,287	17,458,876	2,102,411
Total sheriff	74,547,061	77,285,731	78,466,066	(1,180,335)
Youth detention				
Personnel costs	4,744,379	4,744,379	4,830,259	(85,880)
Other operating costs	705,961	775,961	677,251	98,710
Total youth detention	5,450,340	5,520,340	5,507,510	12,830
Total public safety				
Personnel costs	67,830,694	67,830,694	71,249,867	(3,419,173)
Other operating costs	20,081,673	22,970,251	20,473,164	2,497,087
Total total public safety	87,912,367	90,800,945	91,723,031	(922,086)
Health and welfare				
Senior services				
Personnel costs	326,041	326,041	246,324	79,717
Other operating costs	752,880	974,387	683,222	291,165
Total health and welfare	1,078,921	1,300,428	929,546	370,882
Debt Service				
Principal	400,003	1,102,893	711,085	391,808
Interest	640,246	1,364,244	730,464	633,780
Total debt service	1,040,249	2,467,137	1,441,549	1,025,588
Total expenditures	231,255,292	253,954,385	220,417,110	33,537,275
Deficiency of revenues under expenditures	(46,158,048)	(68,498,431)	(13,779,866)	54,718,565
Other financing sources (uses):				
Proceeds from sale of capital assets	-	-	384,456	384,456
Transfers in	-	73,637,978	90,226,160	16,588,182
Transfers out	-	(25,489,623)	(26,707,606)	(1,217,983)
Total other financing sources (uses)	-	48,148,355	63,903,010	15,754,655
Net change in fund balances	(46,158,048)	(20,350,076)	50,123,144	70,473,220
Fund balance, beginning of fiscal year, as restated	286,751,272	286,751,272	286,751,272	-
Fund balance, end of fiscal year	$ 240,593,224	$ 266,401,196	$ 336,874,416	$ 70,473,220

JEFFERSON COUNTY, ALABAMA
SPECIAL SALES TAX REVENUE FUND
BUDGETARY COMPARISON SCHEDULE - GAAP BASIS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Taxes	$ 119,348,547	$ 134,798,547	$ 134,635,109	$ (163,438)
Interest income	-	-	163,016	163,016
Total revenues	119,348,547	134,798,547	134,798,125	(422)
Expenditures:				
Current:				
General government				
Special sales tax revenue				
Other operating costs	24,100,000	24,100,000	24,100,000	-
Total expenditures	24,100,000	24,100,000	24,100,000	-
Excess of revenues over expenditures	95,248,547	110,698,547	110,698,125	(422)
Other financing uses:				
Transfers out	-	(110,698,125)	(110,698,125)	-
Total other financing uses	-	(110,698,125)	(110,698,125)	-
Net changes in fund balances	95,248,547	422	-	(422)
Fund balances, beginning of fiscal year	-	-	-	-
Fund balances, end of fiscal year	$ 95,248,547	$ 422	$ -	$ (422)

JEFFERSON COUNTY, ALABAMA
INDIGENT CARE FUND
BUDGETARY COMPARISON SCHEDULE - GAAP BASIS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Taxes	$ 62,137,282	$ 69,926,457	$ 69,926,457	$ -
Interest income	-	-	471,869	471,869
Total revenues	62,137,282	69,926,457	70,398,326	471,869
Expenditures:				
Current:				
Health and welfare				
Indigent care				
Other operating costs	62,137,282	67,665,467	68,111,127	(445,660)
Total expenditures	62,137,282	67,665,467	68,111,127	(445,660)
Excess of revenues over expenditures	-	2,260,990	2,287,199	26,209
Other financing uses:				
Transfers out	-	(4,291,466)	(4,291,466)	-
Total other financing uses	-	(4,291,466)	(4,291,466)	-
Net changes in fund balances	-	(2,030,476)	(2,004,267)	26,209
Fund balances, beginning of fiscal year	13,129,803	13,129,803	13,129,803	-
Fund balances, end of fiscal year	$ 13,129,803	$ 11,099,327	$ 11,125,536	$ 26,209

JEFFERSON COUNTY, ALABAMA
AMERICAN RESCUE PLAN FUND
BUDGETARY COMPARISON SCHEDULE - GAAP BASIS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	**Final**	**Actual**	**Final Budget**
Revenues:				
Intergovernmental	$ 22,202,895	$ 22,202,895	$ 14,057,034	$ (8,145,861)
Interest income	-	-	528,054	528,054
Total revenues	22,202,895	22,202,895	14,585,088	(8,145,861)
Expenditures:				
Current:				
General government				
American Rescue Plan				
Grant expenditures	20,458,353	20,458,353	12,312,492	8,145,861
Capital outlay - general government	1,744,542	1,744,542	1,744,542	-
Total expenditures	22,202,895	22,202,895	14,057,034	8,145,861
Net changes in fund balances	-	-	528,054	528,054
Fund balances, beginning of fiscal year	4,690	4,690	4,690	-
Fund balances, end of fiscal year	$ 4,690	$ 4,690	$ 532,744	$ 528,054

JEFFERSON COUNTY, ALABAMA
REQUIRED SUPPLEMENTARY INFORMATION
OPEB RETIREMENT PLAN
SCHEDULE OF CHANGES IN THE COUNTY'S TOTAL OPEB LIABILITY AND RELATED RATIOS

	2022	2021	2020	2019	2018
Total OPEB liability					
Service cost	$ 6,379,911	$ 6,084,712	$ 4,303,584	$ 5,018,436	$ 5,477,022
Interest on total OPEB liability	2,529,478	3,180,743	4,182,343	3,985,495	3,352,505
Experience differences	(673,967)	(10,229,995)	596,549	(14,558,554)	(223,984)
Assumption changes	(522,005)	579,950	15,363,248	(1,066,617)	(6,682,973)
Benefit payments	(4,965,203)	(4,504,785)	(5,320,237)	(4,616,219)	(4,797,648)
Net change in total OPEB liability	2,748,214	(4,889,375)	19,125,487	(11,237,459)	(2,875,078)
Total OPEB liability - beginning	116,925,047	121,814,422	102,688,935	113,926,394	116,801,472
Total OPEB liability - ending	$ 119,673,261	$ 116,925,047	$ 121,814,422	$ 102,688,935	$ 113,926,394
Covered employee payroll	$ 145,971,113	$ 145,971,113	$ 147,968,770	$ 147,968,770	$ 126,644,600
Total OPEB liability as a percentage of covered employee payroll	82.0%	80.1%	82.3%	69.4%	90.0%

Notes to the Schedule:

The schedule will present 10 years of information once it is accumulated.

The County is not accumulating assets in a trust fund that meets the criteria in paragraph 4 of GASB Statement No. 75 for payment of future OPEB benefits.

JEFFERSON COUNTY, ALABAMA

REQUIRED SUPPLEMENTARY INFORMATION

RETIREMENT PLAN

SCHEDULE OF CHANGES IN THE COUNTY'S NET PENSION LIABILITY AND RELATED RATIOS

	2022	2021	2020	2019	2018
Total pension liability					
Service cost	$ 26,741,000	$ 25,372,000	$ 22,859,000	$ 20,890,000	$ 19,490,000
Interest on total pension liability	72,815,000	72,053,000	70,863,000	69,534,000	68,349,000
Differences between expected and actual experience	(1,050,000)	(4,267,000)	(477,000)	(6,423,000)	(8,548,000)
Changes in assumptions	28,728,000	26,958,000	(6,178,000)	-	-
Benefit changes	-	2,756,000	-	-	-
Benefit payments, including refunds of employee contributions	(73,604,000)	(73,297,000)	(66,845,000)	(63,188,000)	(61,527,000)
Net change in total pension liability	53,630,000	49,575,000	20,222,000	20,813,000	17,764,000
Total pension liability - beginning	1,115,549,000	1,065,974,000	1,045,752,000	1,024,939,000	1,007,175,000
Total pension liability - ending (a)	$ 1,169,179,000	$ 1,115,549,000	$ 1,065,974,000	$ 1,045,752,000	$ 1,024,939,000
Plan fiduciary net position					
Contributions - employer	$ 8,401,000	$ 9,180,000	$ 8,710,000	$ 8,340,000	$ 7,627,000
Contributions - employee	8,964,000	9,889,000	9,348,000	8,734,000	8,033,000
Net investment income (loss)	260,802,000	85,095,000	31,930,000	124,985,000	120,056,000
Benefit payments, including refunds of member contributions	(73,604,000)	(73,297,000)	(66,845,000)	(63,188,000)	(61,527,000)
Administration expenses	(1,994,000)	(1,726,000)	(1,648,000)	(1,426,000)	(1,865,000)
Other expenses	(111,000)	(281,000)	(291,000)	(195,000)	(78,000)
Net change in plan fiduciary net position	202,458,000	28,860,000	(18,796,000)	77,250,000	72,246,000
Plan fiduciary net position - beginning	1,242,597,000	1,213,737,000	1,232,533,000	1,155,283,000	1,083,037,000
Plan fiduciary net position - ending (b)	$ 1,445,055,000	$ 1,242,597,000	$ 1,213,737,000	$ 1,232,533,000	$ 1,155,283,000
County's net pension liability - ending (a) - (b)	$ (275,876,000)	$ (127,048,000)	$ (147,763,000)	$ (186,781,000)	$ (130,344,000)
Plan fiduciary net position as a percentage of the total pension liability	123.6%	111.4%	113.9%	117.9%	112.7%
Covered payroll	$ 140,017,000	$ 153,000,000	$ 145,167,000	$ 139,000,000	$ 127,117,000
Net pension liability as a percentage of covered payroll	-197.0%	-83.0%	-101.8%	-134.4%	-102.5%

	2017	2016	2015
Total pension liability			
Service cost	$ 17,798,000	$ 17,325,000	$ 16,860,000
Interest on total pension liability	65,859,000	64,608,000	63,046,000
Differences between expected and actual experience	12,504,000	(5,226,000)	-
Changes in assumptions	-	-	-
Benefit payments, including refunds of employee contributions	-	(58,006,000)	(57,165,000)
Other changes	(59,662,000)	-	-
Net change in total pension liability	36,499,000	18,701,000	22,741,000
Total pension liability - beginning	970,676,000	951,975,000	929,234,000
Total pension liability - ending (a)	$ 1,007,175,000	$ 970,676,000	$ 951,975,000
Plan fiduciary net position			
Contributions - employer	$ 7,393,000	$ 6,732,000	$ 6,587,000
Contributions - employee	7,969,000	7,155,000	7,333,000
Net investment income (loss)	97,411,000	(1,107,000)	105,706,000
Benefit payments, including refunds of member contributions	(59,662,000)	(58,006,000)	(57,165,000)
Administration expenses	(1,300,000)	(998,000)	(931,000)
Other expenses	(78,000)	(78,000)	(84,000)
Net change in plan fiduciary net position	51,733,000	(46,302,000)	61,446,000
Plan fiduciary net position - beginning	1,031,304,000	1,077,606,000	1,016,160,000
Plan fiduciary net position - ending (b)	$ 1,083,037,000	$ 1,031,304,000	$ 1,077,606,000
County's net pension liability - ending (a) - (b)	$ (75,862,000)	$ (60,628,000)	$ (125,631,000)
Plan fiduciary net position as a percentage of the total pension liability	107.5%	106.2%	113.2%
Covered payroll	$ 123,217,000	$ 112,200,000	$ 109,783,000
Net pension liability as a percentage of covered payroll	-61.6%	-54.0%	-114.4%

Notes to the Schedule:

The schedule will present 10 years of information once it is accumulated.

JEFFERSON COUNTY, ALABAMA

REQUIRED SUPPLEMENTARY INFORMATION
RETIREMENT PLAN
SCHEDULE OF COUNTY CONTRIBUTIONS

	2022	2021	2020	2019	2018
Actuarially determined contribution	$ 9,431,746	$ 8,685,695	$ 9,180,000	$ 8,340,000	$ 7,627,000
Contributions in relation to the actuarially determined contribution	9,431,746	8,685,695	9,180,000	8,340,000	7,627,000
Contribution excess	$ -	$ -	$ -	$ -	$ -
Covered payroll	$ 140,017,000	$ 153,000,000	$ 145,167,000	$ 139,000,000	$ 127,117,000
Contributions as a percentage of covered payroll	6.7%	5.7%	6.3%	6.0%	6.0%

	2017	2016	2015	2014	2013
Actuarially determined contribution	$ 7,393,000	$ 6,732,000	$ 6,587,000	$ 6,851,000	$ 7,744,000
Contributions in relation to the actuarially determined contribution	7,393,000	6,732,000	6,587,000	6,851,000	7,744,000
Contribution excess	$ -	$ -	$ -	$ -	$ -
Covered payroll	$ 123,217,000	$ 112,200,000	$ 109,783,000	$ 109,783,000	$ 114,183,000
Contributions as a percentage of covered payroll	6.0%	6.0%	6.0%	6.2%	6.8%

Notes to the Schedule:

(1) Actuarial Assumptions

Valuation Date	September 30, 2022
Cost Method	Entry age normal
Actuarial Asset Valuation Method	5-year market related value
Assumed Rate of Return on Investments	6.75%, net of pension plan investment expense, including inflation
Projected Salary Increases	4.25%-6.75%, including inflation
Inflation	2.75%
Cost-of-living Adjustment	None
Amortization Method	Level percent open
Remaining Amortization Period	21 years

JEFFERSON COUNTY, ALABAMA

REQUIRED SUPPLEMENTARY INFORMATION
RETIREMENT PLAN
SCHEDULE OF PENSION INVESTMENT RETURNS

	2022	2021	2020	2019
Annual money-weighted rate of return, net of investment expenses for the County's Pension Plan	6.50%	25.30%	6.60%	4.20%

	2018	2017	2016	2015
Annual money-weighted rate of return, net of investment expenses for the County's Pension Plan	13.00%	13.00%	11.60%	-2.50%

	2014
Annual money-weighted rate of return, net of investment expenses for the County's Pension Plan	N/A

N/A - number not available per the audited General Retirement System for Employees of Jefferson Couty, Alabama financial report for fiscal year 2014.

Notes to the Schedule:
The schedule will present 10 years of information once it is accumulated.

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SUPPLEMENTARY INFORMATION

NONMAJOR GOVERNMENTAL FUNDS

Special Revenue Funds

Special revenue funds are used to account for specific revenues that are legally restricted or committed to expenditures for particular purposes.

Tax Assessor Birmingham Fund - to account for the expenditures for the State-funded Tax Assessor Birmingham operations.

Tax Assessor Bessemer Fund - to account for the expenditures for the State-funded Tax Assessor Bessemer operations.

Road Fund - to account for the expenditure of funds received for building and maintaining roads and bridges.

Board of Equalization Fund - to account for property taxes restricted by the state for the operation of the Board of Equalization.

Bridge and Public Buildings Fund - to account for the expenditure of special County property taxes for building and maintenance of public buildings, roads and bridges.

Emergency Rental Assistance Fund - to account for the expenditure of funds received for emergency use of rental assistance.

Community Development Fund - to account for the expenditure of federal block grant funds.

Community Development Loan Fund - to account for loans to businesses through the federal block grant funds.

Workforce Development Fund - to account for the expenditures of the Workforce Innovation Opportunity Act (WIOA).

Sheriff Condemnations Fund - to account for funds from fines and forfeitures to be used for law enforcement activities.

Sheriff Special Programs Fund - to account for funds from fines, forfeitures and contributions and donations received that are to be expended within the guidelines of each program as established by external resource providers.

Law Library Fund - to account for funds from the related revenues and expenditures of operating the County's Law Library.

Home Grant Fund - to account for the expenditure of funds received to create affordable housing for low income households.

NONMAJOR GOVERNMENTAL FUNDS

Capital Projects Funds

Capital Improvements Fund - to account for financial resources used in the improvement of major capital facilities.

Road Construction Fund - to account for the financial resources expended in the construction of roads.

Debt Service Funds

Limited Obligation Refunding Debt Fund - to account for the payment of principal and interest on the Series 2017 Limited Obligation Refunding debt.

Debt Service Fund – to account for the accumulation of resources for and the payment of principal and interest on governmental debt.

JEFFERSON COUNTY, ALABAMA
COMBINING BALANCE SHEET
NONMAJOR GOVERNMENTAL FUNDS
SEPTEMBER 30, 2022

	Special Revenue Funds								
ASSETS	**Tax Assessor Birmingham**	**Tax Assessor Bessemer**	**Road**	**Board of Equalization**	**Bridge and Public Buildings**	**Emergency Rental Assistance**	**Community Development**	**Community Development Loan**	**Workforce Development**
Cash and cash equivalents	$ 1,579,600	$ 367,329	$ 23,593,560	$ 1,108,440	$ 3,726,288	$ 3,280,262	$ 326,200	$ 1,099,558	$ 3,234,420
Accounts receivable, net	-	-	38,626	-	-	-	1,591,124	-	1,166,588
Taxes receivable	3,122,170	1,889,746	13,025,147	8,389,478	49,914,599	-	-	-	-
Due from other funds	-	-	-	-	-	-	-	-	-
Advances to other funds	-	-	-	-	-	-	-	-	-
Loan receivables, net	-	-	-	-	-	-	1,215,645	974,653	-
Total assets	$ 4,701,770	$ 2,257,075	$ 36,657,333	$ 9,497,918	$ 53,640,887	$ 3,280,262	$ 3,132,969	$ 2,074,211	$ 4,401,008
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES									
LIABILITIES									
Accounts payable	$ 94,195	$ 5,433	$ 2,498,794	$ 160,322	$ -	$ 468,510	$ 1,021,253	$ -	$ 802,853
Retainage payable	-	-	-	-	-	-	75,448	-	-
Due to other funds	-	-	-	-	-	-	818,709	-	-
Due to other governments	-	-	8,727,475	-	-	-	-	-	-
Accrued payroll and benefits	43,468	24,903	331,621	79,777	-	-	31,665	-	17,576
Unearned revenue - intergovernmental	-	-	-	-	-	2,735,226	649	-	-
Total liabilities	137,663	30,336	11,557,890	240,099	-	3,203,736	1,947,724	-	820,429
DEFERRED INFLOWS OF RESOURCES									
Deferred revenue - property taxes	3,122,170	1,889,746	11,278,338	8,389,478	52,288,324	-	-	-	-
Total deferred inflows of resources	3,122,170	1,889,746	11,278,338	8,389,478	52,288,324	-	-	-	-
FUND BALANCES									
Restricted:									
Grant programs	-	-	-	-	-	76,526	-	-	3,580,579
Tax assessor operations	1,441,937	336,993	-	-	-	-	-	-	-
Public safety	-	-	-	-	-	-	-	-	-
Law library operations	-	-	-	-	-	-	-	-	-
Public works	-	-	13,821,105	-	1,352,563	-	-	-	-
Equalization operations	-	-	-	868,341	-	-	-	-	-
Community development	-	-	-	-	-	-	1,185,245	2,074,211	-
Debt service	-	-	-	-	-	-	-	-	-
Assigned:									
Capital projects	-	-	-	-	-	-	-	-	-
Total fund balances	1,441,937	336,993	13,821,105	868,341	1,352,563	76,526	1,185,245	2,074,211	3,580,579
Total liabilities, deferred inflows of resources and fund balances	$ 4,701,770	$ 2,257,075	$ 36,657,333	$ 9,497,918	$ 53,640,887	$ 3,280,262	$ 3,132,969	$ 2,074,211	$ 4,401,008

	Special Revenue Funds				Capital Projects		Debt Service Funds		
	Sheriff Condemnations	Sheriff Special Programs	Law Library	Home Grant	Capital Improvements	Road Construction	Limited Obligation Refunding Debt	Debt Service	Total Nonmajor Governmental Funds
	$ 1,494,700	$ 4,547,635	$ 985,977	$ -	$ 26,672,135	$ 75,071,282	$ 75,274	$ 3,299,621	$ 150,462,281
	-	-	-	21,778	-	-	-	-	2,818,116
	-	-	-	-	-	-	-	-	76,341,140
	-	-	-	-	-	-	11,438,919	-	11,438,919
	-	-	-	-	-	-	-	2,871,682	2,871,682
	-	-	-	5,274,410	-	-	-	-	7,464,708
	$ 1,494,700	$ 4,547,635	$ 985,977	$ 5,296,188	$ 26,672,135	$ 75,071,282	$ 11,514,193	$ 6,171,303	$ 251,396,846
	$ -	$ -	$ -	$ -	$ 356,216	$ 4,409,197	$ -	$ -	$ 9,816,773
	-	-	-	-	113,308	472,324	-	-	661,080
	-	-	-	75,503	-	-	-	6,156,976	7,051,188
	-	-	-	-	-	-	-	-	8,727,475
	-	-	-	-	-	-	-	-	529,010
	-	-	-	-	-	-	-	-	2,735,875
	-	-	-	75,503	469,524	4,881,521	-	6,156,976	29,521,401
	-	-	-	-	-	-			76,968,056
	-	-	-	-	-	-	-	-	76,968,056
	-	-	-	5,220,685	-	-	-	-	8,877,790
	-	-	-	-	-	-	-	-	1,778,930
	1,494,700	4,547,635	-	-	-	-	-	-	6,042,335
	-	-	985,977	-	-	-	-	-	985,977
	-	-	-	-	-	-	-	-	15,173,668
	-	-	-	-	-	-	-	-	868,341
	-	-	-	-	-	-	-	-	3,259,456
	-	-	-	-	-	-	11,514,193	14,327	11,528,520
	-	-	-	-	26,202,611	70,189,761	-	-	96,392,372
	1,494,700	4,547,635	985,977	5,220,685	26,202,611	70,189,761	11,514,193	14,327	144,907,389
	$ 1,494,700	$ 4,547,635	$ 985,977	$ 5,296,188	$ 26,672,135	$ 75,071,282	$ 11,514,193	$ 6,171,303	$ 251,396,846

JEFFERSON COUNTY, ALABAMA
COMBINING STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES
NONMAJOR GOVERNMENTAL FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Special Revenue Funds								
	Tax Assessor Birmingham	Tax Assessor Bessemer	Road	Board of Equalization	Bridge and Public Buildings	Emergency Rental Assistance	Community Development	Community Development Loan	Workforce Development
Revenues:									
Taxes	$ 3,466,986	$ 1,444,059	$ 24,833,616	$ 5,964,304	$ 54,725,269	$ -	$ -	$ -	$ -
Intergovernmental	-	-	333,462	-		16,993,991	6,126,570	-	4,148,579
Licenses and permits	-	-	827,443	-	-	-	-	-	-
Fines and forfeitures	-	-	-	-	-	-	-	-	-
Charges for services	5,655.00	1,493.00	2,497,639	-	-	-	-	-	-
Contributions and donations	-	-	-	-	-	-	-	-	-
Interest income	-	-	30,069	-	65,583	64,470	1,178	9,079	4,746
Miscellaneous	-	-	596,484	27,695	-	-	3,503	45,451	10,418
Total revenues	3,472,641	1,445,552	29,118,713	5,991,999	54,790,852	17,058,461	6,131,251	54,530	4,163,743
Expenditures:									
Current:									
General government	3,083,632	1,626,944	-	5,863,250	-	-	-	-	-
Public safety	-	-	-	-	-	-	-	-	-
Law library operations	-	-	-	-	-	-	-	-	-
Highway and roads	-	-	33,421,782	-	-	-	-	-	-
Health and welfare	-	-	-	-	-	16,993,991	-	-	-
Community development	-	-	-	-	-	-	5,851,991	-	3,991,308
Capital outlay:									
General government	1,265,017	-	-	795,357	-	-	-	-	-
Public safety	-	-	-	-	-	-	-	-	-
Highway and roads	-	-	-	-	-	-	-	-	-
Debt service:									
Principal	-	-	-	-	-	-	-	-	131,081
Interest	-	-	-	-	-	-	-	-	5,116
Issuance costs	-	-	-	-	-	-	-	-	-
Total expenditures	4,348,649	1,626,944	33,421,782	6,658,607	-	16,993,991	5,851,991	-	4,127,505
Excess (deficiency) of revenues over (under) expenditures	(876,008)	(181,392)	(4,303,069)	(666,608)	54,790,852	64,470	279,260	54,530	36,238
Other financing sources (uses):									
Proceeds from disposal of capital assets	-	-	-	-	-	-	-	-	-
Issuance of bonds	-	-	-	-	-	-	-	-	-
Premium on debt	-	-	-	-	-	-	-	-	-
Transfers in	-	-	7,085,474	-	-	-	-	-	-
Transfers out	-	-	-	-	(54,787,853)	-	-	-	-
Total other financing sources (uses)	-	-	7,085,474	-	(54,787,853)	-	-	-	-
Net change in fund balances	(876,008)	(181,392)	2,782,405	(666,608)	2,999	64,470	279,260	54,530	36,238
Fund balances, beginning of fiscal year	2,317,945	518,385	11,038,700	1,534,949	1,349,564	12,056	905,985	2,019,681	3,544,341
Fund balances, end of fiscal year	$ 1,441,937	$ 336,993	$ 13,821,105	$ 868,341	$ 1,352,563	$ 76,526	$ 1,185,245	$ 2,074,211	$ 3,580,579

Special Revenue Funds				Capital Projects		Debt Service Funds		
Sheriff Condemnations	**Sheriff Special Programs**	**Law Library**	**Home Grant**	**Capital Improvements**	**Road Construction**	**Limited Obligation Refunding Debt**	**Debt Service**	**Total Nonmajor Governmental Funds**
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 90,434,234
-	-	-	1,011,681	-	7,409,389	-	2,316,327	38,339,999
-	-	-	-	-	-	-	-	827,443
500,690	257,820	275,846	-	-	-	-	-	1,034,356
-	-	-	-	-	1,304,551	-	-	3,809,338
-	3,396,961	-	-	-	-	-	-	3,396,961
3,802	2,029	179	21,904	-	210,175	75,462	-	488,676
-	175,262	-	176,574	76,932	96,865	-	-	1,209,184
504,492	3,832,072	276,025	1,210,159	76,932	9,020,980	75,462	2,316,327	139,540,191
-	-	-	-	6,184,701	-	-	-	16,758,527
342,762	3,867,429	-	-	1,321,229	-	-	-	5,531,420
-	-	180,259	-	-	-	-	-	180,259
-	-	-	-	-	5,114,125	-	-	38,535,907
-	-	-	-	-	-	-	-	16,993,991
-	-	-	1,021,113	-	-	-	-	10,864,412
-	-	-	-	1,701,088	-	-	-	3,761,462
-	-	-	-	2,226,621	-	-	-	2,226,621
-	-	-	-	-	19,172,428	-	-	19,172,428
-	-	-	-	1,640,154	210,085	12,220,000	18,140,000	32,341,320
-	-	-	-	274,132	22,403	14,184,638	4,189,502	18,675,791
-	-	-	-	-	1,286,267	-	-	1,286,267
342,762	3,867,429	180,259	1,021,113	13,347,925	25,805,308	26,404,638	22,329,502	166,328,405
161,730	(35,357)	95,766	189,046	(13,270,993)	(16,784,328)	(26,329,176)	(20,013,175)	(26,788,214)
-	-	-	-	386,427	218,394	-	-	604,821
-	-	-	-	-	66,335,000	-	-	66,335,000
-	-	-	-	-	4,447,245	-	-	4,447,245
-	-	-	-	35,850,252	14,600,681	27,658,500	19,846,000	105,040,907
-	-	-	-	-	-	-	-	(54,787,853)
-	-	-	-	36,236,679	85,601,320	27,658,500	19,846,000	121,640,120
161,730	(35,357)	95,766	189,046	22,965,686	68,816,992	1,329,324	(167,175)	94,851,906
1,332,970	4,582,992	890,211	5,031,639	3,236,925	1,372,769	10,184,869	181,502	50,055,483
$ 1,494,700	$ 4,547,635	$ 985,977	$ 5,220,685	$ 26,202,611	$ 70,189,761	$ 11,514,193	$ 14,327	$ 144,907,389

JEFFERSON COUNTY, ALABAMA
TAX ASSESSOR BIRMINGHAM FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Taxes	$ 3,123,260	$ 3,466,986	$ 3,466,986	$ -
Charges for services	-	5,655	5,655	-
Total revenues	3,123,260	3,472,641	3,472,641	-
Expenditures:				
Current:				
General government:				
Tax Assessor Birmingham				
Personnel costs	2,814,109	2,789,609	2,554,392	235,217
Other operating costs	550,412	583,607	529,240	54,367
Total general government	3,364,521	3,373,216	3,083,632	289,584
Capital outlay - general government	2,500,000	2,417,220	1,265,017	1,152,203
Total expenditures	5,864,521	5,790,436	4,348,649	1,441,787
Net changes in fund balances	(2,741,261)	(2,317,795)	(876,008)	1,441,787
Fund balances, beginning of fiscal year	2,317,945	2,317,945	2,317,945	-
Fund balances (deficits), end of fiscal year	$ (423,316)	$ 150	$ 1,441,937	$ 1,441,787

JEFFERSON COUNTY, ALABAMA
TAX ASSESSOR BESSEMER FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Taxes	$ 1,423,527	$ 1,444,059	$ 1,444,059	$ -
Charges for services	-	1,493	1,493	-
Total revenues	1,423,527	1,445,552	1,445,552	-
Expenditures:				
Current:				
General government:				
Tax Assessor Bessemer				
Personnel costs	1,679,625	1,679,625	1,521,727	157,898
Other operating costs	195,380	195,381	105,217	90,164
Total general government	1,875,005	1,875,006	1,626,944	248,062
Capital outlay - general government	60,000	60,000	-	60,000
Total expenditures	1,935,005	1,935,006	1,626,944	308,062
Net changes in fund balances	(511,478)	(489,454)	(181,392)	308,062
Fund balances, beginning of fiscal year	518,385	518,385	518,385	-
Fund balances, end of fiscal year	$ 6,907	$ 28,931	$ 336,993	$ 308,062

JEFFERSON COUNTY, ALABAMA
ROAD FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Taxes	$ 22,945,945	$ 24,204,477	$ 24,833,616	$ 629,139
Intergovernmental	421,550	421,550	333,462	(88,088)
Licenses and permits	835,544	813,100	827,443	14,343
Charges for services	1,980,629	2,472,526	2,497,639	25,113
Interest income	-	-	30,069	30,069
Miscellaneous	-	-	596,484	596,484
Total revenues	26,183,668	27,911,653	29,118,713	1,207,060
Expenditures:				
Current:				
Highway and roads				
Roads				
Personnel costs	23,062,243	23,062,243	20,196,482	2,865,761
Other operating costs	10,206,899	13,831,808	13,225,300	606,508
Total expenditures	33,269,142	36,894,051	33,421,782	3,472,269
Deficiency of revenues under expenditures	(7,085,474)	(8,982,398)	(4,303,069)	4,679,329
Other financing sources:				
Transfers in	7,085,474	7,085,474	7,085,474	-
Total other financing sources	7,085,474	7,085,474	7,085,474	-
Net changes in fund balances	-	(1,896,924)	2,782,405	4,679,329
Fund balances, beginning of fiscal year	11,038,700	11,038,700	11,038,700	-
Fund balances, end of fiscal year	$ 11,038,700	$ 9,141,776	$ 13,821,105	$ 4,679,329

JEFFERSON COUNTY, ALABAMA
BOARD OF EQUALIZATION FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Taxes	$ 5,815,491	$ 5,964,304	$ 5,964,304	$ -
Miscellaneous	-	27,695	27,695	-
Total revenues	5,815,491	5,991,999	5,991,999	-
Expenditures:				
Current:				
General government:				
Board of Equalization				
Personnel costs	5,863,134	5,287,134	4,803,182	483,952
Other operating costs	1,377,023	1,156,846	1,060,068	96,778
Total general government	7,240,157	6,443,980	5,863,250	580,730
Capital outlay - general government	225,000	1,021,176	795,357	225,819
Total expenditures	7,465,157	7,465,156	6,658,607	806,549
Net changes in fund balances	(1,649,666)	(1,473,157)	(666,608)	806,549
Fund balances, beginning of fiscal year	1,534,949	1,534,949	1,534,949	-
Fund balances (deficits), end of fiscal year	$ (114,717)	$ 61,792	$ 868,341	$ 806,549

JEFFERSON COUNTY, ALABAMA
BRIDGE AND PUBLIC BUILDINGS FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Taxes	$ 53,437,853	$ 54,788,289	$ 54,725,269	$ (63,020)
Interest income	-	-	65,583	65,583
Total revenues	53,437,853	54,788,289	54,790,852	2,563
Other financing uses:				
Transfers out	-	(54,787,853)	(54,787,853)	-
Total other financing uses	-	(54,787,853)	(54,787,853)	-
Net changes in fund balances	53,437,853	436	2,999	2,563
Fund balances, beginning of fiscal year	1,349,564	1,349,564	1,349,564	-
Fund balances, end of fiscal year	$ 54,787,417	$ 1,350,000	$ 1,352,563	$ 2,563

JEFFERSON COUNTY, ALABAMA
EMERGENCY RENTAL ASSISTANCE FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Intergovernmental	$ 24,236,532	$ 24,236,532	$ 16,993,991	$ (7,242,541)
Interest income	-	-	64,470	64,470
Total revenues	24,236,532	24,236,532	17,058,461	(7,178,071)
Expenditures:				
Current:				
Health and welfare				
Emergency rental assistance				
Grant payments	24,246,389	24,246,389	16,993,991	7,252,398
Total expenditures	24,246,389	24,246,389	16,993,991	7,252,398
Net changes in fund balances	(9,857)	(9,857)	64,470	74,327
Fund balances, beginning of fiscal year	12,056	12,056	12,056	-
Fund balances, end of fiscal year	$ 2,199	$ 2,199	$ 76,526	$ 74,327

JEFFERSON COUNTY, ALABAMA
COMMUNITY DEVELOPMENT FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Intergovernmental	$ 2,750,144	$ 5,851,991	$ 6,126,570	$ 274,579
Interest income	-	-	1,178	1,178
Miscellaneous	-	-	3,503	3,503
Total revenues	2,750,144	5,851,991	6,131,251	279,260
Expenditures:				
Current:				
Community development				
Community development				
Personnel costs	1,860,969	1,860,970	1,860,970	-
Other operating costs	889,175	3,991,021	3,991,021	-
Total expenditures	2,750,144	5,851,991	5,851,991	-
Net changes in fund balances	-	-	279,260	279,260
Fund balances, beginning of fiscal year	905,985	905,985	905,985	-
Fund balances, end of fiscal year	$ 905,985	$ 905,985	$ 1,185,245	$ 279,260

JEFFERSON COUNTY, ALABAMA
COMMUNITY DEVELOPMENT LOAN FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Interest income	$ -	$ -	$ 9,079	$ 9,079
Miscellaneous	-	-	45,451	45,451
Total revenues	-	-	54,530	54,530
Fund balances, beginning of fiscal year	2,019,681	2,019,681	2,019,681	-
Fund balances, end of fiscal year	$ 2,019,681	$ 2,019,681	$ 2,074,211	$ 54,530

JEFFERSON COUNTY, ALABAMA
WORKFORCE DEVELOPMENT FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Intergovernmental	$ 5,072,207	$ 5,072,207	$ 4,148,579	$ (923,628)
Interest income	-	-	4,746	4,746
Miscellaneous	-	-	10,418	10,418
Total revenues	5,072,207	5,072,207	4,163,743	(908,464)
Expenditures:				
Current:				
Community development				
Workforce development				
Personnel costs	1,511,722	1,511,722	1,317,161	194,561
Other operating costs	3,560,485	4,027,507	2,674,147	1,353,360
Total community development	5,072,207	5,539,229	3,991,308	1,547,921
Debt service:				
Principal	-	131,081	131,081	-
Interest	-	5,116	5,116	-
Total expenditures	5,072,207	5,675,426	4,127,505	1,547,921
Net changes in fund balances	-	(603,219)	36,238	639,457
Fund balances, beginning of fiscal year	3,544,341	3,544,341	3,544,341	-
Fund balances, end of fiscal year	$ 3,544,341	$ 2,941,122	$ 3,580,579	$ 639,457

JEFFERSON COUNTY, ALABAMA
SHERIFF CONDEMNATIONS FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Fines and forfeitures	$ 500,690	$ 500,690	$ 500,690	$ -
Interest income	3,802	3,802	3,802	-
Total revenues	504,492	504,492	504,492	-
Expenditures:				
Current:				
Public safety				
Sheriff condemnations				
Other operating costs	342,762	342,762	342,762	-
Total expenditures	342,762	342,762	342,762	-
Net changes in fund balances	161,730	161,730	161,730	-
Fund balances, beginning of fiscal year	1,332,970	1,332,970	1,332,970	-
Fund balances, end of fiscal year	$ 1,494,700	$ 1,494,700	$ 1,494,700	$ -

JEFFERSON COUNTY, ALABAMA
SHERIFF SPECIAL PROGRAMS FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Fines and forfeitures	$ 257,820	$ 257,820	$ 257,820	$ -
Contributions and donations	3,396,961	3,396,961	3,396,961	-
Interest income	2,029	2,029	2,029	-
Miscellaneous	175,262	175,262	175,262	-
Total revenues	3,832,072	3,832,072	3,832,072	-
Expenditures:				
Current:				
Public safety				
Sheriff special programs				
Other operating costs	3,867,429	3,867,429	3,867,429	-
Total expenditures	3,867,429	3,867,429	3,867,429	-
Net changes in fund balances	(35,357)	(35,357)	(35,357)	-
Fund balances, beginning of fiscal year	4,582,992	4,582,992	4,582,992	-
Fund balances, end of fiscal year	$ 4,547,635	$ 4,547,635	$ 4,547,635	$ -

JEFFERSON COUNTY, ALABAMA
LAW LIBRARY FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Fines and forfeitures	$ 275,846	$ 275,846	$ 275,846	$ -
Interest income	179	179	179	-
Total revenues	276,025	276,025	276,025	-
Expenditures:				
Current:				
Law library operations				
Law library				
Other operating costs	180,259	180,259	180,259	-
Total expenditures	180,259	180,259	180,259	-
Net changes in fund balances	95,766	95,766	95,766	-
Fund balances, beginning of fiscal year	890,211	890,211	890,211	-
Fund balances, end of fiscal year	$ 985,977	$ 985,977	$ 985,977	$ -

JEFFERSON COUNTY, ALABAMA
HOME GRANT FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	**Final**	**Actual**	**Final Budget**
Revenues:				
Intergovernmental	$ 4,877,958	$ 9,467,943	$ 1,011,681	$ (8,456,262)
Interest income	-	-	21,904	21,904
Miscellaneous	-	-	176,574	176,574
Total revenues	4,877,958	9,467,943	1,210,159	(8,257,784)
Expenditures:				
Current:				
Community development				
Home grant				
Personnel costs	79,293	79,293	169,416	(90,123)
Other operating costs	915,290	938,616	851,697	86,919
Total expenditures	994,583	1,017,909	1,021,113	(3,204)
Net changes in fund balances	3,883,375	8,450,034	189,046	(8,254,580)
Fund balances, beginning of fiscal year	5,031,639	5,031,639	5,031,639	-
Fund balances, end of fiscal year	$ 8,915,014	$ 13,481,673	$ 5,220,685	$ (8,254,580)

JEFFERSON COUNTY, ALABAMA
CAPITAL IMPROVEMENTS FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Miscellaneous	$ -	$ -	$ 76,932	$ 76,932
Total revenues	-	-	76,932	76,932
Expenditures:				
Current:				
General government:				
Board of Equalization				
Other operating costs	32,017	32,017	32,017	-
Finance				
Other operating costs	9,232	9,232	9,232	-
General services				
Other operating costs	6,026,348	6,026,348	6,026,348	-
Information technology				
Other operating costs	117,104	117,104	117,104	-
Total current - general government	**6,184,701**	**6,184,701**	**6,184,701**	**-**
Public safety:				
Sheriff				
Other operating costs	1,321,229	1,321,229	1,321,229	-
Total current - public safety	**1,321,229**	**1,321,229**	**1,321,229**	**-**
Capital Outlay:				
General government				
Board of Equalization	337,983	337,983	-	337,983
District Attorney - Birmingham	70,000	100,000	-	100,000
Development services	330,000	469,899	446,415	23,484
Finance	40,768	10,768	-	10,768
Fleet management	736,000	912,621	502,222	410,399
Information technology	238,896	578,056	195,206	382,850
General services	19,960,652	21,041,502	495,677	20,545,825
Revenue department	-	61,568	61,568	-
Total capital outlay - general government	**21,714,299**	**23,512,397**	**1,701,088**	**21,811,309**
Public safety				
Coroner	392,929	476,964	265,987	210,977
Security	31,209	31,209	31,004	205
Sheriff	4,291,599	5,646,391	1,929,630	3,716,761
Total capital outlay - public safety	**4,715,737**	**6,154,564**	**2,226,621**	**3,927,943**
Debt service:				
Principal	1,640,154	1,640,154	1,640,154	-
Interest	274,132	274,132	274,132	-
Total debt service	1,914,286	1,914,286	1,914,286	-
Total expenditures	35,850,252	39,087,177	13,347,925	25,739,252
Deficiency of revenue under expenditures	(35,850,252)	(39,087,177)	(13,270,993)	25,816,184
Other financing sources				
Proceeds from disposal of capital assets	-	-	386,427	386,427
Transfers in	35,850,252	35,850,252	35,850,252	-
Total other financing sources	35,850,252	35,850,252	36,236,679	386,427
Net change in fund balances	-	(3,236,925)	22,965,686	26,202,611
Fund balances, beginning of fiscal year	3,236,925	3,236,925	3,236,925	-
Fund balances, end of fiscal year	$ 3,236,925	$ -	$ 26,202,611	$ 26,202,611

JEFFERSON COUNTY, ALABAMA
ROAD CONSTRUCTION FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES
IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Intergovernmental	$ 3,300,000	$ 9,239,375	$ 7,409,389	$ (1,829,986)
Charges for services	-	-	1,304,551	1,304,551
Interest income	-	-	210,175	210,175
Miscellaneous	-	-	96,865	96,865
Total revenues	3,300,000	9,239,375	9,020,980	(218,395)
Expenditures:				
Current:				
Highway and roads				
Roads and transportation				
Other operating costs	-	5,114,125	5,114,125	-
Total current - highway and roads	**-**	**5,114,125**	**5,114,125**	**-**
Capital Outlay:				
Highway and roads	**15,031,924**	**19,172,428**	**19,172,428**	**-**
Debt service:				
Principal	210,085	210,085	210,085	-
Interest	22,403	22,403	22,403	-
Issuance costs	1,286,267	1,286,267	1,286,267	-
Total debt service	1,518,755	1,518,755	1,518,755	-
Total expenditures	16,550,679	25,805,308	25,805,308	-
Deficiency of revenue under expenditures	(13,250,679)	(16,565,933)	(16,784,328)	(218,395)
Other financing sources				
Proceeds from disposal of capital assets	-	-	218,394	218,394
Issuance of bonds	-	-	66,335,000	66,335,000
Premium on debt	-	-	4,447,245	4,447,245
Transfers in	14,600,681	14,600,681	14,600,681	-
Total other financing sources	14,600,681	14,600,681	85,601,320	71,000,639
Net change in fund balances	1,350,002	(1,965,252)	68,816,992	70,782,244
Fund balances, beginning of fiscal year	1,372,769	1,372,769	1,372,769	-
Fund balances, end of fiscal year	$ 2,722,771	$ (592,483)	$ 70,189,761	$ -

JEFFERSON COUNTY, ALABAMA
LIMITED OBLIGATION REFUNDING DEBT FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Interest income	$ -	$ -	$ 75,462	$ 75,462
Total revenues	-	-	75,462	75,462
Expenditures:				
Debt service:				
Principal	12,220,000	12,220,000	12,220,000	-
Interest	14,184,638	14,184,638	14,184,638	-
Total expenditures	26,404,638	26,404,638	26,404,638	-
Deficiency of revenues under expenditures	(26,404,638)	(26,404,638)	(26,329,176)	75,462
Other financing sources:				
Transfers in	26,404,638	27,658,500	27,658,500	-
Total other financing sources	26,404,638	27,658,500	27,658,500	-
Net changes in fund balances	-	1,253,862	1,329,324	75,462
Fund balances, beginning of fiscal year	10,184,869	10,184,869	10,184,869	-
Fund balances, end of fiscal year	$ 10,184,869	$ 11,438,731	$ 11,514,193	$ 75,462

JEFFERSON COUNTY, ALABAMA
DEBT SERVICE FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Budget			Variance With
	Original	Final	Actual	Final Budget
Revenues:				
Intergovernmental	$ 2,466,000	$ 2,466,000	$ 2,316,327	$ (149,673)
Total revenues	2,466,000	2,466,000	2,316,327	(149,673)
Expenditures:				
Debt service:				
Principal	18,140,000	18,140,000	18,140,000	-
Interest	4,172,000	4,189,502	4,189,502	-
Total expenditures	22,312,000	22,329,502	22,329,502	-
Deficiency of revenues under expenditures	(19,846,000)	(19,863,502)	(20,013,175)	(149,673)
Other financing sources:				
Transfers in	19,846,000	19,846,000	19,846,000	-
Total other financing sources	19,846,000	19,846,000	19,846,000	-
Net changes in fund balances	-	(17,502)	(167,175)	(149,673)
Fund balances, beginning of fiscal year	181,502	181,502	181,502	-
Fund balances, end of fiscal year	$ 181,502	$ 164,000	$ 14,327	$ (149,673)

NONMAJOR PROPRIETARY FUNDS

Enterprise Funds

Landfill Operations Fund - to account for the activities of the County’s landfill.

Hallmark Farms Cooperative - to account for activities of the County’s cooperative agreement with the City of Warrior, Alabama.

JEFFERSON COUNTY, ALABAMA

COMBINING STATEMENT OF NET POSITION
NONMAJOR PROPRIETARY FUNDS
SEPTEMBER 30, 2022

ASSETS	Landfill Operations	Hallmark Farms Cooperative	Nonmajor Proprietary Total
Current assets:			
Cash and cash equivalents	$ 839,270	$ 4,147,396	$ 4,986,666
Receivables, net	285,371	-	285,371
Leases receivable	10,025,515	-	10,025,515
Restricted assets:			
Cash	219,127	305,938	525,065
Total current assets	11,369,283	4,453,334	15,822,617
Capital assets:			
Capital assets, not being depreciated	7,907,361	6,203,677	14,111,038
Capital assets, being depreciated	50,842,198	2,423,143	53,265,341
Less accumulated depreciation	(45,509,841)	(206,977)	(45,716,818)
Total capital assets, net of accumulated depreciation	13,239,718	8,419,843	21,659,561
Total noncurrent assets	13,239,718	8,419,843	21,659,561
Total assets	24,609,001	12,873,177	37,482,178
DEFERRED OUTFLOWS OF RESOURCES			
Deferred charges on refunding	-	46,333	46,333
Total deferred outflows of resources	-	46,333	46,333
LIABILITIES			
Current liabilities:			
Accounts payable	4,387	5,926	10,313
Accrued interest	-	91,588	91,588
Bonds payable, current	-	863,802	863,802
Total current liabilities	4,387	961,316	965,703
Long-term liabilities:			
Landfill postclosure	19,394,310	-	19,394,310
Advances from other funds	2,871,682	-	2,871,682
Bonds payable	-	11,089,448	11,089,448
Total long-term liabilities	22,265,992	11,089,448	33,355,440
Total liabilities	22,270,379	12,050,764	34,321,143
DEFERRED INFLOWS OF RESOURCES			
Lease arrangements	9,911,061	-	9,911,061
Total deferred inflows of resources	9,911,061	-	9,911,061
NET POSITION (DEFICIT)			
Net investment in capital assets	13,239,718	586,218	13,825,936
Unrestricted (deficit)	(20,812,157)	282,528	(20,529,629)
Total net position (deficit)	$ (7,572,439)	$ 868,746	$ (6,703,693)

JEFFERSON COUNTY, ALABAMA

COMBINING STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
NONMAJOR PROPRIETARY FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Landfill Operations	Hallmark Farms Cooperative	Nonmajor Proprietary Total
OPERATING REVENUES			
Charges for services:			
Other	$ 1,381,037	$ 3,000	$ 1,384,037
Total operating revenues	1,381,037	3,000	1,384,037
OPERATING EXPENSES			
Maintenance and operating expenses	2,352,405	78,789	2,431,194
Depreciation expense	1,761,978	60,579	1,822,557
Total operating expenses	4,114,383	139,368	4,253,751
Operating loss	(2,733,346)	(136,368)	(2,869,714)
NONOPERATING REVENUE (EXPENSES)			
Investment earnings	309,934	415	310,349
Interest expense	-	(377,083)	(377,083)
Total nonoperating revenues (expenses)	309,934	(376,668)	(66,734)
LOSS BEFORE TRANSFERS	(2,423,412)	(513,036)	(2,936,448)
Transfers in	-	1,217,983	1,217,983
Change in net position	(2,423,412)	704,947	(1,718,465)
NET POSITION, beginning of fiscal year	(5,149,027)	163,799	(4,985,228)
NET POSITION, end of fiscal year	$ (7,572,439)	$ 868,746	$ (6,703,693)

JEFFERSON COUNTY, ALABAMA

COMBINING STATEMENT OF CASH FLOWS
NONMAJOR PROPRIETARY FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Landfill Operations	Hallmark Farms Cooperative	Nonmajor Proprietary Total
CASH FLOWS FROM OPERATING ACTIVITIES			
Receipts from customers	$ -	$ 3,000	$ 3,000
Lease receipts from landfill operator	633,551	-	633,551
Other receipts from landfill operator	634,773	-	634,773
Payments to suppliers and service providers	(21,066)	(72,863)	(93,929)
Net cash provided by (used in) operating activities	1,247,258	(69,863)	1,177,395
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES			
Transfers in	-	1,217,983	1,217,983
Net cash provided by noncapital financing activities	-	1,217,983	1,217,983
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES			
Purchases of capital assets	-	(60,387)	(60,387)
Principal payments on bonds	-	(838,650)	(838,650)
Repayment of interfund advance	(717,921)	-	(717,921)
Interest and fiscal charges paid	-	(379,566)	(379,566)
Net cash used in capital and related financing activities	(717,921)	(1,278,603)	(1,996,524)
CASH FLOWS FROM INVESTING ACTIVITIES			
Interest received	309,934	415	310,349
Net cash provided by investing activities	309,934	415	310,349
Net increase (decrease) in cash and cash equivalents	839,271	(130,068)	709,203
Cash and cash equivalents:			
Beginning of fiscal year	219,126	4,583,402	4,802,528
End of fiscal year	$ 1,058,397	$ 4,453,334	$ 5,511,731
Classified as:			
Cash and cash equivalents	$ 839,270	$ 4,147,396	$ 4,986,666
Restricted cash and cash equivalents	219,127	305,938	525,065
Total	$ 1,058,397	$ 4,453,334	$ 5,511,731
Reconciliation of operating loss to net cash provided by (used in) operating activities:			
Operating loss	$ (2,733,346)	$ (136,368)	$ (2,869,714)
Adjustments to reconcile operating loss to net cash provided by (used in) operating activities:			
Depreciation and amortization	1,761,978	60,579	1,822,557
Amortization of deferred inflows of resources - lease arrangements	(114,454)	-	(114,454)
Decrease in accounts receivable	1,741	-	1,741
Increase (decrease) in accounts payable	2,671	5,926	8,597
Increase in landfill postclosure care costs	2,328,668	-	2,328,668
Net cash provided by (used in) operating activities	$ 1,247,258	$ (69,863)	$ 1,177,395

CUSTODIAL FUNDS

Custodial funds are used to account for assets held by the government as an agent for individuals, private organizations, and other governments.

Tax Collector - to account for the collection of all property taxes which are disbursed to other taxing units and other parties.

Department of Revenue - to account for the collection of various taxes and fees, which are disbursed to other taxing units and other parties.

Treasurer's Trust - to account for the collection of funds held by the Treasurer, which are disbursed to other entities or other County parties for specified legal purposes and requirements.

Sheriff - to account for collection of cash bonds, fines, forfeitures and other fees, which are disbursed to other parties.

The following custodial funds are used to account for taxes, fines, fees and other moneys collected by the courts and remitted to other parties in accordance with court orders and state law:

Family Court
Probate Court

JEFFERSON COUNTY, ALABAMA

COMBINING STATEMENT OF FIDUCIARY NET POSITION
CUSTODIAL FUNDS
SEPTEMBER 30, 2022

ASSETS	Tax Collector	Department of Revenue	Treasurer's Trust	Sheriff	Family Court	Probate Court	Total
Cash and cash equivalents	$ 29,491,865	$ 43,732,195	$ 14,474,600	$ 2,685,835	$ 503,678	$ 18,216,949	$ 109,105,122
Total assets	29,491,865	43,732,195	14,474,600	2,685,835	503,678	18,216,949	109,105,122
LIABILITIES							
Due to others	4,735,157	43,732,195	7,867,672	86,510	458,853	7,156,495	64,036,882
Total liabilities	4,735,157	43,732,195	7,867,672	86,510	458,853	7,156,495	64,036,882
NET POSITION							
Restricted:							
Individuals, organizations, and other governments	24,756,708	-	6,606,928	2,599,325	44,825	11,060,454	45,068,240
Total net position	$ 24,756,708	$ -	$ 6,606,928	$ 2,599,325	$ 44,825	$ 11,060,454	$ 45,068,240

JEFFERSON COUNTY, ALABAMA
COMBINING STATEMENT OF CHANGES IN
FIDUCIARY NET POSITION
CUSTODIAL FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Tax Collector	Department of Revenue	Treasurer's Trust	Sheriff	Family Court	Probate Court	Total
ADDITIONS							
Taxes	$ 630,620,068	$ 456,287,506	$ -	$ -	$ -	$ -	$ 1,086,907,574
Fines and fees	-	43,136,516	8,449,061	2,087,477	3,523,392	28,389,397	85,585,843
Criminal and civil bonds	-	-	423,615	-	-	-	423,615
Interest & Miscellaneous	-	-	25,795	-	-	-	25,795
Total additions	630,620,068	499,424,022	8,898,471	2,087,477	3,523,392	28,389,397	1,172,942,827
DEDUCTIONS							
Taxes distributed to other governments	622,249,547	456,287,506	-	-	-	-	1,078,537,053
Fines and fees disbursed		43,136,516	7,908,601	1,942,292	3,533,452	26,192,316	82,713,177
Other custodial disbursements	-	-	22,575	-	-	-	22,575
Total deductions	622,249,547	499,424,022	7,931,176	1,942,292	3,533,452	26,192,316	1,161,272,805
Net increase (decrease) in fiduciary net position	8,370,521	-	967,295	145,185	(10,060)	2,197,081	11,670,022
Net position, beginning of fiscal year, as restated	16,386,187	-	5,639,633	2,454,140	54,885	8,863,373	33,398,218
Net position, end of fiscal year	$ 24,756,708	$ -	$ 6,606,928	$ 2,599,325	$ 44,825	$ 11,060,454	$ 45,068,240

COMPONENT UNITS

JEFFERSON COUNTY, ALABAMA

STATEMENT OF CASH FLOWS
COMPONENT UNIT - PERSONNEL BOARD
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	Personnel Board
CASH FLOWS FROM OPERATING ACTIVITIES	
Receipts from customers	$ 9,539,198
Payments to suppliers and service providers	(1,784,866)
Payments to employees	(7,654,883)
Net cash provided by operating activities	99,449
CASH FLOWS FROM INVESTING ACTIVITIES	
Interest received	1,013
Net cash provided by investing activities	1,013
Net increase in cash and cash equivalents	100,462
Cash and cash equivalents:	
Beginning of fiscal year	270,049
End of fiscal year	$ 370,511
Reconciliation of operating income to net cash provided by operating activities:	
Operating income	$ 1,252,033
Adjustments to reconcile operating income to net cash provided by operating activities:	
Depreciation and amortization	19,969
Decrease in accounts receivable	358,150
Increase in net pension asset	(5,686,159)
Increase in deferred outflows from pension	(607,988)
Increase in deferred outflows from OPEB	(60,473)
Decrease in accounts payable	(58,943)
Decrease in accrued liabilities	(210,503)
Decrease in compensated absences	(57,985)
Increase in total OPEB liability	139,220
Increase in deferred intflows from pension	5,049,171
Decrease in deferred intflows from OPEB	(37,043)
Net cash provided by operating activities	$ 99,449

JEFFERSON COUNTY, ALABAMA

BALANCE SHEET
COMPONENT UNIT - EMERGENCY MANAGEMENT AGENCY
SEPTEMBER 30, 2022

ASSETS		
Cash and cash equivalents	$	797,252
Receivables, net of allowance		178,451
Total assets		975,703
LIABILITIES AND FUND BALANCE		
LIABILITIES		
Accounts payable	$	20,489
Accrued liabilities		22,713
Total liabilities		43,202
FUND BALANCE		
Unassigned		932,501
Total liabilities and fund balance	$	975,703

JEFFERSON COUNTY, ALABAMA
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE
COMPONENT UNIT - EMERGENCY MANAGEMENT AGENCY
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

REVENUES		
Intergovernmental	$	232,018
Charges for services		892,799
Interest income		1,108
Miscellaneous		358,410
Total revenues		1,484,335
EXPENDITURES		
Current:		
Public safety		1,594,903
Capital outlay		34,332
Total expenditures		1,629,235
Net change in fund balances		(144,900)
Fund balances, beginning of fiscal year		1,077,401
Fund balances, end of fiscal year	$	932,501

JEFFERSON COUNTY, ALABAMA

COMBINING BALANCE SHEET
GENERAL FUND BY CATEGORY
SEPTEMBER 30, 2022

ASSETS	General Fund	Uncertainty Fund	Catastrophic Fund	Budget Stabilization Fund	Economic Development Fund	Total General Fund
Cash and cash equivalents	$ 86,711,770	$ 20,112,020	$ 20,069,070	$ 20,037,696	$ 31,548,771	$ 178,479,327
Investments	52,893,152	-	-	-	-	52,893,152
Accounts receivable, net	8,055,584	-	-	-	840,000	8,895,584
Taxes receivable	86,454,024	-	-	-	-	86,454,024
Intergovernmental receivables	2,695,263	-	-	-	-	2,695,263
Interest receivable	262,614	-	-	-	-	262,614
Leases receivable	2,090,192	-	-	-	-	2,090,192
Due from other funds	53,790,812	-	-	-	-	53,790,812
Prepaid items	278,637	-	-	-	-	278,637
Restricted assets:						
Cash	6,124,077	-	-	-	-	6,124,077
Investments	5,947,407	-	-	-	-	5,947,407
Loan receivable from component unit	28,819,142	-	-	-	-	28,819,142
Total assets	$ 334,122,674	$ 20,112,020	$ 20,069,070	$ 20,037,696	$ 32,388,771	$ 426,730,231
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES						
LIABILITIES						
Accounts payable	$ 5,157,627	$ -	$ -	$ -	$ -	$ 5,157,627
Retainage payable	20,028	-	-	-	-	20,028
Due to other governments	8,060,570	-	-	-	-	8,060,570
Accrued payroll and benefits	5,439,937	-	-	-	-	5,439,937
Total liabilities	18,678,162	-	-	-	-	18,678,162
DEFERRED INFLOWS OF RESOURCES						
Unearned revenue - property taxes	69,094,296	-	-	-	-	69,094,296
Lease arrangements	2,083,357	-	-	-	-	2,083,357
Total deferred inflows of resources	71,177,653	-	-	-	-	71,177,653
FUND BALANCES						
Fund balances:						
Nonspendable:						
Leases	6,835	-	-	-	-	6,835
Prepaid items	278,637	-	-	-	-	278,637
Loan receivable from component unit	28,819,142	-	-	-	-	28,819,142
Restricted:						
Landfill assurance	6,786,866	-	-	-	-	6,786,866
Unsecured claims	5,306,897	-	-	-	-	5,306,897
Assigned:						
Budget reserve	-	-	-	20,037,696	-	20,037,696
Uncertainty reserve	-	20,112,020	-	-	-	20,112,020
Catastrophic reserve	-	-	20,069,070	-	-	20,069,070
Economic development	-	-	-	-	32,388,771	32,388,771
Unassigned	203,068,482	-	-	-	-	203,068,482
Total fund balances	244,266,859	20,112,020	20,069,070	20,037,696	32,388,771	336,874,416
Total liabilities, deferred inflows of resources and fund balances	$ 334,122,674	$ 20,112,020	$ 20,069,070	$ 20,037,696	$ 32,388,771	$ 426,730,231

JEFFERSON COUNTY, ALABAMA

COMBINING SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE - GENERAL FUND BY CATEGORY GOVERNMENTAL FUNDS

FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

	General Fund	Uncertainty Fund	Catastrophic Fund	Budget Stabilization Fund	Economic Development Fund	Total General Fund
Revenues:						
Taxes	$ 134,237,100	$ -	$ -	$ -	$ -	$ 134,237,100
Licenses and permits	16,138,200	-	-	-	-	16,138,200
Intergovernmental	9,526,129	-	-	-	-	9,526,129
Charges for services	43,865,313	-	-	-	-	43,865,313
Interest income	278,299	36,491	14,182	33,334	-	362,306
Miscellaneous	2,508,196	-	-	-	-	2,508,196
Total revenues	206,553,237	36,491	14,182	33,334	-	206,637,244
Expenditures:						
Current:						
General government	124,381,884	-	-	-	1,941,100	126,322,984
Public safety	91,723,031	-	-	-	-	91,723,031
Health and welfare	929,546	-	-	-	-	929,546
Debt service:						
Principal	349,264	-	-	-	365,300	711,085
Interest	92,285	-	-	-	634,700	730,464
Total expenditures	217,476,010	-	-	-	2,941,100	220,417,110
Excess (deficiency) of revenues over (under) expenditures	(10,922,773)	36,491	14,182	33,334	(2,941,100)	(13,779,866)
Other financing sources (uses):						
Proceeds from sale of capital assets	384,456	-	-	-	-	384,456
Transfers in	65,226,160	5,000,000	5,000,000	5,000,000	10,000,000	90,226,160
Transfers out	(25,489,623)	-	-	-	(1,217,983)	(26,707,606)
Total other financing sources (uses)	40,120,993	5,000,000	5,000,000	5,000,000	8,782,017	63,903,010
Net change in fund balances	29,198,220	5,036,491	5,014,182	5,033,334	5,840,917	50,123,144
Fund balances, beginning of fiscal year	215,068,639	15,075,529	15,054,888	15,004,362	26,547,854	286,751,272
Fund balances, end of fiscal year	$ 244,266,859	$ 20,112,020	$ 20,069,070	$ 20,037,696	$ 32,388,771	$ 336,874,416

STATISTICAL SECTION

STATISTICAL SECTION

This part of Jefferson County's Annual Comprehensive Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the government's overall financial health.

Sources: Unless otherwise noted, the information in these schedules is derived from the Annual Comprehensive Financial Report for the relevant fiscal year.

STATISTICAL SECTION

Sources: Unless otherwise noted, the information in these schedules is derived from the Annual Comprehensive Financial Report for the relevant fiscal year.

FINANCIAL TRENDS

Schedule 1 - Net Position by Component

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

JCCAL Fiscal Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Governmental Activities:										
Net Investment in Capital Assets	$263,507	$261,597	$266,377	$276,510	$279,420	$326,326	$355,613	$362,091	$(58,408) [2]	$(19,809)
Restricted	224,766	229,802	229,372	305,345	171,381	181,451	203,557	173,161	150,430	69,088 [4]
Unrestricted	(848,103)	(746,541)	(575,062)	(585,981)	(458,165)	(529,886)	(486,754)	(371,967)	186,651	365,458
Total Governmental Activities Net Position	(359,830)	(255,142)	(79,313)	(4,126)	(7,364)	(22,109)	72,416	163,285	278,673 [3]	414,737
Business-Type Activities:										
Net Investment in Capital Assets	(108,422)	1,017,057 [1]	999,736	535,762	419,372	307,447	181,147	398,998	235,654	164,383
Restricted	149,080	274,382	320,525	368,329	377,618	369,012	394,063	21,165	471,373	466,193
Unrestricted	(324,921)	(332,239)	(361,931)	(57,794)	(54,792)	(61,335)	(60,587)	(20,057)	(432,880)	(513,096)
Total Business-Type Activities Net Position	(284,263)	959,200	958,330	846,297	742,198	615,124	514,623	400,106	274,147 [3]	117,480
Primary Government:										
Net Investment in Capital Assets	155,085	1,278,654	1,266,113	812,272	698,792	633,773	536,760	761,089	177,246	144,574
Restricted	373,846	504,184	549,897	673,674	548,999	550,463	597,620	194,326	621,803	535,281
Unrestricted	(1,173,024)	(1,078,780)	(936,993)	(643,775)	(512,957)	(591,221)	(547,341)	(392,024)	(246,229)	(147,638)
Total Primary Government Net Position	$ (644,093)	$ 704,058	$ 879,017	$ 842,171	$ 734,834	$ 593,015	$ 587,039	$ 563,391	$ 552,820 [3]	$ 532,217

Source: JCC Finance Department Data

[1] The increase in the Net Investment in Capital Assets was associated with the Sanitary Operations Fund reporting a $1.3 billion increase over the prior year Net Position at September 30, 2013 of ($334.0) million. Additional data associated with Jefferson County restructuring is reported in the FY2014 Audit Report.

[2] The calculation for the County's net investment in capital assets was revised in fiscal year 2021 to appropriately include offsets to the capital asset balances of approximately $372.5 million, as follows: financed purchases payable (approximately $7.4 million}, warrants payable (approximately $415.8 million}, gain on refunding (approximately $7.0 million}, and retainage payable (approximately $0. 7 million).

[3] During fiscal year 2021, restatements to beginning net position of governmental and business-type activities were required to accurately state balances and activity as of and for the year ended September 30, 2021. These restatements were necessary to accurately present the effects of financing activities (approximately $17.1 million decrease), to accurately report the activities of the Jefferson County Economic and Industrial Development Authority, which prior to fiscal year 2021 was reported as a blended component unit in the business-type activities (approximately $2.2 million increase), and to accurately report approximately $0.4 million in amounts previously reported in agency funds. Additionally, the implementation of GASB Statement No. 84, Fiduciary Activities, resulted in an increase to the net position of governmental activities of approximately $5. 5 million.

[4] During fiscal year 2022, restatements to beginning net position of governmental activities were required to accurately state balances and activity as of and for the year ended September 30, 2021. These restatements were necessary to accurately report expenditures (approximately $9.9 million decrease) and to accurately report litigation liabilities by removing them from the General Fund. See Note 15 to the financial statements as of and for the year ended September 30, 2022.

FINANCIAL TRENDS
Schedule 2 - Changes in Net Position
Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

JCCAL Fiscal Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Governmental Activities Expenses:										
General Government	$115,348	$97,131	$104,626	$107,052	$130,242	$120,880	$120,773	$129,700	$156,361	$169,336
Public Safety	55,856	65,700	58,467	70,733	76,685	85,227	85,462	62,470	88,795	99,434
Law Library Operations	-	-	-	-	-	-	-	-	268	180
Highway and Roads	24,247	20,030	25,211	29,883	36,979	38,365	30,418	36,870	40,503	48,824
Health and Welfare	20	51,759	54,632	58,886	64,366	57,364	54,360	136,434	110,993	85,329
Education - Other	-	21,312	-	-	69,000	-	-		-	
Community Development	-	-	-	6,871	5,514	4,805	5,811	9,675	13,529	10,864
Contributions to Other Entities	-	-	-	-	-	37,384	24,100	35,367	-	
Interest and Fiscal Charges	48,203	42,062	38,021	33,405	30,347	18,919	15,463	14,603	13,646	13,832
Total Governmental Activities Expenses	243,674	297,994	280,957	306,830	413,133	362,944	336,387	425,119	424,095	427,799
Business-Type Activities Expenses:										
Cooper Green Hospital	73,249	-	-	-	-	-	-	-	-	
Economic and Industrial Development Authority	907	871	934	868	1,006	1,196	970	1,471	-	
Nursing Home Operations	4,875	-	-	-	-	-	-	-	-	
Sanitary Operations	306,771	300,167	306,906	318,554	329,154	346,866	360,027	375,284	380,446	386,973
Landfill Operations	5,545	3,063	2,870	3,293	3,430	1,761	4,384	1,983	2,750	4,114
Hallmark Farms	-	-	-	-	-	-	-	-	673	516
Total Business-Type Activities Expenses	391,347	304,101	310,710	322,715	333,590	349,823	365,381	378,738	383,869	391,603
Total Primary Government Expenses	**635,021**	**602,095**	**591,667**	**629,545**	**746,723**	**712,767**	**701,768**	**803,857**	**807,964**	**819,402**
Governmental Activities Revenues:										
Charges for Services	28,933	31,792	31,124	29,142	32,596	33,467	30,702	33,603	53,414	65,675
Operating Grants and Contributions	16,019	25,656	27,749	20,070	19,867	21,151	16,586	96,682	74,099	60,055
Capital Grants and Contributions	-	-	-	-	6,458	-	7,667	11,183	4,732	4,388
Total Governmental Activities Program Revenue	44,952	57,448	58,873	49,212	58,921	54,618	54,955	141,468	132,245	130,118
Business-Type Activities Revenues:										
Charges for Services	165,019	174,232	186,930	193,372	210,709	223,789	229,929	227,376	237,988	260,622
Capital Grants and Contributions:	-	-	-	-	7,180	10,027	12,366	10,300	6,826	6,287
Total Business-Type Activities Revenues	165,019	174,232	186,930	193,372	217,889	233,816	242,295	237,676	244,814	266,909
Total Primary Government Program Revenue	**209,971**	**231,680**	**245,803**	**242,584**	**276,810**	**288,434**	**297,250**	**379,144**	**377,059**	**397,027**
Total Net Primary Government	**(425,050)**	**(370,415)**	**(345,864)**	**(386,961)**	**(469,913)**	**(424,333)**	**(404,518)**	**(424,713)**	**(430,905)**	**(422,375)**

FINANCIAL TRENDS

Schedule 2 - Changes in Net Position

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

JCCAL Fiscal Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
General Revenues and Transfers:										
Governmental Activities Revenue:										
General Revenues										
Property Taxes	97,041	103,833	101,769	105,814	109,506	111,931	114,503	123,649	129,152	130,600
Sales and Use Taxes	171,364	180,291	186,349	191,022	204,634	219,428	218,092	226,346	260,694	287,104
Other Taxes	29,622	10,977	7,571	8,754	8,337	8,527	8,710	9,815	11,591	11,529
Licenses and Permits	11,201	12,207	11,222	13,878	11,815	12,824	13,243	12,959	-	-
Unrestricted Investment Earnings	673	402	869	1,030	1,000	1,447	2,765	1,550	458	2,014
Miscellaneous	6,167	6,705	18,457	14,693	18,628	15,498	14,444	10,891	9,695	3,717
Gain on Sale of Capital Assets	-	-	-	-	-	-	7,352	491	1,768	-
Transfers	(39,050)	15,335	-	-	-	-	-	-	(1,204)	(1,218)
Transfers to Agency Funds [1]	-	-	(2,458)	(2,386)	(2,946)	(3,113)	(3,152)	-	-	
Total Governmental Activities Revenue	277,018	329,750	323,779	332,805	350,974	366,542	375,957	385,701	412,154	433,746
Business-Type Activities Revenue:										
General Revenues										
Property Taxes	5,712	5,996	5,956	5,726	6,309	6,441	6,564	7,213	7,567	7,571
Unrestricted Investment Earnings (Losses)	12	427	1,065	3,725	2,009	486	13,343	13,597	3,304	(42,253) [7]
Miscellaneous	17,475	1,820	3,211	2,160	3,284	2,597	2,678	3,559	675	1,298
Gain on Sale of Capital Assets	-	-	4,632	5,699	-	-	-	-	345	193
Transfers	39,050	(15,335)	-	-	-	-	-	-	1,204	1,218
Total Business-Type Activities Revenues	62,249	(7,092)	14,864	17,310	11,602	9,524	22,585	24,369	13,095	(31,973)
Total General Revenues and Transfers:	**339,267**	**322,658**	**338,643**	**350,115**	**362,576**	**376,066**	**398,542**	**410,070**	**425,249**	**401,773**
Extraordinary Item: Gain on Bankruptcy										
Governmental Activities	-	22,188	-	-	-	-	-	-	-	
Business-Type Activities	-	1,405,919	-	-	-	-	-	-		
Extraordinary Item: Gain on Bankruptcy	**-**	**1,428,107**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Change (Decrease) in Net Position:										
Governmental Activities	78,296	111,392	101,695	75,187	(3,238)	58,216	94,525	102,050	120,304	136,065
Business Type Activities	(164,079)	1,268,958	(108,916)	(112,033)	(104,099)	(106,483)	(100,501)	(116,693)	(125,960)	(156,667)
Total Change in Position	(85,783)	1,380,350	(7,221)	(36,846)	(107,337)	(48,267)	(5,976)	(14,643)	(5,656)	(20,602)

FINANCIAL TRENDS
Schedule 2 - Changes in Net Position
Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

JCCAL Fiscal Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Net Position Beginning of Year	(558,310)	(644,093)	704,058	879,017	842,171	734,834	593,015	587,039	572,396	557,735
Prior Period Adjustments to Net Position	-	(32,199) [2]	182,180 [3]	-	-	(93,552) [4]	-	-	(9,005) [5]	(4,916) [6]
Governmental Activities	-	(6,704)	74,134	-	-	(72,961)	-	-	(11,180)	(4,916)
Business Type Activities	-	(25,495)	108,046	-	-	(20,591)	-	-	2,175	
Net Position- Beginning of Year Restated	(558,310)	(676,292)	886,238	879,017	842,171	641,282	593,015	587,039	563,391	552,819
Fund Balances - End of Year	**$ (644,093)**	**$ 704,058**	**$ 879,017**	**$ 842,171**	**$ 734,834**	**$ 593,015**	**$ 587,039**	**$ 572,396**	**$ 557,735**	**$ 532,217**

Source: JCC Finance Department Data

[1] *With the implementation of GASB 84, Agency funds are no longer a component of the audited financial statements.*

[2] *FY 2014 Note B - Summary of Significant Accounting Policies (Pg. 34): The Commission adopted pronouncement GASB 65, this includes a reduction in Net Position of -$32,199 related to Debt Issuance Cost.*

[3] *FY 2015 Note B - Prior Period Adjustments (Pg. 41): The Commission adopted pronouncements GASB 68 and GASB 71, this includes a positive Net Position adjustment of $89,574 related to Pension Benefits. Also, the beginning Net Position has been adjusted to include $93,917 related to Donated Assets & -$1,311 related to Motor Vehicle Taxes.*

[4] *FY 2018 Note B - Significant New Accounting Pronouncements (Pg. 41): The Commission adopted pronouncement GASB 75, this includes a reduction in Net Position of -$93,552 related to other Postemployment Benefits.*

[5] *FY2021 Notes 14, 15, and 16 - During fiscal year 2021, restatements to beginning net position of governmental and business-type activities were required to accurately state balances and activity as of and for the year ended September 30, 2021. These restatements were necessary to accurately present the effects of financing activities (approximately $17.1 million decrease), to accurately report the activities of the Jefferson County Economic and Industrial Development Authority, which prior to fiscal year 2021 was reported as a blended component unit in the business-type activities (approximately $2.2 million increase), and to accurately report approximately $0.4 million in amounts previously reported in agency funds. Additionally, the implementation of GASB Statement No. 84, Fiduciary Activities, resulted in an increase to the net position of governmental activities of approximately $5.5 million.*

[6] *FY 2022 Note 15 - Prior Period Adjustments (Pg. 92): The beginning net position has been adjusted.*

[7] *The County experienced a significant decline in fair values of its investments due to the increase in interest rates economy-wide.*

FINANCIAL TRENDS

Schedule 3 - Fund Balances, Governmental Funds

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

JCCAL Fiscal Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GENERAL FUND										
Nonspendable	$18,848	$19,034	$27,324	$24,324	$21,141	$56,539	$50,195	$49,363	$28,966	$29,104
Restricted	6,768	6,778	6,796	11,831	11,849	11,824	12,183	13,894	12,094	12,094
Committed	4,415	-	-	-	-	-	-	-	500	-
Assigned	22,268	-	11,794	9,541	12,544	30,685	39,713	64,497	71,682	92,608
Unassigned	67,236	102,183	76,578	76,117	84,554	54,998	76,004	111,765	168,509	203,068
Total General Fund	119,535	127,995	122,492	121,813	130,088	154,046	178,095	239,519	281,751	336,874
ALL OTHER GOVERNMENTAL FUNDS										
Nonspendable	17,626	11,654	10,814	9,598	9,193	-	(18,289)	-	-	-
Restricted	200,601	187,561	199,552	201,072	55,888	52,921	68,817	34,755	68,496	60,174
Committed	1,159	-	-	-	-	-	-	-	-	-
Assigned	52,075	59,483	37,128	45,400	22,068	24,445	21,973	22,428	4,610	96,392
Unassigned	(22,268)	(6,525)	3,830	(16,505)	(10,565)	(5,294)	(16,112)	(49)		-
Total All Other Governmental Funds	249,193	252,173	251,324	239,565	76,584	72,072	56,389	57,134	73,106	156,566
Total Governmental Fund Balance	**$ 368,728**	**$ 380,168**	**$ 373,816**	**$ 361,378**	**$ 206,672**	**$ 226,118**	**$ 234,484**	**$ 296,653**	**$ 354,857**	**$ 493,440**

Source: JCC Finance Department Data (FY Audited Financial Data issued by Mauldin & Jenkins)

FINANCIAL TRENDS

Schedule 4 - Revenues, Expenditures, and Other Financial Sources (Uses), Governmental Funds

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

JCCAL Fiscal Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
REVENUES:										
Taxes	$278,391	$294,385	$295,696	$306,970	$322,475	$339,760	$341,295	$359,808	$401,437	$429,233
Licenses and Permits	11,201	12,207	11,222	13,878	11,815	12,824	13,243	12,959	12,625	16,966
Fines and Forfeitures	-	-	-	-	-	-	-	-	1,229	1,034
Intergovernmental	35,657	25,656	27,742	20,070	23,542	21,151	24,253	107,865	70,797	61,923
Charges for Services, Net	28,933	31,792	31,333	29,142	32,596	33,467	30,702	33,603	40,789	47,675
Contributions and Donations	-	-	-	-	-	-	-	-	3,146	3,397
Interest and Investment Income (Loss)	673	402	869	1,030	1,000	1,447	2,765	1,550	458	2,014
Miscellaneous	5,972	8,109	18,212	13,286	16,463	15,225	10,881	10,891	9,695	3,717
TOTAL REVENUES	360,827	372,551	385,074	384,376	407,891	423,874	423,139	526,676	540,176	565,959
EXPENDITURES:										
Current:										
General Government	111,038	93,214	101,362	101,790	111,196	116,593	127,823	131,533	170,587	179,494
Public Safety	55,395	65,239	60,566	68,771	74,303	81,852	81,312	58,538	85,500	97,255
Law Library Operations	-	-	-	-	-	-	-	-	269	180
Highways and Roads	18,790	14,869	21,137	23,502	30,249	30,954	25,392	28,374	31,709	38,536
Health and Welfare	20	48,385	52,412	53,423	60,406	53,776	53,644	132,874	110,064	86,035
Education - other	-	21,312	-	-	69,000	-	-	-	-	-
Community Development	-	-	-	6,865	5,505	4,796	5,802	9,666	13,529	10,864
Capital Outlay	5,877	13,829	20,358	22,209	22,068	23,768	44,270	29,056	22,737	26,905
Indirect	(7,478)	(4,271)	(4,106)	(3,503)	(4,004)	(5,314)	(5,922)	(6,079)	(8,108)	-
Contributions to Other Entities	-	-	-	-	-	37,384	24,100	35,367	-	-
Debt Service:										
Principal	60,022	83,508	95,175	99,982	540,830	178,442	35,864	37,450	36,714	33,053
Interest	50,181	44,594	39,796	35,990	36,252	29,746	22,841	23,115	21,099	19,406
Issuance costs										1,286
TOTAL EXPENDITURES	293,845	380,679	386,700	409,029	945,805	551,997	415,126	479,894	484,100	493,014
Excess (deficiency) of revenues over (under) expenditures	66,982	(8,128)	(1,626)	(24,653)	(537,914)	(128,123)	8,013	46,782	56,076	72,945
Other Financing Sources (Uses)										
Proceeds from Sales of Capital Assets	947	120	137	1,407	2,165	320	3,505	2,132	2,677	989
Issuance of Financed Purchases	-	-	-	-	-	-	-	-	655	-
Issuance of Bonds	-	-	-	-	338,925	138,175	-	-	-	66,335
Premium on Bonds	-	-	-	-	45,064	13,209	-	-	-	4,448
Transfers In	50,360	37,565	40,277	38,350	430,186	225,241	163,998	149,168	169,164	195,267
Transfers Out	(89,410)	(39,952)	(42,735)	(40,736)	(433,132)	(229,376)	(167,150)	(149,168)	(170,368)	(196,485)
Total other financing sources (uses)	(38,103)	(2,267)	(2,321)	(979)	383,208	147,569	353	2,132	2,128	70,554
Extraordinary Item: Gain on Bankruptcy	-	22,188 [2]	-	-	-	-	-	-		-
Net Change In Fund Balances	28,879	11,793	(3,947)	(25,632)	(154,706)	19,446	8,366	48,914	58,204	143,499
Fund Balances - Beginning of Year	339,849 [1]	368,375 [3]	380,168	373,816	361,378	206,672	226,118	234,484	283,398	354,857
Prior Period Adjustments Governmental Funds	-	-	(2,405) [4]	13,194 [5]	-	-	-	-	13,255	(4,916) [8]
Fund Balances - Beginning of Year Restated	339,849	368,375	377,763	387,010	361,378	206,672	226,118	234,484	296,653 [6]	349,941

JCCAL Fiscal Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fund Balances - End of Year	**$ 368,728**	**$ 380,168**	**$ 373,816**	**$ 361,378**	**$ 206,672**	**$ 226,118**	**$ 234,484**	**$ 283,398**	**$ 354,857**	**$ 493,440**
Ratio of Total Debt Service to Noncapital Expenditures:	38.27%	34.92%	36.84%	35.15%	62.47%	39.41%	15.83%	13.43% [7]	12.59%	11.63%

Source: JCC Finance Department Data

[1] *FY 2013: The beginning balance in 2013 is $2 less than the ending balance in 2012. This is related to the Indigent Care Fund.*

[2] *FY 2014 Note B - Summary of Significant Accounting Policies (Pg. 42): The beginning balance in 2014 is $353 less than the ending balance in 2013. This is related to the re-allocation of the Emergency Mgmt. Fund in 2014 as a separate Agency Fund.*

[3] *FY 2014 the Commission filed Chapter 9 Bankruptcy. With the bankruptcy confirmation, the Commission retired certain warrant series and issued new warrants. The entire Sewer Revenue Warrant Series (totaling $3,107,518 as of December 3, 2013) was retired as well as the GO Series 2001-B Warrants (totaling $105,000 as of December 3, 2013). The Series 2013 Sewer Warrants totaling $1,785,486 and Series 2013 GO Warrants of $105,000 were issued as of December 3, 2013. The Commission realized a net gain on the bankruptcy restructuring of the sewer warrants of approximately $1,406,000, net of various settlement costs. The Commission also realized a net gain on the bankruptcy restructuring of the GO 2001-B Warrants of approximately $22,188 net of various settlement costs.*

[4] *FY 2015 Note B - Prior Period Adjustments (Pg. 41): The beginning Fund Balance has been adjusted to include -$1,094 related to Long Term Loans and -$1,311 related to Motor Vehicle Taxes.*

[5] *FY 2016 Note B - Prior Period Adjustments (Pg. 40): The beginning Fund Balance has been adjusted to exclude Accrued Interest $5,974 and liabilities related to Accrued Compensated Absences $7,220.*

[6] *Correction of 2020 Ratio of Total Debt Service to Noncapital Expenditures*

[7] *FY2021 Note 14 - Change in Accounting Principle: The Commission adopted pronouncement GASB 84, this includes a positive Fund Balance adjustment of $5,549 related to Fiduciary Activities. Note 15 - Change in Reporting Entity: The Commission determined that the $414 Revolving Loan Fund, previously reported as an Agency Fund, should be presented within the Community Development Loan Fund. Note 16 - Restatements:*

[8] *FY 2022 Note 15 - Prior Period Adjustments (Pg. 92): The beginning Fund Balance has been adjusted.*

REVENUE CAPACITY

Schedule 5 - Sales and Use Tax Revenues To Total Taxes

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 [5]
Breakdown of Tax Revenue:										
County Sales Tax [1, 2]	$ 97,380	$ 99,183	$ 104,513	$ 102,752	$ 111,339	$ 120,361	$ 114,549	$ 117,379	$ 129,399	$ 139,672
Education Sales Tax [3]	96,613	100,377	103,732	104,844	103,490	4,795				
Special Revenue Sales Tax [3, 4]					7,173	115,048	115,984	113,537	127,335	138,936
Simplified Sellers Use Tax					1,881	2,714	5,493	10,196	14,161	16,710
Total Sales Taxes	193,993	199,560	208,245	207,596	223,883	242,918	236,026	241,112	270,895	295,318
Property Tax	106,496	105,705	108,070	112,732	114,680	117,735	121,227	134,217	136,719	140,221
Total Taxes	$ 300,489	$ 305,265	$ 316,315	$ 320,328	$ 338,563	$ 360,653	$ 357,253	$ 375,329	$ 407,614	$ 435,539
% of Sales & Use to Total Taxes	64.56%	65.37%	65.83%	64.81%	66.13%	67.36%	66.07%	64.24%	66.46%	67.81%

Source: Jefferson County Tax Collector and Jefferson County Revenue Director

[1] *The sales and use tax revenue on this schedule are reported gross vs net (less commissions and fees) on the accompanying financial statements.*

[2] *Source: Jefferson County Revenue Director represents the gross collections from the one-cent general sales and use tax and the one-cent education sales tax reported on a cash basis. The Jefferson County Revenue Department does not provide data by industry type.*

[3] *Pursuant to Act No. 2015-226 adopted by the Alabama Legislature, the levy of the Education Sales and Use Tax was canceled simultaneously with the issuance of the county's Limited Obligation Refunding Warrants, Series 2017 and the levy of the Special Revenue Sales and Use Tax on July 31, 2017.*

[4] *The Special Revenue Sales and Use Tax was first levied on August 1, 2017 and is collected a month in arrears. The amount provided above for fiscal year 2017 reflects one month's collections.*

[5] *All tax collections increased in FY 2022 due to the increase of new businesses, and increase in the price of products.*

REVENUE CAPACITY

Schedule 6 - Jefferson County Ten Largest Special Revenue Sales and Use Tax Payors

Last Six Fiscal Years - Fiscal Year Ending September 30th

Fiscal Year Ending September 30	Total Amount Collected	Percentage of Total Amount Collected
2017	$ 1,498,235	20.89%
2018	19,651,558	17.08%
2019	21,926,938	18.91%
2020	25,739,763	22.67%
2021	18,845,552	14.80%
2022	19,717,930	14.19%

Source: Jefferson County Revenue Department.

The Special Revenue Sales and Use Tax was first levied on August 1, 2017 and is collected a month in arrears. The amount provided above for fiscal year 2017 reflects one month's collections.

The Special Revenue Sales and Use Taxpayers industry types include retail, software/computers, and public utility.

REVENUE CAPACITY

Schedule 7 - Jefferson County Ad Valorem Tax Revenue

Last Ten Fiscal Years - Fiscal Year Ending September 30th

Fiscal Year Ended September 30	General Tax (5.6 mills)[1]	Sewer Tax (0.7 mills)	Public Buildings, Bridges and Roads (5.1 mills)	Rural Roads (2.1 mills)[2]
2013	$38,353,976	$5,620,979	$40,260,285	$16,721,178
2014	39,065,798	5,561,248	40,380,950	16,641,498
2015	36,514,904	5,454,528	39,727,570	16,356,708
2016	35,725,294	5,323,850	38,207,090	15,852,105
2017	39,732,959	5,780,605	42,123,580	17,343,419
2018	40,809,458	5,929,372	43,208,439	17,789,926
2019	42,238,337	6,122,740	44,619,166	18,370,425
2020	44,688,901	6,496,513	46,088,276	19,233,552
2021	46,145,101	6,769,196	48,024,439	20,041,230
2022	46,211,376	6,797,513	48,277,508	20,135,768

Source: Jefferson County Tax Assessor; Jefferson County Tax Collector

Figures do not include (i) ad valorem tax revenues from motor vehicles or (ii) ad valorem tax revenues resulting from delinquent ad valorem collections.

[1] Net of amounts required to be deducted from the 5.6 mill tax proceeds for certain purposes, including, among others, payments to The Birmingham-Jefferson County Transit Authority, the Jefferson County Department of Health, and the State Mapping and Reappraisal Program.

[2] Approximately one half of the ad valorem tax revenue resulting from the Rural Roads tax is returned to municipalities via a "Road Tax Distribution."

REVENUE CAPACITY

Schedule 8 - Property Taxes Levied and Collections

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

Tax Year Ended September 30 [1]	Total Net Tax Levy [2]	Current Tax Collection	Percent of Levy Collected	Deliquent Tax Collection	Total Collection	Percent of Total Tax Collection to Tax Levy
2013	$ 542,537	$ 532,280	98.11%	$ 7,768	$ 540,048	99.54%
2014	550,902	540,580	98.13%	7,552	548,133	99.50%
2015	565,752	556,568	98.38%	8,780	565,348	99.93%
2016	597,336	580,276	97.14%	10,161	590,437	98.85%
2017	613,117	600,525	97.95%	9,590	610,115	99.51%
2018	628,709	617,697	98.25%	8,427	626,124	99.59%
2019	649,100	639,433	98.51%	8,022	647,456	99.75%
2020	741,487	706,909	95.34%	8,281	715,191	96.45%
2021	760,809	739,252	97.17%	7,055	746,307	98.09%
2022	775,377	754,090	97.25%	6,606	760,696	98.11%

Source: Jefferson County Tax Assessor; Jefferson County Tax Collector

[1] *Taxes collected in each fiscal year represent the taxes levied by the Tax Assessor in the prior fiscal year and collected by the Tax Collector in the current year as taxes are collected in arrears.*

[2] *Increased Total Net Tax Levy for Tax Year Ended September 30, 2022 reflects property reappraisals completed by the Board of Equalization for such Tax Year.*

REVENUE CAPACITY

Schedule 9 -Assessed Value and Estimated True Value of All Taxable Property

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

	Class 1* Property of Utilities		Class 2* All Unclassified Real/Personal		Class 3* Agriculture, Forest, Residential, Historic		Class 4** Motor Vehicles		Total			
Tax Year Ending 30-Sep	Assessed Value [2]	Estimated True Value [1]	Assessed Value [2]	Estimated True Value [1]	Assessed Value [2]	Estimated True Value [1]	Assessed Value [2]	Estimated True Value [1]	Assessed Value [2]	Estimated True Value [1]	Ratio of Assessed Value to Estimated True Value	Total Direct Rate
2013	$ 759,983	$ 2,450,854	$ 4,671,454	$22,894,924	$ 2,473,713	$ 24,485,047	$ 947,476	$ 6,316,510	$ 8,852,625	$ 56,147,335	15.77%	1.35
2014	754,284	2,533,277	4,823,545	23,332,367	2,473,713	24,560,565	955,622	6,370,819	9,007,163	56,797,028	15.86%	1.35
2015	749,937	2,514,279	5,081,132	24,084,601	2,543,286	24,737,125	970,132	6,467,553	9,344,487	57,803,558	16.17%	1.35
2016	755,801	2,499,789	5,195,420	25,380,377	2,627,198	25,432,862	1,037,058	6,913,723	9,615,477	60,226,751	15.97%	1.35
2017	768,574	2,519,335	5,281,482	25,945,977	2,705,295	26,271,980	1,027,164	6,847,764	9,782,515	61,585,056	15.88%	1.35
2018	782,337	2,561,914	5,400,223	26,383,047	2,842,460	27,052,948	971,568	6,477,122	9,996,587	62,475,031	16.00%	1.35
2019	795,622	2,607,788	6,467,939	26,971,258	3,069,053	28,424,596	988,424	6,589,494	11,321,039	64,593,136	17.53%	1.35
2020	835,428	2,652,073	6,477,973	32,311,206	3,218,597	30,690,534	979,906	6,532,712	11,511,904	72,186,525	15.95%	1.35
2021	849,734	2,832,734	6,714,241	33,571,207	2,742,914	27,429,143	1,034,897	6,899,316	11,341,786	70,732,400	16.03%	1.35
2022	864,853	2,882,840	6,686,052	33,430,260	3,898,801	38,988,010	1,015,138	6,400,624	12,464,844	81,701,734	15.26%	1.35

Source: • Jefferson County Tax Assessor and •• Jefferson County Revenue Director

[1] *Estimated True Value is calculated based on the following percentages:*

Class I Public Utility-30%

Class II Commercial-20%

Class III Residential-10% Class IV Automobile-15%

[2] *Assessed Values are reported as net assessments after exemptions and penalties applied as reported on the Tax Assessor's abstract*

REVENUE CAPACITY

Schedule 10 - Principal Property Taxpayers (Jefferson County Only)

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

	Fiscal Year Ended September 30, 2022 [3]			Fiscal Year Ended September 30, 2013		
Assessed Entity	Total Assessed Value [1] of Property Within County Limits	Rank	% of Total Assessed Valuation	Total Assessed Value [2] of Property Within County Limits	Rank	% of Total Assessed Valuation
Alabama Power CO	763,125,500	1	6.67%	$580,064,500	1	7.35%
United States Steel CORP Tax Division	71,011,900	2	0.62%	96,054,474	2	1.22%
Affinity Hospital LLC	70,297,860	3	0.61%			
Bellsouth Telecommunications LLC	69,050,300	4	0.60%	36,841,880	4	0.47%
Wells Fargo Bank National Association	60,854,760	5	0.53%			
Norfolk Southern Combined Rail	60,460,120	6	0.53%	41,550,500	3	0.53%
Kamtek INC	52,445,200	7	0.46%			
AT & T Services	37,888,000	8	0.33%	25,436,660	10	0.32%
American Cast Iron Pipe CO	36,827,220	9	0.32%	32,593,480	6	0.41%
Spire Alabama INC	36,569,600	10	0.32%			
Alabama Gas Corp				35,798,100	5	0.45%
GSA Birmingham Realty				28,487,660	7	0.36%
Amsouth Bank				26,484,820	9	0.34%
Hoover Mall Limited LP				27,789,880	8	0.35%
	$ 1,258,530,460		10.99%	$ 931,101,954		11.80%

Source: Jefferson County Tax Assessor

[1] *Total 2022 assessed value of property within county limits reflected $11,449,706 (excludes Class 4-Motor Vehicles) on the net abstract.*

[2] *Total 2013 assessed value of property within county limits reflected $7,887,493 (excludes Class 4-Motor Vehicles) on the net abstract.*

[3] *Tax year versus fiscal year end variances.*

REVENUE CAPACITY

Schedule 11 - Property Taxes - Direct and Overlapping Governments

Jefferson County, Alabama

Last Ten Fiscal Years - Fiscal Year Ending September 30th (Per $100 of Assessed Value)

OVERLAPPING TAX RATES

	Jefferson County				City of Birmingham				
Fiscal Year	Direct County Government	County Schools	Special Schools	County Total	Municipal Tax	BOE School	City Total	State of Alabama	Total Direct & Overlapping
2013	1.35	0.82	2.19	4.36	2.85	1.28	4.13	0.65	9.14
2014	1.35	0.82	2.19	4.36	2.85	1.28	4.13	0.65	9.14
2015	1.35	0.82	2.19	4.36	2.85	1.58	4.43	0.65	9.44
2016	1.35	0.82	2.19	4.36	2.85	1.58	4.43	0.65	9.44
2017	1.35	0.82	2.19	4.36	2.85	1.58	4.43	0.65	9.44
2018	1.35	0.82	2.19	4.36	2.85	1.58	4.43	0.65	9.44
2019	1.35	0.82	2.19	4.36	2.85	1.58	4.43	0.65	9.44
2020	1.35	0.82	2.19	4.36	2.85	1.58	4.43	0.65	9.44
2021	1.35	0.82	2.19	4.36	2.85	1.58	4.43	0.65	9.44
2022	1.35	0.82	2.19	4.36	2.85	1.58	4.43	0.65	9.44

OVERLAPPING TAX RATES

	Jefferson County				City of Vestavia Hills				
Fiscal Year	Direct County Government	County Schools	Special Schools	County Total	Municipal Tax	BOE School	City Total	State of Alabama	Total Direct & Overlapping
2013	1.35	0.82	2.19	4.36	4.93	1.51	6.44	0.65	11.45
2014	1.35	0.82	2.19	4.36	4.93	1.51	6.44	0.65	11.45
2015	1.35	0.82	2.19	4.36	4.93	1.51	6.44	0.65	11.45
2016	1.35	0.82	2.19	4.36	4.93	1.51	6.44	0.65	11.45
2017	1.35	0.82	2.19	4.36	4.93	1.51	6.44	0.65	11.45
2018	1.35	0.82	2.19	4.36	4.93	1.51	6.44	0.65	11.45
2019	1.35	0.82	2.19	4.36	4.93	1.51	6.44	0.65	11.45
2020	1.35	0.82	2.19	4.36	4.93	1.51	6.44	0.65	11.45
2021	1.35	0.82	2.19	4.36	4.93	1.51	6.44	0.65	11.45
2022	1.35	0.82	2.19	4.36	4.93	1.51	6.44	0.65	11.45

REVENUE CAPACITY

Schedule 11 - Property Taxes - Direct and Overlapping Governments

Jefferson County, Alabama

Last Ten Fiscal Years - Fiscal Year Ending September 30th (Per $100 of Assessed Value)

OVERLAPPING TAX RATES

	Jefferson County				City of Mountain Brook				
Fiscal Year	Direct County Government	County Schools	Special Schools	County Total	Municipal Tax	BOE School	City Total	State of Alabama	Total Direct & Overlapping
2013	1.35	0.82	2.19	4.36	4.67	3.41	8.08	0.65	13.09
2014	1.35	0.82	2.19	4.36	4.67	3.41	8.08	0.65	13.09
2015	1.35	0.82	2.19	4.36	4.67	3.41	8.08	0.65	13.09
2016	1.35	0.82	2.19	4.36	4.67	3.41	8.08	0.65	13.09
2017	1.35	0.82	2.19	4.36	4.67	3.41	8.08	0.65	13.09
2018	1.35	0.82	2.19	4.36	4.67	3.41	8.08	0.65	13.09
2019	1.35	0.82	2.19	4.36	4.67	3.41	8.08	0.65	13.09
2020	1.35	0.82	2.19	4.36	4.67	3.41	8.08	0.65	13.09
2021	1.35	0.82	2.19	4.36	4.67	3.41	8.08	0.65	13.09
2022	1.35	0.82	2.19	4.36	4.67	3.41	8.08	0.65	13.09

OVERLAPPING TAX RATES

	Jefferson County				City of Hoover				
Fiscal Year	Direct County Government	County Schools	Special Schools	County Total	Municipal Tax	BOE School	City Total	State of Alabama	Total Direct & Overlapping
2013	1.35	0.82	2.19	4.36	3.17	1.51	4.68	0.65	9.69
2014	1.35	0.82	2.19	4.36	3.17	1.51	4.68	0.65	9.69
2015	1.35	0.82	2.19	4.36	3.17	1.51	4.68	0.65	9.69
2016	1.35	0.82	2.19	4.36	3.17	1.51	4.68	0.65	9.69
2017	1.35	0.82	2.19	4.36	3.17	1.51	4.68	0.65	9.69
2018	1.35	0.82	2.19	4.36	3.17	1.51	4.68	0.65	9.69
2019	1.35	0.82	2.19	4.36	3.17	1.51	4.68	0.65	9.69
2020	1.35	0.82	2.19	4.36	3.17	1.51	4.68	0.65	9.69
2021	1.35	0.82	2.19	4.36	3.17	1.51	4.68	0.65	9.69
2022	1.35	0.82	2.19	4.36	3.05	1.39	4.44	0.65	9.45

Source: Jefferson County Tax Assessor/ Code of Alabama 1975 Title 40 section 40-5-9

Tax Due Date: October 1

Delinquent Date: January 1

Discounts Allowed: None

Tax Sale Date: Usually May or June

Incorrect municipality (Homewood) calculated for previous years for Hoover 2013-2021

REVENUE CAPACITY

Schedule 12 - Enterprise Fund Data

Jefferson County, Alabama

Last Ten Fiscal Years - Fiscal Year Ending September 30th

Account Data*									
Fiscal Year Ended September 30	**Residential Accounts Served**	**Non-Residential Accounts Served**	**Total Accounts Served**	**Accounts Billed by the Water Works Board of the City of Birmingham (Alabama)**	**Percentage Accounts Billed by the Water Works Board of the City of Birmingham (Alabama)**	**Accounts Billed by Bessemer Water Works (acting as a department of the City of Bessemer, Alabama)**	**Percentage Accounts Billed by Bessemer Water Works (acting as a department of the City of Bessemer, Alabama)**	**Accounts Billed by Jefferson County**	**Percentage Accounts Billed by Jefferson County**
2013	124,750	15,190	139,940	111,235	79.5%	16,409	11.7%	12,296	8.8%
2014	125,657	14,703	140,360	111,440	79.4%	16,474	11.7%	12,446	8.9%
2015	126,825	13,733	140,558	111,024	79.0%	16,720	11.9%	12,814	9.1%
2016	125,173	15,847	141,020	111,279	78.9%	16,832	11.9%	12,909	9.2%
2017	127,771	13,861	141,632	111,450	78.7%	17,135	12.1%	13,047	9.2%
2018	126,929	13,083	140,012	109,635	78.3%	17,286	12.3%	13,091	9.3%
2019	126,470	14,654	141,124	110,791	78.5%	17,311	12.3%	13,022	9.2%
2020	128,005	14,223	142,228	110,995	78.0%	17,383	12.2%	13,850	9.7%
2021	131,499	12,158	143,657	111,977	77.9%	17,519	12.2%	14,161	9.9%
2022	133,181	12,214	145,395	113,260	77.9%	17,730	12.2%	14,406	9.9%

**Sewer account data is based on estimates provided by the Jefferson County Environmental Services Department.*

REVENUE CAPACITY

Schedule 13 - Historical Sewer Rates

Jefferson County, Alabama

Last Ten Fiscal Years - Fiscal Year Ending September 30th

Fiscal Year Ended September 30	**2013[1], [2]**	**2014[3]**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Minimum Charge										
5/8 inch meter	$ 10.00	$ 15.00	$ 16.18	$ 17.46	$ 18.84	$ 20.33	$ 21.04	$ 21.77	$ 22.55	$ 23.34
3/4 inch meter	11.00	16.50	17.80	19.21	20.73	22.37	23.15	23.96	24.80	25.67
1 inch meter	14.00	21.00	22.66	24.44	26.37	28.45	29.44	30.47	31.54	32.65
1 1/2 inch meter	18.00	27.00	29.13	31.43	33.91	36.59	37.87	39.19	40.57	41.99
2 inch meter	29.00	43.50	46.93	50.64	54.64	58.95	61.01	63.14	65.35	67.64
3 inch meter	110.00	165.00	178.02	192.06	207.21	223.56	231.36	239.43	247.80	256.45
4 inch meter	140.00	210.00	226.57	244.45	263.74	284.55	294.48	304.76	315.40	326.41
6 inch meter	210.00	315.00	339.85	366.67	395.60	426.81	441.71	457.13	473.09	489.61
8 inch meter	290.00	435.00	469.32	506.35	546.30	589.40	609.97	631.26	653.30	676.11
10 inch meter	370.00	555.00	598.79	646.03	697.00	751.99	778.23	805.39	833.51	862.60
Residential Volume Charge, per CCF										
0 - 3 CCF	4.50	4.50	4.86	5.24	5.65	6.10	6.31	6.53	6.77	7.01
4 - 6 CCF	7.00	7.00	7.55	8.15	8.79	9.48	9.81	10.15	10.52	10.89
7 CCF & Above	8.00	8.00	8.63	9.31	10.04	10.83	11.21	11.60	12.02	12.44
Non-Residential Volume Charge, per CCF										
All CCF	7.60	7.87	8.49	9.16	9.88	10.66	11.03	12.53	11.82	12.24
5 CCF User Bill[4]	**37.50**	**42.50**	**45.86**	**49.48**	**53.37**	**57.59**	**59.59**	**61.67**	**63.90**	**66.15**
Bill increase	*1.40%*	*13.33%*	*7.91%*	*7.89%*	*7.86%*	*7.91%*	*3.47%*	*3.49%*	*3.62%*	*3.52%*

Source: Jefferson County Environmental Services Department

(1) *In fiscal year 2013, a base charge replaced the minimum charge and a tiered volumetric rate structure was implemented for residential customers.*

(2) *The fiscal year 2013 rate increase became effective five months into the fiscal year, on March 1, 2013.*

(3) *As of November 1, 2013.*

(4) *The monthly bill for a typical residential account of the System with billable flows of 5 CCF and a 5/8 inch meter. Does not reflect Residential Return Factor of 0.85.*

REVENUE CAPACITY

Schedule 14 - Top 10 Sewer Customers

Current Fiscal Year and Nine Fiscal Years Ago - Fiscal Year Ending September 30th (In Thousands)

	Fiscal Year Ended September 30, 2022				Fiscal Year Ended September 30, 2013			
Major Sewer Customers [2]	**Total Consumption (CCF)**	**Annual Sewer Service Charges Billed** [1]	Rank	% of Total Charges Billed	**Total Consumption (CCF)**	**Annual Sewer Service Charges Billed** [1]	Rank	% of Total Charges Billed
University of Alabama at Birmingham	606,691	$ 7,622	1	3.13%	410,685	$ 3,039	1	2.05%
Birmingham Housing Authority	259,609	3,217	2	1.32%	212,166	1,570	3	1.06%
U.S. Steel	114,665	1,419	3	0.58%	509,159	2,597	2	1.75%
Tenet Healthcare	95,962	1,189	4	0.49%				0.00%
Samford University	94,542	1,175	5	0.48%	104,034	770	8	0.52%
St. Vincent's Hospital	94,851	1,171	6	0.48%				0.00%
SMI Steel, Inc.	93,637	1,152	7	0.47%	114,505	847	5	0.57%
Veterans Administration	71,335	885	8	0.36%	142,964	1,058	4	0.71%
Dairy Farmers of America, Inc	61,531	759	9	0.31%				0.00%
Valora At Homewood BL LLC	60,520	743	10	0.31%				
St. Vincent's Hospital - East								0.00%
Barber's Pure Milk Co.					124,272	809	6	0.55%
Brookwood Hospital AMI					107,763	797	7	0.54%
Trinity Medical Center					99,856	739	9	0.50%
Coca Cola Bottling Company					140,548	624	10	0.42%
Subtotal, Major Sewer Customers		19,333		7.94%		12,850		8.66%
Other Customers		224,306				135,490		
Total Sewer Customers		243,639				148,340		

Source: Jefferson County Environmental Services Department

(1) Excludes proceeds from the Sewer Tax levied within the County pursuant to Act No. 716, enacted February 28, 1901 by the Alabama Legislature

(2) Largest Account and Top Ten Accounts based on annual charges billed (See Major Accounts Fiscal Year Ended September 30, 2021)

DEBT CAPACITY

Schedule 15 - Jefferson County Debt Ratios

Fiscal Year Ended September 30, 2022

Population [1]	674,721
Assessed Value of Taxable Property as of September 30, 2022 [2]	$ 12,464,844,000
General Obligation Debt Outstanding as of September 30, 2022	$ 99,711,657
General Obligation Debt Per Capita	$ 147.78
Ratio of General Obligation Debt to Assessed Value	0.80%

[1] *Source: 2020 US Census Bureau population for Jefferson County, Alabama*

[2] *Source: Jefferson County Tax Assessor and Jefferson County Revenue Department*

DEBT CAPACITY

Schedule 16 - Ratios of Outstanding Debt by Type

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

	Governmental Funds				Business-Type Activities							
Fiscal Year	General Obligation Warrants	Lease Revenue Warrants	Limited Obligation Warrants [1]	Funding Agreements [2]	Sewer Revenue Warrants [3]	Component Unit Bonds	Financial Leases [4]	Total Outstanding Debt	Aggregate Income	Percentage of Personal Income	County Population	Outstanding Debt Per Capita (In Dollars)
2013 [1]	$ 200,520	$ 74,015	$ 726,110	$ -	$ 3,107,518	$ -	$ 393	$ 4,108,556	$ 29,706,376	13.83%	$ 659,265	$ 6,232
2014	181,855	69,425	666,110	-	1,821,205	-	153	2,738,748	30,897,715	8.86%	659,972	4,150
2015	162,420	64,585	595,475	-	1,867,336	-	167	2,689,983	32,467,641	8.29%	660,455	4,073
2016	145,385	59,480	517,785	-	1,914,656	-	167	2,637,473	32,979,113	8.00%	660,343	3,994
2017	127,720	54,100	338,925	-	1,960,664	-	167	2,481,576	34,907,850	7.11%	659,599	3,762
2018	150,640	-	330,720	17,810	2,005,052	-	4,595	2,508,817	36,644,708	6.85%	659,429	3,804
2019	128,195	-	320,165	17,484	2,052,555	13,000	6,773	2,538,172	37,755,657	6.72%	658,573	3,849
2020	106,310	-	309,080	17,145	2,118,942	13,000	8,537	2,573,014	38,287,681	6.72%	674,721	3,907
2021	87,766	-	328,080	16,793	2,161,385	12,792	7,390	2,614,206	41,652,714	6.28%	674,721	3,874
2022	67,939	-	383,385	16,428	2,230,564	11,953	5,539	2,715,808	NA	N/A	674,721	4,025

Source: JCC Finance Department Data (FY22 Audited Financial Data), Aggregate & Per Capita Income from Bureau of Economic Analysis report CAINC1 Personal Income Summary, as of November 16, 2022 updated release, and Population data from 2020 US Census Bureau data for Jefferson County, Alabama

[1] *Limited Obligation Warrants includes the Limited Obligation Refunding Warrants Series 2017 and the Alabama Transportation Infrastructure Bank Revenue Bonds Series 2022B.*

[2] *Funding Agreements includes the principal component of the 2018 BJCC Funding Agreement for Series 2018E Bonds. Please see Schedule 34 for a full amortization schedule.*

[3] *During the Jefferson County Bankruptcy Plan of Adjustment, finalized December 13, 2013, the County refunded portions of the debt.*

[4] *With the release of GASB 87 Guidelines, all lease agreements are considered to have a financial component.*

DEBT CAPACITY

Schedule 17 - Ratios of Net General Bonded Debt to Estimated True Value and Net Bonded Debt Per Capita

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

Fiscal Year	County Population [1]	Estimated True Value [2]	General Bonded Debt [3]	Less Bond Reserve Fund Balance [4]	Net General Bonded Debt	Ratio of Net Bonded Debt To Estimated True Value	Net Bonded Debt Per Capita (In Dollars)
2013	659,265	$56,147,335	$4,108,556	$105,395	$4,003,161	7.13%	$6,072
2014	659,972	56,797,028	2,738,748	106,428	2,632,320	4.63%	3,989
2015	660,455	57,803,558	2,689,983	100,471	2,589,512	4.48%	3,921
2016	660,343	60,226,751	2,637,473	105,407	2,532,066	4.20%	3,834
2017	659,599	61,585,056	2,481,576	12,995	2,468,581	4.01%	3,743
2018	659,429	62,475,031	2,508,817	14,215	2,494,602	3.99%	3,783
2019	658,573	64,593,136	2,538,172	-	2,538,172	3.93%	3,854
2020	674,721	72,186,525	2,573,014	-	2,573,014	3.56%	3,813
2021	674,721	70,732,400	2,614,206	8,745	2,605,461	3.68%	3,862
2022	674,721	81,701,734	2,715,808	10,980	2,704,828	3.31%	4,009

[1] 2020 US Census Bureua population for Jefferson County.

[2] See Schedule 9 "Assessed Value and Estimated True Value of All Taxable Property"

[3] Includes General Obligation Warrants, Limited Obligation Warrants, Lease Revenue Warrants, Sewer Revenue Warrants, Funding Agreements, Financial Leases, and Bonded Debts of Component Units.

[4] Includes Limited Obligation School Warrants 2004A and 2005A&B Reserve Funds (refunded by Limited Obligation Refunding Warrants Series 2017), as well as other amounts held in trust for the purpose of repaying Warrants Principal.

DEBT CAPACITY

Schedule 18 - Estimated Constitutional Debt Margin

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Net Assessed Value of Real and Personal Property [1]	$8,852,625	$9,007,163	$9,344,487	$9,615,477	$9,782,515	$9,996,587	$11,321,039	$11,511,904	$11,341,786	$12,464,844
Constitutional Debt Limit (5% of Assessed Value) [2]	442,631	450,358	467,224	480,774	489,126	499,829	566,052	575,595	567,089	623,242
Outstanding Long-Term Debt of the County [3]	4,108,556	2,738,748	2,689,983	2,637,473	2,481,576	2,508,817	2,538,172	2,573,014	2,614,206	2,715,808
(Less) Exemption for School and Sewer Debt [2]	(3,907,643)	(2,556,740)	(2,527,396)	(2,491,921)	(2,353,689)	(2,335,772)	(2,385,720)	(2,441,022)	(2,502,257)	(2,625,902)
(Less) Exemption for Debt Issued Under Section 772 [4]	-	-	-	-	-	(17,810)	(30,484)	(30,145)	(29,585)	(28,379)
Total Long-Term Debt Subject to the Debt Margin	200,913	182,008	162,587	145,552	127,887	155,235	121,968	101,847	82,364	61,527
Constitutional Debt Margin	241,718	268,350	304,637	335,222	361,239	344,594	444,084	473,748	484,725	561,715
Ratio of Outstanding Debt to Constitutional Debt Limit:	45.39%	40.41%	34.80%	30.27%	26.15%	31.06%	21.55%	17.69%	14.52%	9.87%

[1] *See Schedule 9 "Assessed Value and Estimated True Value of All Taxable Property"*

[2] *Section 224 of the Constitution of the State of Alabama limits the indebtedness of Counties to 5% of the assessed value of taxable property in the County. Debts issued for schools and sewers are excluded from this limit.*

[3] *Amounts presented net of Unamortized Premiums and (Discounts). Before amortizable amounts, total outstanding longterm debt of the County is $2,793,672 .*

[4] *The Birmingham Jefferson Civic Center Authority Funding Agreement Series 2018E (see Schedule 34) and the Hallmark Capital Improvement Loan Series 2019 are exempt from consideration for purposes of the Constitutional Debt Limit pursuant to Amendment 772 of the Alabama Constitution.*

DEBT CAPACITY

Schedule 19 - Pledged-Revenue Coverage for Sewer Revenue Bonds

Last Ten Fiscal Years - Bond Year Ending October 1st (In Thousands)

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Service Revenue [1]	$ 174,127	$ 186,816	$ 193,372	$ 210,709	$ 223,789	$ 229,929	$ 227,376	$ 222,674	$ 243,639
Other Operating Revenue	798	1,887	4,080	5,343	6,462	8,050	8,098	18,787	15,599
Total Operating Revenues	174,925	188,703	197,452	216,052	230,251	237,979	235,474	241,461	259,238
Operating Expenses	53,029	50,213	56,707	63,068	73,906	81,301	91,226	91,243	94,149
(Less) Tax Revenue [2]	(5,996)	(5,956)	(5,726)	(6,309)	(6,441)	(6,564)	(7,213)	(7,567)	(7,683)
Total Operating Expense	47,033	44,257	50,981	56,759	67,465	74,737	84,013	83,676	86,466
Net Revenue Available for Debt Service	127,892	144,446	146,471	159,293	162,786	163,242	151,461	157,785	172,772
Total Debt Service [3]	59,773	74,493	79,439	84,721	85,292	70,366	70,366	79,111	80,909
Projected Total Debt Service Coverage [4]	2.14	1.94	1.84	1.88	1.91	2.32	2.15	1.99	2.14

Source: JCC Finance Department Data (FY 2022 Audited Financial Data issued by Mauldin & Jenkins). Bond year calculations include debt service payments made October 1 of bond year noted and included in the following fiscal year's financial report; and may include payments that haven't been audited by time of issued report

[1] *Tax Revenue and Intergovernmental Revenue are excluded from pledged revenues*

[2] *Tax Revenue may not be included as pledged revenues, but may be shown as an offset to System operating expenses to calculate coverage*

[3] *Represents total 2013 Sewer Revenue Warrants Senior Lien Series 2013A-C and Subordinate Lien Series 2013D-F debt service payments in bond year dollars, as prescribed by the County indenture. In 2022, this includes $10,980 of principal and $69,929 of interest, differing from the $77,851 shown on the audited financial statements due to the timing of payments*

[4] *Debt service coverage metrics rounded down to the second significant digit*

DEBT CAPACITY

Schedule 20 - Pledged-Revenue Coverage for Cooper Green Funding Agreement

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sales & Use Tax Receipts [1, 2]	$ 42,960	$ 42,719	$ 46,891	$ 45,326	$ 49,115	$ 53,095	$ 50,533	$ 51,775	$ 57,068	$ 61,072
Alcohol Beverage License Receipts [1, 2]	3,474	3,584	3,867	4,104	4,596	4,822	5,440	4,843	6,294	7,526
Total Indigent Care Fund Receipts	46,434	46,303	50,758	49,430	53,711	57,917	55,973	56,618	63,362	68,598
Maximum Annual Debt Service [3]	5,627	5,627	5,627	5,627	5,627	5,627	5,627	5,627	5,627	5,627
Coverage Based on Historical Collections [4]	8.25	8.23	9.02	8.78	9.55	10.29	9.95	10.06	11.26	12.19

Source: JCC Finance Department Data

[1] The County entered into a Funding Agreement dated September 14, 2022 with Cooper Green Mercy Health Services Authority, An Affiliate of UAB Health System (the "Authority") pursuant to which the County is obligated to make payments to the Authority payable solely from and secured by a limited obligation pledge and assignment of the proceeds of certain taxes levied in the County (the "Pledged Tax Proceeds") that provide funding for the County's Indigent Care Fund. The Pledged Tax Proceeds were pledged by the Authority to pay the debt service on the Authority's $84,525,000 Revenue Bonds (Jefferson County Funding), Series 2022A.

[2] Includes only those portions of the Alcohol Beverage License Tax and Sales and Use Tax collected by the County and deposited into the Indigent Care Fund, net of any administrative or collection fees. Amounts have been calculated on a cash basis and may differ from any presentation in the County's Audited Financial Statements, and are therefore considered unaudited information provided by the County.

[3] The Maximum Total Annual Debt Service in any future Bond Year is $5,626,738 for Bond Year 2039.

[4] Bonds issued September 14, 2022. Historical Revenues and Coverage ratios are provided based on historical revenues and maximum future debt service.

DEBT CAPACITY

Schedule 21 - Pledged-Revenue Coverage for Alabama Transportation Infrastructure Bank Bonds

Last Ten Fiscal Years - Fiscal Year Ending September 30th (In Thousands)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Real and Personal Property (Excluding Motor Vehicles) [1]	$ 40,260	$ 40,381	$ 39,728	$ 38,207	$ 42,124	$ 43,208	$ 44,619	$ 46,088	$ 48,024	$ 48,876
Motor Vehicles [1]	4,480	4,542	4,631	4,908	4,832	4,575	4,667	4,801	5,125	5,432
Total Pledged 5.1 mill Ad Valorem Tax Revenues [1]	44,740	44,923	44,359	43,115	46,956	47,783	49,286	50,889	53,149	54,308
Maximum Annual Debt Service [2]	5,107	5,107	5,107	5,107	5,107	5,107	5,107	5,107	5,107	5,107
Coverage Based on Historical Collections [3]	8.76	8.80	8.69	8.44	9.19	9.36	9.65	9.96	10.41	10.63

Source: JCC Finance Department Data

[1] Includes only the current portions of Bridge & Building 5.1 mill ad valorem tax collected by the County. Amounts have been calculated on a cash basis and may differ from any presentation in the County's Audited Financial Statements, and are therefore considered unaudited information provided by the County. Amounts provided by Tax Collector and Department of Revenue

[2] The Maximum Total Annual Debt Service in any future Fiscal Year is $5,107,331 in Fiscal Year ending September 30, 2042.

[3] Bonds issued July 19, 2022. Historical Revenues and Coverage ratios are provided based on historical revenues and maximum future debt service.

DEMOGRAPHIC AND ECONOMIC INFORMATION

Schedule 22 - Demographic and Economic Statistics

Last Ten Fiscal Years - Fiscal Year Ending September 30th

	Jefferson County				
Year	Population [1]	Median Household Income [2]	Per Capita Personal Income [2]	County Unemployment Rate [3]	Birmingham Hoover MA Annual Average Unemployment Rate
2013	659,265	$49,481	$29,922	6.2	5.9
2014	659,972	48,260	28,143	5.4	6.0
2015	660,455	52,328	30,619	5.6	5.5
2016	660,343	53,460	32,679	5.3	5.4
2017	659,599	52,886	32,012	3.4	4.0
2018	659,429	56,207	32,257	3.2	3.5
2019	658,573	53,944	32,561	2.3	2.7
2020	674,721	57,802 [4]	34,929 [4]	4.6	5.9
2021	674,721	55,210 [4]	34,181 [4]	3.1	2.7
2022	674,721	-		2.4	2.4

[1] *2020 US Census Bureau population data for Jefferson County, Alabama*

[2] *2021 Department of Numbers data for Jefferson County, Alabama*

[3] *Federal Reserve Bank (FRED) of St. Louis, Economic Research*

[4] *2022 information unavailable from Department of Numbers data*

DEMOGRAPHIC AND ECONOMIC INFORMATION
Schedule 23 - Principal Private Sector Employers
Last Ten Fiscal Years - Fiscal Year Ending September 30th

Employer	Product	Presence	2022 # of Employees	2022 % of Total Employment	2022 Rank	2013 # of Employees	2013 % of Total Employment	2013 Rank
University of Alabama/Birmingham	Education and health care services	Headquarters	23,000	7%	1	23,000	8%	1
Regions Financial System	Financial Services, banking, corporate headquarters	Headquarters	9,000	3%	2	7,668	3%	2
St Vincent Health System	Health Care services, hospital network serving metro B'ham	Headquarters	5,100	2%	3	4,644	2%	4
Children's Health System	Health Care services, regional specialized health care	Headquarters	5,000	2%	4	3,975	1%	8
AT&T	Telecommunications, regional operate	Regional	4,517	1%	5	5,750	2%	3
Honda Manufacturing of Al	Manufacturing, vehicle assembly plant	Regional	4,500	1%	6	4,500	2%	5
Brookwood Baptist Health	Health Care Services, management	Headquarters	4,459	1%	7		0%	
Jeff Co Board of Education	Government, public education	Headquarters	4,400	1%	8		0%	
City of Birmingham	Government, city administration	Headquarters	4,200	1%	9		0%	
Mercedes Benz	Manufacturing, vehicle assembly plant	Regional	3,600	1%	10	3,500	1%	9
Alabama Power	Utility Services, electrical	Headquarters				3,982	1%	7
Blue Cross Blue Shield of AL						4,000	1%	6
Baptist Health System						3,200	1%	10

Source: Birmingham Business Alliance

** 2022 Information unavailable; 2020 information used.*

OPERATING INFORMATION

Schedule 24 - Operating Indicators by Function

Last Ten Fiscal Years - Fiscal Year Ending September 30th

Function	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sheriff										
General calls	-	-	-	81,591	88,473	87,986	89,310	85,362	87,496	95,383
Traffic calls	-	-	-	21,971	26,061	26,940	26,526	20,352	17,722	15,085
Transportation										
Street resurfacing miles	-	-	-	46	88	103	101	115	73	95
Bridges maintained	292	292	292	292	292	292	292	292	292	293
Total Road miles with an inspection rating of good or higher	-	-	-	-	-	-	-	-	1,125	1,383
Community Services										
Number of senior citizens' one-way passenger trips	-	-	-	35,612	35,424	35,587	34,210	21,916	22,045	29,507
# Accepted Appicants CDBG Housing Rehabilitation	30	30	20	20	20	20	20	20	20	20
# of Workforce participants adults (PROGRAM YEAR)	-	-	-	-	-	237	322	633	919	114
# of Workforce participants dislocated workers	-	-	-	-	-	39	33	39	77	5
Development Services										
Building permits issued	327	336	380	360	325	347	336	357	403	615
Building permits issued(plumbing; gas; electrical)	2,041	2,099	2,251	2,137	1,977	2,693	2,856	2,191	1,424	674
Utility Permits	247	345	309	499	599	465	406	447	377	434
Building structures inspected	5,309	5,101	4,795	5,033	3,645	4,299	5,719	6,441	4,937	5,528
Plan Review	28	19	30	41	36	29	32	61	26	43
Zoning hearings (subdivision; rezoning; adjustments)	117	112	127	114	133	137	147	221	172	217
Registrar of voters										
Voting precints	178	172	173	174	169	172	172	172	174	175
Active Voters		411,086 *		411,838 *		473,578 *		503,389		435,913
Sewer										
Residential Accounts Served	-	-	-	125,173	127,771	126,929	126,470	128,005	131,705 **	133,181
Non- Residential Accounts Served	-	-	-	15,847	13,861	13,083	14,654	14,223	11,953 **	12,214

- Represent data that is unavailable

** The odd election years only consist of Special Elections*

** In fiscal year 2021, the County migrated its legacy billing system from a mainframe to virtual environment, which resulted in an under-reporting of non-residential accounts served and a corresponding over-reporting of residential accounts served for Accounts Billed by Jefferson County. The County expects to launch a new billing system for Accounts Billed by Jefferson County in Spring 2023.

OPERATING INFORMATION

Schedule 25 - Number of County Employees by Function/Program

Last Ten Fiscal Years - Fiscal Year Ending September 30th

Function/Program	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
General Government										
Commission	21	21	20	22	20	20	20	20	20	20
County Manager	3	3	6	7	18	19	14	8	10	7
Probate Court	44	46	46	46	55	56	56	54	55	55
Family Court	80	82	83	83	83	84	86	80	80	80
State Courts	61	64	55	55	53	54	51	51	47	47
District Attorney	39	39	39	39	41	44	46	43	43	46
Law Library	3	3	3	3	3	4	4	4	4	4
Finance	33	35	32	35	37	40	52	52	54	53
Budget Management	7	9	9	9	9	5	5	0		
Human Resources	17	20	73	58	82	58	61	55	59	49
HR-Receiver	0		7	6	3	2	1	0		
Revenue	126	132	157	158	156	172	173	161	161	161
County Attorney	7	9	10	10	11	12	18	17	17	18
Board of Equalization	73	71	72	71	70	70	69	70	70	71
Tax Assessor	62	64	66	65	71	70	70	69	69	69
Tax Collector	28	32	36	36	42	44	50	43	42	42
Treasurer	8	8	8	8	8	8	8	8	8	8
Land Development	18	18	18	18	19 -	-	-			
Compliance										10
Information Technology	34	34	27	36	40	45	67	51	54	55
General Services	114	115	114	120	145	172	233	198	138	144
Board of Registrars	9	9	9	9	9	10	10	10	10	10
Inspection Services	17	18	18	18	20	-	-	-		
Storm Water Management	8	8	8	8						
Development Services					9	49	50	42	43	56
Non Dept/Barber Commission	1	1	1	1	1	1	3	5	5	5
Delegation Office	1									
Non Departmental Retirement Credit	19									
Public Information							3 *	2 *	2	3
Community Development	34	35	35	35	36	36	43	38	41	40
Pension*	10	10	9	9	8	7	8	9		
Personnel Board*	64	66	66	76	76	76	70	70	64	66
Public Safety										
Sheriff	646	645	688	691	724	724	724	722	719	719
Youth Detention	53	53	53	53	54	54	65	52	51	65
Coroner	17	17	17	17	17	18	18	20	20	21
Security									59	54
Emergency Management*	10	10	9	7	7	6	7	7	7	7
Highways and Roads										
Roads and Transportation	195	196	196	207	261	300	326	340	338	326
Fleet Management*	26	26	26	26	27	30	42	33	33	33
Health and Welfare										
Office Senior Services	11	20	30	31	10	5	4	4	4	4
Cooper Green	648	256	241	173	219	228	227	219		
JRHC	73	-								
Environmental Services										
Environmental Services	437	441	441	455	478	509	526	554	544	554
	3,057	2,616	2,728	2,701	2,922	3,032	3,210	3,111	2,871	2,902

Source: JCC Budget Management Office

** includes Fiduciary Funds*

OPERATING INFORMATION
Schedule 26 - Capital Asset Statistics by Function/Program
Last Ten Fiscal Years - Fiscal Year Ending September 30th

	2013*	2014*	2015	2016	2017	2018	2019	2020	2021	2022
Function/Program										
General Government										
Commission										
County Manager										
Probate Court				10,998		13,498		687,975		
Family Court			105,410	28,898	29,309	75,624			236,004	
State Courts										
District Attorney	28,453					29,292		104,631		
Law Library		101,000								
Finance					120,874	182,425			13,043	9,232
Budget Management										
Human Resources	79,500						130,707			
HR-Receiver			847,339							
Revenue	1,900,461	1,300,000	132,438	165,408	49,030	91,574	24,174	86,263	5,732	61,568
County Attorney							54,270	31,831		
Board of Equalization	662,655	630,000	359,522	128,292	276,562	265,761	728,461	188,000	145,176	827,375
Tax Assessor	1,844,259	1,538,818		8,850		233,971		651,637	932,271	1,265,017
Tax Collector	300,000	300,000								
Treasurer										
Land Development			48,650		114,043					
Info Technology	566,720	5,860,000	3,190,662	1,500,907	1,238,565	401,743	160,344	2,252,794	1,221,603	1,298,024
General Services	1,125,438	4,600,000	3,963,177	2,865,787	4,746,695	10,293,245	19,613,421	8,132,740	7,357,616	6,522,025
Board of Registrars										
Inspection Services			105,888	51,744	83,190					
Development Service								519,971	263,755	446,415
Non Dept/Barber										
Public Information										
Community Devp										
Personnel Board	15,000	89,192	491,941		725,667		25,612			
Public Safety										
Sheriff	1,295,232	2,050,000	3,250,787	2,772,282	2,890,621	3,879,286	2,130,981	3,247,141	2,823,802	4,179,430
Youth Detention	20,000	21,000		42,351				73,917	60,000	
Coroner		25,000	27,916	96,596	99,849	69,932		39,704	149,197	265,987
Security										31,004
Emergency Mgmt										34,332
Highways and Roads										
Roads and Trans	6,000	4,899,000	11,796,434	10,782,828	11,299,645	7,606,996	19,245,798	23,268,582	17,464,644	25,732,858
Fleet Mgmt			531,841	585,789	290,818	441,382	169,602	578,987	494,747	502,222
Health and Welfare										
Office Senior Svs.										
Cooper Green			216,258	586,305	775,422	110,745	11,688			
Environmental Svs										
Environmental Svs	11,623,455	6,398,600	31,903,123	39,964,957	78,428,882	68,476,815	57,168,811	39,094,926	37,721,145	57,278,972
	19,467,173	27,812,610	56,971,386	59,591,992	101,169,172	92,172,289	99,463,869	78,959,099	68,888,735	98,454,461

Source: JCC Budget Management Office

** Adopted 13, and 14*

DEBT SERVICE SCHEDULES

Schedule 27 - Warrants Maturity Schedules

(In Thousands)

	Business-Type Activities[1]				Governmental Activities[2]			Total Debt Obligations				
Fiscal Year Ending 30-Sep	Principal	Interest	Future Interest Accretion	Total Debt Service	Principal	Interest	Total Debt Service	Principal	Interest	Total Principal and Interest	Future Interest Accretion	Total Debt Service
2023	$11,844	$70,001	$82,638	$164,483	$34,034	$20,782	$54,816	$45,878	$90,783	$136,661	$82,638	$219,299
2024	15,670	105,575	15,046	136,291	$35,954	$18,862	54,816	51,624	124,437	176,061	15,046	191,107
2025	917	141,421	16,146	158,484	$29,529	$17,069	46,598	30,446	158,490	188,936	16,146	205,082
2026	4,923	141,392	17,061	163,376	$31,000	$15,597	46,597	35,923	156,989	192,912	17,061	209,973
2027	8,587	141,363	17,743	167,693	$18,456	$14,052	32,508	27,043	155,415	182,458	17,743	200,201
2028	11,924	141,334	18,162	171,420	$19,373	$13,135	32,508	31,297	154,469	185,766	18,162	203,928
2029	14,490	141,302	18,163	173,955	$20,335	$12,172	32,507	34,825	153,474	188,299	18,163	206,462
2030	16,769	141,270	17,733	175,772	$21,344	$11,160	32,504	38,113	152,430	190,543	17,733	208,276
2031	18,691	141,237	16,810	176,738	$22,353	$10,155	32,508	41,044	151,392	192,436	16,810	209,246
2032	20,356	141,204	15,341	176,901	$23,467	$9,043	32,510	43,823	150,247	194,070	15,341	209,411
2033	21,697	141,168	13,257	176,122	$24,628	$7,876	32,504	46,325	149,044	195,369	13,257	208,626
2034	22,586	141,135	10,510	174,231	$25,854	$6,651	32,505	48,440	147,786	196,226	10,510	206,736
2035	23,274	141,128	7,159	171,561	$27,141	$5,364	32,505	50,415	146,492	196,907	7,159	204,066
2036	24,015	141,128	3,013	168,156	$28,494	$4,015	32,509	52,509	145,143	197,652	3,013	200,665
2037	39,343	140,196	-	179,539	$29,668	$2,837	32,505	69,011	143,033	212,044	-	212,044
2038	72,367	136,470	-	208,837	$6,697	$1,652	8,349	79,064	138,122	217,186	-	217,186
2039	87,064	130,688	-	217,752	$6,968	$1,385	8,353	94,032	132,073	226,105	-	226,105
2040	94,626	124,429	-	219,055	$7,244	$1,108	8,352	101,870	125,537	227,407	-	227,407
2041	70,748	118,896	-	189,644	$7,532	$819	8,351	78,280	119,715	197,995	-	197,995
2042	76,033	114,202	-	190,235	$7,841	$512	8,353	83,874	114,714	198,588	-	198,588
2043	81,711	109,159	-	190,870	$805	$195	1,000	82,516	109,354	191,870	-	191,870
2044	66,639	104,348	-	170,987	$836	$164	1,000	67,475	104,512	171,987	-	171,987
2045	76,924	99,550	-	176,474	$868	$132	1,000	77,792	99,682	177,474	-	177,474
2046	85,669	93,575	-	179,244	$902	$98	1,000	86,571	93,673	180,244	-	180,244
2047	100,328	86,524	-	186,852	$936	$64	1,000	101,264	86,588	187,852	-	187,852
2048	114,767	78,664	-	193,431	$974	$29	1,003	115,741	78,693	194,434	-	194,434
2049	129,684	69,695	-	199,379	$0	$0	-	129,684	69,695	199,379	-	199,379
2050	142,861	59,072	-	201,933	$0	$0	-	142,861	59,072	201,933	-	201,933
2051	166,530	47,048	-	213,578	$0	$0	-	166,530	47,048	213,578	-	213,578
2052	194,545	34,621	-	229,166	$0	$0	-	194,545	34,621	229,166	-	229,166
2053	215,825	21,653	-	237,478	$0	$0	-	215,825	21,653	237,478	-	237,478
2054	238,970	7,463	-	246,433	$0	$0	-	238,970	7,463	246,433	-	246,433
Subtotal:	**2,270,377**	**3,446,911**	**268,782**	**5,986,070**	**433,233**	**174,928**	**608,161**	**2,703,610**	**3,621,839**	**6,325,449**	**268,782**	**6,594,231**
Unamortized Premium (Discount)	(27,860)	-	-	(27,860)	34,519	-	34,519	6,659	-	6,659	-	6,659
Total	**$ 2,242,517**	**$ 3,446,911**	**$ 268,782**	**$ 5,958,210**	**$ 467,752**	**$ 174,928**	**$ 642,680**	**$ 2,710,269**	**$ 3,621,839**	**$ 6,332,108**	**$ 268,782**	**$ 6,600,890**

Source: JCC Finance Department Data (FY22 Audited Financial Data)

[1] Business-Type Activities Warrants payable include obligations for warrants issued in the name of the Jefferson County Commission for the primary purpose of sewer capital projects and related improvements (Business-Type Activities – Sewer Revenue Warrants), and Limited Obligation Bonds Payable for the primary purpose of capital projects and related improvements (Hallmark District - Jefferson County Limited Funding). See Business-Type Activities in Note 7 for details on accretion.

[2] Governmental Activities Warrants payable include obligations for warrants issued in the name of the Jefferson County Commission for the primary purpose of general capital projects and related improvements (Governmental Activities – General Obligation Refunding Warrants), for the primary purpose of school capital projects and related improvements (Governmental Activities – Limited Obligation Refunding Warrants), and funding agreements for the primary purpose of economic development (Limited Funding Agreement BJCC).

DEBT SERVICE SCHEDULES

Schedule 28 - Senior Lien Sewer Revenue Warrants Series 2013-A through Series 2013-C

Business-Type Activities (In Thousands)

	Series 2013-A (Tax Exempt)[1]			Series 2013-B (Tax Exempt)[2]			Series 2013-C (Tax Exempt)[3]				TOTAL - Sewer Revenue Senior Warrants			
Fiscal Year Ending 30-Sept	Principal	Interest	Total Debt Service	Principal	Future Interest Accretion	Total Debt Service	Principal	Interest	Future Interest Accretion	Total Debt Service	Principal	Interest	Future Interest Accretion	Total Debt Service
2023	$ -	$21,071	$21,071	$ -	$6,122	$6,122	$ -	$ -	$18,195	$18,195	$ -	$21,071	$24,317	$45,388
2024	-	21,071	21,071	-	6,516	6,516	-	9,555	-	9,555	-	30,626	6,516	37,142
2025	-	21,071	21,071	-	6,936	6,936	-	19,109	-	19,109	-	40,180	6,936	47,116
2026	-	21,071	21,071	3,979	7,115	11,094	-	19,109	-	19,109	3,979	40,180	7,115	51,274
2027	-	21,071	21,071	7,615	7,003	14,618	-	19,109	-	19,109	7,615	40,180	7,003	54,798
2028	-	21,071	21,071	10,923	6,565	17,488	-	19,109	-	19,109	10,923	40,180	6,565	57,668
2029	-	21,071	21,071	8,268	6,257	14,525	-	19,109	-	19,109	8,268	40,180	6,257	54,705
2030	-	21,071	21,071	7,719	5,917	13,636	-	19,109	-	19,109	7,719	40,180	5,917	53,816
2031	-	21,071	21,071	7,188	5,541	12,729	-	19,109	-	19,109	7,188	40,180	5,541	52,909
2032	-	21,071	21,071	6,751	5,142	11,893	-	19,109	-	19,109	6,751	40,180	5,142	52,073
2033	-	21,071	21,071	6,264	4,702	10,966	-	19,109	-	19,109	6,264	40,180	4,702	51,146
2034	-	21,071	21,071	5,876	4,234	10,110	-	19,109	-	19,109	5,876	40,180	4,234	50,290
2035	-	21,071	21,071	10,903	2,913	13,816	-	19,109	-	19,109	10,903	40,180	2,913	53,996
2036	-	21,071	21,071	10,217	1,504	11,721	-	19,109	-	19,109	10,217	40,180	1,504	51,901
2037	-	21,071	21,071	9,570	-	9,570	-	19,109	-	19,109	9,570	40,180	-	49,750
2038	-	21,071	21,071	-	-	-	22,363	18,334	-	40,697	22,363	39,405	-	61,768
2039	-	21,071	21,071	-	-	-	23,812	16,735	-	40,547	23,812	37,806	-	61,618
2040	-	21,071	21,071	-	-	-	25,340	15,017	-	40,357	25,340	36,088	-	61,428
2041	-	21,071	21,071	-	-	-	27,008	13,174	-	40,182	27,008	34,245	-	61,253
2042	-	21,071	21,071	-	-	-	28,793	11,209	-	40,002	28,793	32,280	-	61,073
2043	-	21,071	21,071	-	-	-	30,691	9,114	-	39,805	30,691	30,185	-	60,876
2044	34,915	20,198	55,113	-	-	-	-	8,033	-	8,033	34,915	28,231	-	63,146
2045	36,660	18,409	55,069	-	-	-	-	8,033	-	8,033	36,660	26,442	-	63,102
2046	-	17,493	17,493	-	-	-	36,017	6,734	-	42,751	36,017	24,227	-	60,244
2047	29,300	16,723	46,023	-	-	-	11,033	5,037	-	16,070	40,333	21,760	-	62,093
2048	43,425	14,814	58,239	-	-	-	-	4,640	-	4,640	43,425	19,454	-	62,879
2049	45,705	12,475	58,180	-	-	-	-	4,640	-	4,640	45,705	17,115	-	62,820
2050	-	11,275	11,275	-	-	-	44,945	2,980	-	47,925	44,945	14,255	-	59,200
2051	32,285	10,387	42,672			-	17,885	660	-	18,545	50,170	11,047	-	61,217
2052	54,520	8,000	62,520	-	-	-	-	-	-	-	54,520	8,000	-	62,520
2053	57,515	4,919	62,434	-	-	-	-	-	-	-	57,515	4,919	-	62,434
2054	60,680	1,669	62,349	-	-	-	-	-	-	-	60,680	1,669	-	62,349
Subtotal	**395,005**	**578,853**	**973,858**	**95,273**	**76,467**	**171,740**	**267,887**	**382,312**	**18,195**	**668,394**	**758,165**	**961,165**	**94,662**	**1,813,992**
Unamortized Premium (Discount)	(6,163)		(6,163)	(858)		(858)	(2,341)			(2,341)	(9,362)	-	-	(9,362)
Total	**$ 388,842**	**$ 578,853**	**$ 967,695**	**$ 94,415**	**$ 76,467**	**$ 170,882**	**$ 265,546**	**$ 382,312**	**$ 18,195**	**$ 666,053**	**$ 748,803**	**$ 961,165**	**$ 94,662**	**$ 1,804,630**

Source: JCC Finance Department Data (FY22 Audited Financial Data)

[1] Senior Lien Sewer Revenue Current Interest Warrants, Series 2013-A, with interest paid semiannually at fixed rates ranging from 5.00% to 5.50% and principal payments due from October 1, 2044 to 2053.

[2] Senior Lien Sewer Revenue Capital Appreciation Warrants, Series 2013-B, with interest accreting & compounding semiannually at fixed rates of 5.625% to 6.625% to maturity, with accreted value (principal and interest) payments due from October 1, 2026 to 2036. Principal presented as original issue amount of $55,000 plus net accreted interest of $40,273.

[3] Senior Lien Sewer Revenue Convertible Capital Appreciation Warrants, Series 2013-C, with interest compounding semiannually at fixed rates of 6.50% to 6.90% to October 1, 2023, and thereafter interest paid semiannually with accreted value payments (principal and interest) due from October 1, 2038 to 2050. Principal presented as original issue amount of $149,998 plus net accreted interest of $117,888.

DEBT SERVICE SCHEDULES

Schedule 29 - Subordinate Lien Sewer Revenue Warrants Series 2013-D through Series 2013-F

Business-Type Activities (In Thousands)

	Series 2013-D (Tax Exempt)[1]			Series 2013-E (Tax Exempt)[2]			Series 2013-F (Tax Exempt)[3]				TOTAL - Sewer Revenue Senior Warrants			
Fiscal Year Ending 30-Sept	Principal	Interest	Total Debt Service	Principal	Future Interest Accretion	Total Debt Service	Principal	Interest	Future Interest Accretion	Total Debt Service	Principal	Interest	Future Interest Accretion	Total Debt Service
2023	$ 10,980	$ 48,583	$ 59,563	$ 0	$ 7,899	$ 7,899	$ 0	$ 0	$ 50,422	$ 50,422	$ 10,980	$ 48,583	$ 58,321	$ 117,884
2024	14,780	47,939	62,719	-	8,530	8,530	-	26,689	-	26,689	14,780	74,628	8,530	97,938
2025	-	47,570	47,570	-	9,210	9,210	-	53,378	-	53,378	-	100,948	9,210	110,158
2026	-	47,570	47,570	-	9,946	9,946	-	53,378	-	53,378	-	100,948	9,946	110,894
2027	-	47,570	47,570	-	10,740	10,740	-	53,378	-	53,378	-	100,948	10,740	111,688
2028	-	47,570	47,570	-	11,597	11,597	-	53,378	-	53,378	-	100,948	11,597	112,545
2029	-	47,570	47,570	5,191	11,906	17,097	-	53,378	-	53,378	5,191	100,948	11,906	118,045
2030	-	47,570	47,570	7,988	11,816	19,804	-	53,378	-	53,378	7,988	100,948	11,816	120,752
2031	-	47,570	47,570	10,409	11,269	21,678	-	53,378	-	53,378	10,409	100,948	11,269	122,626
2032	-	47,570	47,570	12,478	10,199	22,677	-	53,378	-	53,378	12,478	100,948	10,199	123,625
2033	-	47,570	47,570	14,272	8,555	22,827	-	53,378	-	53,378	14,272	100,948	8,555	123,775
2034	-	47,570	47,570	15,820	6,276	22,096	-	53,378	-	53,378	15,820	100,948	6,276	123,044
2035	-	47,570	47,570	12,371	4,246	16,617	-	53,378	-	53,378	12,371	100,948	4,246	117,565
2036	-	47,570	47,570	13,798	1,509	15,307	-	53,378	-	53,378	13,798	100,948	1,509	116,255
2037	-	47,570	47,570	6,669		6,669	23,104	52,446	-	75,550	29,773	100,016	-	129,789
2038	-	47,570	47,570	-	-	-	50,004	49,495	-	99,499	50,004	97,065	-	147,069
2039	37,500	46,445	83,945	-	-	-	25,752	46,437	-	72,189	63,252	92,882	-	156,134
2040	40,505	44,105	84,610	-	-	-	28,781	44,236	-	73,017	69,286	88,341	-	157,627
2041	43,740	41,577	85,317	-	-	-	-	43,074	-	43,074	43,740	84,651	-	128,391
2042	47,240	38,848	86,088	-	-	-	-	43,074	-	43,074	47,240	81,922	-	129,162
2043	51,020	35,900	86,920	-	-	-	-	43,074	-	43,074	51,020	78,974	-	129,994
2044	-	34,370	34,370	-	-	-	31,724	41,747	-	73,471	31,724	76,117	-	107,841
2045	-	34,370	34,370	-	-	-	40,264	38,738	-	79,002	40,264	73,108	-	113,372
2046	-	34,370	34,370	-	-	-	49,652	34,978	-	84,630	49,652	69,348	-	119,000
2047	-	34,370	34,370	-	-	-	59,995	30,394	-	90,389	59,995	64,764	-	124,759
2048	-	34,370	34,370	-	-	-	71,342	24,840	-	96,182	71,342	59,210	-	130,552
2049	-	34,370	34,370	-	-	-	83,979	18,210	-	102,189	83,979	52,580	-	136,559
2050	-	34,370	34,370	-	-	-	97,916	10,447	-	108,363	97,916	44,817	-	142,733
2051	42,940	32,867	75,807	-	-	-	73,420	3,134	-	76,554	116,360	36,001	-	152,361
2052	140,025	26,621	166,646	-	-	-	-	-	-	-	140,025	26,621	-	166,646
2053	158,310	16,734	175,044	-	-	-	-	-	-	-	158,310	16,734	-	175,044
2054	178,290	5,794	184,084	-	-	-	-	-	-	-	178,290	5,794	-	184,084
Subtotal	**765,330**	**1,291,983**	**2,057,313**	**98,996**	**123,698**	**222,694**	**635,933**	**1,191,549**	**50,422**	**1,877,904**	**1,500,259**	**2,483,532**	**174,120**	**4,157,911**
Unamortized Premium (Discount)	(12,653)		(12,653)	(784)		(784)	(5,060.20)			(5,060)	(18,498)	-	-	(18,498)
Total	**$ 752,677**	**$ 1,291,983**	**$ 2,044,660**	**$ 98,212**	**$ 123,698**	**$ 221,910**	**$ 630,873**	**$ 1,191,549**	**$ 50,422**	**$ 1,872,844**	**$ 1,481,761**	**$ 2,483,532**	**$ 174,120**	**$ 4,139,413**

Source: JCC Finance Department Data (FY22 Audited Financial Data)

[1] Subordinate Lien Sewer Revenue Current Interest Warrants, Series 2013-D, with interest paid semiannually at fixed rates ranging from 5.00% to 7.00% and principal payments due from October 1, 2017 to 2053.

[2] Subordinate Lien Sewer Revenue Capital Appreciation Warrants, Series 2013-E, with interest accreting and compounding semiannually at fixed rates of 7.50% to 8.00% to maturity, with accreted value (principal and interest) payments due from October 1, 2029 to 2036. Principal presented as original issue amount of $50,271 plus net accreted interest of $48,725.

[3] Subordinate Lien Sewer Revenue Convertible Capital Appreciation Warrants, Series 2013-F, with interest accreting and compounding semiannually at fixed rates of 7.50% to 7.90% to October 1, 2023, and thereafter interest paid semiannually with accreted value payments (principal and interest) due from October 1, 2037 to 2050. Principal presented as original issue amount of $324,297 plus net accreted interest of $311,636.

DEBT SERVICE SCHEDULES

Schedule 30 - Hallmark Cooperative District Capital Improvement Loan Series 2019

Business-Type Activities (In Thousands)

Fiscal Year Ending 30-Sep	Hallmark Cooperative District Capital Improvement Loan[1] Principal	Interest	Total Debt Service
2023	$ 864	$ 347	$ 1,211
2024	890	321	1,211
2025	917	293	1,210
2026	944	264	1,208
2027	972	235	1,207
2028	1,001	206	1,207
2029	1,031	174	1,205
2030	1,062	142	1,204
2031	1,094	109	1,203
2032	1,127	76	1,203
2033	1,161	40	1,201
2034	890	7	897
	$ 11,953	**$ 2,214**	**$ 14,167**

Source: JCC Finance Department Data (FY22 Audited Financial Data)

[1] *Limited Obligation Funding Agreement with interest paid quarterly at fixed rates ranging from 3.00% to 3.80% and principal payments due from July 1, 2021 through April 1, 2034.*

DEBT SERVICE SCHEDULES

Schedule 31 - Series 2018-A General Obligation Refunding Warrants

Governmental Activities (In Thousands)

Fiscal Year Ending 30-Sep	Series 2018-A General Obligation Refunding (Tax Exempt)[1] Principal	Interest	Total Debt Service
2023	$ 19,050	$ 3,263	$ 22,313
2024	20,000	2,310	22,310
2025	12,780	1,310	14,090
2026	13,420	671	14,091
Subtotal	**65,250**	**7,554**	**72,804**
Unamortized Premium (Discount)	2,689		2,689
Total	**$ 67,939**	**$ 7,554**	**$ 75,493**

Source: JCC Finance Department Data (FY22 Audited Financial Data)

[1]General Obligation Refunding Warrants, Series 2018-A, with interest paid semiannually at fixed rates ranging from 4.00% to 5.00% and annual principal payments through 2026. The Commission issued Series 2018-A under the Trust Indenture dated May 1, 2018 (2018 Trust Indenture), between Jefferson County, Alabama, and Wilmington Trust National Association, as Trustee, for the purpose of refunding the General Obligation Warrants, Series 2003-A and 2004-A, and the Lease Revenue Warrants, Series 2006. These refunded warrants were defeased on May 31, 2018, and fully redeemed pursuant to their terms on July 2, 2018. Debt Service Requirements and Coverage is reflected on page 3 of the Official Statement dated September 17, 2018.

DEBT SERVICE SCHEDULES

Schedule 32 - Series 2017 Limited Obligation Refunding Warrants

Governmental Activities (In Thousands)

	Series 2017 Limited Obligation Refunding (Tax Exempt)[1]		
Fiscal Year Ending 30-Sep	**Principal**	**Interest**	**Total Debt Service**
2023	$ 12,785	$ 13,615	$ 26,400
2024	13,425	12,975	26,400
2025	14,100	12,304	26,404
2026	14,800	11,599	26,399
2027	15,545	10,859	26,404
2028	16,320	10,082	26,402
2029	17,135	9,266	26,401
2030	17,990	8,409	26,399
2031	18,835	7,566	26,401
2032	19,780	6,624	26,404
2033	20,765	5,635	26,400
2034	21,805	4,597	26,402
2035	22,895	3,506	26,401
2036	24,040	2,362	26,402
2037	25,000	1,400	26,400
2038	1,845	400	2,245
2039	1,920	326	2,246
2040	2,000	249	2,249
2041	2,075	169	2,244
2042	2,160	86	2,246
Subtotal	**285,220**	**122,029**	**407,249**
Unamortized Premium (Discount)	27,450		27,450
Total	**$ 312,670**	**$ 122,029**	**$ 434,699**

Source: JCC Finance Department Data (FY22 Audited Financial Data)

[1]Limited Obligation Refunding Warrants, Series 2017, with interest paid semiannually at fixed rates ranging from 3.00% to 5.00% and annual principal payments through 2037. The Commission issued refunding warrants under the Trust Indenture dated July 1, 2017 (2017 Trust Indenture), between Jefferson County, Alabama and Regions Bank, as Trustee, for the purpose of refunding the outstanding Limited Obligation School Warrants, Series 2004-A and Series 2005-A. The Limited Obligation School Warrants, Series 2005-B, were fully redeemed pursuant to their terms on March 1, 2017. The warrants issued under the 2017 Trust Indenture are not general obligations of the Commission, but represent limited obligations of the Commission, payable solely out of the Trust Estate established under the 2017 Trust Indenture, which includes a pledge of the gross proceeds of a new one cent Special Revenue Sales and Use Tax. Payment of the principal and interest on the warrants when due us secured on an equal and proportionate basis by the Trust Estate. Debt Service Requirements and Coverage are reflected on page 16 of the Official Statement dated July 14, 2017.

DEBT SERVICE SCHEDULES

Schedule 33- Alabama Transportation Infrastructure Bank Limited Obligation Revenue Bonds (Jefferson County Project) Series 2022-B

Governmental Activities (In Thousands)

	Series 2022B ATIB Limited Obligation Revenue Bonds[1]		
Fiscal Year Ending 30-Sep	**Principal**	**Interest**	**Total Debt Service**
2023	$ 1,820	$ 3,283	$ 5,103
2024	2,135	2,971	5,106
2025	2,240	2,864	5,104
2026	2,355	2,752	5,107
2027	2,470	2,634	5,104
2028	2,595	2,511	5,106
2029	2,725	2,381	5,106
2030	2,860	2,245	5,105
2031	3,005	2,102	5,107
2032	3,155	1,951	5,106
2033	3,310	1,794	5,104
2034	3,475	1,628	5,103
2035	3,650	1,454	5,104
2036	3,835	1,272	5,107
2037	4,025	1,080	5,105
2038	4,185	919	5,104
2039	4,355	752	5,107
2040	4,525	578	5,103
2041	4,710	397	5,107
2042	4,905	202	5,107
Subtotal	**66,335**	**35,770**	**102,105**
Unamortized Premium (Discount)	4,380		4,380
Total	**$ 70,715**	**$ 35,770**	**$ 106,485**

Source: JCC Finance Department Data (FY22 Audited Financial Data)

[1]Alabama Transportation Infrastructure Bank Limited Obligation Revenue Bonds (Jefferson County Project) Series 2022-B, with interest paid annually at fixed rates ranging from 4.125% to 5.00% and annual principal payments through 2042. The Bonds are being issued by Alabama Transportation Infrastructure Bank (the "Issuer"), a public corporation created under Section 23-7 et seq. of the Code of Alabama (1975), as amended. The Bonds are being issued under that certain Trust Indenture, dated July 1, 2022 (the "Indenture"), between the Issuer and Regions Bank, as trustee. Proceeds of the Bonds will be loaned by the Issuer to Jefferson County, Alabama (the "Loan Recipient"), pursuant to a Loan Agreement, dated July 1, 2022, between the Issuer and the Loan Recipient to pay the costs of certain road and bridge improvements to be located in Jefferson County, Alabama.

DEBT SERVICE SCHEDULES

Schedule 34 - Birmingham Jefferson Civic Center Authority Funding Agreement Series 2018E

(In Thousands)

Fiscal Year Ending 30-Sep	Series 2018E BJCCA Funding Agreement[1]		
	Principal	**Interest**	**Total Debt Service**
2023	$ 379	$ 621	$ 1,000
2024	394	606	1,000
2025	409	591	1,000
2026	425	575	1,000
2027	441	559	1,000
2028	458	542	1,000
2029	475	525	1,000
2030	494	506	1,000
2031	513	487	1,000
2032	532	468	1,000
2033	553	447	1,000
2034	574	426	1,000
2035	596	404	1,000
2036	619	381	1,000
2037	643	357	1,000
2038	667	333	1,000
2039	693	307	1,000
2040	719	281	1,000
2041	747	253	1,000
2042	776	224	1,000
2043	805	195	1,000
2044	836	164	1,000
2045	868	132	1,000
2046	902	98	1,000
2047	936	64	1,000
2048	974	29	1,003
	$ 16,428	**$ 9,573**	**$ 26,003**

Source: JCC Finance Department Data

[1] General obligation of the County with semi-annual payments applied to principal and interest. Interest payments have an effective rate of 3.76%, representing the combined effect of the Birmingham Jefferson County Civic Center's fixed interest rates of 3.35% to 5%.

APPENDIX I
2023 RATE RESOLUTION

APPROVED BY THE JEFFERSON COUNTY COMMISSION
10/12/2023
Item # 11330, Resolution: 2023-1004, Minute Book: 178, Page(s) 124-130

RESOLUTION OF THE JEFFERSON COUNTY COMMISSION

WHEREAS,

A. The Jefferson County Commission (the "County Commission") is the governing body of Jefferson County, Alabama (the "County");

WHEREAS,

B. On November 15, 1948, the Constitution of the State of Alabama was amended by the Jefferson County Sewer Amendment ("Amendment 73") pertaining to the operation, repair, improvement, and management of the Jefferson County sanitary sewer system (the "Sewer System");

WHEREAS,

C. Amendment 73 vests the County Commission, as "[t]he governing body of Jefferson county," with "full power and authority to manage, operate, control and administer" the Sewer System, "and, to that end, [to] make any reasonable and nondiscriminatory rules and regulations fixing rates and charges, providing for the payment, collection and enforcement thereof, and the protection of its property,";

WHEREAS,

D. On September 19, 1949, Act Number 619, 1949 Ala. Acts 949, *et seq.* ("Act 619"), a supplement to Amendment 73, became effective by its terms;

WHEREAS,

E. Act 619 restates and confirms that the County Commission has full "power to maintain and operate" the Sewer System and to levy and collect "sewer rentals or service charges" from "the persons and property whose [sewage] is disposed of or treated by the [Sewer System]," (Act 619 §§ 2, 4);

WHEREAS,

F. Act 619 provides that the County Commission "shall prescribe and from time to time when necessary revise a schedule of [sewer rates and charges] which shall . . . be such that the revenues derived therefrom will at all times be adequate but not in excess of amounts reasonably necessary [(i)] to pay all reasonable expenses of operation and maintenance of the [Sewer System], including reserves and insurance[; (ii)] to make any necessary or appropriate replacements, extensions or improvements [to the Sewer System; and (iii)] to pay punctually the principal of and interest on any bonds issued by the County pursuant to [Amendment 73]," (Act 619 § 6(a));

WHEREAS,

G. Act 619 directs that sewer rates and charges "shall, as nearly as may be practicable and equitable, be uniform throughout the county for the same type, class and amount of use or service of the [Sewer] [S]ystem, and may be based or computed either on the consumption of water on or in connection with the real property served, making due allowance for commercial use of water or for water not entering the [Sewer] [S]ystem, or on the number and kind of water outlets on or in connection with such real property, or on the number and kind of plumbing or sewerage *[sic]* fixtures or facilities on or in connection with such real property, or on the number of persons residing or working on or otherwise connected or identified with such real property, or on the capacity of the improvements on or connected with such real property, or on any other factors determining the type, class and amount of use or service of the [Sewer] [S]ystem, or on any combination of any such factors, and may give weight to the characteristics of the sewerage *[sic]* and other wastes and any other special matter affecting the cost of treatment and disposal thereof . . ," (Act 619 § 5);

WHEREAS,

H. On November 9, 2011, the County filed a petition for relief under chapter 9 of title 11 of the United States Code, thereby commencing Case No. 11-05736-TBB9 (the "Case") before the United States Bankruptcy Court for the Northern District of Alabama, Southern Division (the "Bankruptcy Court");

WHEREAS,

I. On March 4, 2012, the Bankruptcy Court entered an order for relief in the Case;

WHEREAS,

J. On November 6, 2012, after a series of public hearings, the County Commission enacted an interim sewer rate structure (the "Interim Rate Structure") as set forth in the following instruments adopted on November 6, 2012, and recorded in the Official Minutes and Records of the County Commission at Minute Book 164, pages 38-81:

i. the 2012 Rate Resolution (the "2012 Rate Resolution");

ii. the Jefferson County Sewer Use Administrative Ordinance No. 1808 (the "Administrative Ordinance"); and

iii. the Jefferson County Sewer Use Charge Ordinance No. 1809 (the "Original Charge Ordinance").

The Administrative Ordinance and the Original Charge Ordinance, as amended, (as well as the Sewer System generally) are administered on a day-to-day basis by the County's Environmental Services Department ("ESD");

WHEREAS,

K. The 2012 Rate Resolution provided for implementation of the Interim Rate Structure on March 1, 2013 (or as soon thereafter as could practicably be implemented by the County's billing partners), and the Interim Rate Structure was successfully implemented on March 1, 2013, and was duly administered thereafter in accordance with its terms;

WHEREAS,

L. On July 29, 2013, the County filed its amended chapter 9 plan (as further amended by its chapter 9 plan dated November 6, 2013, the "Chapter 9 Plan") and accompanying disclosure statement (the "Disclosure Statement") with the Bankruptcy Court in connection with the Case.

WHEREAS,

M. The Disclosure Statement included a schedule (the "Approved Rate Structure") enumerating the various categories of rates, charges, and fees (collectively, the "User Charges") that the County charged for sewer service and detailing how adjustments to the Sewer System rates and charges contemplated by the Chapter 9 Plan would take effect starting on November 1, 2013.

WHEREAS,

N. In addition to the changes in User Charges scheduled to take effect on November 1, 2013, the Approved Rate Structure contemplated that the County Commission would consider certain uniform percentage increases of overall User Charges (the "Required Percentage Increases") that would take effect only upon the occurrence of the date set forth in the Bankruptcy Court's order (the "Confirmation Order") confirming the County's Chapter 9 Plan (the "Chapter 9 Effective Date") by January 1, 2014;

WHEREAS,

O. On September 23, 2013, subsequent to a public hearing held on that day, the County Commission adopted a resolution recorded in the Official Minutes and Records of the County Commission at Minute Book 165, pages 330-444 (the "2013 Rate Resolution") enacting the rates and charges embodied in the Approved Rate Structure to take effect on November 1, 2013, amending and restating the Original Charge Ordinance to reflect the rates and charges embodied in the Approved Rate Structure to take effect on November 1, 2013 (the "Charge Ordinance") and conditionally enacting the schedule of rates and charges embodied in the Approved Rate Structure to take effect contingent upon the occurrence of the Chapter 9 Effective Date.

WHEREAS,

P. Under the Chapter 9 Plan, the County agreed, among other things and under certain conditions (including confirmation of the Chapter 9 Plan by the Bankruptcy Court and the occurrence of the Chapter 9 Effective Date) to issue its Sewer Revenue Warrants, Series 2013-A to Series 2013-F (the "Series 2013 Warrants").

WHEREAS,

Q. On November 6, 2013, the Bankruptcy Court issued its Confirmation Order whereby it, among other things, validated the issuance of the Series 2013 Warrants, validated the Approved Rate Structure and ordered the County to adopt the Approved Rate Structure on the Chapter 9 Effective Date.

WHEREAS,

R. On December 3, 2013, the Chapter 9 Effective Date took place and the Series 2013 Warrants were issued in the initial aggregate principal amount of $1,785,486,521.65.

WHEREAS,

S. Pursuant to and in amounts specified in the Approved Rate Structure, the Required Percentage Increases went into effect on November 1, 2014, November 1, 2015 and October 1 of 2016, 2017, 2018, 2019, 2020, 2021, 2022 and 2023.

WHEREAS,

T. Under the Approved Rate Structure, annual Required Percentage Increases are required to take effect on each October 1 and remain in effect through and including the following September 30 for each year of the remaining term of the Series 2013 Warrants.

WHEREAS,

U. The Approved Rate Structure is currently in effect and enumerates the User Charges that the County currently charges for sewer service, which User Charges took effect on October 1, 2023, and are embodied in the Charge Ordinance;

WHEREAS,

V. Effective October 1, 2023, the current User Charges are as follows:

i. Monthly base charge (5/8” meter): $25.01;

ii. Monthly base charge (3/4” meter): $27.50;

iii. Monthly base charge (1” meter): $34.97;

iv. Monthly base charge (1.5” meter): $44.98;

v. Monthly base charge (2” meter): $72.45;

vi. Monthly base charge (3” meter): $274.67;

vii. Monthly base charge (4” meter): $349.60;

viii. Monthly base charge (6” meter): $524.39;

ix. Monthly base charge (8” meter): $724.13;

x. Monthly base charge (10” meter): $923.87;

xi. Non-residential block volumetric charge: $13.12 per CCF;

xii. Residential block volumetric charge (first three CCF): $7.52 per CCF;

xiii. Residential block volumetric charge (next three CCF): $11.68 per CCF;

xiv. Residential block volumetric charge (additional CCF): $13.33 per CCF;

xv. Surcharge for BOD (300 mg/1 strength): $1.3794 per pound;

xvi. Surcharge for COD (750 mg/1 strength): $0.6897 per pound;

xvii. Surcharge for TSS (300 mg/1 strength): $0.4554 per pound;

xviii. Surcharge for FOG (50 mg/1 strength): $0.2855 per pound;

xix. Surcharge for TP (4 mg/1 strength): $5.4351 per pound;

xx. Septage and domestic wastewater charge: $99.90 per 1,000 gallons;

xxi. Grease Trap Waste charge: $124.88 per 1,000 gallons;

xxii. Private meter application processing fee: $20.00 per application;

xxiii. Sewer impact fees for new connections to the system: $374.56 per fixture;

xxiv. Connection fee for properties currently on septic: $166.49;

xxv. Impact fee refund charge (1-10 fixtures): $33.32;

xxvi. Impact fee refund charge (11-50 fixtures): $49.96;

xxvii. Impact fee refund charge (more than 50 fixtures): $83.26;

xxviii. Connection permit (pre-installation): $83.26;

xxix. Connection permit (post-installation): $915.58;

xxx. Repair permit (pre-installation): $83.26;

xxxi. Repair permit (post-installation): $915.58;

xxxii. Tap permit: $249.73;

xxxiii. Disconnection permit: $41.65;

xxxiv. Grease trap annual inspection fee (1-5 units): $499.43;

xxxv. Grease trap annual inspection fee (6-10 units): $832.32;

xxxvi. Grease trap annual inspection fee (additional units): $332.95 per 5 additional units;

xxxvii. Grease trap non-compliance fee: $665.88;

xxxviii. Grease trap re-inspection fee: $665.88;

xxxix. Grease trap exemption fee: $499.43;

xl. Lien recording fee: $26.66;

xli. Lien Satisfaction fee: $26.66;

xlii. Return check fee: $30.00; and

xliii. Pay off amount: $6.70 per sheet;

WHEREAS,

W. The County is currently evaluating the savings that could be achieved by issuing its Sewer Revenue Refunding Warrants (the "Refunding Sewer Warrants") for the purpose of refunding all of the outstanding 2013 Sewer Warrants at some future date, if any, to be determined (the "Refunding Effective Date");

WHEREAS,

X. The County acknowledges that the annual Required Percentage Increases under the Approved Rate Structure will cease to be required once the 2013 Sewer Warrants are no longer outstanding, and therefore wishes to conditionally adopt a revised Approved Rate Structure (the "Revised Rate Structure") attached hereto as Exhibit A and pursuant to which the annual Required Percentage Increases set forth in the Approved Rate Structure for fiscal years beginning October 1, 2018 and thereafter would continue to be required for the term of the Refunding Sewer Warrants;

WHEREAS,

Y. This resolution will have no effect and the provisions of this resolution and the conditional adoption of the Revised Rate Structure will not take effect (i) unless the Refunding Effective Date has occurred on or before September 1, 2024 and (ii) until October 1, 2024.

WHEREAS,

Z. The Revised Rate Structure provides that - if and only if the Refunding Effective Date has occurred by September 1, 2024 - for each fiscal year starting with the fiscal year beginning October 1, 2024, and continuing through the remaining term of the Refunding Sewer Warrants, the User Charges (with the exception of Return Check Fees which are already the maximum amount allowed by law) in effect as of September 30 of the immediately preceding fiscal year shall be increased by 3.49% for each remaining fiscal year that the Refunding Sewer Warrants remain outstanding;

WHEREAS,

AA. The Approved Rate Structure contemplates that each of the Required Percentage Increases shall be made by uniformly adjusting the fees and charges in each of the categories of User Charges (with the exception of Return Check Fees which are already the maximum amount allowed by law) by the requisite percentage (the "Uniform Method"), provided, however, that the County may elect to make the Required Percentage Increases non-uniformly by increasing, decreasing, or leaving unchanged certain of the fees and charges in each of the categories of User Charges (the "Non-Uniform Method") upon certification (pursuant to the terms of the Revised Rate Structure) that the revenues projected to be generated in the fiscal year for which the Required Percentage Increase is applicable will be greater than or equal to the revenues that would be projected to be generated in that same fiscal year if the Uniform Method had instead been used;

WHEREAS,

BB. To ensure that User Charges are neither too high nor too low to meet the Sewer System's needs, the Revised Rate Structure allows the County Commission to enact appropriate Adjusting Resolutions that: (i) modify the Required Percentage Increase for the next fiscal year; (ii) provide for the implementation of the Required Percentage Increase via the Non-Uniform Method; and (iii) modify the existing categories of User Charges;

WHEREAS,

CC. Refinancing the 2013 Sewer Warrants to lower the debt service obligations of the System is of substantial benefit to the County, its residents, ratepayers, taxpayers, creditors, and all interested parties;

THE JEFFERSON COUNTY COMMISSION FINDS AND DETERMINES THAT:

I. The County Commission can exercise its constitutional responsibility to make "reasonable and nondiscriminatory rules and regulations fixing rates and charges," (Amendment 73), for sewer service, and may appropriately do so, all of which the County Commission has carefully considered;

II. The process by which this resolution was adopted and the rates were enacted accords with Alabama law (Amendment 73 and Act 619) and constitutional guarantees of due process, including full and fair notice and opportunity to be heard;

III. Under the circumstances now presented and conditioned upon the occurrence of the Refunding Effective Date by September 1, 2024, for each fiscal year starting with the fiscal year beginning October 1, 2024 and continuing through the remaining term of the Refunding Sewer Warrants, modifying the User Charges in effect as of September 30 of the immediately preceding year by the annual Required Percentage Increase, *i.e.,* 3.49% per year, is reasonable and non-discriminatory, and is consistent with Amendment 73 and Act 619;

IV. Under the circumstances now presented and conditioned upon the occurrence of the Refunding Effective Date by September 1, 2024, the User Charges embodied in the Revised Rate Structure, and the revenues projected to be generated by such User Charges, are designed to meet the forecasted cost of operating the Sewer System in compliance with applicable law and in service to the community, and if such User Charges produce more revenue in a given year than is required to pay the costs of operating the Sewer System in compliance with applicable law, the County Commission may adopt Adjusting Resolutions that decrease rates or reduce or defer future rate increases;

NOW, THEREFORE, BE IT RESOLVED BY THE JEFFERSON COUNTY COMMISSION, THAT:

1. If and only if the Refunding Effective Date has occurred by September 1, 2024, for each fiscal year starting with the fiscal year beginning October 1, 2024, and continuing through the remaining term of the Refunding Sewer Warrants, the User Charges (with the exception of Return Check Fees which are already the maximum amount allowed by law) in effect as of September 30 of the immediately preceding fiscal year shall be increased by 3.49% for each remaining fiscal year that the Refunding Sewer Warrants remain outstanding, without any further action by the County Commission;

2. If and only if the Refunding Effective Date has occurred by September 1, 2024, and absent a duly enacted Adjusting Resolution (consistent with the terms of the Revised Rate Structure) providing otherwise, implementation of the percentage increases specified in Resolving ¶1 shall be made by uniformly adjusting the fees and charges in each of the categories of User Charges by the Uniform Method;

3. Notwithstanding anything to the contrary herein, if the Refunding Effective Date has not occurred by September 1, 2024, the provisions of this resolution shall be null, void, and of no effect whatsoever;

4. Notwithstanding anything to the contrary herein, the provisions of this resolution and the adoption of the Revised Rate Structure shall not take effect until October 1, 2024;

5. The Jefferson County Sewer Use Administrative Ordinance (No. 1808) enacted November 6, 2012 and the Amended and Restated Jefferson County Sewer Use Charge Ordinance (No. 1809), originally enacted November 6, 2012 and amended on September 23, 2013, are hereby confirmed and shall remain in effect; and

DONE and ORDERED this 12th day of October, 2023.

[INSERT REVISED RATE STRUCTURE]

Exhibit A

Revised Rate Structure

Rates and charges for sewer service are embodied in the *Jefferson County Sewer Use Charge Ordinance*, adopted November 6, 2012 (as amended from time to time, the "Charge Ordinance"), the current version of which is appended to and incorporated into this Revised Rate Structure. The Charge Ordinance sets out pertinent defined terms and describes in detail the policies and procedures by which bills are calculated. This Revised Rate Structure details how further changes in rates and charges will be implemented.

User Charges

Under the Charge Ordinance, each user pays: (i) a monthly base charge that varies depending on meter size; and (ii) volumetric charges (measured on a per-CCF basis) that vary depending on whether the user is classified as residential or non-residential, and (for residential users) that vary based on the level of the user's consumption. In addition, the Charge Ordinance specifies certain industrial waste surcharges and the fees for discharging hauled wastewater (septage and domestic wastewater, as well as grease trap waste) into the system. Finally, the Charge Ordinance sets out certain miscellaneous fees and charges, including fees for inspections, permits, returned checks, and the like. These fees and charges are collectively referred to as the "User Charges," and they are set out immediately below.

Effective October 1, 2023, the User Charges are as follows:

Category	Amount
Monthly Base Charge (5/8" Meter)	$25.01
Monthly Base Charge (3/4" Meter)	$27.50
Monthly Base Charge (1" Meter)	$34.97
Monthly Base Charge (1.5" Meter)	$44.98
Monthly Base Charge (2" Meter)	$72.45
Monthly Base Charge (3" Meter)	$274.67
Monthly Base Charge (4" Meter)	$349.60
Monthly Base Charge (6" Meter)	$524.39
Monthly Base Charge (8" Meter)	$724.13
Monthly Base Charge (10" Meter)	$923.87
Non-Residential Block Volumetric Charge	$13.12 per CCF

Category	Amount
Residential Block Volumetric Charge (first three CCF)	$7.52 per CCF
Residential Block Volumetric Charge (next three CCF)	$11.68 per CCF
Residential Block Volumetric Charge (additional CCF)	$13.33 per CCF
Surcharge for BOD (300 mg/l strength)	$1.3794 per pound
Surcharge for COD (750 mg/l strength)	$0.6897 per pound
Surcharge for TSS (300 mg/l strength)	$0.4554 per pound
Surcharge for FOG (50 mg/l strength)	$0.2855 per pound
Surcharge for TP (4 mg/l strength)	$5.4351 per pound
Septage and Domestic Wastewater	$99.90 per 1,000 gallons
Grease Trap Waste	$124.88 per 1,000 gallons
Private Meter Application Processing Fee	$20.00 per application
Sewer Impact Fees for New Connections to the System	$374.56 per fixture
Connection Fee for Properties Currently on Septic	$166.49
Impact Fee Refund Charge (1 – 10 Fixtures)	$33.32
Impact Fee Refund Charge (11 – 50 Fixtures)	$49.96
Impact Fee Refund Charge (More than 50 Fixtures)	$83.26
Connection Permit (Pre-Installation)	$83.26
Connection Permit (Post-Installation)	$915.58
Repair Permit (Pre-Installation)	$83.26
Repair Permit (Post-Installation)	$915.58
Tap Permit	$249.73
Disconnection Permit	$41.65

Category	Amount
Grease Trap Annual Inspection Fee (1 – 5 Units)	$499.43
Grease Trap Annual Inspection Fee (6 – 10 Units)	$832.32
Grease Trap Annual Inspection Fee (Additional Units)	$332.95 per 5 additional units
Grease Trap Non-Compliance Fee	$665.88
Grease Trap Re-Inspection Fee	$665.88
Grease Trap Exemption Fee	$499.43
Lien Recording Fee	$26.66
Lien Satisfaction Fee	$26.66
Return Check Fee	$30.00
Pay Off Amount	$6.70 per sheet

The County Commission may add, delete, or modify these categories of User Charges by adopting an Adjusting Resolution (defined below), provided that any modification of the categories of User Charges shall be either revenue-neutral or revenue-enhancing as shown by a Revenue Certification (defined below).

Method of Imposing Rate Modifications for User Charges

In connection with the issuance of the Refunding Sewer Warrants, the County shall increase the overall User Charges by certain required percentages (the "Required Percentage Increases," as more specifically defined below).

The County shall, unless it otherwise so elects as herein permitted, make the Required Percentage Increases by uniformly increasing the fees and charges in each of the categories of User Charges (with the exception of Return Check Fees which are already the maximum amount allowed by law) by the requisite percentage (rounded to the nearest cent except for those fees and charges expressed above in hundredths of a cent increments, which shall be rounded to the nearest hundredth of a cent). This method of making the Required Percentage Increases is the "Uniform Method."

Alternatively, the County may, but is not required to, elect to make the Required Percentage Increases non-uniformly (the "Non-Uniform Method") by increasing, decreasing, or leaving unchanged certain of the fees and charges in each of the categories of User Charges in such manner as the County shall determine in its reasonable discretion. If the County uses the Non-Uniform Method to make a Required Percentage Increase, then the County shall certify via resolution adopted by the County Commission that the revenues projected to be generated in the fiscal year for which the Required Percentage Increase is applicable will be greater than or equal to the revenues that would be projected to be generated in that same fiscal year if the

Uniform Method had instead been used to make the Required Percentage Rate Increase (a "Revenue Certification").

Required Percentage Increases

Subject to the entirety of this Revised Rate Structure, and only if the Refunding Effective Date has occurred by September 1, 2024, for each fiscal year starting with the fiscal year beginning October 1, 2024 and continuing through the remaining term of the Refunding Sewer Warrants, the User Charges (with the exception of Return Check Fees which are already the maximum amount allowed by law) in effect as of September 30 of the immediately preceding fiscal year shall be increased by 3.49% (the "Annual Required Percentage Increase"). The Annual Required Percentage Increase shall be given effect no later than October 1 of each fiscal year starting with the fiscal year beginning October 1, 2024. The User Charges thereby established will remain in effect through and including the following September 30.

The Annual Required Percentage Increase shall equal 3.49% for each remaining fiscal year that the Refunding Sewer Warrants remain outstanding, unless adjusted upward or downward by an Adjusting Resolution. The Annual Required Percentage Increase shall be made using the Uniform Method unless the County otherwise elects.

Adjusting Resolutions

The costs of operating the Sewer System and servicing the Refunding Sewer Warrants may permit or require User Charges to decrease or increase other than as specified in the 2023 Rate Resolution. Moreover, the County Commission may elect to implement some or all of the Required Percentage Increases using the Non-Uniform Method, which will require precise calculations that must be made closer in time to the scheduled adjustments of User Charges.

Accordingly, to preserve the County Commission's flexibility and to ensure that User Charges are neither too high nor too low, the County Commission may from time to time enact a resolution (an "Adjusting Resolution") that may do any or all of the following: (i) modify the Required Percentage Increase for the next fiscal year only; (ii) provide for the implementation of the Required Percentage Increase via the Non-Uniform Method for the next fiscal year only; and (iii) modify the existing categories of User Charges.

An Adjusting Resolution must: (i) be duly enacted in the fiscal year immediately preceding the first fiscal year for which the Adjusting Resolution will take effect; (ii) be enacted at least thirty (30) days prior to the start of the fiscal year for which the Adjusting Resolution will take effect; and (iii) fully comply with the rate and revenue covenants of the Refunding Sewer Warrant indenture.

Any Adjusting Resolution that provides for the implementation of a Required Percentage Increase by the Non-Uniform Method must: (i) set out which User Charges will be increased, which (if any) will be decreased, and which will be left unchanged; and (ii) be accompanied by a Revenue Certification.

Any Adjusting Resolution that adds, deletes, or modifies any categories of User Charges shall be accompanied by a Revenue Certification.

Notwithstanding anything to the contrary in this Revised Rate Structure, the County Commission may increase User Charges at any time.

[Insert Charge Ordinance as Appendix]

JEFFERSON COUNTY
SEWER USE CHARGE ORDINANCE
ADOPTED NOVEMBER 6, 2012
AMENDED AND RESTATED BY RESOLUTION DATED SEPTEMBER 23, 2013
EFFECTIVE NOVEMBER 1, 2013

This document is provided as a convenience to the public. The official ordinance and amendments thereto are contained in the office of the Minute Clerk of Jefferson County in Minute Book 164, pages 38 to 81. In the event of a discrepancy between any words or figures contained in this document and those contained in the official minutes of the Jefferson County Commission, the words and figures reflected in the official minutes shall govern.

JEFFERSON COUNTY
SEWER USE CHARGE ORDINANCE

Table of Contents

ARTICLE I. GENERAL PROVISIONS

A. Purpose and Policy

This ordinance establishes sewer charges for those whose sewerage is disposed of or treated by the wastewater collection and treatment system for Jefferson County, Alabama. This ordinance contains the Commission's reasonable and nondiscriminatory rules and regulations fixing rates and charges for sewer service, providing for the payment, collection, and enforcement thereof, and the protection of its property. These rules and regulations accomplish the equitable distribution of costs of the System.

This ordinance shall apply to all System Users in Jefferson County and to persons outside the County who are, by contract or agreement with the County, Users of the System. Except as otherwise provided herein, the Environmental Services Department shall administer, interpret, implement, and enforce the provisions of this ordinance. Where not specifically provided herein, the provisions of this ordinance shall be enforced and interpreted consistent with the "Jefferson County Sewer Use Administrative Ordinance."

B. Definitions

Unless the context specifically indicates otherwise, the meaning of terms used in this Ordinance shall be as follows:

1. "ADEM" shall mean the Alabama Department of Environmental Management or its duly authorized deputy, agent, or representative.

2. "All contributors" denotes any Person or Owner contributing wastewater to the System.

3. "BOD_5" (denoting five day biochemical oxygen demand), shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five days at 20 degrees C, expressed in milligrams per liter by weight. BOD shall be determined by standard methods as hereinafter defined.

4. "Billed Volumetric Units" shall mean the total metered volume of water after application of the Return Factor (see Article II.A)

5. "COD" shall mean chemical oxygen demand as determined by standard test methods.

6. "Condensate" shall mean liquid water resulting from the change of water vapor to liquid by the use of traditional air conditioner units or water heaters.

7. "Constituents" shall mean the combination of particles, chemicals or conditions existing in the wastewater.

8. "Consumption" shall mean the amount of water used, as measured by a water meter using a given unit of measure.

9. “Cooling Water” shall mean the water discharged from commercial air conditioning, cooling or refrigeration sources such as chillers and cooling towers.

10. “Cu. Ft.” denotes cubic feet.

11. “County” shall mean the Jefferson County Commission or its employees, duly authorized agents or representatives.

12. “Director” shall mean the Director of the Environmental Services Department or his designee.

13. “Environmental Services Department” or “ESD” shall mean the County department that has direct responsibility for the maintenance, management and operations of the Sewer System.

14. “FOG” shall mean fats, oils, and grease.

15. “Grease Control Device” shall mean any grease interceptor, grease trap or other approved mechanism, device or process, which attaches to, or is applied to, wastewater plumbing fixtures and lines, the purpose of which is to trap, collect or treat FOG prior to the balance of the liquid waste being discharged into the System.

16. “Grease Interceptor” shall mean an indoor device located in a food service facility or under a sink designed to collect, contain and remove food wastes and grease from the waste stream while allowing the balance of the liquid waste to discharge to the System by gravity.

17. “Grease Permit” or “Food Service Facility Grease Control Program Permit (FSFGCPP)” shall mean the license/authorization to discharge wastewater/liquid waste into the System granted to the Owner of a Food Service Facility or his/her authorized agent.

18. “Grease Trap” shall mean an outdoor device located underground and outside of a food service facility designed to collect, contain and remove food wastes and grease from the waste stream while allowing the balance of the liquid waste to discharge to the System by gravity.

19. “Health Department” shall mean the State Board of Health as constituted in accordance with Ala. Code § 22-2-1 *et seq.*, and includes the Committee of Public Health or State Health Officer when acting as the Board. The Health Department is not affiliated with the Jefferson County Commission.

20. “Impact Fee” shall mean the charge assessed to any sewer user prior to connection with, or access to, the System.

21. “Industrial User” shall mean any industry discharging liquid waste into the System either with or without pretreatment.

22. "Industrial Wastewater" shall mean any wastewater discharge with pollutant loadings in excess of the values described in Article IV.D.1.

23. "Industrial Wastewater Surcharge" shall mean the additional service charge assessed to Users whose wastewater characteristics exceed those of normal wastewater as defined in this ordinance.

24. "l" denotes liter.

25. "Lounge" shall mean any establishment which serves alcoholic beverages for on-premises consumption.

26. "Metered Water" shall mean the quantity of all sources of water, including water from wells, consumed by the sewer User (see Article II).

27. "mg/l" denotes milligrams per liter and shall mean ratio by weight.

28. "Non-Residential User" or "Other User" shall mean a premise or person who is not considered a Residential User and includes multi-family residential (with master meter(s), i.e. apartment complex, mobile home complex, etc.), commercial and industrial premises that discharge wastewater of Standard Strength into the System.

29. "Non-Resident User" shall mean a User whose property is located outside the corporate limits of Jefferson County.

30. "Person" or "Owner" shall mean any natural person, individual, firm, company, joint stock company, association, society, corporation, group, partnership, co-partnership, trust, estate, governmental or legal entity, or their assigned representatives, agents or assigns.

31. "Private Meter" shall mean a secondary water meter installed by the user downstream of the primary domestic water meter to measure non-sewered (outdoor) water use.

32. "Public Water System" shall mean a system for the provision to the public of piped water for human consumption.

33. "Residential User" or "Domestic User" shall mean a premise or person who discharges into the System wastewater that is of a volume and strength typical for residences, and who lives in a single-family structure, such as an individual house, duplex, townhouse, or condominium, or any other independently-owned single-family structure with an individual water meter for metering potable water. Multi-family residential units are not considered Residential Users.

34. "Restaurant" shall mean an establishment which serves food and/or beverages for consumption on the premises by use of reusable flatware/tableware, or glassware.

35. “Sanitary Sewer” shall mean a sewer which carries wastewater, and from which storm, surface, and ground waters are intended to be excluded.

36. “Sewer” or “main sewer” shall mean a pipe or conduit eight (8) inches in diameter or larger intended for carrying wastewater and generally located in public right-of-way or easement.

37. “Sewer Connection Permit” shall mean the license to proceed with work on a sewer service line, either as new construction or for the repair of an existing line.

38. “Sewer Service Line” shall mean any sanitary sewer line or conduit located outside the building structure which connects the building’s plumbing from the outside building wall to the main sewer. The sewer service line is usually four (4) inches in diameter, sometimes six (6) inches in diameter, and in special cases eight (8) inches in diameter or larger. The County does not maintain the sewer service line from the outside building wall to the main sewer.

39. “Sewer System” or “System” shall mean a publicly-owned treatment works (POTW) (as defined by Section 212 of the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, codified at 33 U.S.C. § 1292) owned by the County. The term shall mean any wastewater treatment facility, any sanitary sewer that conveys wastewater to such treatment facility and any wastewater pumping facility.

40. “Shall” is mandatory; “may” is permissive.

41. “Standard Methods” shall mean those sampling and analysis procedures established by and in accordance with EPA pursuant to Section 304(g) of the Act and contained in 40 CFR, Part 136, as amended, or the “Standard Methods for the Examination of Water and Sewer” as prepared, approved, and published jointly by the American Public Health Association, the American Water Works Association, and the Water Environment Federation. In cases where procedures vary, the EPA’s methodologies shall supersede.

42. “Standard Strength” shall describe wastewaters of any origin having a pollutant content less than the wastewater pollutant characteristics defined in Article IV, Section D.1 of this ordinance and having no prohibited qualities of sanitary sewer system admission.

43. “Suspended Solids” shall mean solids that either float on the surface, or are in suspension in water, wastewater, or liquid as defined by standard methods.

44. “Total Phosphorous” or “TP” shall mean total phosphorous as determined by standard methods.

45. “TSS” shall mean total suspended solids as determined by standard methods.

46. “Total Solids” shall mean total weight expressed in mg/l of all solids: dissolved, undissolved, organic, or inorganic.

47. “User” shall mean the occupant and/or the owner(s) of property from which wastewater is discharged into the System and any individual or entity, including municipalities, who contributes, causes, or permits the contribution of wastewater into the System.

48. “Wastewater” shall mean any solids, liquids, gas, or radiological substance originating from residences, business buildings, institutions, and industrial establishments together with any ground water, surface water, and storm water that may be present, whether treated or untreated, which is contributed into or permitted to enter the System.

Terms for which definitions are not specifically provided herein or in the “Jefferson County Sewer Use Administrative Ordinance” shall be interpreted as defined in the Glossary of the current edition of “Design of Municipal Wastewater Treatment Plants, Volume 3” (MOP 8) published by the WEF and the American Society of Civil Engineers.

ARTICLE II.BILLING UNITS

A. Volume Determination

The Environmental Services Department shall, at its own discretion, determine the factor and percentage of metered or non-metered water discharged to the System for the purposes of billing consistent with the following:

In making a quantity determination for System Users, the quantity of wastewater discharged by the User to the System shall be the same as the quantity of water delivered to the User by the Public Water System. In limited circumstances, should well water be used for the User's supply of water, the well shall be metered and quantities made known to the County on a monthly basis.

1. Residential Users

Billed Volumetric Units for Residential Users, except participants in the private meter program or as otherwise determined, shall be the metered quantity multiplied by a Return Factor as an allowance for metered water not returned to sewer. The Factor shall be as follows:

Residential Return Factor 0.85

Multi-family residences, apartments, condominiums, lofts and other residential users without unique, contiguous, deeded, unimproved land for that residential unit shall not be eligible for the Residential Return Factor.

2. Non-Residential Users

Billed Volumetric Units for Non-Residential Users and participants in the private meter program shall be the metered quantity multiplied by a Return Factor of 1.00, *provided, however*, a custom return factor may be established at the discretion of ESD for future, continuous use where sufficient evidence exists.

It shall be the obligation of Non-Residential Users who evaporate or otherwise dispose of water delivered by the Public Water System to alternate disposal systems to install such meters or other devices deemed necessary by the County to determine the estimated quantity discharged to the System. The County will consider establishing a constant ratio, factor, or percentage to be applied to the metered water quantity delivered by the Public Water System in order to determine the quantity of wastewater discharged by the User. It shall be the responsibility of the User to provide adequate written documentation which justifies the factor to the satisfaction of the County. The value of this factor will be reviewed for accuracy by ESD biannually, or whenever deemed necessary by the County in its sole discretion.

B. Impact Fee Units

1. Fixtures

Impact fee units shall be billed per defined unit times the rate provided in this ordinance as follows:

Fixture Type	No. Units
Bathtub	1
Shower	1
Water Closet/toilet	1
Lavatory	1
Sink	1
Urinal	1
Bidet	1
Sink	1
Dishwasher	1
Washing Machine	1
Garbage disposal units or pre-wiring for same	1
Stub outs for plumbing fixtures	1
Floor drain	0.25
Trench drain (per 18" of length)	0.25
Bradley wash sink (per 18" of sink perimeter)	1
Body wash/massage	1
Drinking fountain	0.25
Condensate drain	0.25
Sump pump or ejector	1
Dumpster Drain	1
Commercial kitchen sink	1
Commercial dishwasher	1
Commercial ice machine	1
Photographic developing machine	1
Autoclave	1
Restaurant/Bar Seat (booths are calculated per 18" length)	1
Other (any other connection to the System as determined by the County as a full or partial unit)	

2. Food Service Establishments

The impact fee for full service restaurants and lounges shall be assessed at a rate of one (1) plumbing fixture per seat. The impact fee for all other food-serving establishments shall be determined on the basis of projected volume of flow to the sewer as provided for in Article II.B.4.

3. Alternate Waste Disposal (Septic) System Conversion

A fixture credit shall be applied for each existing fixture up to a maximum of sixteen (16) fixtures (or equivalent fixtures) in the event of a conversion from an existing septic or alternate waste disposal system. If the conversion is performed without a permit then the fixture credits shall not apply.

4. Non-Residential

The impact fee for any connection to the System which will result in a non-domestic discharge of wastewater by virtue of the volume, rate of flow, or the level of pollutant concentrations will be determined by the County on a case-by-case basis. The County will base its determination upon all factors which may substantially affect System hydraulic and treatment capacity.

The determination shall be based on the annual volume contributed by a domestic household, which is defined as having twelve (12) plumbing fixtures, and the flow from which is equivalent to 125 hundred cubic feet per year. Therefore, an equivalent fixture, in terms of flow, shall be equal to 10.42 hundred cubic feet per year.

The impact connection fee for non-domestic users shall be as follows:

1) The impact fee shall be determined based on the applicant's estimates of flow at the time of application to secure an impact permit.
2) The County shall apply the applicant's estimates to the following formula to determine the number of equivalent plumbing fixtures and the impact fee to be charged as a result thereof.

$$\text{Number of Equivalent Plumbing Fixtures} = \frac{\text{annual volume of water to sewer (cu. ft.)}}{1{,}042}$$

$$\text{Non-Residential Impact Fee} = \text{Number of Equivalent Plumbing Fixtures} \times \text{the rate established by Article IV.E.1}$$

3) A determination of actual wastewater volume discharged to the System shall be made using actual metered water consumption during the first year of the applicant's use. If it is determined by actual measurement that the volume discharged to the System is substantially different from the estimates given by the applicant, an adjustment will be made either by refund or additional charge to the applicant. The adjustment shall be made on the highest six (6) month volume discharged to the System. Metering shall be installed at the User's expense if required by the County for determination of actual wastewater volume discharged.

ARTICLE III. ADJUSTMENTS AND CREDITS

A. Sewer User Adjustments

Users are eligible to receive a leak adjustment credit based on their volumetric (consumption) sewer charge within the prior twelve (12) month period. Any leak of domestic water that does not discharge to a sanitary drainage system at the premise may be eligible for credit. However, such leak shall be documented to have arisen from a defect in the permanent plumbing system and subsequently have been repaired. A "Jefferson County ESD Request for Leak Adjustment Form" must be completed in its entirety and returned to the Sewer Permitting and Inspections Office, located at 716 Richard Arrington Jr. Blvd. North, Suite A300, Birmingham, AL 35203, along with a dated and descriptive plumbing repair invoice, a work order from a Public Water System, or a receipt in cases where the Owner completes his own repairs.

The County does not provide "courtesy" adjustments. No adjustment will be given based solely on the fact that a User has an unusually high water and sewer bill, and water adjustments or credits given by a Public Water System shall not form the sole basis nor create an obligation to the County to grant a similar adjustment for sewer charges. Sewer charges may be adjusted only if the User supplies sufficient written documentation.

Swimming pools which have been verified on site, measured for volume, and are deemed to be a permanent structure by a Sewer Service Inspector, are eligible for a once-per-year adjustment. The User must be able to demonstrate that the water drained from the pool was not discharged to the System. The adjustment shall be allowed only in cases where there is a substantial pool filling. Adjustments shall not be made prior to the User being billed for the water volume.

B. Adjustment Limitations

Any request for an adjustment of sewer charges shall be limited to one (1) year from the billing date of the original charge, and shall be submitted to the Sewer Permitting and Inspection Office (716 Richard Arrington Jr. Blvd. North, Suite A300, Birmingham, AL).

C. Credit for Existing Fixtures

If an existing structure is to be demolished, altered, remodeled or expanded, an applicant will be allowed credit for the plumbing fixtures in the existing structure. Credit will be given only for those plumbing fixtures in the existing structure which are connected to the System and shall only be applied to a new or remodeled structure at the same location. To receive credit for existing fixtures, applicants must arrange an inspection by County personnel to verify the fixture count before removing the old fixtures. Credit will not be given unless the fixtures have been inspected by ESD prior to removal or evidence of a prior paid impact permit is presented. Except as provided herein, credit for existing connections and fixtures cannot be transferred to another location.

In circumstances such as natural disasters or other uncontrollable circumstances where credit for existing fixtures cannot be accurately determined, the County shall determine the credits available based on available information consistent with this Ordinance. The burden of proof for establishing any claimed credit as provided herein shall be on the applicant.

D. Exemptions

The governing bodies of all municipalities under the terms of their respective unification agreements shall be exempt from payment of all impact fees for facilities which will be used directly by those governing bodies for carrying out their governmental functions. The impact fee exemption does not apply to park boards, recreation boards, school systems, or any other boards or alliances which are autonomous, or are not a direct function of, or owned by, the municipal governing body. However, this fee exemption does not remove the requirement that any applicable permits must be obtained prior to securing a building permit.

E. Refund of Impact Fees

Upon proper application by the permittee, the County will refund Impact Fees for fixtures which have not been installed. If no building permit was issued, the permittee must return all copies of the original impact permit in order to receive a refund. If a building permit was issued, the permittee must return the applicant's copy of the impact permit along with the original issued receipt to the Sewer Permitting and Inspection Office within two (2) years of issuance. The administrative fee shall be deducted from the total amount of the refund.

F. Private Meters

A User of the System may elect to install a private meter on a water service line that is connected to fixtures, equipment, or systems that do not discharge wastewater to the System. Users with installed private meters shall not be eligible for the Residential Return Factor adjustment. Private meter requirements and credit procedures are as follows:

1) A private meter must be permanently installed on the water service line or water distribution system downstream of the primary domestic water service meter. Water metered by the private meter must not directly or indirectly enter the System. Portable meters that attach onto the end of a hose or faucet are not eligible.
2) The private meter shall be registered by an ESD Sewer Service Inspector. The initial meter reading shall start from the reading that is registered at the time of inspection. It is the responsibility of the User to inform the County of the presence of a private meter by calling 205-325-5801 to request a registration/inspection of the private meter. Retroactive usage credit prior to registration shall not be allowed.

3) The private meter owner or an authorized party must be present at the time the private meter is registered by the County and must acknowledge its limitations of use.
4) All private meter readings must be submitted to the Environmental Services Sewer Permitting and Inspection Office at 716 Richard Arrington Jr. Blvd. North, Suite A300, Birmingham, AL 35203.
5) Meter readings should be submitted every 6 months, but not more frequently than every 6 months. Credit shall not be granted for any use prior to the twelve-month period from the date of submission for credit.
6) Private meter forms must be filled out in their entirety in order to be processed.
7) A private meter processing fee as provided for in Article IV.B shall be charged for each private water meter credit administered.

Any active participant of the private meter program who wishes to terminate their current enrollment status must request such action in writing to ESD and shall not be allowed re-enrollment for a twelve month period from the date of request.

The County reserves the right to require, at any time, the private meter to be inspected or re-registered by a Sewer Service Inspector.

It shall be the responsibility of the User to determine whether a private meter is enrolled in the credit program.

ARTICLE IV.FEES, CHARGES, AND PENALTIES

A. Sewer Use Charges

All Users of the System, or their designated agents, shall pay a sewer use charge to the County. Sewer use charges shall include (1) fixed monthly charges and (2) volumetric charges in accordance with the following schedules. Sewer use charges for unmetered water will be determined by the County in its sole discretion.

1. Residential

A block volume charge shall be levied on Billed Volumetric Units in accordance with the below schedule. Whole units shall be used to determine under which Block the charge arises.

	Per 100 Cubic Feet		
	Block 1	Block 2	Block 3
Volume	0-3	4-6	7+
Rate per unit	$7.52	$11.68	$13.33

	Per 1000 Gallons		
	Block 1	Block 2	Block 3
Volume	0-2.243	2.244-4.487	4.488+
Rate per unit	$10.06	$15.62	$17.83

2. Non-residential

A block volume charge shall be levied on Billed Volumetric Units in accordance with the below schedule.

	Per 100 Cubic Feet
Volume	0+
Rate per unit	$13.12

	Per 1000 Gallons
Volume	0+
Rate per unit	$17.54

3. Monthly Base Charge

In addition to the volumetric charges in A.1 and A.2, a monthly base charge for each installed meter (except Private Meters) shall be levied as follows:

Meter Size (in. dia.)	Charge
5/8”	$25.01
3/4”	27.50
1”	34.97
1.5”	44.98
2”	72.45
3”	274.67
4”	349.60
6”	524.39
8”	724.13
10”	923.87

4. Billing Frequency

Bills are rendered monthly or quarterly at the discretion of the County.

B. Private Meter/Pool Processing Fee

A processing fee in the amount of $20.00 shall be imposed for the processing of each application for private meter or pool credit.

C. Non-Resident Users

All Non-Resident Users shall pay a sewer User charge to the County equal to the User charges described in Sections A.1 through A.3 of this Article multiplied by the following Non-Resident User Factor.

Non-Resident User Factor = 1.06

The monthly base charges set forth in Section A.3 of this Article shall also be multiplied by the Non-Resident User Factor. All other fees or charges described within this Ordinance shall be assessed to Non-Resident Users in accordance with the schedules set forth herein or as may be established by Jefferson County.

At the discretion of the County and at such times when County ad-valorem tax or any other System-related tax is modified or adopted, the Non-Resident User Factor may be changed or modified by the County.

D. Industrial Waste Surcharges

1. Industrial User Surcharges

An industrial waste surcharge shall be levied against any Industrial User of the System whose wastewater characteristics exceed the following standard strength:

Constituent	Strength	Rate per pound
BOD	300 mg/l	$1.3794
COD	750 mg/l	$0.6897
TSS	300 mg/l	$0.4554
FOG	50 mg/l	$0.2855
TP	4 mg/l	$5.4351

If an industrial wastewater discharge contains excessive loading for both BOD and COD, the imposed surcharge will be based on one of the two parameters as determined by the County in its sole discretion.

At the discretion of the County and at such times when data has been compiled and established, additional or modified industrial waste surcharge parameters, concentrations, or rates may be imposed.

Pounds shall be computed by multiplying the factor 0.00624 (the conversion factor used to determine the weight in pounds of one milligram per liter (mg/l) for a liquid volume in hundreds of cubic feet) times the volume of the wastewater (in hundreds of cubic feet) times the parts per million (ppm) of wastewater characteristics as described in the Table above.

2. Sampling and Analysis

Sampling and analysis charges shall be calculated and assessed as follows:

(1) Round trip mileage shall be charged per mile at the currently published Internal Revenue Service Standard Mileage Rate.
(2) Crew cost: $58.25 per hour (charged in ¼ hour segments at sampling site, each segment = $14.56).
(3) Laboratory analytical cost: Billed by wastewater characteristic, as defined in the laboratory fee schedule, which may be obtained from the Industrial Pretreatment Office at 205-238-3878 or 205-238-3866.
(4) Technical and administrative fees including data collection, calculations, entry, report dispersal and billing per sampling cycle: Flat rate of $83.26.

3. Miscellaneous Fees

Cost incurred by the County for sampling, analysis and monitoring of industrial wastewater not otherwise provided for in this Ordinance shall be charged to the monitored industry on an actual cost basis.

4. Hauled Wastewater

Charges for discharging all hauled wastewater into an approved System facility, as measured at the receiving facility, shall be as follows:

Waste type	Rate per 1000 gallons
Septage and domestic wastewater	$99.90
Grease trap waste	$124.88
Other	*

*Charges for other non-standard discharges shall be calculated by the County based on estimated increased operating costs if, at the County's discretion, the particular waste stream constituents are higher concentrations than typical domestic septage or grease trap waste. Leachate, unless otherwise determined, shall be considered septage.

E. Sewer Impact Fees

1. Fixture Rate

An impact fee shall be levied upon each new connection to the System regardless of county jurisdiction as follows:

Fixture	Impact Fee
Single fixture unit	$374.56
Equivalent fixture unit	$374.56
Stubouts for plumbing fixtures	*
Other fixtures	**

* Impact fee for stubouts will be the cumulative fee for the fixtures to be served by the stubout.

** Impact fee to be determined by the County on a case by case basis in accordance with Article II.B.4 and at a rate of $374.56 per plumbing fixture.

Failure to make payment for any plumbing fixture prior to installation shall result in a doubling of the payment if said payment is not submitted within thirty (30) days of notification. However, failure to mail any notice, or failure to receive any notice, shall in no way affect the obligation of the applicant to pay the fees and any penalty.

2. Alternate Waste Disposal System Conversion

Any home, mobile home or commercial building served by a septic tank, package plant, or other means of waste disposal which was constructed and approved for use subject to the standards of the Jefferson County Department of Health may connect to the System, provided there is no prohibition in the regulations of the County, State or Federal Government and upon payment of a one hundred dollar ($166.49) fee for such connection.

3. Impact Fees Refund

An administrative fee for refund of impact fees will be assessed as follows:

No. Fixtures	Fee
1 - 10	$33.32
11 - 50	$49.96
51	$83.26

F. Sewer Connection Fees

The sewer connection fees as listed include all required inspections and will be assessed for each single user connection in accordance with the following schedule:

Permit type	Prior to installation	After installation
Connection	$83.26	$915.58
Repair	$83.26	$915.58
Tap[1]	$249.73	
Disconnection	$41.65	

[1]County provides saddle, labor, and materials for tap to existing sewer mains.

If the County Sewer Service Inspector is required to visit the connection site for more than two (2) inspections due to faulty material, poor workmanship etc., the third inspection and each inspection thereafter shall be charged at $160.87 per inspection. After hour, weekend, and holiday inspections must be pre-approved by the ESD and shall be charged at a rate of $150.00 per hour, with a 2 hour minimum. The rate is "per inspector" as deemed necessary by the County.

G. Grease Trap Fees

Grease trap and interceptor fees shall be assessed in accordance with the following schedule:

Annual Inspection Fee

Number	Fee
1-5	$499.43
6-10	$832.32
11+	*

*Units in excess of 10 shall be assessed $832.32 plus $332.95 for each additional 5 units in excess of 10

Other Fees

Type	Fee
Non-compliance	$665.88
Re-inspection	$665.88
Exemption	$499.43

Installation, modifications, repairs or replacement of grease control devices shall be inspected by the ESD inspectors. Any work completed without prior notice shall be subject to a non-compliance fee.

H. Billing Fees

Billing fees shall be assessed in accordance with the following schedule:

Type	Fee
Lien Recording	$26.66
Lien Satisfaction	$26.66
Return Check	$30.00
Pay Off Amount (per sheet)	$6.70

ARTICLE V. GENERAL PROVISIONS

A. Validity

All resolutions, ordinances, parts of resolutions, or parts of ordinances in conflict herewith are hereby repealed.

B. Severability

The provisions of this Ordinance are severable. If any provision, section, paragraph, sentence or part thereof, or the application thereof to any individual or entity, shall be held unconstitutional or invalid, such decision shall not affect or impair the remainder of this Ordinance, it being the Commission's legislative intent to ordain and enact each provision, section, paragraph, sentence and part thereof separately and independently of each other.

C. Penalties

The County shall be allowed to recover reasonable attorney's fees, interest, penalties, collection fees, court costs, court reporter's fees and any other expenses of litigation or collections from any person or entity in violation or non-payment of the provisions of this this Ordinance.

ARTICLE VI.ORDINANCE IN FORCE

A. Date Effective

This ordinance shall be in full force and effect on the date of passage, with such rates and charges being assessed as soon as is practicable.

B. Date Adopted

Passed and adopted by the Jefferson County Commission on the 6th day of November, 2012. Amended and restated by resolution on the 23rd day of September, 2013.

by W.D. Carrington, President – Jefferson County Commission

Attest:

Diane Townes
Minute Clerk of the Jefferson County Commission
Approved as to correctness:

APPENDIX J
UNAUDITED FINANCIAL STATEMENTS FOR THE SYSTEM
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2023

[TO BE ATTACHED WHEN AVAILABLE]

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JEFFERSON COUNTY, ALABAMA • SEWER REVENUE WARRANTS, SERIES 2024

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