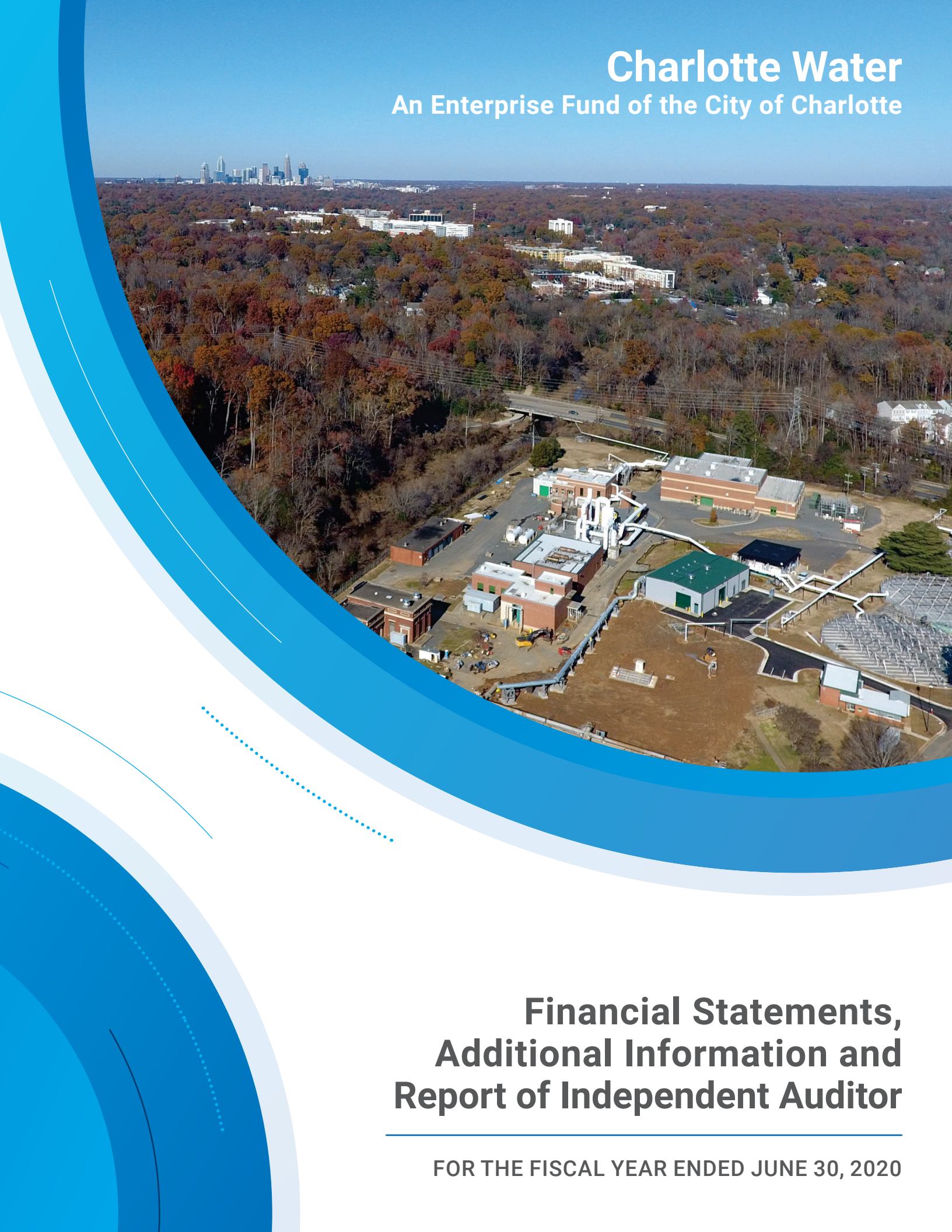


# Charlotte Water

An Enterprise Fund of the City of Charlotte



## Financial Statements, Additional Information and Report of Independent Auditor

---

FOR THE FISCAL YEAR ENDED JUNE 30, 2020



# TABLE OF CONTENTS

CHARLOTTE WATER



## FINANCIAL SECTION

Report of Independent Auditor .....	1
Management's Discussion and Analysis .....	5
Basic Financial Statements:	
Statement of Net Position .....	11
Statement of Revenues, Expenses and Changes in Net Position .....	13
Statement of Cash Flows .....	14
Notes to the Financial Statements .....	19
Required Supplementary Information:	
Local Government Employee's Retirement System	
Proportionate Share of Net Pension Liability (Asset) for the City of Charlotte .....	42
City of Charlotte's Contributions .....	43
Employee Benefit Trust Plan (EBTP)	
Schedule of Changes in Net OPEB Liability .....	44
Schedule of Changes of Total Liability as a Percentage of Covered Payroll .....	45
Schedule of City Contributions and Investment Returns .....	46
Individual Fund and Other Supplemental Information:	
Operating Fund	
Schedule of Revenues, Expenditures and Transfer – Budget and Actual (Non-GAAP) .....	50
Debt Service Fund	
Schedule of Revenues, Expenditures and Transfer – Budget and Actual (Non-GAAP) .....	51
Capital Projects Fund	
Schedule of Expenditures Compared with Authorizations .....	52
Schedule of Reconciliation of Budgetary (Non-GAAP Basis) to Full Accrual Basis .....	53

## STATISTICAL SECTION

Financial Trends	
Net Position .....	58
Operating Revenues by Source .....	59
Operating Revenues by Source .....	60
Operating Expenses .....	61
Nonoperating Revenues and Expenses .....	62
Revenue Capacity	
Water and Sewer Customers .....	63
Debt Capacity	
Revenue Bond Coverage .....	64
Demographic and Economic Information	
Demographic and Economic Statistics .....	65



# TABLE OF CONTENTS

CHARLOTTE WATER

Principal Employers .....	66
Operating Information	
Full-Time Equivalent Employees by Function/Program .....	67
Operating Indicators by Function/Program .....	68
Capital Asset Statistics by Function/Program .....	69



# FINANCIAL SECTION

CHARLOTTE WATER







## **Report of Independent Auditor**

To the Honorable Mayor and Members of City Council  
City of Charlotte, North Carolina

### **Report on the Financial Statements**

We have audited the accompanying statement of net position of Charlotte Water, an enterprise fund of the City of Charlotte, North Carolina (the “City”), as of June 30, 2020, and the statements of revenues, expenses, and changes in net position and cash flows for the year then ended, and the related notes to the financial statements, which collectively comprise Charlotte Water’s basic financial statements as listed in the table of contents.

### **Management’s Responsibility 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; this includes 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.

### **Auditor’s Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Water and Sewer’s preparation and fair presentation of the financial statements 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 Water and Sewer’s internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion the financial statements referred to above present fairly, in all material respects, the financial position of Charlotte Water as of June 30, 2020 and the changes in its financial position and cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

## OTHER MATTERS

### Emphasis of a Matter

As discussed in Note 1, the financial statements present only Charlotte Water and do not purport to, and do not, present fairly the financial position of the City as of June 30, 2020 and the changes in its financial position and cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and the Required Supplementary Information, as listed in the table of contents, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audit of the 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.

### Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements of Charlotte Water as a whole. The Statistical Section, as listed in the accompanying table of contents, is presented for the purpose of additional analysis and is not a required part of the financial statements. This information has not been subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we do not express an opinion or provide any assurance on it.



Charlotte, North Carolina  
May 28, 2021





## MANAGEMENT'S DISCUSSION AND ANALYSIS





## MANAGEMENT'S DISCUSSION AND ANALYSIS

Management's Discussion and Analysis (MD&A) serves as an introduction, overview, and analysis of the financial statements of Charlotte Water, an enterprise fund of the City of Charlotte. The information contained herein pertains to the financial performance of Charlotte Water for the Fiscal Year (FY) ended June 30, 2020. This MD&A should be read in conjunction with the Financial Statements and Notes that follow.

### FINANCIAL HIGHLIGHTS

- Total net position of the Charlotte Water Enterprise Fund on June 30, 2020 was \$2,504.5 million; 13 percent or \$319.7 million of that total was unrestricted. The net position increased by \$144.5 million (6 percent) from the net position on June 30, 2019 and is available to finance day-to-day operations without constraints established by debt covenants or other legal requirements.
- Operating revenues were \$438.1 million in 2020, an increase of \$13.8 million (3 percent) compared to 2019, which is primarily due to a rate increase of 3.4 percent.
- Total operating expenses increased by \$31.2 million to \$311.5 million in FY 2020. This is primarily due to increased administrative costs pertaining to cost allocation and direct salary costs to support the General Fund and depreciation expense.
- Non-operating expenses decreased by \$2.7 million to \$44.9 million.
- Capital contributions decreased by \$8.8 million to \$57.2 million in FY 2020. These contributions consist of donated sewer systems constructed by local developers. Due to the COVID-19 pandemic, projects were delayed or halted.

### OVERVIEW OF THE FINANCIAL STATEMENTS

The Financial Section of this report consists of two parts: Management's Discussion & Analysis (this section) and the Basic Financial Statements. The Basic Financial Statement section includes Notes to the Financial Statements that provide explanations and detailed data on pages 11 through 38.

The Charlotte Water Enterprise Fund is an enterprise fund of the City of Charlotte. This fund is used to account for Charlotte Water's ongoing operations. The City uses the accrual basis of accounting, so revenues are recognized when earned and expenses are recognized when incurred.

The following is a summary of Charlotte Water's Net Position as of June 30:

#### Net Position

(In thousands)

	2020	2019
<b>ASSETS</b>		
Current assets	\$ 446,987	\$ 466,571
Capital assets, net	3,829,404	3,624,938
<b>Total assets</b>	<b>4,276,391</b>	<b>4,091,509</b>
<b>DEFERRED OUTFLOWS OF RESOURCES</b>	75,601	58,773
Current liabilities	181,133	170,827
Noncurrent liabilities	1,644,661	1,610,768
<b>Total liabilities</b>	<b>1,825,794</b>	<b>1,781,595</b>
<b>DEFERRED INFLOWS OF RESOURCES</b>	21,733	8,760
<b>NET POSITION</b>		
Net investment in capital assets	2,184,781	1,977,806
Unrestricted	319,684	382,121
<b>TOTAL NET POSITION</b>	<b>\$ 2,504,465</b>	<b>\$ 2,359,927</b>

Total assets increased by \$184.9 million or 5 percent in FY 2020 compared to FY 2019. The increase is primarily due to capitalization of CIP projects, such as Briar Creek Sewer Relief and McAlpine Creek Wastewater Rehabilitation.

Total liabilities increased by \$44.2 million or 3 percent in FY 2020 compared to FY 2019. This increase is primarily attributable to the issuance of revenue bond anticipation notes and state revolving loans to be used for financing construction and maintenance projects for water and sewer systems.

Total net position increased by \$144.5 million or 6 percent compared to FY 2019. As of June 30, 2020, \$2.2 billion was invested in capital assets while \$319.7 million was unrestricted and available for short-term operational needs. This increased net position is primarily due to ongoing capital development for Charlotte Water operations.

The following is a summary of Changes in Net Position as of June 30:

### Changes in Net Position

(In thousands)

	2020	2019
Operating revenues	\$ 438,105	\$ 424,327
Operating expenses	311,501	280,334
Operating income	126,604	143,993
Nonoperating revenues (expenses)		
Investment earnings	6,838	10,287
Interest expense and other charges	(56,921)	(61,377)
Miscellaneous	5,148	3,425
Total nonoperating revenues (expenses)	(44,935)	(47,665)
Income before contributions	81,669	96,328
Capital contributions	57,158	65,912
Transfers in	5,831	-
Transfers out	(120)	(98)
Change in net position	144,538	162,142
Total net position - beginning	2,359,927	2,197,785
<b>Total net position - ending</b>	<b>\$ 2,504,465</b>	<b>\$ 2,359,927</b>

Charlotte Water's Changes in Net Position provides information concerning what contributed to the net changes reported in the schedule of Net Position. Several financial factors positively and negatively impacted the increase in Net Position highlighted below.

Charlotte Water's revenues were \$438.1 million in 2020, an increase of \$13.8 million or 3 percent compared to 2019. This is due to an average rate increase of 3.42 percent effective July 1, 2019 and an increase in system development fees.

Investment earnings decreased by \$3.4 million to \$6.8 million for the current year compared to \$10.3 million in FY 2019. This is attributed to a lower interest rate in FY 2020 of 1.89 percent compared to FY 2019 interest rate of 2.12 percent.

Transfers in for FY 2020 was \$5.8 million, an interfund transfer from the Airport Enterprise Fund to Charlotte Water after the completion of a sanitary sewer line project during the expansion of the airport terminal.



Operating expenses increased by \$31.2 million or 11 percent, to \$311.5 million in FY 2020. Increases in administration were due to paying additional costs through cost allocation and direct salaries for services provided by other City departments.

The following tables highlight Charlotte Water's operating expenses for fiscal years 2020 and 2019:

### Operating Expenses

(In thousands)

	2020	2019
Administration	\$ 43,394	\$ 26,136
Operations and maintenance	132,641	127,432
Other	1,078	542
Depreciation	134,388	126,224
<b>Total operating expenses</b>	<b>\$ 311,501</b>	<b>\$ 280,334</b>

### Capital Assets

Charlotte Water's net capital assets were \$3,829.4 million in FY 2020 and \$3,624.9 million in FY 2019.

The following is a summary of capital assets at June 30, 2020 and 2019:

### Capital Assets

(In thousands)

	2020	2019
Land	\$ 54,100	\$ 52,615
Construction in progress	321,725	325,289
Buildings	45,539	44,598
Water and sewer systems	5,312,632	4,983,254
Intangibles	25,373	20,839
Machinery and equipment	59,469	56,395
<b>Total capital assets</b>	<b>5,818,838</b>	<b>5,482,990</b>
Less: accumulated depreciation	1,989,434	1,858,052
<b>Net capital assets</b>	<b>\$ 3,829,404</b>	<b>\$ 3,624,938</b>

New capital assets added during FY 2020 include:

- Briar Creek Relief Sewer - \$25.7 million
- Sanitary Sewer Rehabilitation - \$19.6 million
- Major Water Main Replacement and Rehabilitation - \$19.1 million
- Doby Creek Sanitary Sewer Improvements - \$18.0 million
- McAlpine Aeration and Clarifier Rehabilitation - \$16.6 million

Additional information on the Charlotte Water Enterprise Fund's Capital Assets can be found in Note 2 in the Notes to the Financial Statements on page 22.

## DEBT ADMINISTRATION

At June 30, 2020, Charlotte Water's outstanding bonds and loans debt totaled \$1,650.9 million net of applicable premiums, and discounts. These amounts consist of general obligation bonds, revenue bonds, installment purchases, bond anticipation notes (BANs), low-interest and interest-free loans from the state of North Carolina, and refundable construction deposits.

New debt for FY 2020 resulted from issuing \$78.8 million in refunding debt and installment contracts, \$63.3 million in revenue bond anticipation notes, and \$35.3 million in state revolving loans.

Charlotte Water's credit ratings for its bonds are AAA by Standard & Poor's, Aaa by the Moody's, and AAA by Fitch Ratings. These ratings reflect Charlotte Water's strong fiscal policy and standards.

Charlotte Water is required by bond covenants to maintain a debt service coverage ratio of 1.25 for principal and interest. The debt service coverage ratio was 1.9 for both 2020 and 2019.

Additional information on Charlotte Water's long-term debt can be found in Note 4 in the Notes to the Financial Statements on page 23.

### Economic Factors Affecting the Charlotte Water Enterprise Fund

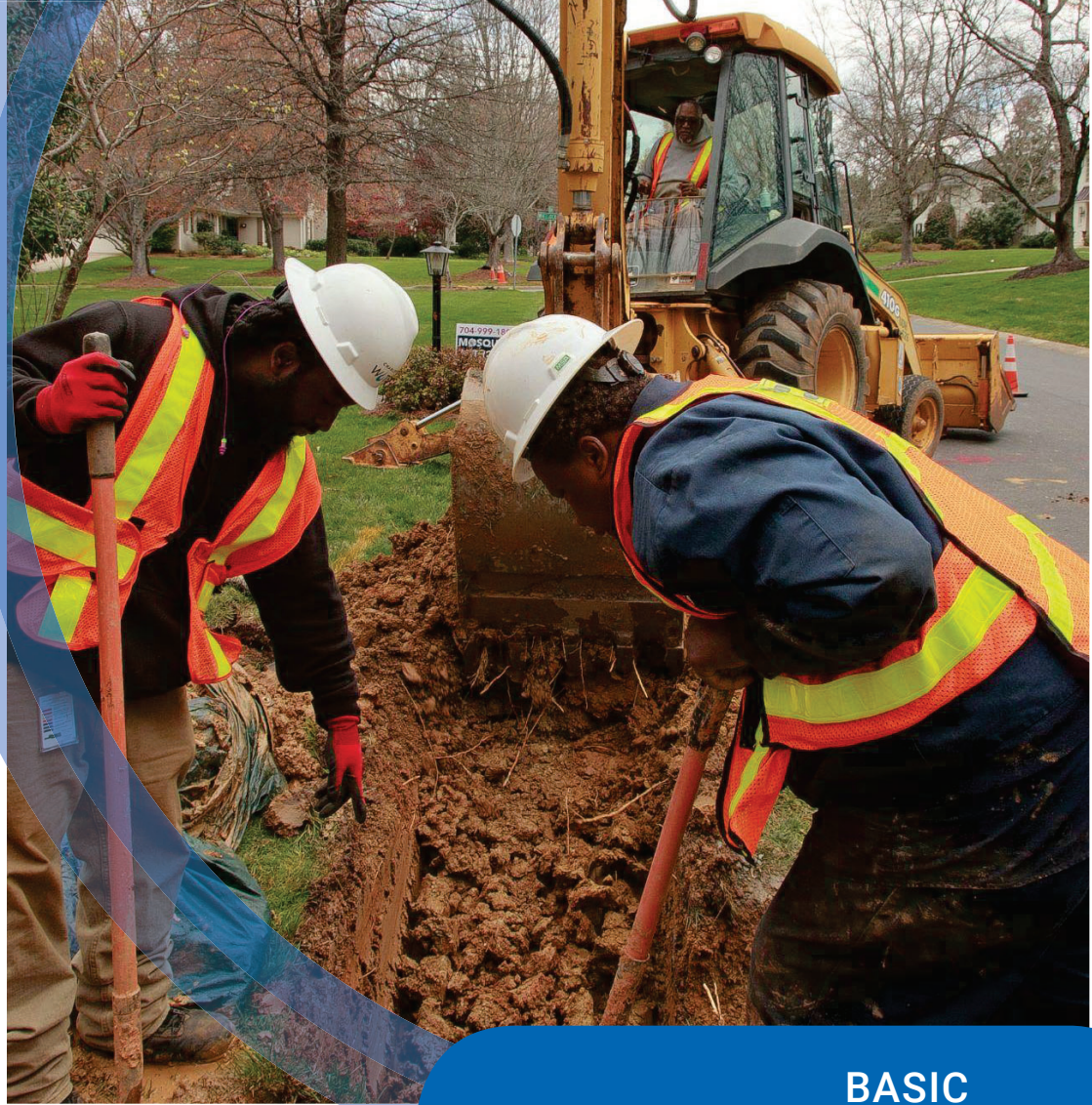
- During the COVID pandemic, the governor of North Carolina issued NC Executive Order 124 on March 31, 2020 stating utilities were required to stop customer service disconnections and late fees for non-payment. On July 29, 2020, the Executive Order expired but Charlotte Water continued the terms and began placing customers on automatic 12-month payment plans in October 2020.
- The City of Charlotte and Mecklenburg County are geographically located along a ridgeline separating the Catawba River basin and the Rocky River basin. This location tends to make regional provision of utility services an effective strategy. The City has established cooperative working relationships with the cities, counties, and utility agencies within and surrounding Charlotte-Mecklenburg.
- Agreements are in place with the Water and Sewer Authority of Cabarrus County that provide for that agency to treat up to 6 million gallons of wastewater from northeast Mecklenburg. Separate agreements provide for the City to treat wastewater from Union County and Lancaster County, South Carolina. The agreements provide for future expansions, industrial pretreatment programs, and other operational and management concerns. The City also sells treated potable water to York County, South Carolina; the Town of Harrisburg, North Carolina, and to the Lancaster County Water and Sewer District, South Carolina. In addition, the City sells treated potable water to the City of Concord, North Carolina on an as needed basis.
- Charlotte Water's budget for FY 2021 is \$172.4 million, a 3 percent increase over FY 2020, which includes an increase to the Water and Sewer Fee by almost 2 percent. The budget focuses on maintaining a high quality drinking water and wastewater system, improving safety and security, and guaranteeing a high level of customer satisfaction.

## REQUESTS FOR FINANCIAL INFORMATION

This annual financial report is designed to provide a general overview of Charlotte Water's finances.

Questions concerning any of the information provided in this report or requests for additional financial information should be directed to the City of Charlotte's Finance Department, 600 East Fourth Street, Charlotte, NC 28202-2848.

For other City financial information please visit the City of Charlotte's Finance Department website at: <https://charlottenc.gov/finance/Pages/publications.aspx>.



## BASIC FINANCIAL STATEMENTS







**STATEMENT OF NET POSITION**  
**JUNE 30, 2020**  
(Dollar Amounts In Thousands)

**ASSETS:**

Current assets:

Cash, cash equivalents and investments	\$ 391,357
Receivables, net of allowance for uncollectibles (\$8,070)	
Accounts	46,097
Other	1,662
<b>Total receivables</b>	<b>47,759</b>
Due from other governmental agencies	4,458
Inventories	2,147
Restricted assets-	
Cash and cash equivalents	1,026
Investments	240
<b>Total restricted assets</b>	<b>1,266</b>
<b>Total current assets</b>	<b>446,987</b>

**Noncurrent assets:**

Capital assets-	
Land	54,100
Buildings	45,539
Water and sewer systems	5,312,632
Intangibles	25,373
Machinery and equipment	59,469
Construction in progress	321,725
Total capital assets	5,818,838
Less accumulated depreciation	1,989,434
<b>Total capital assets, net</b>	<b>3,829,404</b>
<b>Total noncurrent assets</b>	<b>3,829,404</b>
<b>Total assets</b>	<b>4,276,391</b>

**DEFERRED OUTFLOWS OF RESOURCES:**

Pension deferrals	7,822
OPEB deferrals	8,731
Contributions to pension plan in current fiscal year	5,118
Accumulated decreases in fair value of hedging derivatives	46,042
Unamortized bond refunding charges	7,888
<b>Total deferred outflows of resources</b>	<b>75,601</b>

Continued on next page

The notes to the financial statements are an integral part of this statement.

**STATEMENT OF NET POSITION - (Continued)**  
**JUNE 30, 2020**  
**(Dollar Amounts In Thousands)**

**LIABILITIES:**

Current liabilities:

Accounts payable	\$ 45,846
Deposits and retainage payable	8,681
Accrued interest payable	29,912
Current maturities of noncurrent liabilities	96,558
Current liabilities payable from restricted assets-	
Accounts payable	136
<b>Total current liabilities</b>	<b>181,133</b>

Noncurrent liabilities:

General obligation bonds payable - net of unamortized premiums of \$4,569	15,520
Revenue bonds payable - net of unamortized premiums of \$145,337	1,374,859
Revenue bond anticipation notes payable	96,241
Installment purchases - net of unamortized premiums of \$458	18,731
Derivative instrument liability	46,042
State revolving loan payable	47,811
Refundable water and sewer construction deposits	3,790
Compensated absences payable	4,325
Net pension liability	21,179
Net OPEB liability	16,163
<b>Total noncurrent liabilities</b>	<b>1,644,661</b>

<b>Total liabilities</b>	<b>1,825,794</b>
--------------------------	------------------

**DEFERRED INFLOWS OF RESOURCES:**

Pension deferrals	2
OPEB deferrals	6,533
Gain on refundings	15,198
<b>Total deferred inflows of resources</b>	<b>21,733</b>

**NET POSITION:**

Net investment in capital assets	2,184,781
Unrestricted	319,684
<b>Total net position</b>	<b>\$ 2,504,465</b>

The notes to the financial statements are an integral part of this statement.



**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION  
FOR THE YEAR ENDED JUNE 30, 2020  
(Dollar Amounts In Thousands)**

**OPERATING REVENUES:**

Charges for services	\$ 355,501
Availability fees	47,903
System development fees	30,115
Miscellaneous	4,586

<b>Total operating revenues</b>	<b>438,105</b>
---------------------------------	----------------

**OPERATING EXPENSES:**

Administration	43,394
Operations and maintenance	132,641
Other	1,078
Depreciation	134,388

<b>Total operating expenses</b>	<b>311,501</b>
---------------------------------	----------------

Operating income	126,604
------------------	---------

**NONOPERATING REVENUES (EXPENSES):**

Investment earnings	6,838
Interest expense and other charges	(56,921)
Miscellaneous	5,148

<b>Total nonoperating revenues (expenses)</b>	<b>(44,935)</b>
---	-----------------

Income before contributions	81,669
-----------------------------	--------

<b>CAPITAL CONTRIBUTIONS</b>	<b>57,158</b>
------------------------------	---------------

<b>TRANSFERS IN</b>	<b>5,831</b>
---------------------	--------------

<b>TRANSFERS OUT</b>	<b>(120)</b>
----------------------	--------------

Change in net position	144,538
------------------------	---------

<b>Total net position - beginning</b>	<b>2,359,927</b>
---------------------------------------	------------------

<b>Total net position - ending</b>	<b>\$ 2,504,465</b>
------------------------------------	---------------------

The notes to the financial statements are an integral part of this statement.

**STATEMENT OF CASH FLOWS**  
**FOR THE YEAR ENDED JUNE 30, 2020**  
(Dollar Amounts In Thousands)

**CASH FLOWS FROM OPERATING ACTIVITIES:**

Receipts from customers	\$ 443,318
Payments to suppliers	(91,523)
Internal activity - (payments to) receipts from other funds	(30,882)
Payments to employees	(48,553)
Other receipts (payments)	23,041
<b>Net cash provided by operating activities</b>	<b>295,401</b>

**CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES**

Transfers	(120)
-----------	-------

**CASH FLOWS FROM CAPITAL AND RELATED FINANCING**

**ACTIVITIES:**

Proceeds from capital debt	118,580
Acquisition and construction of capital assets	(280,154)
Principal paid on capital debt	(84,130)
Interest and other charges paid on capital debt	(66,949)
Capital contributions	(5,483)
<b>Net cash (used) by capital and related financing activities</b>	<b>(318,136)</b>

**CASH FLOWS FROM INVESTING ACTIVITIES:**

Purchase of investments	(160)
Proceeds from sale and maturities of investments	10,395
Interest received	7,840
<b>Net cash provided by investing activities</b>	<b>18,075</b>

<b>Net (decrease) in cash and cash equivalents</b>	<b>(4,780)</b>
--	----------------

<b>Cash, cash equivalents and investments - beginning of year</b>	<b>397,163</b>
---	----------------

<b>Cash, cash equivalents and investments - end of year</b>	<b>\$ 392,383</b>
---	-------------------

continued on next page

The notes to the financial statements are an integral part of this statement.





**STATEMENT OF CASH FLOWS - (Continued)**  
**FOR THE YEAR ENDED JUNE 30, 2020**  
(Dollar Amounts In Thousands)

**RECONCILIATION OF OPERATING INCOME TO NET CASH**

**PROVIDED BY OPERATING ACTIVITIES:**

Operating income	\$	126,604
Adjustments to reconcile operating income to net cash provided by operating activities-		
Depreciation		134,388
Other receipts		23,041
Change in assets and liabilities-		
Decrease in receivables		5,110
(Increase) in due from other governmental agencies		(80)
(Increase) in inventories		(215)
Decrease in deferred outflows of resources for pensions		1,600
(Increase) in deferred outflows of resources for OPEB		(8,596)
Increase in accounts payable		1,000
Increase in deposits and retainage payable		103
Increase in net pension liability		2,904
(Decrease) in deferred inflows of resources for pensions		(97)
(Decrease) in deferred inflows of resources for OPEB		(2,128)
Increase in compensated absences payable		1,078
Increase in net OPEB liability		10,689
<b>Total adjustments</b>		<b>168,797</b>
<b>Net cash provided by operating activities</b>	<b>\$</b>	<b>295,401</b>

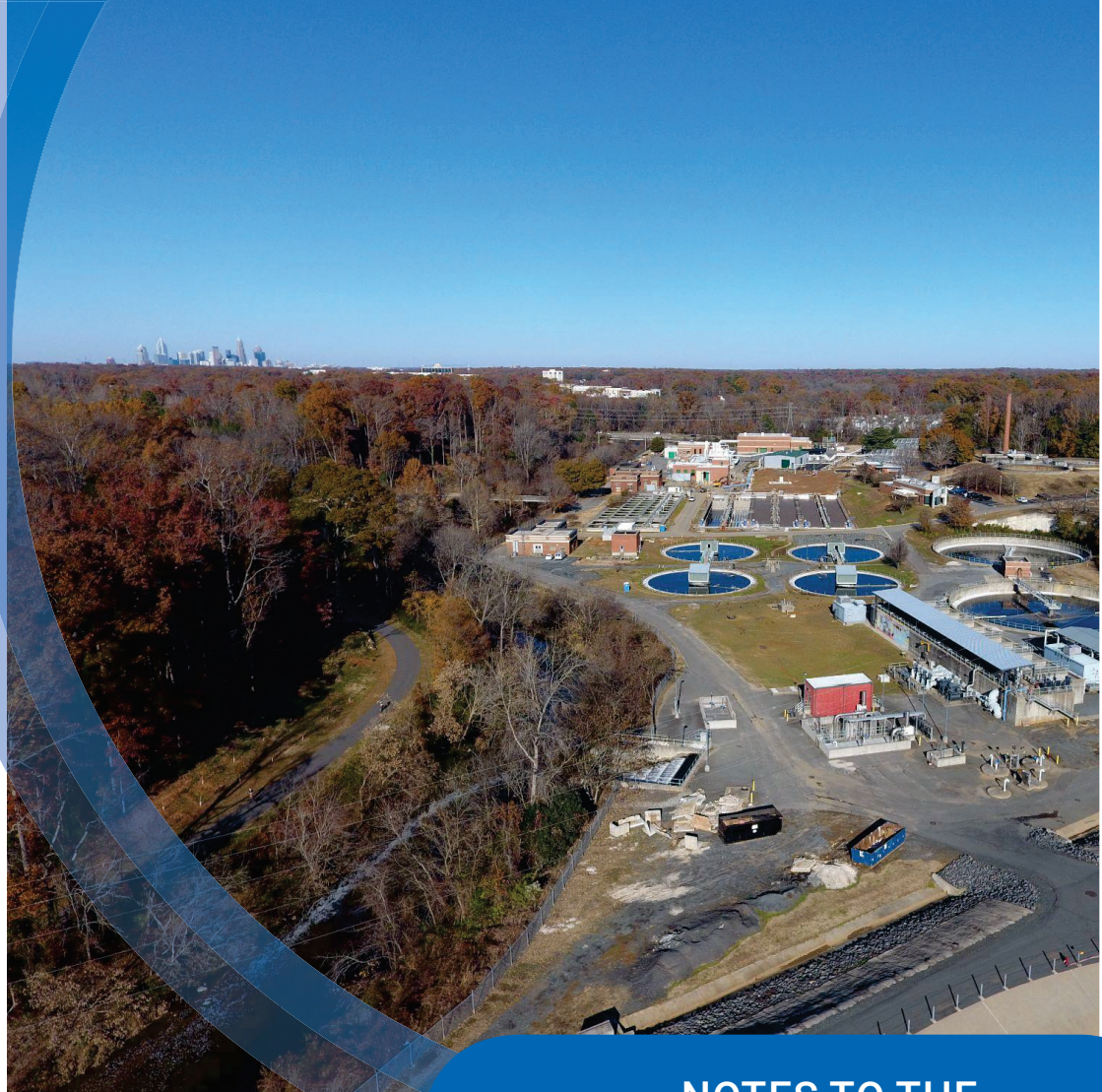
**NONCASH INVESTING, CAPITAL AND FINANCING**

**ACTIVITIES:**

Donated assets	\$	58,322
Proceeds from refunding bonds		73,275
Payment to refunded bond escrow agent		(73,275)
<b>Net noncash investing, capital and financing activities</b>	<b>\$</b>	<b>58,322</b>

The notes to the financial statements are an integral part of this statement.





Financial

## NOTES TO THE FINANCIAL STATEMENTS



## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

### a. Reporting Entity

The accompanying financial statements present only the activities and resources of Charlotte Water, an enterprise fund of the City of Charlotte (City), North Carolina, and, accordingly, do not purport to and do not present the financial position of the City of Charlotte, North Carolina.

### b. Basis of Presentation

Charlotte Water is an enterprise fund of the City that accounts for the operations of the public water and wastewater utility systems. All assets and liabilities associated with Charlotte Water's activities are included on the Statement of Net Position. Charlotte Water financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

### c. Cash and Cash Equivalents/Investments

The City maintains a cash management pool (pool) that is used by Charlotte Water and other funds of the City. The pool facilitates disbursement and investment and maximizes investment income. Earnings on the pooled funds are apportioned and credited to the funds monthly based on the average daily balance of each fund. Since Charlotte Water may deposit additional amounts at any time and may withdraw funds at any time without prior notice or penalty, the pool is used essentially as a demand deposit account. Therefore, for the Statement of Net Position and Statement of Cash Flows, Charlotte Water's portion of pooled cash is considered cash and cash equivalents. The restricted cash and cash equivalents/investments are held by trustees as required by revenue bond covenants. All restricted money market funds are considered cash and cash equivalents. The remaining amount of restricted assets is considered investments.

### d. Accounts Receivables

Accounts receivables are shown net of an allowance for uncollectibles. This amount is estimated by identifying receivables unlikely to be paid but not yet eligible for final write-off.

### e. Capital Assets

Capital assets are assets with an initial, individual cost of more than \$5 and are reported at cost. Depreciation is computed using the straight-line method over the following estimated useful lives:

Buildings	40 years
Water and sewer systems	5 - 40 years
Intangibles	5 years
Machinery and equipment	3 - 40 years

### f. Deferred Outflows and Inflows of Resources

In addition to assets, the Statement of Net Position will sometimes report a separate section for deferred outflows of resources. The Deferred Outflows of Resources financial statement element represents a consumption of net position that applies to a future period and so will not be recognized as an expense until then. Charlotte Water has pension, OPEB deferrals, contributions to the pension plan in the current fiscal year, accumulated decreases in fair value of hedging derivatives, and unamortized bond refunding charges that meet these criteria in the follow amounts:

	2020
Pension deferrals	\$ 7,822
OPEB deferrals	8,731
Contributions to the pension plan in the current fiscal year	5,118
Accumulated decreases in fair value of hedging derivatives	46,042
Unamortized bond refunding charges	7,888
Total	<u>\$ 75,601</u>



In addition to liabilities, the Statement of Net Position will sometimes report a separate section for deferred inflows of resources. The Deferred Inflows of Resources financial statement element represents an acquisition of net position that applies to a future period and so will not be recognized as revenue until then. Charlotte Water has pension, OPEB deferrals, and gains on refundings that meet these criteria in the following amounts:

	2020
Pension deferrals	\$ 2
OPEB deferrals	6,533
Gain on refundings	15,198
Total	<u>\$ 21,733</u>

### g. Noncurrent Liabilities

Bond premiums are deferred and amortized over the life of the bonds using the straight-line method. Bonds payable are reported net of applicable premiums. Bond issuance costs are expensed in the reporting period in which they are incurred.

### h. Compensated Absences

Employees earn vacation leave at the rate of 10 to 20 days per year and can accrue a maximum of 20 to 40 days, depending on length of service. Effective January 1, 2016, vacation in excess of maximum accumulation is transferred into the employee's sick leave balance. Unused vacation days are payable upon termination, resignation, retirement or death.

Employees accumulate sick leave at the rate of one day per month and can accrue an unlimited number of days. Sick leave can be taken for personal illness or illness of a member of the immediate family. Sick leave is lost upon termination or resignation, unless the employee's effective date of retirement is within 365 days of the termination or resignation. However, twenty percent of outstanding sick leave, with a maximum of 43.5 days, is payable upon retirement or death.

Compensated absences payable includes accumulated unpaid vacation leave and sick leave.

### i. Net Position

Net position is classified as net investment in capital assets and unrestricted. Net investment in capital assets consists of capital assets, net of accumulated depreciation/amortization and reduced by outstanding balances of bonds, notes, and other debt that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are included in this component of net position. Unrestricted net position is the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that does not meet the definition of the preceding category.

**j. Revenues**

*Rates and charges.* The City Council sets the water and sanitary sewer rates. No State or other authority regulates the City's water and sanitary sewer rates. Monthly service charges consist of minimum fixed charges, an availability fee and tiered consumption charges. In addition, charges are imposed for various specific services including charges on discharged sewage that contains suspended solids or has a biological oxygen demand greater than normal domestic sewage. Rates and charges are reviewed and approved annually by the City Council on consideration of the next fiscal year's operating budget, existing debt service and future debt service for obligations supported by revenues. Water and Sewer System rates do not differentiate between City and County residents.

In 1994, the City implemented an inclining block rate structure designed to promote water conservation. In April of 2008, the City Council approved a change in the water rate methodology that adjusts the inclining block rate structure to more aggressively promote water conservation. This modified rate structure is intended to allocate the cost of providing infrastructure for peak and excess demand to the users creating the demand. In February 2011, the city again modified the water and sewer rate methodology by adding an availability fee which was initially implemented in fiscal year 2012. The availability fee applies to both water and sewer. The amount of the fee is based on recovering approximately a percentage, currently approximately 33 percent, of the Water and Sewer System's annual debt service amount. Revenue from the availability fee helps pay for projects as well as reduce impact of consumption variability due to weather. The fee varies proportionally based on the size of each customer's meter.

*System Development Fees.* On July 20, 2017, House Bill 436, Session Law 2017-138, also known as the "Public Water and Sewer System Development Fee Act" became law in North Carolina. In addition, on June 22, 2018, House Bill 826, Session Law 2018-34, also known as "An Act to Revise System Development Fees", collectively with the System Development Fee Act, became law in North Carolina. The System Development Fee acts provide uniform authority to local government units, including the City, to implement system development fees for public water and sewer systems. The City meets the requirements of the System Development Fee Acts. System development fees are subject to the pledge of net revenues of the water and sewer system pursuant to the general trust indentures. Additional information on contingencies related to system development fees can be found in Note 8 on page 38.

**k. Use of Estimates**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities 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 those estimates.

**l. Pensions**

For purposes of measuring the net pension asset, deferred outflows of resources and deferred inflows of resources related to pensions and pension expense, information about fiduciary net position of the Local Governmental Employee's Retirement System (LGERs) and additions to/deductions from LGER's fiduciary net position have been determined on the same basis as they are reported by LGERs. For this purpose, plan member contributions are recognized in the period in which the contributions are due. The City of Charlotte's employer contributions are recognized when due and there is a legal requirement to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of LGERs. Investments are reported at fair value.

For purposes of measuring the net OPEB liability (asset), deferred outflows and inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the Employee Benefit Trust Plan (EBTP) and additions to/deductions from the EBTP fiduciary net position have been determined on the same basis as they are reported by the EBTP. For this purpose, the EBTP recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value.

## 2. CAPITAL ASSETS

Capital asset activity for the year ended June 30, 2020, was as follows:

	Beginning Balances	Increase	Decrease	Ending Balance
Capital assets not being depreciated:				
Land	\$ 52,615	\$ 1,485	\$ -	\$ 54,100
Construction in progress	325,289	293,361	296,925	321,725
Total capital assets not being depreciated	377,904	294,846	296,925	375,825
Capital assets being depreciated:				
Buildings	44,598	941	-	45,539
Water and sewer systems	4,983,254	329,378	-	5,312,632
Intangibles	20,839	4,534	-	25,373
Machinery and equipment	56,395	6,270	3,196	59,469
Total capital assets being depreciated	5,105,086	341,123	3,196	5,443,013
Less accumulated depreciation for:				
Buildings	11,808	1,110	-	12,918
Water and sewer systems	1,791,649	125,583	-	1,917,232
Intangibles	18,743	1,412	-	20,155
Machinery and equipment	35,852	6,283	3,006	39,129
Total accumulated depreciation	1,858,052	134,388	3,006	1,989,434
Total capital assets being depreciated net	3,247,034	206,735	190	3,453,579
Capital assets, net	\$ 3,624,938	\$ 501,581	\$ 297,115	\$ 3,829,404

## 3. INTERFUND TRANSFERS:

On October 8, 2018, City Council approved a contract to build a sanitary sewer line on Rental Car Road due to increased sewer demand from Concourse A Expansion and Terminal Lobby Expansion projects at the Charlotte Douglas International Airport. The sewer line was completed in FY 2020 for \$5,831 and the ownership was transferred from the Airport Enterprise Fund to Charlotte Water.

#### 4. NONCURRENT LIABILITIES:

A summary of changes in long-term liabilities for the year ended June 30, 2020 were as follows:

	Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
General obligation bonds	\$ 44,017	\$ -	\$ 17,809	\$ 26,208	\$ 14,373
Plus unamortized premiums	10,664	-	6,095	4,569	884
Revenue bonds	1,373,365	58,750	133,375	1,298,740	62,390
Plus unamortized premiums	148,821	14,995	18,479	145,337	6,828
Total bonds payable	1,576,867	73,745	175,758	1,474,854	84,475
Direct placement installment purchases	1,829	20,000	3,105	18,724	5,240
Installment purchases	9,138	-	2,578	6,560	1,640
Plus unamortized premiums	627	-	169	458	131
Total installment purchases	11,594	20,000	5,852	25,742	7,011
Direct place revenue bond anticipation notes	32,947	63,294	-	96,241	-
Other financing agreements- Municipal	250	-	250	-	-
Direct borrowing state revolving loan	13,992	35,286	226	49,052	1,241
Derivative instrument liability	34,571	11,471	-	46,042	-
Refundable construction deposits	5,040	5,920	5,906	5,054	1,264
Compensated absences	5,814	4,891	3,813	6,892	2,567
Net pension liability (LGERS)	18,275	2,904	-	21,179	-
Net OPEB liability	5,474	10,689	-	16,163	-
Total	\$ 1,704,824	\$ 228,200	\$ 191,805	\$ 1,741,219	\$ 96,558

##### a. General Obligation Bonds

The City issues general obligation bonds to finance acquisition or construction of major capital facilities and the purchase of other major capital items. Bonded indebtedness has also been issued to advance refund several general obligation bonds. The following table summarizes the Charlotte Water's general obligation bonds:

Purpose	Interest Rates	Date Issued	Final Maturity	Original Issue	Balance June 30, 2020
General Obligation Refunding, Series 2015	4.00% - 5.00%	06/01/2015	2023	\$ 27,144	\$ 10,448
General Obligation Refunding, Series 2018A	5.00%	08/01/2018	2024	26,920	15,760
Total					\$ 26,208

The principal and interest on the General Obligation Bonds are wholly payable from net revenue of the Water and Sewer systems.

Debt service requirements to maturity for general obligation bonds are as follows:

Year Ended		
	June 30	
	Principal	Interest
2021	\$ 14,373	\$ 951
2022	5,076	465
2023	5,224	208
2024	1,535	38
	<u>\$ 26,208</u>	<u>\$ 1,662</u>

### b. Revenue Bonds

The following table summarizes Charlotte Water's revenue bonds for the year ended June 30, 2020:

Purpose	Interest Rates	Date Issued	Final Maturity	Original Issue	Balance June 30, 2021
Water and Sewer, Series 2006B	Variable	07/26/2006	2037	\$ 300,000	\$ 137,600
Water and Sewer, Series 2009B	3.50% - 5.00%	12/09/2009	2040	366,380	306,295
Water and Sewer, Refunding Series 2011	1.50% - 5.00%	08/03/2011	2025	93,390	41,690
Water and Sewer, Refunding Series 2015	1.00% - 5.00%	08/27/2015	2046	459,585	357,045
Water and Sewer, Refunding Series 2018	3.00% - 5.00%	04/25/2018	2049	409,915	397,360
Water and Sewer, Refunding Series 2019	3.00% - 5.00%	09/10/2019	2036	58,750	58,750
Total					<u>\$ 1,298,740</u>

Interest on the variable-rate bonds is determined by a remarketing agent based upon market conditions. The City entered into an interest rate swap agreement for the variable rate Water and Sewer Revenue Bonds Series 2006B. Additional information can be found in Note 4.f. on page 27.

The principal and interest on the Water and Sewer Bonds are payable from net revenues of water and sewer systems. Pursuant to the general trust indentures, the City has covenanted to charge rates that produce net revenues which (1) including 50 percent of the surplus fund, after providing for a two-month operating reserve, are at least 120 percent of the principal and interest requirements plus 100 percent of the non-revenue bond debt service requirements and (2) are at least 110 percent of the principal and interest requirements plus 100 percent of non-revenue bond debt service requirements. Based on the FY 2020 Water and Sewer Fund budgets, revenue bond debt service coverage was at least 2.8 percent.

The revenue bonds do not constitute a legal or equitable pledge, charge, lien or encumbrance upon any of the City's property or upon any of its income, receipts or revenues, except as provided in the Revenue Bond Orders. Neither credit nor the taxing power of the City is pledged for the payment of the principal and interest, and no owner has the right to compel the exercise of the taxing power of the City or the forfeiture of any of its property in connection with any default under the Revenue Bond Orders.



Revenue bond debt service requirements to maturity are as follows:

Year Ended June 30	Principal		Interest	
2021	\$	62,390	\$	54,502
2022		65,430		51,025
2023		65,865		48,079
2024		68,970		45,092
2025		66,765		42,053
2026-2030		266,260		173,476
2031-2035		294,435		116,282
2036-2040		283,155		54,132
2041-2045		79,780		18,159
2046-2049		45,690		2,977
	\$	1,298,740	\$	605,777

### c. Installment Purchases

The following summarizes Charlotte Water's installment purchases:

Purpose	Interest Rates	Date Issued	Final Maturity	Original Issue	Balance June 30, 2020
Equipment, Series 2016, Direct Placement	1.32%	06/07/2016	2021	\$ 4,600	\$ 880
Equipment, Series 2018	5.00%	11/08/2018	2024	8,205	6,560
Equipment, 2019, Direct Placement	1.52%	10/11/2019	2024	20,000	17,844
Total					\$ 25,284

These installment purchase contracts are non-general obligation financings. In accordance with State statutes, no deficiency judgment may be rendered against the City for amounts owed and the taxing power of the City may not be pledged directly or indirectly to collateralize amounts due pursuant to these contracts.

The City enters into installment purchase contracts annually for the purchase of capital equipment. These financings are payable over five years.

Water Sewer's outstanding non-direct and direct placement installment purchases are secured with collateral of equipment purchased.

Installment purchases debt service requirements to maturity are as follows:

Year Ended June 30	Direct Placements			
	Principal	Interest	Principal	Interest
2021	\$ 1,640	\$ 287	\$ 5,240	\$ 263
2022	1,640	205	4,427	188
2023	1,640	123	4,495	121
2024	1,640	41	4,562	49
	\$ 6,560	\$ 656	\$ 18,724	\$ 621

### d. Revenue Bond Anticipation Note

The City has available a Water and Sewer direct placement revenue bond anticipation note program to finance the cost of water and sewer system improvements. The aggregate principal amount of the note outstanding at any one time shall not exceed \$100,000. The note is payable from net revenues of the water and sewer systems. The note does not constitute a legal or equitable pledge, charge, lien or encumbrance upon any of the City's property or upon any of its income, receipts or revenues, except as provided in the Revenue Bond orders. Neither the credit nor the taxing power of the City is pledged for the payment of the principal or interest, and no owner has the right to compel the exercise of the taxing power of the City or the forfeiture of any of its property in connection with any default on the note. In addition, the City has entered in a Note Purchase and Advance Agreement. The note will be replaced by water and sewer revenue bonds. The note will mature no later than the third anniversary of the closing date or October 10, 2021. The City had direct placement Water and Sewer revenue bond anticipation notes payable of \$96,241 outstanding at June 30, 2020. Interest rates are based upon market conditions.

Direct placement revenue bond anticipation note debt service requirements to maturity are as follows:

Year Ended		
June 30	Principal	Interest
2021	\$ -	\$ 410
2022	96,241	115
	<u>\$ 96,241</u>	<u>\$ 525</u>

### e. State Revolving Loan

Pursuant to the North Carolina Clean Water Revolving Loan & Grant Act of 1987, the City was awarded a direct borrowing state revolving loan through the North Carolina Department of Environmental Quality. The City utilized loan proceeds to construct wastewater treatment works projects. As of June 30, 2020, direct borrowing loans totaling \$93,775 have been approved (but not fully disbursed). The maximum loan term is twenty years. As of June 30, 2020, interest rates varied from zero to 1.71 percent.

Debt service requirements to maturity are as follows:

Year Ended		
June 30	Principal	Interest
2021	\$ 1,241	\$ 227
2022	1,241	216
2023	1,241	205
2024	2,487	1,045
2025	2,487	991
2026-2030	12,433	4,146
2031-2035	12,433	2,797
2036-2040	11,753	1,448
2041-2043	3,736	256
	<u>\$ 49,052</u>	<u>\$ 11,331</u>

**f. Derivative Instruments**

The fair value balances and notional amounts of derivative instruments outstanding at June 30, 2020 classified by type, and the changes in fair value of such derivative instruments for the year ended are as follows:

	Changes in Fair Value		Fair Value at June 30, 2020		Notional
	Classification	Amount	Classification	Amount	
Cash flow hedges:					
Pay-fixed interest rate swap	Deferred outflow	\$ (11,471)	Debt	\$ (46,042)	\$ 137,600

The mid-market values of the interest rate swaps were estimated using the income approach. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted to a single net present value amount. The interest rate swaps are classified in Level 3 as the valuation relies primarily on unobservable inputs.

The following table displays the objective and terms of Charlotte Water's hedging derivative instruments outstanding at June 30, 2020 along with the credit rating of the associated counterparty:

Type	Objective	Notional Amount	Effective Date	Maturity Date	Terms	Counterparty Credit Rating
Pay-fixed interest rate swap	Hedge of changes in cash flows on the 2006B Water and Sewer Revenue Bonds	\$ 137,600	8/1/2006	7/1/2036	Pay 4.04%; receive SIFMA swap index	Aa2/A+

**Interest Rate Risk:** The City is exposed to interest rate risk on its interest rate swaps. On its pay-fixed, receive-variable interest rate swaps, as the SIFMA swap index decreases, the City's net payment on the swaps increases.

**Basis Risk:** The City's hedging derivative instruments expose the City to basis risk since the variable payment received from the counterparty is determined on a basis different from that used to calculate the bond floating rate for the associated bonds. As of June 30, 2020, the rate received by the City for the 2006B agreement was 1.02 percent, whereas the bond floating rate paid by the City was .10 percent.

**Termination Risk:** Either the City or its counterparties may terminate the hedging derivative instruments if the other party fails to perform under the terms of the contract. Termination could result in the City being required to make a termination payment.

**Rollover Risk:** The City is exposed to rollover risk on hedging derivative instruments that are hedges of debt that may be terminated prior to the maturity of the hedged debt. If the option to terminate the hedging derivative instrument is exercised, then the City will be re-exposed to the risks being hedged by the hedging derivative instrument.

**Hedging Derivative Instrument Payments and Hedged Debt:** As of June 30, 2020, aggregate debt service requirements of the City's variable-rate debt and net receipts/payments on associated hedging derivative instruments are as follows. These amounts assume that current interest rates on variable-rate bonds and the current reference rates of hedging derivative instruments will remain the same for their term. As these rates vary, interest payments on variable-rate bonds and net receipts/payments on the hedging derivative instruments will vary.

Year Ending June 30	Variable Rate Bonds		Hedging Derivatives, Net	Total
	Principal	Interest		
2021	\$ 5,470	\$ 706	\$ 4,708	\$ 10,884
2022	5,660	129	5,094	10,883
2023	5,875	123	4,866	10,864
2024	6,090	117	4,624	10,831
2025	6,320	112	4,392	10,824
2026-2030	35,190	455	17,940	53,585
2031-2035	41,980	263	10,354	52,597
2036-2037	31,015	33	1,294	32,342
	<u>\$ 137,600</u>	<u>\$ 1,938</u>	<u>\$ 53,272</u>	<u>\$ 192,810</u>

**Commitments:** The City's derivative instruments include provisions that require the City to post collateral in the event its credit rating falls below A3 by Moody's and A- by Standards & Poor's. The hedging derivative instruments will be collateralized at fair value with cash and/or U.S. government securities. Collateral will be posted with the City or its agent. At June 30, 2020 the aggregate fair value of all hedging derivative instruments with these collateral posting provisions is (\$46,042). If the collateral posting requirements were triggered at June 30, 2020 the City would not be required to post collateral to its counterparties because they had negative fair values. The City's general obligation debt rating is Aaa from Moody's and AAA from S&P; therefore, no collateral has been posted at June 30, 2020.

### g. Refundings

In September 2019, the City issued \$58,750 in Water and Sewer System Refunding Revenue Bonds, Series 2019 with interest rates ranging from three to five percent. The net proceeds of \$73,278 (after payment of \$468 in underwriting fees, insurance and other issue costs) were used to refund \$73,275 of outstanding fixed rate installment purchases, Series 2009. The refunding resulted in a difference between the reacquisition price and the net carrying amount of the old debt of \$4,500. This difference, reported in the accompanying financial statements as a gain on refundings, is being charged to operations through the year 2036 using the effective interest method. The City completed the refunding to reduce the total debt service payments over a period of 17 years by \$22,214 and to obtain an economic gain (difference between the present values of the old and new debt service payments) of \$19,873.

### h. Other Debt Information

Under an irrevocable letter of credit issued by US Bank, the City is entitled to draw an amount sufficient to pay the amount demanded under the sewer construction contract between the City and Bridges at Mint Hill, LLC (the total amount not to exceed \$2,935). The letter of credit is valid through July 23, 2020 (automatically extended for successive one-year periods, unless US Bank notifies the City at least 30 days before the current expiration date that issuer elects not to extend the expiration date).

In the event of default of any City debt, the City agrees to pay the purchases on-demand interest on any and all amounts due and owing by the City under the related documents. Within the various credit entities of the City, new debt is issued on parity with existing debt. General obligation debt is backed by the full faith and credit of the City, installment purchase contracts are backed by pledged collateral, and revenue bonds are backed by revenue bond covenants.

### i. Subsequent Events

On July 31, 2020, the City received \$4,625 in direct borrowing state revolving loan through North Carolina Department of Environmental Quality to be used for wastewater treatment plant improvements.

On August 7, 2020, the City received \$2,375 in direct borrowing state revolving loan through North Carolina Department of Environmental Quality to be used for wastewater treatment plant improvements.

On August 7, 2020, the City received \$87 in direct borrowing state revolving loan through North Carolina Department of Environmental Quality to be used for wastewater treatment plant improvements.

On September 22, 2020, the irrevocable letter of credit issued by US Bank entitling the City to draw an amount sufficient to pay the amount demanded under the sewer construction contract between the City and Bridges at Mint Hill, LLC was terminated and replaced by a developer deposit of \$2,935.

On September 24, 2020, the City issued \$333,445 in Water and Sewer System Refunding Revenue Bonds Series 2020 to refund \$297,055 of outstanding Water and Sewer Refunding Revenue Bonds, Series 2009B and prepay in full \$100,000 of outstanding Water and Sewer System Revenue Bond Anticipation Notes, Series 2018. The City completed the refunding to reduce the total debt service payments over a period of 20 years by \$112,585 and to obtain an economic gain (difference between the present values of the old and new debt service payments) of \$97,944.

On October 5, 2020, the City received \$415 in direct borrowing state revolving loan through North Carolina Department of Environmental Quality to be used for wastewater treatment plant improvements.

On November 30, 2020, the City received \$8,472 in direct borrowing state revolving loan through North Carolina Department of Environmental Quality to be used for wastewater treatment plant improvements.

## 5. TRANSACTIONS WITH THE CITY OF CHARLOTTE:

Expenses include certain costs charged Charlotte Water by other funds of the City. These charges are as follows:

Administrative and other City Services	\$ 24,971
Revenue Services	5,911
	<u>\$ 30,882</u>

## 6. PENSION PLAN AND OTHER BENEFITS:

### a. Local Governmental Employees' Retirement System (LGERS)

The City of Charlotte, and Charlotte Water as an enterprise fund of the City, is a participating employer in the statewide Local Governmental Employees' Retirement System (LGERS), a cost-sharing multiple-employer defined benefit pension plan administered by the State of North Carolina. LGERS membership is comprised of general employees and local law enforcement officers (LEO) of participating local governmental entities. Article 3 of G.S. Chapter 128 assigns the authority to establish and amend benefit provisions to the North Carolina General Assembly. Management of the plan is vested in the LGERS Board of Trustees, which consists of 13 members – nine appointed by the Governor, one appointed by the State Senate, one appointed by the State House of Representatives, and the State Treasurer and State Superintendent, who serve as ex-officio members. The Local Governmental Employees' Retirement System is included in the Comprehensive Annual Financial Report for the State of North Carolina. The State's Comprehensive Annual Financial Report includes financial statements and required supplementary information for LGERS. That report may be obtained by writing to the Office of the State Controller, 1410 Mail Service Center, Raleigh, North Carolina 27699-1410, by calling (919) 981-5454, or at [www.osc.nc.gov](http://www.osc.nc.gov).

*Benefits Provided:* LGERS provides retirement and survivor benefits. Retirement benefits are determined at 1.85 percent of the member's average final compensation times the member's years of creditable service. A member's average final compensation is calculated as the average of a member's four highest consecutive years of compensation. Plan members are eligible to retire with full retirement benefits at age 65 with five years of creditable service, at age 60 with 25 years of creditable service, or at any age with 30 years of creditable service. Plan members are eligible to retire with partial retirement benefits at age 50 with 20 years of creditable service or at age 60 with five years of creditable service. Survivor benefits are available to eligible beneficiaries of members who die while in active service or within 180 days of their last day of service and who have either completed 20 years of creditable service regardless of age or have completed five years of service and have reached age 60. Eligible beneficiaries may elect to receive a monthly Survivor's Alternate Benefit for life or a return of the member's contributions. The plan does not provide for automatic post-retirement benefit increases. Increases are contingent upon actuarial gains of the plan.

*Contributions:* Contribution provisions are established by General Statute 128-30 and may be amended only by the North Carolina General Assembly. Charlotte Water employees are required to contribute six percent of their



compensation. Employer contributions are actuarially determined and set annually by the LGERS Board of Trustees. The contractually required contribution rate for the year ended June 30, 2020, was 8.95 percent for general employees of Charlotte Water, actuarially determined as an amount that, when combined with employee contributions, is expected to finance the costs of benefits earned by employees during the year. Contributions to the pension plan from Charlotte Water were \$5,118 for the year ended June 30, 2020.

**Refund of Contributions:** Charlotte Water employees who have terminated service as a contributing member of LGERS, may file an application for a refund of their contributions. By state law, refunds to members with at least five years of service include four percent interest. State law requires a 60-day waiting period after service termination before the refund may be paid. The acceptance of a refund payment cancels the individual's right to employer contributions or any other benefit provided by LGERS.

**Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions.**

At June 30, 2020, Charlotte Water reported a liability of \$21,179 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2019. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2018. The total pension liability was then rolled forward to the measurement date of June 30, 2019 utilizing update procedures incorporating the actuarial assumptions. The City's proportion of the net pension liability was based on a projection of the City's long-term share of future payroll covered by the pension plan, relative to the projected future payroll covered by the pension plan of all participating LGERS employers, actuarially determined. At June 30, 2019, the City's proportion was 6.320 percent which was an increase of 0.068 percent from its proportion measured as of June 30, 2018.

For the year ended June 30, 2020, Charlotte Water recognized pension expense of \$9,525. At June 30, 2020, Charlotte Water reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 3,626	\$ -
Changes of assumptions	3,452	-
Net difference between projected and actual earnings on pension plan investments	517	-
Changes in proportion and differences between Charlotte Water contributions and proportionate share of contributions	227	2
Charlotte Water's contributions subsequent to the measurement date	5,118	-
Total	<u>\$ 12,940</u>	<u>\$ 2</u>

\$5,118 reported as deferred outflows of resources related to pensions resulting from Charlotte Water contributions subsequent to the measurement date will be recognized as an increase of the net pension asset/liability in the year ended June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30:	
2021	\$ 3,857
2022	1,245
2023	2,106
2024	612
	<u>\$ 7,820</u>

**Actuarial Assumptions:** The total pension liability in the December 31, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	3.50 to 8.10%, including inflation and productivity factor
Investment rate of return	7.00%, net of pension plan investment expense, including inflation

The plan currently uses mortality tables that vary by age, gender, employee group (i.e., general, law enforcement officer) and health status (i.e., disabled and healthy). The current mortality rates are based on published tables and based on studies that cover significant portions of the U.S. population. The healthy mortality rates also contain a provision to reflect future mortality improvements.

The actuarial assumptions used in the December 31, 2018 valuation were based on the results of an actuarial experience study for the period January 1, 2010 through December 31, 2014.

Future ad hoc cost of living adjustment amounts are not considered to be substantively automatic and are therefore not included in the measurement.

The projected long-term investment returns and inflation assumptions are developed through review of current and historical capital markets data, sell-side investment research, consultant whitepapers, and historical performance of investment strategies. Fixed income return projections reflect current yields across the U.S. Treasury yield curve and market expectations of forward yields projected and interpolated for multiple tenors and over multiple year horizons. Global public equity return projections are established through analysis of the equity risk premium and the fixed income return projections. Other asset categories and strategies' return projections reflect the foregoing and historical data analysis. These projections are 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.

The target allocation and best estimates of arithmetic real rates of return for each major asset class as of June 30, 2019 are summarized in the following table:

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term Expected Real Rate of Return</b>
Fixed Income	29.0%	1.4%
Global Equity	42.0%	5.3%
Real Estate	8.0%	4.3%
Alternatives	8.0%	8.9%
Credit	7.0%	6.0%
Inflation Protection	6.0%	4.0%
Total	100.0%	

The information above is based on 30-year expectations developed with the consulting actuary for the 2018 asset, liability and investment policy study for the North Carolina Retirement Systems. The long-term nominal rates of return underlying the real rates of return are arithmetic annualized figures. The real rates of return are calculated from nominal rates by multiplicatively subtracting a long-term inflation assumption of 3.05 percent. All rates of return and inflation are annualized.

**Discount Rate:** The discount rate used to measure the total pension liability was 7.00 percent. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from employers will be made at statutorily required rates, actuarially determined. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Sensitivity of the Proportionate Share of the Net Pension Liability to Changes in the Discount Rate:** The following presents Charlotte Water's proportionate share of the net pension asset or net pension liability calculated using the

discount rate of 7.00 percent, as well as what Charlotte Water's proportionate share of the net pension asset or net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.00 percent) or one percentage point higher (8.00 percent) than the current rate.

	1% Decrease (6.00)%	Discount Rate (7.00)%	1% Increase (8.00)%
Charlotte Water's proportionate share of the net pension liability (asset)	\$ 48,440	\$ 21,179	\$ (1,481)

**Pension Plan Fiduciary Net Position:** Detailed information about the pension plan's fiduciary net position is available in the separately issued Comprehensive Annual Financial Report for the State of North Carolina.

### b. Other Postemployment Benefits

Charlotte Water participates in the City of Charlotte Employee Benefit Trust Plan (EBTP).

**Plan Description:** The EBTP is a single-employer defined benefit healthcare plan administered by the City of Charlotte. The EBTP provides health and welfare benefit plans for the benefit of eligible retired employees of the City. Section 4.05 of the Charlotte City Code assigns the authority to establish benefit provisions for EBTP to the City Council. The EBTP is included in the Comprehensive Annual Financial Report for the City of Charlotte. The City's Comprehensive Annual Financial Report includes financial statements and required supplementary information for the EBTP. That report may be obtained by writing to the City of Charlotte, Finance Department, Charlotte-Mecklenburg Government Center, 600 East Fourth Street, 10th Floor, Charlotte, North Carolina 28202-2848.

**Plan Membership:** At June 30, 2018 the EBTP membership consisted of the following:

	2018
Inactive plan members or beneficiaries currently receiving benefit payments	2,208
Active plan members	3,513
Total	5,721

**Benefits Provided:** The EBTP provided healthcare benefits for retirees hired before July 1, 2009 and have at least ten years of City service and immediately begin drawing a retirement benefit. The City pays a percentage of the cost of coverage for employees' benefits through private insurers based on years of service. Retirees are eligible for this benefit after the earliest of 30 years of creditable service; age 60 with 25 years of creditable service; or age 55 with five years creditable service.

**Contributions:** The contribution requirements of plan members and the City are established and may be amended by the City Council. The required contribution rates for plan members were dependent on the years of service and the coverage selected. Monthly rates ranged from \$233 to \$2,517 per retiree.

#### City Contributions to EBTP based on years of creditable service

	Date Hired	
	Pre-July 1, 2009	On or after July 1, 2009
Less than 10 years	0%	0%
10 to 20 years	50%	0%
20+ years	100%	0%

The City Council set the employer contribution rate to contribute the projected pay-as-you-go-financing requirements, with additional amounts to prefund benefits as determined annually. For the current year, the City contributed \$19,957 to the plan. Charlotte Water's proportionate share of the employer contribution was \$2,250.

**Investments:** The Long-Term Investment Program (LTIP) represents an investment program in which long-term capital reserves of the City are invested under expanded investment authorization outlined in State law G.S. 147-69.2(b)(1)-(6) and (8) as rewritten with additional investment authorization in Senate Bill 703, ratified June 3, 2009, in order to diversify investment assets of the City. In addition, the LTIP is expected to be a source of funding for future OPEB obligations of the City.

The LTIP is overseen by its Board which works with an external investment consultant to manage the LTIP by developing and monitoring its investment policy, including asset allocation, selecting qualified investment managers to manage LTIP assets, and to monitor and evaluate individual investment manager performance.

The LTIP policy regarding the allocation of invested assets, is established and may be amended by the LTIP Board by a majority vote of its members. It is the policy of the Board to pursue an investment strategy with moderate risk that provides a rate of return that exceeds the rate of inflation and that is above average compared to relevant market benchmarks. The Board also seeks prudent diversification of the portfolio across a broad selection of distinct asset classes. The LTIP discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans. LTIP investments are valued at market value. The following was the Board's adopted asset allocation policy based on an analysis of historical and projected capital market return patterns and consistent with the moderate risk tolerance defined in its policy.

Asset Class	Target Allocation	Long-Term Expected Real
		Rate of Return
Domestic equity	50%	5.50%
International equity	18%	5.40%
Global fixed income	20%	-0.09%
Domestic fixed income	12%	0.10%
Total	100%	

**Rate of Return:** For the year ended June 30, 2020, the annual money market weighted rate of return on investment, net of investment expenses was 1.30 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

The components of the net OPEB liability of the City at June 30, 2020 were as follows:

	City	Charlotte Water's Proportionate Share
Total OPEB liability	\$ 633,011	\$ 43,916
Plan fiduciary net position	101,049	27,753
Net OPEB liability	\$ 531,962	\$ 16,163
Plan fiduciary net position as a percentage of the total OPEB liability	15.96%	63.20%

**Actuarial Assumptions:** The total OPEB liability of the City was determined on an actuarial valuation as of June 30, 2018, using the following key actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.50%
Real wage growth	1.00%
Wage inflation	3.50%
Salary increases, including wage inflation	
General employees	3.50% - 7.75%
Firefighters	3.50% - 7.75%
Law Enforcement Officers	3.50% - 7.35%
Long-term investment rate of return, net of OPEB plan investment expense, including price inflation	6.60%
Municipal Bond Index Rate	
Prior measurement date	3.50%
Measurement date	2.21%
Year FNP is projected to be depleted	
Prior measurement date	2047
Measurement date	2039
Single Equivalent Interest Rate, net of OPEB plan investment expense, including price inflation	
Prior measurement date	4.78%
Measurement date	3.05%
Healthcare cost trends	
Pre-Medicare medical and prescription drug	7.25% for 2018 decreasing to an ultimate rate of 4.75% by 2028
Medicare medical and prescription drug	5.38% for 2018 decreasing to an ultimate rate of 4.75% by 2022

Total OPEB liabilities were rolled forward to June 30, 2019 and June 30, 2020 for the employer and the plan, respectively, utilizing updated procedures incorporating the actuarial assumptions.

Mortality rates were based on the RP-2014 mortality tables, with adjustments for OPEB experience and generational mortality improvements using Scale MP-2015.

**Discount Rate:** The discount rate used to measure the total OPEB liability at June 30, 2019 was 3.05 percent. The projection's basis was an actuarial valuation performed as of June 30, 2018.

**Sensitivity of the Proportionate Share of the Net OPEB Liability to Changes in the Discount Rate:** The following presents Charlotte Water's proportionate share of the net OPEB liability of the EBTP as of June 30, 2020 calculated using the discount rate of 3.05 percent, as well as what Charlotte Water's proportionate share of the EBTP's liability would be if it were calculated using a discount rate that is one-percentage-point lower (2.05 percent) or one-percentage-point higher (4.05 percent) than the current rate.

	1% Decrease (2.05)%	Discount Rate (3.05)%	1% Increase (4.05)%
Net OPEB liability (asset)	\$ 19,714	\$ 16,163	\$ 13,388

**Sensitivity of the Proportionate Share of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates.** The following presents Charlotte Water's proportionate share of the net OPEB liability of the EBTP as of June 30, 2020, calculated using the current rate of 5 percent, as well as what Charlotte Water's proportionate share of the EBTP's liability would be if it were to calculate the healthcare cost trend rates that are one-percentage-point lower (4 percent) or one-percentage-point higher (6 percent) than the current healthcare cost trend rate.



	Healthcare Cost Trend Rates		
	1% Decrease	Discount Rate	1% Increase
	(4.00)%	(5.00)%	(6.00)%
Net OPEB liability (asset)	\$ 12,883	\$ 16,163	\$ 20,436

**Changes in Net OPEB Liability, OPEB Expenses and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB:** At June 30, 2020, Charlotte Water's proportionate share of the EBTP's reported net OPEB liability was \$16,163. The total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of June 30, 2018. The total OPEB liability was then rolled forward to the measurement date of June 30, 2020 utilizing update procedures incorporating the actuarial assumptions.

At June 30, 2020, the components of Charlotte Water's proportionate share of the net OPEB liability of the EBTP, measured as of June 30, 2020, were as follows:

	Increase (Decrease)		
	Total OPEB	Plan Fiduciary	Net OPEB
	Liability (a)	Net Position (b)	Asset (a) - (b)
Balances at June 30, 2019	\$ 32,914	\$ 27,440	\$ 5,474
Changes for the year:			
Service Cost	714	-	714
Interest	1,480	-	1,480
Difference between expected and actual experience	216	-	216
Changes of Assumptions	9,803	-	9,803
Contributions-employers	-	2,250	(2,250)
Net investment income	-	336	(336)
Administrative expense	-	(1,051)	1,051
Benefit payments	(1,211)	(1,211)	-
Other	-	(11)	11
Net change	11,002	313	10,689
Balances at June 30, 2020	<u>\$ 43,916</u>	<u>\$ 27,753</u>	<u>\$ 16,163</u>

**Changes of Assumptions:** Changes of assumptions and other inputs reflect a change in the discount rate from 4.78 percent in 2018 to 3.05 percent in 2019. Medical claims cost and rates were changed based on most recent experience and changed to the current schedule. The Excise Tax of 40 percent on healthcare plans that are above the thresholds set by the Affordable Care Act that will be effective in 2022 and have been reflected.

For the year ended June 30, 2020, Charlotte Water's proportionate share of the EBTP's recognized OPEB expense was \$2,021. At June 30, 2020, Charlotte Water's proportionate share of the EBTP's reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 180	\$ 4,573
Changes of assumptions or other inputs	8,174	1,960
Net difference between projected and actual earnings on plan investment	377	-
Total	<u>\$ 8,731</u>	<u>\$ 6,533</u>

Total amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

**Year ended June 30:**

2021	\$	49
2022		52
2023		54
2024		1,626
2025		417
	\$	<u>2,198</u>

Below are the City's Statement of Net Position and Statement of Changes in Net Position for the Employee Benefit – Other Employee Benefit Trust:

**Statement of Net Position - Other Employee Benefit Trust**

Assets:

Cash, cash equivalents and investments	\$	189
--	----	-----

Receivables:

Interest and dividends		8
------------------------	--	---

Investments:

Mutual Funds		<u>100,878</u>
--------------	--	----------------

Total assets		<u>101,075</u>
--------------	--	----------------

Liabilities

Accounts payable		<u>26</u>
------------------	--	-----------

Total liabilities		<u>26</u>
-------------------	--	-----------

Net Position:

Net position restricted for OPEB	\$	<u>101,049</u>
----------------------------------	----	----------------

**Statement of Changes in Net Position - Other Employee Benefit Trust**

Additions:	
Contributions-	
Employer	\$ 19,010
Investment income -	
Net appreciation in fair value of investments	572
Interest	974
Total investment income	1,546
Investment expense	321
Net investment income	1,225
Total additions	20,235
Deductions:	
Benefits	10,326
Insurance premiums	7,691
Administration	1,984
Total deductions	20,001
Change in net position	234
Net position - beginning	100,815
Net position - ending	\$ 101,049

**c. Deferred Compensation Plan**

The City offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan, which is available to all City employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency. The plan assets are placed in trust for the exclusive benefit of the participants and their beneficiaries and therefore are not included in the City's financial statements.

**7. INSURANCE:**

**a. Employee Health and Life**

The City provides health and life benefits to employees and retirees. Private companies administer these benefits pursuant to administrative services agreements. The City maintains insurance coverage with private carriers for life claims, vision claims, and excess coverage for health claims in excess of \$500. The City has an Employee Health and Life Insurance Fund (EHLIF), an internal service fund, to account for and finance its health and life insurance program.

Charlotte Water participates and makes payments to the EHLIF for both an amount per employee and a proportionate share of the administrative cost. The amount per employee is based on actuarial estimates of amounts needed to pay prior and current year claims. The employees and retirees contribute a portion of the cost for health coverage. The City provides basic life insurance and accidental death and dismemberment benefits for employees in the amount of two times the employees' salary up to a maximum of \$500. Employees may purchase additional life insurance up to a maximum of five times their salary. The City provides short-term disability that equal 60 percent of salary for up to 26 weeks.

**b. Risk Management**

Charlotte Water is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The City has a Risk Management Fund (RMF), an internal service fund, to account for and finance its insured and uninsured risks of loss. Currently, insurance coverage is purchased for excess property damage for buildings, contents, City vehicles while parked and light rail train; excess workers' compensation, excess vehicle and general liability; network security liability; police professional liability; police helicopter hull liability; drone liability; airport liability; City bus liability and passenger railway liability for the light rail train operations. Insurance coverage includes vehicle and general liability claims in excess of \$2,000 but less than \$22,000 per occurrence, workers' compensation claims in excess of \$2,000, property damage claims in excess of \$250 and flood insurance of \$100,000 in all flood zones, except \$10,000 in flood zone A in excess of federal flood program maximums, network security coverage in the amount of \$10,000 and drone liability in the amount of \$2,000. The finance officer is bonded for \$100. Employees who handle funds or have access to inventories are bonded under a blanket bond for \$500. The actuarially determined losses for the remaining risks and deductible amounts are funded in the RMF. Settled claims have not exceeded insurance coverage in the past three years. Charlotte Water participates in the risk management program and makes payments to the RMF based on historical cost information or actuarial estimates of the amounts needed to pay prior and current year claims and establish a reserve for catastrophic losses. Charlotte Water made payments to the RMF for the year ended June 30, 2020 in the amount of \$3,913.

**8. COMMITMENTS AND CONTINGENCIES:**

On October 2, 2020, a state judge entered a ruling that is made up of two parts. On the first part, the state judge granted a ruling declaring Charlotte Water's assessment of system development fees between November 5, 2015, and June 30, 2018, to be illegal and ordered those fees be repaid, with interest, to the plaintiffs. The City has a right to appeal this part of the ruling and will consider its options to do so. On the second part of the ruling, the state judge ordered a jury trial to determine the legality of Charlotte Water's assessment of system development fees on and after July 1, 2018. If the court rules against the City in the second part, it would have a right to appeal as well. It is likely that any appeal of either part of the ruling would commence after the second part has concluded.

Charlotte Water has received a number of federal and state grants for specific purposes that are subject to review by the grantor agencies. Such reviews could lead to requests for reimbursement to the grantor agencies for expenditures disallowed under the terms of the grants. The City management believes that such disallowances, if any, would not be significant.

During 2020, an outbreak of a novel strain of coronavirus (COVID-19) emerged globally. As a result of the spread of COVID-19, economic uncertainties have arisen that could negatively impact Charlotte Water's revenue and operations for an indeterminable time period. Other financial impacts could occur that are unknown at this time.

Charlotte Water authorized capital projects at June 30 as follows:

	2020
Project authorization	\$3,453,698
Expended	2,671,436
Unexpended	<u>\$782,262</u>

Financial resources are available to fund the total amount of unexpended authorizations. Charlotte Water had construction and other contractual commitments of approximately \$346,938 at June 30, 2020.



A photograph of two water utility workers in safety gear (hard hats, high-visibility vests, and gloves) working on a yellow fire hydrant. One worker is using a tool to adjust the hydrant, while the other stands nearby. A white bucket labeled 'R40 HYDRAULIC OIL' is on the ground. The background shows a residential street with trees and a house. The image is framed by a blue circular graphic on the left.

# REQUIRED SUPPLEMENTARY INFORMATION

CHARLOTTE WATER





# TABLE OF CONTENTS

CHARLOTTE WATER



## Required Supplementary Information

### Local Government Employee's Retirement System

Proportionate Share of Net Pension Liability (Asset) for the City of Charlotte .....	42
City of Charlotte's Contributions .....	43

### Employee Benefit Trust Plan (EBTP)

Schedule of Changes in Net OPEB Liability .....	44
Schedule of Changes of Total Liability as a Percentage of Covered Payroll .....	45
Schedule of City Contributions and Investment Returns .....	46



## REQUIRED SUPPLEMENTARY INFORMATION

**CHARLOTTE WATER**  
**LOCAL GOVERNMENT EMPLOYEES' RETIREMENT SYSTEM**  
**PROPORTIONATE SHARE OF NET PENSION LIABILITY (ASSET) FOR THE CITY OF CHARLOTTE**  
**LAST SEVEN FISCAL YEARS (Dollar Amounts in Thousands)**

Valuation Date Measurement Date Reporting Date	December 31, 2012 June 30, 2013 June 30, 2014	December 31, 2013 June 30, 2014 June 30, 2015	December 31, 2014 June 30, 2015 June 30, 2016	December 31, 2015 June 30, 2016 June 30, 2017	December 31, 2016 June 30, 2017 June 30, 2018	December 31, 2017 June 30, 2018 June 30, 2019	December 31, 2018 June 30, 2019 June 30, 2020
City of Charlotte's proportion of the net pension liability (asset) (%)	5.89%	(5.88%)	5.89%	6.05%	6.12%	6.25%	6.32%
City of Charlotte's proportion of the net pension liability (asset) (\$)	\$ 71,032	\$ (32,461)	\$ 26,455	\$ 128,378	\$ 93,421	\$ 148,334	\$ 172,606
Charlotte Water's proportion of the net pension liability (asset) (\$)	\$ 7,954	\$ (3,885)	\$ 3,189	\$ 14,961	\$ 11,070	\$ 18,275	\$ 21,179
City of Charlotte's covered payroll	\$ 317,369	\$ 358,413	\$ 327,094	\$ 350,856	\$ 381,739	\$ 397,056	\$ 425,364
City of Charlotte's proportionate share of the net pension (asset) as a percentage of its covered payroll	22.38%	(9.06%)	8.09%	36.59%	24.47%	37.36%	40.58%
Plan fiduciary net position as a percentage of the total pension liability <sup>(1)</sup>	94.35%	102.64%	98.09%	91.47%	94.18%	91.63%	90.86%

**NOTES:**

<sup>(1)</sup> This will be the same percentage for all participant employers in the LGERS plan. Information shown on this page is for the employer, the City of Charlotte, unless otherwise noted. This schedule will not present ten years' of fiscal information until 2023

**CHARLOTTE WATER**  
**LOCAL GOVERNMENT EMPLOYEES' RETIREMENT SYSTEM**  
**CITY OF CHARLOTTE'S CONTRIBUTIONS**  
**LAST SEVEN FISCAL YEARS (Dollar Amounts in Thousands)**

	2014	2015	2016	2017	2018	2019	2020
City of Charlotte's contractually required contribution	\$ 23,348	\$ 24,288	\$ 23,959	\$ 28,613	\$ 30,712	\$ 33,945	\$ 41,715
City of Charlotte's contributions in relation to the contractually required contribution	23,348	24,288	23,959	28,613	30,712	33,945	41,715
<b>Contribution deficiency (excess)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
City of Charlotte's covered payroll	\$ 358,413	\$ 327,094	\$ 350,856	\$ 381,739	\$ 397,056	\$ 425,364	\$ 454,357
City of Charlotte's contributions as a percentage of covered payroll	6.51%	7.43%	6.83%	7.50%	7.73%	7.98%	9.18%
Charlotte Water's proportion of contractually required contribution	\$ 2,615	\$ 2,750	\$ 2,757	\$ 3,335	\$ 3,639	\$ 4,182	\$ 5,118
Charlotte Water's proportion of contributions in relation to the contractually required contribution	2,615	2,750	2,757	3,335	3,639	4,182	5,118
<b>Contribution deficiency (excess)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

NOTES:  
Information shown on this page is for the employer, the City of Charlotte, unless otherwise noted.  
This schedule will not present ten years' of fiscal information until 2023



## REQUIRED SUPPLEMENTARY INFORMATION

CHARLOTTE WATER  
EMPLOYEE BENEFIT TRUST PLAN (EBTP)  
SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY  
LAST FOUR FISCAL YEARS (Dollar Amounts in Thousands)

Valuation Date	July 1, 2017	July 1, 2017	June 30, 2018	June 30, 2018	June 30, 2018
Measurement Date	June 30, 2017	June 30, 2017	June 30, 2018	June 30, 2019	June 30, 2020
Reporting Date	June 30, 2017	June 30, 2017	June 30, 2018	June 30, 2019	June 30, 2020
City of Charlotte's total OPEB Liability					
Service cost at end of year	\$ 7,002	\$ 7,545	\$ 8,123	\$ 10,615	
Interest on the total OPEB liability	23,432	24,372	24,031	22,012	
Difference between expected and actual experience	(294)	-	(106,807)	3,218	
Changes of assumptions or other inputs	-	-	(45,850)	145,782	
Benefit payments	(14,639)	(25,143)	(15,592)	(18,016)	
Net change in Total OPEB Liability	15,501	6,774	(136,095)	163,611	
Total OPEB Liability - beginning	583,220	598,721	605,495	469,400	
Total OPEB Liability - ending	598,721	605,495	469,400	633,011	
Plan Fiduciary Net Position					
Contributions - employer	16,361	20,454	21,689	19,957	
Net investment income	7,532	5,881	4,730	1,224	
Benefit payments	(14,639)	(14,782)	(15,592)	(18,016)	
Additional contributions into the trust	-	20,325	-	-	
Administrative expense	(232)	(266)	(223)	(1,984)	
Other	(1,844)	(2,746)	-	(41)	
Net change in Plan Fiduciary Net Position	7,178	28,866	10,604	1,140	
Plan Fiduciary Net Position - beginning	53,261	60,439	89,305	99,909	
Plan Fiduciary Net Position - ending	60,439	89,305	99,909	101,049	
Net OPEB Liability - ending	\$ 538,282	\$ 516,190	\$ 369,491	\$ 531,962	

NOTES:

Information shown on this page is for the employer, the City of Charlotte, unless otherwise noted.  
This schedule will not present ten years' of fiscal information until 2026

**CHARLOTTE WATER**  
**EMPLOYEE BENEFIT TRUST PLAN (EBTP)**  
**SCHEDULE OF CHANGES OF TOTAL LIABILITY AS A PERCENTAGE OF COVERED PAYROLL**  
**LAST FOUR FISCAL YEARS (Dollar Amounts in Thousands)**

	2017	2018	2019	2020
City of Charlotte's total OPEB liability	\$ 598,721	\$ 605,495	\$ 469,400	\$ 633,011
Plan fiduciary net position	60,439	89,305	99,909	101,049
<b>City of Charlotte's net OPEB liability</b>	<b>\$ 538,282</b>	<b>\$ 516,190</b>	<b>\$ 369,491</b>	<b>\$ 531,962</b>
Plan fiduciary net position as a percentage of total OPEB liability	10.09%	14.75%	21.28%	15.96%
City of Charlotte's covered payroll	\$ 402,489	\$ 402,489	\$ 252,834	\$ 252,834
City of Charlotte's net OPEB liability as a percentage of covered payroll	133.74%	128.25%	146.14%	210.40%

NOTES:  
Information shown on this page is for the employer, the City of Charlotte, unless otherwise noted.  
This schedule will not present ten years' of fiscal information until 2026

**CHARLOTTE WATER**  
**EMPLOYEE BENEFIT TRUST PLAN (EBTP)**  
**SCHEDULE OF CITY CONTRIBUTIONS AND INVESTMENT RETURNS**  
**LAST FOUR FISCAL YEARS (Dollar Amounts in Thousands)**

	2017	2018	2019	2020
Actuarially determined contribution	\$ 22,729	\$ 25,967	\$ 26,605	\$ 26,605
Contributions in relation to actuarially determined contribution	24,630	40,778	21,689	19,957
<b>Contribution deficiency (excess)</b>	<b>\$ (1,901)</b>	<b>\$ (14,811)</b>	<b>\$ 4,916</b>	<b>\$ 6,648</b>
City of Charlotte's covered payroll	\$ 402,489	\$ 402,489	\$ 252,834	\$ 252,834
Contributions in relation to actuarially determined contribution as a percentage of covered payroll	6.12%	10.13%	8.58%	7.89%

The total OPEB liability was determined based on actuarial valuation as of June 30, 2018, using the following key actuarial assumptions and other inputs:

Inflation	2.50%
Real wage growth	1.00%
Wage inflation	3.50%
Salary increases, including wage inflation	
General employees	3.50% - 7.75%
Firefighters	3.50% - 7.75%
Law Enforcement Officers	3.50% - 7.35%
Long-term investment rate of return, net of OPEB plan investment expense, including price inflation	6.60%
Municipal Bond Index Rate	
Prior measurement date	3.50%
Measurement date	2.21%
Year FNP is projected to be depleted	
Prior measurement date	2047
Measurement date	2039
Single Equivalent Interest Rate, net of OPEB plan investment expense, including price inflation	
Prior measurement date	4.78%
Measurement date	3.05%
Healthcare cost trends	
Pre-Medicare medical and prescription drug	7.25% for 2018 decreasing to an ultimate rate of 4.75% by 2028
Medicare medical and prescription drug	5.38% for 2018 decreasing to an ultimate rate of 4.75% by 2022

	2017	2018	2019	2020
Annual money-weighted rate of return, net of investment expenses	13.84%	7.60%	4.38%	1.30%

**NOTES:**

Information shown on this page is for the employer, the City of Charlotte, unless otherwise noted.

This schedule will not present ten years' worth of fiscal information until 2026



# INDIVIDUAL FUND AND OTHER SUPPLEMENTARY INFORMATION

CHARLOTTE WATER





# TABLE OF CONTENTS

CHARLOTTE WATER



## Individual Fund and Other Supplementary Information

Operating Fund	
Schedule of Revenues, Expenditures and Transfer – Budget and Actual (Non-GAAP) .....	50
Debt Service Fund	
Schedule of Revenues, Expenditures and Transfer – Budget and Actual (Non-GAAP) .....	51
Capital Projects Fund	
Schedule of Expenditures Compared with Authorizations .....	52
Schedule of Reconciliation of Budgetary (Non-GAAP Basis) to Full Accrual Basis .....	53

**CHARLOTTE WATER  
OPERATING FUND  
SCHEDULE OF REVENUES, EXPENDITURES AND TRANSFERS-  
BUDGET AND ACTUAL (NON-GAAP BASIS)  
FOR THE YEAR ENDED JUNE 30, 2020  
(Dollar Amounts In Thousands)**

	Budget	Actual	Variance- Positive (Negative)
<b>REVENUES:</b>			
Volumetric rates	\$ 308,743	\$ 300,832	\$ (7,911)
Fixed rates	75,683	79,262	3,579
System development fees	18,000	30,115	12,115
Other	23,490	33,069	9,579
Investment earnings	3,000	3,344	344
<b>Total revenues</b>	<b>428,916</b>	<b>446,622</b>	<b>17,706</b>
<b>EXPENDITURES:</b>			
Water supply and treatment	17,902	16,928	974
Sewer system and treatment	50,130	47,249	2,881
Administration and engineering	45,738	39,788	5,950
Other operating	66,657	63,779	2,878
<b>Total expenditures</b>	<b>180,427</b>	<b>167,744</b>	<b>12,683</b>
Revenues over expenditures	248,489	278,878	30,389
<b>TRANSFERS OUT:</b>			
Water and Sewer Debt Service	151,763	149,633	2,130
Water and Sewer Capital Projects	135,035	135,035	-
Capital Projects	120	120	-
<b>Total transfers out</b>	<b>286,918</b>	<b>284,788</b>	<b>2,130</b>
Revenues (under) expenditures and transfers	\$ (38,429)	\$ (5,910)	\$ 32,519



**CHARLOTTE WATER**  
**DEBT SERVICE FUND**  
**SCHEDULE OF REVENUES, EXPENDITURES AND TRANSFERS-**  
**BUDGET AND ACTUAL (NON-GAAP BASIS)**  
**FOR THE YEAR ENDED JUNE 30, 2020**  
**(Dollar Amounts In Thousands)**

	Budget	Actual	Variance- Positive (Negative)
<b>REVENUES:</b>			
Investment earnings	\$ -	\$ 25	\$ 25
Refunding bonds issued	58,750	58,750	-
Premium on debt issuance	15,045	14,995	(50)
Proceeds from installment purchases	-	38	38
<b>Total revenues</b>	<b>73,795</b>	<b>73,808</b>	<b>13</b>
<b>EXPENDITURES:</b>			
Bonds-			
Principal retirement	78,135	78,135	-
Interest	62,402	62,402	-
Other financing agreements-			
Principal retirement	8,270	5,933	2,337
Interest	2,771	1,249	1,522
Payment to refunded bond escrow agent	73,275	73,275	-
Bond issue expense	520	500	20
Other	1,014	676	338
<b>Total expenditures</b>	<b>226,387</b>	<b>222,170</b>	<b>4,217</b>
Revenues (under) expenditures	(152,592)	(148,362)	4,230
<b>TRANSFERS IN:</b>			
Water and Sewer Operating	151,763	149,633	(2,130)
Water and Sewer Capital Projects	829	528	(301)
<b>Total transfers in</b>	<b>152,592</b>	<b>150,161</b>	<b>(2,431)</b>
Revenues and transfer over expenditures	\$ -	\$ 1,799	\$ 1,799



**CHARLOTTE WATER**  
**CAPITAL PROJECTS FUND**  
**SCHEDULE OF EXPENDITURES COMPARED WITH AUTHORIZATIONS**  
**FOR THE YEAR ENDED JUNE 30, 2020**  
(Dollar Amounts In Thousands)

	Authorizations	Expenditures			Unexpended Authorizations
		Current Year	Prior Years	Total	
Water:					
Capacity for growth	\$ 467,554	\$ 22,174	\$ 316,133	\$ 338,307	\$ 129,247
Commitment public projects/Operations	155,009	6,532	119,492	126,024	28,985
Rehab and replacement	441,248	43,427	323,117	366,544	74,704
Regulatory requirements	45,617	5,172	34,325	39,497	6,120
Sewer:					
Capacity for growth	976,259	114,514	578,748	693,262	282,997
Commitment public projects/Operations	125,647	3,983	97,944	101,927	23,720
Rehab and replacement	922,587	54,315	745,677	799,992	122,595
Regulatory requirements	186,563	28,791	89,441	118,232	68,331
New facilities	26,924	1,987	1,095	3,082	23,842
Facility renovations	5,547	339	1,227	1,566	3,981
Facilities maintenance	2,354	1,186	424	1,610	744
Technology	58,286	5,370	41,295	46,665	11,621
Capital equipment	40,103	5,571	29,157	34,728	5,375
<b>Total water and sewer capital projects</b>	<b>\$ 3,453,698</b>	<b>\$ 293,361</b>	<b>\$ 2,378,075</b>	<b>\$ 2,671,436</b>	<b>\$ 782,262</b>





**CHARLOTTE WATER**  
**SCHEDULE OF RECONCILIATION OF BUDGETARY (NON-GAAP BASIS)**  
**TO FULL ACCRUAL BASIS**  
**FOR THE YEAR ENDED JUNE 30, 2020**  
**(Dollar Amounts In Thousands)**

Revenues and transfers over (under) expenditures and transfers:

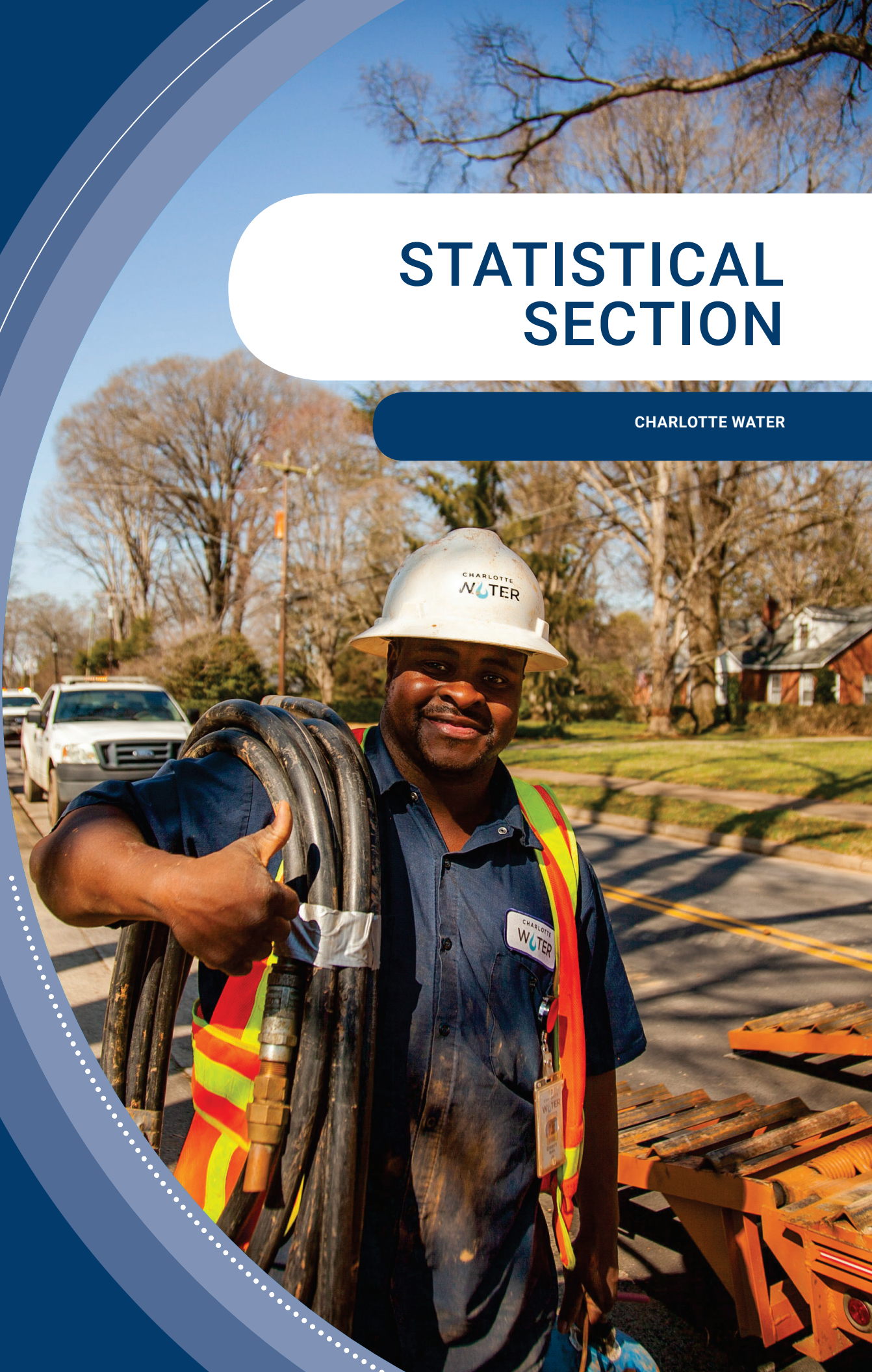
Operating Fund	\$	(5,910)
Debt Service Fund		1,799
Capital Projects Fund investment earnings		3,469
Current year encumbrances		13,190
Deferred outflows of resources for pensions		(1,600)
Net pension liability		(2,904)
Deferred inflows of resources for pensions		97
Deferred outflows of resources for OPEB		8,596
Net OPEB liability		(10,689)
Deferred inflows of resources for OPEB		2,128
Depreciation		(134,388)
Debt principal retirement		84,068
Premium on debt issuance		(14,995)
Capital outlay		288
Amortization of deferred charges		(1,639)
Amortization of premium		24,743
Deferred inflows of gains on refundings		(15,198)
Capital contributions		57,158
Other		(2,936)
Net transfers to (from) Water and Sewer Capital Projects Fund:		
Water and Sewer Operating		140,866
Water and Sewer Debt Service		(528)
Compensated absences		(1,077)
Change in net position	\$	<u>144,538</u>

Note: Pursuant to state law, budgets are adopted on an annual basis for Operating and Debt Service Funds. Budgets for Capital Projects Funds are adopted on a project basis.



# STATISTICAL SECTION

CHARLOTTE WATER





# TABLE OF CONTENTS

CHARLOTTE WATER



## Statistical Section

### Financial Trends

Net Position .....	58
Operating Revenues by Source .....	59
Operating Revenues by Source .....	60
Operating Expenses .....	61
Nonoperating Revenues and Expenses .....	62

### Revenue Capacity

Water and Sewer Customers .....	63
---------------------------------	----

### Debt Capacity

Revenue Bond Coverage .....	64
-----------------------------	----

### Demographic and Economic Information

Demographic and Economic Statistics .....	65
Principal Employers .....	66

### Operating Information

Full-Time Equivalent Employees by Function/Program .....	67
Operating Indicators by Function/Program .....	68
Capital Asset Statistics by Function/Program .....	69

CHARLOTTE WATER  
NET POSITION  
LAST TEN FISCAL YEARS (Dollar Amounts in Thousands)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Net investments in capital assets	\$ 1,283,140	\$ 1,258,432	\$ 1,464,238	\$ 1,517,997	\$ 1,523,291	\$ 1,583,337	\$ 1,720,933	\$ 1,786,625	\$ 1,977,806	\$ 2,184,781
Restricted for:										
Debt Service	14,644	3,302	3,304	3,310	3,154	-	-	-	-	-
Unrestricted	252,774	342,836	186,600	224,887	289,999	334,392	363,349	411,160	382,121	319,684
<b>Total</b>	<b>\$ 1,550,558</b>	<b>\$ 1,604,570</b>	<b>\$ 1,654,142</b>	<b>\$ 1,746,194</b>	<b>\$ 1,816,444</b>	<b>\$ 1,917,729</b>	<b>\$ 2,084,282</b>	<b>\$ 2,197,785</b>	<b>\$ 2,359,927</b>	<b>\$ 2,504,465</b>

SOURCE:  
City of Charlotte Finance Department



**CHARLOTTE WATER**  
**CHANGES IN NET POSITION**  
**LAST TEN FISCAL YEARS (Dollar Amounts in Thousands)**

	2011	2012	2013	2014	2015	2016	2017	2018 <sup>(3)</sup>	2019	2020
Operating revenues	\$ 265,490	\$ 292,836	\$ 304,348	\$ 318,859	\$ 340,764	\$ 377,127	\$ 402,309	\$ 407,344	\$ 424,327	\$ 438,105
Operating expenses	185,432	191,093	192,841	199,869	242,850	225,916	258,927	256,734	280,334	311,501
Nonoperating revenues (expenses)	(54,562)	(60,472)	(59,406)	(51,744)	(49,172)	(76,196)	(40,939)	(53,980)	(47,665)	(44,935)
<b>Income before capital contributions</b>	<b>25,496</b>	<b>41,271</b>	<b>52,101</b>	<b>67,246</b>	<b>48,742</b>	<b>75,015</b>	<b>102,443</b>	<b>96,630</b>	<b>96,328</b>	<b>81,669</b>
Capital contributions	24,671	12,741	10,976	24,806	26,847	26,270	60,729	48,478	65,912	57,158
Transfers in (out)	-	-	(1,878)	-	-	-	3,381	(331)	(98)	5,711
<b>Change in net position</b>	<b>\$ 50,167</b>	<b>\$ 54,012</b>	<b>\$ 61,199</b>	<b>\$ 92,052</b>	<b>\$ 75,589</b>	<b>\$ 101,285</b>	<b>\$ 166,553</b>	<b>\$ 144,777</b>	<b>\$ 162,142</b>	<b>\$ 144,538</b>

SOURCE:

City of Charlotte Finance Department

NOTES:

<sup>(1)</sup> In fiscal year 2012, the city implemented availability fees to help recover a portion of annual debt service, approximately 33 percent.

<sup>(2)</sup> Capacity fees changed to system development fees due to House Bill 436, Session Law 2017-138, passed on July 20, 2017, also known as the "Public Water and Sewer Development Fee Act".

<sup>(3)</sup> Fiscal year 2018 has been restated to reflect recategorization of capacity fees from nonoperating revenues to operating revenues in the amount of \$28,316.

**CHARLOTTE WATER**  
**OPERATING REVENUES BY SOURCE**  
**LAST TEN FISCAL YEARS (Dollar Amounts in Thousands)**

	2011	2012	2013	2014	2015	2016	2017	2018 <sup>(3)</sup>	2019	2020
Operating Revenues:										
Charges for services	\$ 256,733	\$ 255,742	\$ 260,146	\$ 271,438	\$ 289,303	\$ 313,781	\$ 324,311	\$ 318,084	\$ 343,705	\$ 355,501
Availability fees <sup>(1)</sup>	-	25,813	29,517	30,857	31,766	37,113	44,913	51,039	51,141	47,903
Capacity fees <sup>(2)</sup>	5,951	7,443	10,352	11,795	13,098	19,157	24,290	-	-	-
System development fees <sup>(2)</sup>	-	-	-	-	-	-	-	28,316	23,829	30,115
Miscellaneous	2,806	3,838	4,333	4,769	6,597	7,076	8,795	9,905	5,652	4,586
<b>Total operating revenues</b>	<b>\$ 265,490</b>	<b>\$ 292,836</b>	<b>\$ 304,348</b>	<b>\$ 318,859</b>	<b>\$ 340,764</b>	<b>\$ 377,127</b>	<b>\$ 402,309</b>	<b>\$ 407,344</b>	<b>\$ 424,327</b>	<b>\$ 438,105</b>

## SOURCE:

City of Charlotte Finance Department

## NOTES:

<sup>(1)</sup> In fiscal year 2012, the city implemented availability fees to help recover a portion of annual debt service, approximately 33 percent.<sup>(2)</sup> Capacity fees changed to system development fees due to House Bill 436, Session Law 2017-138, passed on July 20, 2017, also known as the "Public Water and Sewer Development Fee Act".<sup>(3)</sup> Fiscal year 2018 has been restated to reflect recategorization of capacity fees from nonoperating revenues to operating revenues in the amount of \$28,316.

**CHARLOTTE WATER  
OPERATING EXPENSES  
LAST TEN FISCAL YEARS (Dollar Amounts in Thousands)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Operating Expenses:										
Administration <sup>(1)</sup>	\$ 31,366	\$ 30,782	\$ 25,275	\$ 26,327	\$ 28,963	\$ 28,728	\$ 39,864	\$ 36,598	\$ 26,136	\$ 43,394
Operating and maintenance <sup>(2)</sup>	67,587	70,235	74,635	79,255	92,038	91,487	104,917	99,496	127,432	132,641
Other	436	1,475	1,473	1,629	1,648	1,929	2,183	121	542	1,078
Depreciation	86,043	88,601	91,458	92,658	120,201	103,772	111,963	120,519	126,224	134,388
<b>Total operating expenses</b>	<b>\$ 185,432</b>	<b>\$ 191,093</b>	<b>\$ 192,841</b>	<b>\$ 199,869</b>	<b>\$ 242,850</b>	<b>\$ 225,916</b>	<b>\$ 258,927</b>	<b>\$ 256,734</b>	<b>\$ 280,334</b>	<b>\$ 311,501</b>

SOURCE:

City of Charlotte Finance Department

NOTES:

<sup>(1)</sup> In fiscal year 2020, increase in administration were due to paying additional costs through cost allocation and direct salaries for services provided by other City departments.

<sup>(2)</sup> In fiscal year 2015, operating and maintenance increased due to additional environmental services related to sludge disposal. In fiscal year 2019, increased expenses were due to changes in deferred inflows for OPEB and increased CIP for various construction projects.

**CHARLOTTE WATER**  
**NONOPERATING REVENUES AND EXPENSES**  
**LAST TEN FISCAL YEARS (Dollar Amounts in Thousands)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Nonoperating Revenues (Expenses):										
Investment earnings	\$ 2,320	\$ 1,316	\$ (176)	\$ 1,175	\$ 1,155	\$ 1,768	\$ 1,600	\$ 5,830	\$ 10,287	\$ 6,838
Interest expense and other charges	(63,932)	(60,188)	(56,545)	(56,653)	(55,084)	(82,368)	(49,192)	(66,976)	(61,377)	(56,921)
Grant contributions	222	16	-	-	-	-	-	-	-	-
Miscellaneous	6,828	(1,616)	(2,685)	3,734	4,757	4,404	6,653	7,166	3,425	5,148
<b>Total nonoperating (expenses)</b>	<b>\$ (54,562)</b>	<b>\$ (60,472)</b>	<b>\$ (59,406)</b>	<b>\$ (51,744)</b>	<b>\$ (49,172)</b>	<b>\$ (76,196)</b>	<b>\$ (40,939)</b>	<b>\$ (53,980)</b>	<b>\$ (47,665)</b>	<b>\$ (44,935)</b>

SOURCE:

City of Charlotte Finance Department

**CHARLOTTE WATER  
WATER AND SEWER CUSTOMERS  
CURRENT YEAR AND NINE YEARS AGO**

The following table presents information on the ten largest users of water and sewer system during the fiscal year ended June 30, 2020. There have been no substantial new users added to the water and sewer system since June 30, 2020.

Number	Customer	Revenues	Percentage
1	Chesapeake Treatment Co. LLC	\$ 716,863	17.94%
2	Frito Lay Inc.	655,045	16.40%
3	UNC Charlotte	452,876	11.34%
4	Independent Beverage Corp.	449,117	11.24%
5	Union County	390,900	9.78%
6	Atrium Health - 1400 Scott Ave.	333,538	8.35%
7	Barnhardt Manufacturing Co.	268,108	6.71%
8	Presbyterian Hospital	246,073	6.16%
9	Atrium Health - 1000 Blythe Blvd.	244,463	6.12%
10	Blue Granite	238,219	5.96%
	Total	<u>\$ 3,995,202</u>	<u>100.00%</u>

The following table presents information on the ten largest users of water and sewer system during the fiscal year ended June 30, 2011.

Number	Customer	Revenues	Percentage
1	York County Water & Sewer	\$ 1,495,070	35.38%
2	Chesapeake Treatment Co. LLC	506,992	12.00%
3	UNC Charlotte	500,564	11.85%
4	Frito Lay Inc.	369,755	8.75%
5	Independent Beverage Corp.	296,815	7.02%
6	City of Charlotte - Airport	226,339	5.36%
7	Cargill, Inc.	222,865	5.27%
8	Presbyterian Hospital	215,691	5.10%
9	Paramount Carowinds	197,968	4.69%
10	Lance	193,559	4.58%
	Total	<u>\$ 4,225,618</u>	<u>100.00%</u>

SOURCE:  
Charlotte Water

**CHARLOTTE WATER  
REVENUE BOND COVERAGE  
LAST TEN FISCAL YEARS**  
(Dollar Amounts in Thousands)

<b>Fiscal Year</b>	<b>Allowable Revenues <sup>(1)</sup></b>	<b>Current Expenses <sup>(1)</sup></b>	<b>Debt Service Requirement</b>	<b>Revenue Bond Coverage</b>	<b>50% of Surplus Fund <sup>(1)</sup></b>	<b>Revenue Bond Coverage, Including Surplus Fund</b>
2011	\$ 268,791	\$ 103,436	\$ 147,208	1.1	\$ 61,343	1.5
2012	295,784	106,737	140,599	1.3	73,442	1.9
2013	308,137	108,679	143,074	1.4	85,595	2
2014	323,047	114,147	145,837	1.4	83,019	2
2015	345,228	125,272	142,804	1.5	71,888	2
2016	382,826	129,059	150,528	1.7	92,803	2.3
2017	410,308	146,262	150,819	1.8	119,415	2.5
2018	418,226	142,433	146,441	1.9	133,664	2.8
2019	435,750	150,082	153,687	1.9	142,773	2.8
2020	446,647	168,420	147,719	1.9	136,712	2.8

SOURCE:

City of Charlotte Finance Department

NOTES:

<sup>(1)</sup> Allowable revenues, current expenses and Surplus Fund as defined by the Revenue Bond Order.





**CHARLOTTE WATER  
DEMOGRAPHICS AND ECONOMIC STATISTICS  
LAST TEN FISCAL YEARS**

<b>Year</b>	<b>Population</b>	<b>Personal Income (thousands of dollars)</b>	<b>Per Capita Personal Income</b>	<b>Median Age</b>	<b>Unemployment Rate</b>
2011	731,424	\$ 23,109,445	\$ 24,267	35.2	10
2012	772,627	22,605,735	23,667	33.9	8.8
2013	796,921	22,270,608	22,874	33.9	8.4
2014	796,921	23,708,978	23,946	34.5	6.0
2015	809,958	26,268,690	25,877	35.4	5.3
2016	827,097	27,738,165	26,575	35.5	4.5
2017	856,062	N/A	37,687	34.7	4.1
2018	875,318	N/A	37,913	35.1	4.0
2019	919,503	N/A	N/A	34.7	4.2
2020	940,144	N/A	N/A	N/A	8.8

**SOURCE:**

Unemployment rates are from NC Commerce LAUS reports, Population provided by the City of Charlotte Planning Department, Per Capita and Median Age provided by Census Reporter

N/A: Information not available

**NOTE:**

Population estimated by using the municipal population of the City of Charlotte and Extra Territorial Jurisdiction consisting of tax parcel data and residential certificates of occupancy.

Unemployment rate is for the City of Charlotte during June of the corresponding year.

**CHARLOTTE WATER**  
**PRINCIPAL EMPLOYERS FOR THE CITY OF CHARLOTTE**  
**CURRENT YEAR AND NINE YEARS AGO**

Employer	2020			2011		
	Employees	Rank	Percentage to Total City Employment	Employees	Rank	Percentage to Total City Employment
Atrium Health (formerly Carolinas Healthcare System)	35,700	1	6.48%	27,432	1	5.98%
Wells Fargo	23,500	2	4.26	20,500	2	4.47
Charlotte-Mecklenburg Schools	18,495	3	3.36	18,202	3	3.97
Wal-Mart Stores, Incorporated	17,100	4	3.10	14,000	5	3.05
Bank of America	15,000	5	2.72	15,000	4	3.27
Novant Health/Presbyterian Regional Healthcare Corporation	11,698	6	2.12	9,000	6	1.96
American Airlines/US Airways Group, Incorporated	11,000	7	2.00	6,637	10	1.45
Delhaize America Incorporated/ Food Lion LLC	9,078	8	1.65	8,700	7	1.90
Harris Teeter Incorporated	8,239	9	1.50	-	-	-
Lowe's Companies, Incorporated	7,801	10	1.42	8,700	7	1.90
Duke Energy Corporation	-	-	-	7,300	9	1.59
<b>Total</b>	<b>157,611</b>		<b>28.61%</b>	<b>135,471</b>		<b>29.54%</b>

**SOURCE:**

Number of employees provided by Charlotte Regional Business Alliance. Total city employment provided by NC Department of Commerce.

**CHARLOTTE WATER**  
**FULL-TIME EQUIVALENT EMPLOYEES BY FUNCTION/PROGRAM**  
**LAST TEN FISCAL YEARS**

Function/Program	Full-time Equivalent Employees as of June 30									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Water and Sewer <sup>(1)</sup>	791.50	746.25	746.50	761.50	796.00	822.00	846.00	912.00	958.00	997.00

<sup>(1)</sup> In 2012, vacant positions were eliminated as part of the financial stability plan. In 2014, positions were added to offset reductions in contractual services. In 2015, positions were added to meet service demand. In 2016, positions were added in response to the improving economy and regulatory changes. In 2017 through 2019 positions were added to keep pace with the growth in customer base. In 2020, positions were added to support rehabilitation and replacement efforts and to maintain regulatory compliance.

**SOURCE:**

Position allocations per Strategy and Budget Department.

CHARLOTTE WATER  
OPERATING INDICATORS BY FUNCTION/PROGRAM  
LAST TEN FISCAL YEARS

Function/Program	Fiscal Year									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Water										
Number of service connections	248,257	253,557	257,683	262,607	267,664	273,574	279,380	285,092	290,442	297,098
Average daily pumped (in millions of gallons)	110	101	99	101	103	107	107	106	108	109
Sewer										
Number of service connections	229,002	235,157	238,854	242,959	247,165	246,299	256,327	260,580	264,981	270,640
Average daily treatment (in millions of gallons)	76	78	79	83	81	80	80	78	91	89

SOURCE:  
Charlotte Water

**CHARLOTTE WATER**  
**CAPITAL ASSET STATISTICS BY FUNCTION/PROGRAM**  
**LAST TEN FISCAL YEARS**

Function/Program	Fiscal Year									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Water</b>										
Treatment plants	3	3	3	3	3	3	3	3	3	3
Miles of water mains	4,094	4,206	4,198	4,209	4,232	4,269	4,314	4,353	4,393	4,431
Fire hydrants	12,568	16,756	16,889	16,631	16,766	16,901	17,109	17,344	17,517	17,677
<b>Sewer</b>										
Treatment plants	5	5	5	5	5	5	5	5	7	7
Miles of sanitary sewer lines	4,073	4,180	4,170	4,320	4,200	4,244	4,288	4,330	4,376	4,420

SOURCE:

Charlotte Water



# **Charlotte Water**

**An Enterprise Fund of the City of Charlotte**