

of the Refunded Bonds from a taxable rate to a tax-exempt rate. The City has designated the 2005 Series B Swap Transaction as a "Qualified Hedging Transaction" within the meaning of the Resolution. The counterparty to the 2005 Series B Swap Transaction (Goldman Sachs Mitsui Marine Derivatives Products L.P.) currently has a counterparty risk rating of "Aa2" from Moody's and a counterparty credit rating of "AA-" from S&P. When entered into, the term of the 2005 Series B Swap Transaction was identical to the term of the Refunded Bonds, and the notional amount of the 2005 Series B Swap Transaction was scheduled to amortize at the same times and in the same amounts as the pro-rata portion of the Refunded Bonds. On August 2, 2012, \$31,560,000 of the 2005 Series B Bonds were redeemed with proceeds from the issuance of the City's 2012 Series B Bonds. As a result, the 2005 Series B Swap Transaction no longer served as a hedge against the Refunded Bonds. However, since the City had other taxable Bonds Outstanding, the City left the 2005 Series B Swap Transaction outstanding following the issuance of the 2012 Series B Bonds, as a partial hedge against the interest rate movements. It is anticipated that the remainder of the 2005 Series B Bonds will be redeemed with proceeds of the 2019E Bonds. Since the City has other variable rate Bonds Outstanding, the City will leave the 2005 Series B Swap Transaction outstanding following issuance of the 2019E Bonds, as a partial hedge against interest rate movements. The 2005 Series B Swap Transaction is subject to early termination by the City or the counterparty at certain times and under certain conditions. The currently scheduled termination of the 2005 Series B Swap Transaction is October 1, 2021.

The City has entered into a floating-to-fixed rate interest rate swap transaction (the "2005 Series C Swap Transaction"). During the term of the 2005 Series C Swap Transaction, the City will pay to the counterparty a fixed rate of 3.20% per annum and will receive from the counterparty a rate equal to 60.36% of the ten-year LIBOR swap rate. Initially, the term of the 2005 Series C Swap Transaction was identical to the term of the 2005 Series C Bonds, and the notional amount of the 2005 Series C Swap Transaction was scheduled to amortize at the same times and in the same amounts as the 2005 Series C Bonds. The effect of the 2005 Series C Swap Transaction was to synthetically fix the interest rate on the 2005 Series C Bonds at a rate of approximately 3.20% per annum, although the City bears basis risk which could result in a realized rate over time that may be lower or higher than the 3.20% rate. The counterparty (JPMorgan Chase Bank) currently has a counterparty credit rating of "Aa3" from Moody's and a counterparty credit rating of "A+" from S&P. The City has designated the 2005 Series C Swap Transaction as a "Qualified Hedging Transaction". On August 2, 2012, \$17,570,000 of the 2005 Series C Bonds were redeemed with proceeds from the issuance of the 2012 Series B Bonds. The City left the 2005 Series C Swap Transaction outstanding following the issuance of the 2012 Series B Bonds, as a partial hedge against the interest rate movements. [Since the City has other variable rate Bonds Outstanding, the 2005 Series C Swap Transaction will remain outstanding following issuance of the 2019C Bonds as a partial hedge against interest movements.] The 2005 Series C Swap Transaction is subject to early termination by the City or the counterparty at certain times and under certain conditions. The currently scheduled termination of the 2005 Series C Swap Transaction is October 1, 2026.

In September 2005, the City entered into a forward-starting floating-to-fixed rate interest rate swap transaction (as amended, the "2006 Series A Swap Transaction"). During the term of the 2006 Series A Swap Transaction, the City will pay to the counterparty a fixed rate of 3.224% per annum and will receive from the counterparty a rate equal to 68% of the ten-year LIBOR swap rate minus 36.5 basis points. The effect of the 2006 Series A Swap Transaction was to synthetically fix the interest rate on the 2006 Series A Bonds at a rate of approximately 3.224% per annum, although the City bears basis risk, which could result in a realized rate over time that may be lower or higher than the 3.224% rate. Initially, the term of the 2006 Series A Swap Transaction was identical to the term of the 2006 Series A Bonds, and the notional amount of the 2006 Series A Swap Transaction was scheduled to amortize at the same times

and in the same amounts as the 2006 Series A Bonds. The counterparty to the 2006 Series A Swap Transaction (Goldman Sachs Mitsui Marine Derivatives Products L.P.) currently has a counterparty risk rating of "Aa2" from Moody's and a counterparty credit rating of "AA-" from S&P. The City has designated the 2006 Series A Swap Transaction as a "Qualified Hedging Transaction". On August 2, 2012, \$25,930,000 of the 2006 Series A Bonds were redeemed with proceeds from the issuance of the 2012 Series B Bonds. The City left that portion of the 2006 Series A Swap Transaction outstanding as a partial hedge against the interest rate movements. [Since the City has other variable rate Bonds Outstanding, it is expected that all or a portion of the outstanding 2006 Series A Bonds will be refunded with proceeds of the 2019C Bonds. The 2006 Series A Swap Transaction will remain outstanding following issuance of the 2019C Bonds as a partial hedge against interest movements.] The 2006 Series A Swap Transaction is subject to early termination by the City or the counterparty at certain times and under certain conditions. The currently scheduled termination of the 2006 Series A Swap Transaction is October 1, 2026.

The City has entered into a floating-to-fixed rate interest rate swap transaction (the "2007 Series A Swap Transaction") with respect to the 2007 Series A Bonds. The term of the 2007 Series A Swap Transaction is identical to the term of the 2007 Series A Bonds, and the notional amount of the 2007 Series A Swap Transaction will amortize at the same times and in the same amounts as the 2007 Series A Bonds. During the term of the 2007 Series A Swap Transaction, the City will pay to the counterparty a fixed rate of 3.944% per annum and will receive from the counterparty a rate equal to the SIFMA Municipal Swap Index. The effect of the 2007 Series A Swap Transaction is to synthetically fix the interest rate on the 2007 Series A Bonds at a rate of approximately 3.944% per annum. The counterparty to the 2007 Series A Swap Transaction (Goldman Sachs Mitsui Marine Derivatives Products L.P.) currently has a counterparty risk rating of "Aa2" from Moody's and a financial program rating of "AA-" from S&P. The City has designated the 2007 Series A Swap Transaction as a "Qualified Hedging Transaction" within the meaning of the Resolution. [Since the City has other variable rate Bonds Outstanding, it is expected that all or a portion of the outstanding 2007 Series A Bonds will be refunded with proceeds of the 2019C Bonds. The 2007 Series A Swap Transaction will remain outstanding following issuance of the 2019C Bonds as a partial hedge against interest movements.] The 2007 Series A Swap Transaction is subject to early termination by the City or the counterparty at certain times and under certain conditions. The currently scheduled termination of the 2007 Series A Swap Transaction is October 1, 2036.

The City has entered into two floating-to-fixed rate interest rate swap transactions (the "2008 Series B Swap Transactions") with respect to the 2008 Series B Bonds. The terms of the 2008 Series B Swap Transactions are identical to the term of the 2008 Series B Bonds, and the notional amount of the 2008 Series B Swap Transactions will amortize at the same times and in the same amounts as the 2008 Series B Bonds. During the terms of the 2008 Series B Swap Transactions, the City will pay to the counterparty a fixed rate of 4.229% per annum and will receive from the counterparty a rate equal to the SIFMA Municipal Swap Index. The effect of the 2008 Series B Swap Transactions is to synthetically fix the interest rate on the 2008 Series B Bonds at a rate of approximately 4.229% per annum. The counterparty to the 2008 Series B Swap Transactions (JPMorgan Chase Bank) currently has a counterparty risk rating of "Aa3" from Moody's and a financial program rating of "A+" from S&P. The City has designated each of the 2008 Series B Swap Transactions as a "Qualified Hedging Transaction" within the meaning of the Resolution. [Since the City has other variable rate Bonds Outstanding, it is expected that all or a portion of the outstanding 2008 Series B Bonds will be refunded with proceeds of the 2019C Bonds. The 2008 Series B Swap Transaction will remain outstanding following issuance of the 2019C Bonds as a partial hedge against interest movements.] The 2008 Series B Swap Transactions

are subject to early termination by the City or the counterparty at certain times and under certain conditions. The currently scheduled termination of the 2008 Series B Swap Transaction is October 1, 2038.

The City has entered into a cancellable floating-to-fixed rate interest rate swap transaction (the "2017 Series B Swap Transaction") with respect to the 2017 Series B Bonds. The two counterparties for this swap transaction are Citigroup, N.A. and Goldman Sachs Bank USA. In the aggregate, terms of the 2017 Series B Swap Transactions are similar to the term of the 2017 Series B Bonds, and the notional amounts of the 2017 Series B Swap Transactions will amortize at the same times and in the same amounts as the 2017 Series B Bonds. Where Goldman Sachs Bank, USA is the counterparty, during the term of this 2017 Series B Swap Transaction, the City will pay a fixed rate per annum of 2.119% and GRU will receive from the counterparty a rate equal to 70% of 1 month LIBOR. The current notional amount with respect to Goldman Sachs Bank, USA is \$105,000,000. Where Citibank N.A. is the counterparty, during the term of this 2017 Series B Swap Transaction, the City will pay to Citibank, N.A., a fixed rate per annum of 2.11% and GRU will receive from the counterparty a rate equal to 70% of 1 month LIBOR. The effect of the 2017 Series B Swap Transaction is to synthetically fix the interest rate on the 2017 Series B Bonds. As discussed below, there is now a basis differential due to the rate changing on the 2017 Series B Bonds due to the decrease in marginal corporate tax rate. The City has designated the 2017 Series B Swap Transaction as a "Qualified Hedging Transaction" within the meaning of the Resolution. The 2017 Series B Swap Transaction is subject to early termination by the City or the counterparty or counterparties at certain times and under certain conditions. The currently scheduled termination of the 2017 Series B Swap Transaction is October 1, 2044. However, the City has an optional early terminate date of October 1, 2027 and semiannually thereafter, subject to early termination terms. The parties entered into a bilateral Credit Support Annex to which eligible collateral includes cash or Treasury securities having a remaining maturity on such date of one year or less, Treasury securities having a remaining maturity on such date greater than one up to and including five years or Treasury securities having a remaining maturity on such date of greater than five years up to and including ten years. The threshold amount for posting collateral is based upon the counterparty's or counterparties' long term unsecured and unenhanced debt ratings from S&P and Moody's and the City's credit ratings on senior lien Bonds. If the credit ratings drop below BBB- by S&P and Baa3 by Moody's, the threshold shall be \$0.

In December of 2017, the President signed the Tax Cuts and Jobs Act into law. One provision of this law was to change the maximum corporate tax rate from 35% to 21%. Based on the agreements underlying the 2017 Series B Bonds, there was an adjustment to the percent of LIBOR that GRU pays on the 2017 Series B Bonds. The effect was to change the index associated with the 2017 Series B Bonds from 70% of 1 Month LIBOR to 85% of 1 Month LIBOR (which also resulted in an adjustment to the Applicable Spread (as defined in the 2017 Series B Bonds)). Due to this change, the underlying index for the bonds no longer matches the underlying index for the 2017 Series B Swap Transaction. GRU does not believe these changes are material in nature.

Under the master agreements, the interest rate swap transactions entered into pursuant to such master agreements are subject to early termination upon the occurrence of certain "events of default" and upon the occurrence of certain "termination events." One such "termination event" with respect to the Bonds is a suspension or withdrawal of certain credit ratings with respect to the Bonds, or a downgrade of such ratings below the levels set forth in the master agreement or in the confirmation related to a particular interest rate swap transaction. Upon the early termination of an interest rate swap transaction, the City may owe the applicable counterparty a termination payment, the amount of which

could be substantial. The amount of any such potential termination payment would be determined in the manner provided in the applicable master agreement and would be based primarily upon prevailing market interest rate levels and the remaining term of the interest rate swap transaction at the time of termination. Such termination payments are Subordinated Hedging Contract Obligations pursuant to the terms of the Resolution. In general, the ratings triggers on the part of the System contained in the master agreements range from (x) if any two ratings are below "Baa2" by Moody's and/ or "BBB" by S&P and/ or "BBB" by Fitch to (y) if the City fails to have at least one rating of "Baa3" by Moody's, "BBB-" by S&P or "BBB-" by Fitch.

The System's estimated aggregate exposure under all of its outstanding interest rate swap transactions (*i.e.*, the net amount of the termination payments that the System will owe its counterparties if all of the interest rate swap transactions were terminated) is \$47,373,357.18 as of December 31, 2018. As of September 30, 2017, the System's estimated aggregate exposure under all of its then outstanding interest rate swap transactions (*i.e.*, the net amount of the termination payments that the System would owe its counterparties if all of the interest rate swap transactions were terminated) was \$64,101,764.72. As of September 30, 2016, the System's estimated aggregate exposure under all of its then outstanding interest rate swap transactions (*i.e.*, the net amount of the termination payments that the System would owe its counterparties if all of the interest rate swap transactions were terminated) was \$93,138,518.72. As of September 30, 2015, the System's estimated aggregate exposure under all of its then outstanding interest rate swap transactions was \$77,042,766.58. As of September 30, 2014, the System's estimated aggregate exposure under all of its then outstanding interest rate swap transactions was \$55,103,516.23. Termination payments are Subordinated Hedging Contract Obligations pursuant to the terms of the Resolution.

The System adopted Governmental Accounting Standards Board ("GASB") Statement No. 53, Accounting and Reporting for Financial Reporting and Derivative Instruments, which addresses the recognition, measurement and disclosure of information for derivative instruments, and was effective for periods beginning after June 15, 2009. GASB Statement No. 53 requires retrospective adoption, which requires a restatement of the financial statements for the earliest year presented. GASB Statement No. 53 requires the fair market value of derivative instruments, including interest rate swap transactions, to be recorded on the balance sheet. Changes in fair value for effective derivative instruments are recorded as a deferred inflow or outflow, while changes in fair value for ineffective derivative instruments are recorded as investment income. This is a significant change from previous practice, which required the fair value of derivative instruments to be disclosed in the footnotes to the financial statements.

The System records assets and liabilities in accordance with GASB Statement No. 72, *Fair Value Measurement and Application*, which determines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurement.

Fair value is defined in GASB Statement No. 72 as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). Fair value is a market-based measurement for a particular asset or liability based on assumptions that market participants would use in pricing the asset or liability. Such assumptions include observable and unobservable inputs of market data, as well as assumptions about risk and the risk inherent in the inputs to the valuation technique.

As a basis for considering market participant assumptions in fair value measurements, GASB Statement No. 72 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels:

Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date. U.S. Treasury securities are examples of Level 1 inputs.

Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. U.S. agencies, corporate bonds and financial hedges are examples of Level 2 inputs.

Level 3 inputs are unobservable inputs that reflect GRU's own assumptions about factors that market participants would use in pricing the asset or liability (including assumptions about risk).

Valuation methods of the primary fair value measurements are as follows:

Investments in debt securities are valued using Level 2 measurements because the valuations use interest rate curves and credit spreads applied to the terms of the debt instrument (maturity and coupon interest rate) and consider the counterparty credit rating.

Commodity derivatives, such as futures, swaps and options, which are ultimately settled using prices at locations quoted through clearinghouses are valued using level 1 inputs.

Other hedging derivatives, such as swaps settled using prices at locations other than those quoted through clearinghouses and options with strike prices not identically quoted through a clearinghouse, are valued using Level 2 inputs. For these instruments, fair value is based on pricing algorithms using observable market quotes.

Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. GRU's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of fair value assets and liabilities and their place within the fair value hierarchy levels. GRU's fair value measurements are performed on a recurring basis.]

Funding the Capital Improvement Program - Additional Financing Requirements

The System's current five-year capital improvement program requires a total of approximately \$349 million in capital expenditures in the fiscal years ending September 30, 2019 through and including 2023, and does not include the DHR Biomass Plant acquisition described above. Such amount was funded in part from Revenues and approximately \$147 million of additional Bonds (including additional commercial paper notes which are Subordinated Indebtedness). The following table shows the sources of funding for the fiscal years ending September 30, 2019 through and including 2023:

Source of Funds:	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Total</u>
Bond Financing	\$33,000,000	\$57,000,000	\$34,500,000	\$8,000,000	\$14,500,000	\$147,000,000
Revenues	51,000,000	43,000,000	37,500,000	40,000,000	30,500,000	202,000,000
Total Sources	\$84,000,000	\$100,000,000	\$72,000,000	\$48,000,000	\$45,000,000	\$349,000,000

Source: Prepared by the Finance Department of the System.

The table above represents GRU's planned future capital improvements to the System and the planned sources of funds. Future City Commission approved budgets could materially change the sources and uses of funds for the capital improvement program.

Factors Affecting the Utility Industry

General

The primary factors currently affecting the utility industry include environmental regulations, Operating, Planning and Critical Infrastructure Protection Standards promulgated by NERC under FERC jurisdiction, and the increasing strategic and price differences among various types of fuels. No state or federal legislation is pending or proposed at this time for retail competition in Florida.

The role of municipalities as telecommunications providers pursuant to the 1996 Federal Telecommunications Act resulted in a number of state-level legislative initiatives across the nation to curtail this activity. In Florida, this issue culminated in the passage, in 2005, of legislation codified in Section 350.81, Florida Statutes (Section 350.81) that defined the conditions under which municipalities are allowed to provide retail telecommunications services. Although the System has special status as a grandfathered entity under this legislation, the provision of certain additional retail telecommunications services by the System would implicate certain requirements of Section 350.81. Management of the System does not expect that any required compliance with the requirements of Section 350.81 would have a material adverse effect on the operations or financial condition of GRUCom.

Environmental and Other Natural Resource Regulations

The System and its operations are subject to federal, state and local environmental regulations which include, among other things, control of emissions of particulates, mercury, acid gases, SO₂ and NO_x into the air; discharges of pollutants, including heat, into surface or ground water; the disposal of wastes and reuse of products generated by wastewater treatment and combustion processes; management of hazardous materials; and the nature of waste materials discharged into the wastewater system's collection facilities. Environmental regulations generally are becoming more numerous and more stringent and, as a result, may substantially increase the costs of the System's services by requiring changes in the operation of existing facilities as well as changes in the location, design, construction and operation of new facilities (including both facilities that are owned and operated by the System as well as facilities that are owned and operated by others, from which the System purchases output, services, commodities and other materials). There is no assurance that the facilities in operation, under construction or contemplated will always remain subject to the regulations currently in effect or will always be in compliance with future regulations. Compliance with applicable regulations could result in increases in the costs of construction and/or operation of affected facilities, including associated costs such as transmission and transportation, as well as limitations on the operation of such facilities. Failure to comply with regulatory requirements

could result in reduced operating levels or the complete shutdown of those facilities not in compliance as well as the imposition of civil and criminal penalties.

Increasing concerns about climate change and the effects of GHGs on the environment have resulted in EPA finalizing on August 3, 2015 carbon regulations, the CPP, for existing power plants. Currently, the CPP is being litigated and August 10, 2017, the United States Court of Appeals for the D.C. Circuit issued an order holding the challenges to the greenhouse gas new source performance standards ("GHG NSPS") in abeyance "pending further order of the court." The order also directs EPA to file status reports at 90-day intervals beginning October 27, 2017. Further litigation is expected regardless of the DC Circuit Court of Appeals decision. In addition, the EPA has been given presidential direction to review the CPP. The court has also ordered the parties to file supplemental briefs addressing whether the challenges should be remanded to the EPA rather than held in abeyance. The briefs were filed on May 15, 2017.

On October 16, 2017, the proposed repeal of the CPP was published in the Federal Register. Hearings were held November 28-29, 2017 in West Virginia. On January 11, 2018, the comment period extended to April 26, 2018 and three listening sessions were held in February and March in Missouri, California and Wyoming. The Whitehouse OMB received the EPA's proposal to replace the CPP on July 9, 2018. Then, on August 21, 2018, EPA proposed the Affordable Clean Energy ("ACE") plan as a replacement to the CPP. It is currently under review. However, the timeline for finalizing the ACE rule may be delayed due to the partial government shut-down from December 28, 2018 to January 25, 2019. TEPA plans to take final action on the ACE rule in the second quarter of 2019.

Air Emissions

The Clean Air Act

The Clean Air Act ("CAA") regulates emissions of air pollutants, establishes national air quality standards for major pollutants, and requires permitting of both new and existing sources of air pollution. Among the provisions of the CAA that affect the System's operations are (1) the acid rain program, which requires nationwide reductions of SO₂ and NO_x from existing and new fossil-fueled electric generating plants, (2) provisions related to toxic or hazardous pollutants, and (3) requirements to address regional haze.

The CAA also requires persons constructing new major air pollution sources or implementing significant modifications to existing air pollution sources to obtain a permit prior to such construction or modifications. Significant modifications include operational changes that increase the emissions expected from an air pollution source above specified thresholds. In order to obtain a permit for these purposes, the owner or operator of the affected facility must undergo a "new source review," which requires the identification and implementation of BACT for all regulated air pollutants and an analysis of the ambient air quality impacts of a facility. In 2009, the EPA announced plans to actively pursue new source review enforcement actions against electric utilities for making such changes to their coal-fired power plants without completing new source review. Under Section 114 of the CAA, the EPA has the authority to request from any person who owns or operates an emission source, information and records about operation, maintenance, emissions, and other data relating to such source for the purpose of developing regulatory programs, determining if a violation occurred (such as the failure to undergo new source review), or carrying out other statutory responsibilities.

The Cross-State Air Pollution Rule (CSAPR)

On July 6, 2011, the EPA released its final Cross-State Air Pollution Rule ("CSAPR"). This rule is the final version of the Transport Rule and replaces Clean Air Interstate Rule ("CAIR"). In Florida, only ozone season NO_x emissions are regulated by CSAPR through the use of allowances.

Various states, local governments, and other stakeholders challenged CSAPR and, on August 21, 2012, a three-judge panel of the D.C. Circuit Court, by a 2-1 vote, held that the EPA had exceeded its statutory authority in issuing CSAPR and vacated CSAPR along with certain related federal implementation plans. As part of its holding, the D.C. Circuit Court panel held that the EPA should continue to administer the original CAIR program until the EPA promulgates a valid replacement.

On July 28, 2015, the D.C. Circuit ruled that Florida's allowance budget is invalid and remanded CSAPR to the EPA. On October 26, 2016 EPA published, in the *Federal Register* at 81 Fed. Reg. 74504, an update to the CSAPR to address the 2008 Ozone National Ambient Air Quality Standards ("NAAQS"). For three states (North Carolina, South Carolina and Florida), the EPA is removing the states from the CSAPR ozone season NO_x trading program because modeling for the Final Rule indicates that these states do not contribute significantly to ozone air quality problems in downwind states under the 2008 ozone NAAQS. Therefore, GRU did not have to meet ozone season limits in 2018 and, most likely, will not in 2019.

EPA's Rule Establishing Mercury and Air Toxics Standards ("MATS")

On December 16, 2011, the EPA promulgated a rule to reduce emissions of toxic air pollutants from power plants. Specifically, these mercury and air toxics standards or MATS for power plants will reduce emissions from new and existing coal- and oil-fired electric utility steam generating units ("EGU"). The EPA also signed revisions to the new source performance standards for fossil fuel-fired EGUs. Such revisions revised the standards that new coal- and oil-fired power plants must meet for particulate matter, SO₂ and NO_x. On November 25, 2014, the United States Supreme Court accepted certiorari to hear challenges to the mercury rules.

On June 29, 2015, the U.S. Supreme Court issued a 5-to-4 decision reversing a prior D.C. Circuit decision to uphold MATS for electric generating units. *Michigan, et al. v. EPA, et al., No. 14-46 ("Michigan v. EPA")*. The Court granted review on a single issue: "Whether the Environmental Protection Agency unreasonably refused to consider costs in determining whether it is appropriate to regulate hazardous air pollutants emitted by electric utilities." Writing for the majority, Justice Scalia held that EPA "strayed far beyond" the "bounds of reasonable interpretation" when the Agency interpreted the CAA to mean that it "could ignore costs when deciding to regulate power plants." The Court remanded the case to the D.C. Circuit Court for further proceedings consistent with the Court's opinion. On August 10, 2015, EPA stated in a motion filed with the D.C. Circuit Court that the EPA then planned to revise its "appropriate and necessary" determination for MATS by the spring of 2016, prior to the extended MATS compliance deadline of April 15, 2016. The EPA also stated that it intended to request that the D.C. Circuit Court remand the rule without vacatur while the EPA works on this revision. Since the D.C. Circuit Court did not vacate the rule, the MATS rule is still in effect.

On April 14, 2016, the Administrator of the EPA signed the final supplemental finding in the MATS rule. The new "appropriate and necessary" finding responds to the U.S. Supreme Court decision in *Michigan v. EPA*, and explains how the EPA has taken cost into account in evaluating whether it is

appropriate and necessary to regulate coal- and- oil-fired EGUs under Section 112 of the CAA. The EPA still concludes it is proper to regulate mercury emissions from power plants.

On May 6, 2016, the EPA filed a brief urging the U.S. Supreme Court to deny a *writ of certiorari* filed by 20 states, which requested that the Court review and reverse a decision by the U.S. Court of Appeals for the D.C. Circuit Court to remand MATS to the EPA without vacating the rule. According to the EPA's brief, the Supreme Court should deny review of whether MATS should have been vacated while the EPA made its "appropriate and necessary" finding because the issue was then moot since the EPA had issued the finding. Additionally, the EPA argued that the CAA, not the Administrative Procedure Act, governs whether MATS should have been vacated, and the CAA does not mandate vacatur of a rule on remand. Rather, the EPA argued that the CAA gives a court discretion on whether to vacate a remanded rule based on the circumstances. Finally, the EPA asserted that the D.C. Circuit Court was correct in not vacating MATS on remand because the EPA could quickly remedy the legal deficiency and vacating the rule would have been harmful to the public because it would have allowed an increase in emissions of hazardous air pollutants from EGUs.

Murray Energy became the first party to appeal the final MATS Appropriate and Necessary Finding, filing its petition for review on April 25, 2016, the same day the rule was published in the *Federal Register*. 81 Fed. Reg. 24,420 (Apr. 25, 2016). All petitions for review of the Finding must have been filed in the D.C. Circuit Court no later than June 24, 2016. As of this deadline, six petitions for review were filed in the D.C. Circuit Court and consolidated under the lead case *Murray Energy Corp. v. EPA*, No. 16-1127.

On October 14, 2016, the D.C. Circuit Court issued orders establishing the briefing schedule for the challenge related to MATS. In *Murray v. EPA*, 16-1127 (D.C. Cir.), industry petitioners challenge the EPA's supplemental determination that it was "appropriate and necessary" to regulate emissions of hazardous air pollutants from electric generating units.

On April 27, 2017, the D.C. Circuit Court granted the EPA's motions to postpone oral argument in the challenge to the EPA's supplemental determination that it was "appropriate and necessary" to regulate emissions of hazardous air pollutants from electric generating units ("Supplemental Finding"), *Murray v. EPA*, No. 16-1127 (D.C. Cir.), as well as in industry's challenge to the EPA's denial of administrative petitions for reconsideration of MATS, *ARIPPA v. EPA*, No. 15-1180 (D.C. Cir.). Oral argument in both cases was previously scheduled for May 18, 2017.

The court also ordered both challenges held in abeyance "pending further order of the court." EPA is directed to file status reports with the court every (ninety) 90 days. The parties will be directed to file motions to govern future proceedings within (thirty) 30 days of the EPA notifying the court and the parties of any action it has or will be taking with respect to the Supplemental Finding and the MATS reconsideration petitions.

So far, since the MATS program became effective on April 16, 2015, DH 2 (the only unit MATS applies to) has complied with all requirements.

Regional Haze

On June 15, 2005, the EPA issued the Clean Air Visibility Rule, amending its 1999 regional haze rule, which had established timelines for states to improve visibility in national parks and wilderness areas throughout the United States. Under the amended rule, certain types of older sources may be required to

install best available retrofit technology ("BART"). Some of the effects of the amended rule could be requirements for newer and cleaner technologies and additional controls for particulate matter, SO₂ and NO_x emissions from utility sources. The states were to develop their regional haze implementation plans by December 2007, identifying the facilities that will have to reduce emissions and then set emissions limits for those facilities. However, states have not met that schedule and on January 15, 2009, the EPA published a notice finding that 37 states (including Florida), the District of Columbia and the Virgin Islands failed to submit all or a portion of their regional haze implementation plans. The EPA's notice initiates a two-year period during which each jurisdiction must submit a haze implementation plan or become subject to a Federal Implementation Plan issued by the EPA that would set the basic program requirements. See "-- The Electric System – Energy Supply System – *Generating Facilities – Deerhaven*" herein for a description of the actions that have been taken by the System to install additional emission control equipment at DH 2 and reduce SO₂ and NO_x emissions that potentially contribute to regional haze.

Emissions modeling was completed for DH 1 to determine its impact on visibility in the Class I areas within 300 km of the DGS. Results of this modeling confirmed that DH 1 had impacts on the applicable Class I areas below the 0.5 deciview threshold and therefore is exempt from the BART program associated with the regional haze program.

The reasonable further progress ("RFP") section of Florida's regional haze state implementation plan, which has been approved by EPA, applies to DH 2. The System has voluntarily requested a cap on SO₂ emissions, which provides DH 2 with an exemption from the RFP section. A draft permit from the FDEP was issued on June 1, 2012 approving the System's requested cap on SO₂ emissions, and the final permit was issued on June 26, 2012.

Internal Combustion Engine MACT

On August 20, 2010, the EPA published a final rule for the National Emissions Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, which covers existing stationary spark ignition reciprocating internal combustion engines located at major sources of hazardous air pollutant emissions such as power plant sites. This final rule, which became effective on October 19, 2010, requires the reduction of emissions of hazardous air pollutants from covered engines. Several of the System's reciprocating engines are covered by this rule and all are in full compliance.

Climate Change

On June 25, 2013, President Obama issued a Presidential Memorandum directing the EPA to work expeditiously to complete GHG standards for the power sector. The agency is using its authority under Section 111(d) of the CAA to issue emission guidelines to address GHG emissions from existing power plants. The Presidential Memorandum specifically directed the EPA to build on state leadership, provide flexibility and take advantage of a wide range of energy sources and technologies towards building a cleaner power sector. It also directed the EPA to issue proposed GHG standards, regulations or guidelines, as appropriate, for existing power plants by no later than June 1, 2014, and issue final standards, regulations or guidelines, as appropriate, by no later than June 1, 2015. In addition, the Presidential Memorandum directed the EPA to include in the guidelines, addressing existing power plants, a requirement that states submit to the EPA the implementation plans required under Section 111(d) of the CAA and its implementing regulations by no later than June 30, 2016. States would be able to request more time to submit complete implementation plans with the EPA being able to allow states until June 30, 2017 or

June 30, 2018, as appropriate, to submit additional information completing the submitted plan no later than June 30, 2016.

Accordingly, on June 2, 2014, the EPA released a proposed rule, the CPP Rule, that would limit and reduce carbon dioxide emissions from certain fossil fuel power plants, including existing plants. Finally, on August 3, 2015, the EPA released the final version of such rule, and on October 23, 2015, EPA published in the *Federal Register* the GHG existing source performance standards for power plants (the CPP), and the final NSPS for GHG emissions from new, modified and reconstructed fossil fuel-fired power plants. The final CPP was published at 80 Fed. Reg. 64662, and the final GHG NSPS were published at 80 Fed. Reg. 64510.

On October 23, 2015, the American Public Power Association ("APPA") and the Utility Air Regulatory Group ("UARG") filed a joint petition for review of the EPA's final Section 111(d) rule to regulate carbon dioxide ("CO₂") emissions from existing electric generating sources in the D.C. Circuit Court. In addition, the state of West Virginia joined by Texas, Alabama, Arkansas, Colorado, Florida, Georgia, Indiana, Kansas, Kentucky, Louisiana, Michigan, Missouri, Montana, Nebraska, New Jersey, Ohio, South Carolina, South Dakota, Utah, Wisconsin, Wyoming, the Arizona Corporation Commission, and the North Carolina Department of Environmental Quality also filed their motion to stay the final Section 111(d) rule under the CAA. Such a stay would put implementation of the rule on hold until the court decides on its legality.

On January 26, 2016, 29 states requested that the U.S. Supreme Court stay implementation of the final GHG Clean Power Plan or CPP (80 Fed. Reg. 64662 - Oct. 23, 2015), pending judicial review of the rule. On February 9, 2016, the Supreme Court granted the stay of the CPP pending judicial review of the rule. The stay will remain in effect pending Supreme Court review if such review is sought. Since the US Supreme Court stayed the EPA rulemaking on the CPP, that extraordinary action will delay any regulatory action. GRU continues to closely monitor any activities with respect to Climate Change and GHGs.

The D.C. Circuit Court issued an order on April 28, 2017, holding the consolidated CPP cases in abeyance for sixty (60) days. The D.C. Circuit Court is requiring the EPA to file status reports concerning its ongoing regulatory deliberations at thirty (30) days intervals. The court also asked the parties to file supplemental briefs by May 15, 2017 addressing whether the judicial process should be ended and the matter should be remanded to the EPA.

On August 10, 2017, the United States Court of Appeals for the D.C. Circuit issued an order holding the challenges to the greenhouse GHG NSPS in abeyance "pending further order of the court. The order also directs EPA to file status reports at 90-day intervals beginning October 27, 2017.

On October 10, 2017, the EPA Administrator signed a rule proposing the repeal of the CPP and on October 16, 2017 the proposed repeal of the CPP was published in the Federal Register. On November 2, 2017, a hearing was announced for November 28 and 29, 2017 in West Virginia. On January 11, 2018, the comment period extended to April 26, 2018 and three listening sessions were announced for February and March in Missouri, California, and Wyoming.

With respect to a replacement rule, the Advance Notice of Proposed Rulemaking for the CPP replacement was published on December 28, 2017. The Whitehouse OMB received the EPA's proposal to replace the CPP on July 9, 2018. Then, on August 21, 2018, EPA proposed the Affordable Clean Energy (ACE) plan as a replacement to the CPP. It is currently under review.

Coal Combustion Products

The EPA published a final rule (40 CFR 257), effective October 14, 2015, to regulate the disposal of coal combustion residuals ("CCR") as solid waste under subtitle D of the Resource Conservation and Recovery Act ("RCRA"). The rule includes national minimum criteria for existing and new CCR landfills and existing and new CCR surface impoundments. GRU is subject to the requirements of the promulgated rule that are applicable to CCR ponds and landfill at Deerhaven.

On May 1, 2017, EPA Administrator Scott Pruitt sent a letter informing states that the EPA is working on guidance for implementing state permitting programs that allow flexibility in individual permits to manage the safe disposal of coal combustion residuals, known as CCR or "coal ash." The EPA expects that its new guidance will allow for the safe disposal and continued beneficial use of coal ash, while enabling states to decide what works best for their environment. GRU, through the Florida Electric Power Coordinating Group, made contact with FDEP's Tim Bahr on May 2, 2017 and he confirmed that the EPA shared some draft CCR permit program materials (draft FAQs, draft checklist, etc.) last week. The FDEP is planning to discuss that internally. The EPA has not finished drafting the guidance document that is intended to assist States in ensuring that their permit program applications are complete. This guidance has been published in the Federal Register. GRU continues to closely follow developments related to CCR regulations.

FCG has requested FDEP to apply to EPA for program approval through FDEP's incorporation by reference of the federal CCR Rule, in the Department's rules, which may include Florida specific provisions.

Storage Tanks

GRU is required to demonstrate financial responsibility for the costs of corrective actions and compensation of third-parties for bodily injury and property damage arising from releases of petroleum products and hazardous substances from certain underground and above-ground storage tank systems. GRU has eleven fuel oil storage tanks. The South Energy Center has two underground distillate (No. 2) oil tanks, the JRK Station has four above-ground distillate oil tanks, two of which are empty and out of service, and two above-ground No. 6 oil tanks which are empty and out of service. DH has one above-ground distillate and two above-ground No. 6 oil tanks, one of which is out of service. All of GRU's fuel storage tanks have secondary containment and/or interstitial monitoring and GRU is insured for the requisite amounts.

Remediation Sites

Several site investigations have been completed at the JRK Station, most recently in 2011. According to previous assessments, the horizontal extent of soils impacted with No. 6 fuel oil extends from the northern containment wall of the aboveground storage tanks to the wastewater filter beds and from the old plant building to Sweetwater Branch Creek. The results of the most recent soil assessment document the presence of Benzo[a]pyrene in one soil sample at a concentration greater than its default commercial/industrial direct exposure based soil cleanup target levels ("SCTL"). Four of the soil samples contained Benzo[a]pyrene equivalents at concentrations greater than its default commercial/industrial direct exposure based SCTLs. In addition, two of the soil samples contained total recoverable petroleum

hydrocarbons at concentrations greater than its default commercial/industrial direct exposure based SCTLs.

In the Site-Wide Monitoring Report dated March 24, 2011, measurable free product was detected in four wells. An inspection in April 2013 showed that groundwater contains four of the polynuclear aromatic hydrocarbons ("PAH") (Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, and Dibenzo[a,h]anthracene) at concentrations greater than their groundwater cleanup target levels ("GCTL"). With the exception of Benzo[a]pyrene, the concentration of the remainder of these parameters did not exceed their Natural Attenuation Default Concentrations. The groundwater quality data reported in the 2011 Site-Wide Groundwater Monitoring Report documents that groundwater quality meets applicable GCTLs at the locations sampled. It is likely that groundwater quality impacts exist in the area where residual number 6 Fuel Oil is present as a non-aqueous phase liquid.

Following the submittal of the August 2013 No Further Action Proposal, the FDEP prepared comments regarding the No Further Action Proposal and provided them to GRU in a letter dated January 10, 2014.

In August of 2014, GRU provided responses to the FDEP's January 2014 comment letter.

In March of 2016, an attempt was made to meet with the FDEP, but a time was not set up for a meeting. The delay in responding to GRU's comments was due in part to the FDEP waiting on resolution of the request to use an active hydraulic containment system as an engineering control. Ultimately, the FDEP rejected the use of the active containment system as an engineering control.

On April 17, 2017, the FDEP provided comments on GRU's August 2014 response to the FDEP January 2014 comment letter.

ECT prepared a response to the FDEP's comments which was submitted to the FDEP on October 19, 2018. The FDEP requested further assessment of the extent of No. 6 fuel oil in the subsurface. ECT's response proposed additional soil investigation to assess the extent of No. 6 fuel oil; both as a non-aqueous phase liquid and as stained soils. ECT also proposed temporarily shutting down the groundwater recovery system and evaluating whether free product returns to the wells. This information will be used to evaluate what actions will be needed to recover free product, if any is detected.

Water Use Restrictions

Pursuant to Florida law, a water management district in Florida may mandate restrictions on water use for non-essential purposes when it determines such restrictions are necessary. The restrictions may either be temporary or permanent. The SJRWMD has mandated permanent district-wide restrictions on residential and commercial landscape irrigation. The restrictions limit irrigation to no more than two days per week during Daylight Savings Time, and one day per week during Eastern Standard Time. The restrictions apply to centralized potable water as provided by the System as well as private wells. All irrigation between the hours of 10:00 a.m. and 4:00 p.m. is prohibited.

In addition, in April 2010, the County adopted, and the City subsequently opted into, an Irrigation Ordinance that codified the above-referenced water restrictions which promote and encourage water conservation. County personnel enforce this ordinance, which further assists in reducing water use and thereby extending the System's water supply.

The SJRWMD and the SRWMD each have promulgated regulations referred to as "Year-Round Water Conservation Measures," for the purpose of increasing long-term water use efficiency through regulatory means. In addition, the SJRWMD and the SRWMD each have promulgated regulations referred to as a "Water Shortage Plan," for the purpose of allocating and conserving the water resource during periods of water shortage and maintaining a uniform approach towards water use restrictions. Each Water Shortage Plan sets forth the framework for imposing restrictions on water use for non-essential purposes when deemed necessary by the applicable water management district. On August 7, 2012, in order to assist the SJRWMD and the SRWMD in the implementation and enforcement of such Water Conservation Measures and such Water Shortage Plans, the Board of County Commissioners of the County enacted an ordinance creating year-round water conservation measures and water shortage regulations (the "County Water Use Ordinance"), thereby making such Water Conservation Measures and such Water Shortage Plans applicable to the unincorporated areas of the County. On December 20, 2012, the City Commission adopted a resolution to opt into the County's "year round water conservation measures" and "water shortage regulations" ordinances in order to give the Alachua County Environmental Protection Department the authority to enforce water shortage orders and water shortage emergencies within the City.

Manufactured Gas Plant

Gainesville's natural gas system originally distributed blue water gas, which was produced in town by gasification of coal using distillate oil. Although manufactured gas was replaced by pipeline gas in the mid-1950's, coal residuals and spilt fuel contaminated soils at and adjacent to the manufactured gas plant ("MGP") site. When the natural gas system was purchased, the System assumed responsibility for the investigation and remediation of environmental impacts related to the operation of the former MGP. The System has pursued recovery for the MGP from past insurance policies and, to date, has recovered \$2.2 million from such policies. The System has received final approval of its Remedial Action Plan which entailed the excavation and landfilling of impacted soils at a specially designed facility. This plan was implemented pursuant to a Brownfield Site Rehabilitation Agreement with the State. Following remediation, the property has been redeveloped by the City as a park with stormwater ponds, nature trails, and recreational space, all of which were considered in the remediation plan's design. The duration of the groundwater monitoring program will be for the duration of the permit, and that timeframe is open to the results of what the sampling data shows.

Based upon GRU's analysis of the cost to clean up this site, GRU has accrued a liability to reflect the costs associated with the cleanup effort. During fiscal years ended September 30, 2017 and 2016, expenditures which reduced the liability balance were approximately \$1.1 million and \$1.0 million, respectively. The reserve balance at September 30, 2017 and 2016 was approximately \$814,000 and \$629,000, respectively.

GRU is recovering the costs of this cleanup through customer charges. A regulatory asset was established for the recovery of remediation costs from customers. Through fiscal years ended September 30, 2018 and 2017, customer billings were \$1.3 million and \$1.1 million, respectively, and the regulatory asset balance was \$11.7 million and \$13.1 million, respectively.

Although some uncertainties associated with environmental assessment and remediation activities remain, GRU believes that the current provision for such costs is adequate and additional costs, if any, will not have an adverse material effect on GRU's financial position, results of operations, or liquidity.

Wholesale and Retail Electric Restructuring

Energy Policy Act of 2005

The 2005 Energy Policy Act empowered FERC to enforce mandatory compliance with the Bulk Electric System reliability standards. FERC delegated policy enforcement and standard development to NERC who, in turn, delegated regional enforcement and monitoring to the FRCC in the State to become the ERO monitoring the System's compliance. The System is a "registered entity" with NERC and FRCC under the following nine functional categories and must comply with all standards applicable to those categories:

- Balancing Authority
- Distribution Provider
- Generation Owner
- Generation Operator
- Planning Authority
- Resource Planner
- Transmission Owner
- Transmission Operator
- Transmission Planner

Electric utilities registered as a Balancing Authority or Transmission Operator are required to undergo an on-site audit for compliance with the reliability standards once every three years. The System is registered as both a Balancing Authority and a Transmission Operator and is therefore subject to the 3-year on-site audit cycle. In addition to the NERC O&P reliability standards, GRU must comply with NERC's Critical Infrastructure Protection ("CIP") standards which helps ensure the cyber and physical security of GRU's Bulk Electric System ("BES"). In November, 2017, FRCC compliance auditors conducted an on-site audit for compliance with the standards and requirements associated with the System's functions within the Florida bulk power system as listed above. FRCC identified two (2) violations, both of which were treated as "compliance exceptions" by FRCC, meaning that no penalties are levied. The System's next on-site reliability compliance audit is anticipated to occur in November, 2020.

FERC Order 779

FERC Order 779 was issued in May 2013 to deal with the establishment of Geomagnetic Disturbances ("GMD") reliability standards in two stages. Stage one became effective in April 2015 and required the development and implementation of operating procedures that mitigate the impact of GMD events. Stage two (Notice of Proposed Rulemaking, May 14, 2015) will require that the transmission system will be planned in a manner to mitigate the risks associated with GMD events such as system instability and/or uncontrolled separation. FERC Order 779 will have a minor impact on the System.

FERC Order 1000

FERC Order 1000 became effective sixty (60) days after publication of the final order in the Federal Register, August 11, 2011. Order 1000 affects transmission planning and cost allocation requirements and drives reform in three areas: planning, cost allocation and non-incumbent developers.

Planning element reforms:

- Each public utility transmission provider must participate in the development of a regional transmission plan.
- Regional and local transmission plans are to be driven by state or federal laws or regulation. Transmission needs and associated solutions are to be weighed against those requirements.
- Neighboring transmission regions are to coordinate the satisfaction of mutual transmission needs (efficiency and cost).

Cost allocation reforms:

- Each public utility transmission provider must participate in a regional cost sharing allocation method for the selected transmission solution.
- A similar cost allocation is required when neighboring transmission regions select an interregional solution.
- Participant finding is permitted. However, it may not be the regional or interregional allocation schema.

Developer reforms:

- With certain limitations, public utility providers must remove from their tariffs a federal right of first refusal for a regional transmission plan needs solution for the purposes of cost allocation.
- The reliability and service requirements of incumbent transmission providers may be dependent upon regional transmission infrastructure. The order requires the reevaluation of the regional transmission plan and the identification of alternative transmission solutions should the delay in infrastructure development adversely impact system reliability and/or the delivery of required services.

The System is a full participant in the regional transmission planning process through the FRCC.

Impact of Hurricane Irma

On September 10, 2017, the State of Florida was impacted by Hurricane Irma. At approximately 9:00 a.m., the center of Hurricane Irma made landfall at Cudjoe Key in the lower Florida Keys as a Category 4 storm, according to the National Weather Service. The center of Hurricane Irma made a second landfall as a Category 3 storm, at approximately 3:30 p.m., near Marco Island, which is located approximately 300 miles southwest of the City. The City recorded sustained winds of 70 mph along with approximately 12 inches of rain in the local area in a 24 hour period. As expected, due to the winds, rain and local area flooding, electric service and other outages were experienced. At the peak of the storm, about 46,000 customers were without power. GRU worked to restore power to approximately 84% of those customers without power within 48 hours after restoration efforts began, and 100% of those who lost service during the storm were restored by September 18, 2017. Any residual outages as a result of trees downed subsequent to the storm were dealt with on a case-by-case basis.

While there was some isolated structural damage and local area flooding, the electric system sustained no significant damage. None of GRU's power generating assets were damaged by the hurricane and the majority of the buildings were undamaged.

There were 50 customers that experienced a disruption to their drinking water service due to isolated incidents such as overturned trees. These individual customers were issued Precautionary Boil Water Notices and their water services were quickly restored. The overall water system maintained system pressure and delivered safe water throughout the incident.

The extreme rainfall and flooding had the biggest impact to the wastewater system. The flooding resulted in significant inflow of stormwater and floodwaters into the collection system which resulted in comingled wastewater and stormwater overwhelming portions of the collection system. There were numerous locations that the collection system experienced overflows. GRU and private pumpers hauled over 13.8 million gallons of stormwater and wastewater from the collection system to mitigate release impact and help bring the system back to normal operation. During the hurricane and in the following days, it is estimated that approximately 3.5 million gallons of combined stormwater and wastewater were released from the collection system. It is estimated that approximately 80% (or 2.8 mg) of the release was stormwater and 20% (or 0.7 mg) was wastewater. Additionally, GRU lost power to 92 of the 170 wastewater lift stations. However, GRU was able to utilize 41 generators to keep such lift stations operational. GRU restored power to most of the GRU served lift stations by September 12, 2017. There was minimal impact to customers.

GRU coordinated with Alachua County Environmental Protection Department and the Alachua County Department of Health throughout the response and recovery to ensure public health and safety and environmental health. Immediately following the storm, GRU provided an initial notice of wastewater releases to the Florida Department of Environmental Protection ("FDEP") through the State Watch Office and the FDEP Pollution Public Notification website. Environmental assessment teams were deployed throughout the service area and regular regulatory updates and notification of significant operational changes were provided through email and FDEP Storm Tracker. On September 20, 2017, a final update was provided to all regulatory agencies summarizing environmental assessments and release volumes.

In response to wastewater overflows due to Hurricane Irma, FDEP has issued Consent Orders to numerous utilities across the State. The Florida Statutes do not offer regulatory relief for wastewater overflows for any reason, including force majeure. Since GRU responded aggressively and followed prudent utility practices to protect public health and safety and the environment, FDEP issued a Short Form Consent Order (SFCO) without Corrective Actions. The SFCO includes civil penalties based on the releases. In lieu of paying the civil penalties, GRU has elected to execute an In-Kind project that will improve the wastewater collection system. In addition, GRU is committed to reducing inflow and infiltration in the wastewater collection system and is in the process of conducting a Resiliency Study. This study will identify critical areas for infrastructure improvements and will help GRU prioritize future capital improvements. Projects identified through this study will be incorporated into the capital improvement budget and will help mitigate future wastewater releases. These projects are not included in the capital improvement plan in "—Funding the Capital Improvement Plan" below.

The water and wastewater systems did not experience any significant damage to the facilities as a result of the storm.

GRU continues to analyze the System in order to determine if any additional capital improvements will be needed. Initial assessments indicate that the System did not sustain any material infrastructure damage. Overall, the System remains in good condition. Costs associated with any necessary repairs, in addition to the extraordinary operational costs incurred as a result of the power outages, are preliminarily estimated to be approximately \$5.5 million.

As a result of the temporary loss of service, the City estimates an initial loss of revenue in the approximate amount of \$1.1 million, which is based upon the loss of electric service to active customers for a period of four days. The impact on the customer base caused by wind and flood damage from Hurricane Irma appears to be minimal.

In addition to federal aid that may be received to assist with offsetting potential costs and loss of revenues, GRU has property insurance, including loss of income insurance, and flood insurance. GRU will be aggressively pursuing all possible insurance claims and federal aid, including FEMA reimbursements. The City also has funds in the amount of approximately \$68 million in its Rate Stabilization Fund, as well as funds in the amount of \$41 million in unrestricted cash, that can be applied, if necessary, to pay for any damages, costs, or lost revenues that GRU may incur as a result of Hurricane Irma's impacts to the System. Based on past experience, the City expects FEMA reimbursements to approximate 75% of the expenditures.

As of September 22, 2017, electric, water, wastewater and GRUcom service was restored to 100% of the service area.

At the present time, the City does not believe the impacts of Hurricane Irma will materially adversely affect its ability to pay debt service on the 2019 Bonds.

Plant Vogtle Litigation

JEA and the City of Jacksonville, Florida ("Jacksonville"), recently filed a complaint in Florida state court for declaratory judgment regarding a power purchase agreement in place with MEAG Power since 2008. The power purchase agreement is tied to the expansion project at Plant Vogtle, a nuclear power generating facility in Georgia. Under the power purchase agreement, MEAG Power agreed to sell JEA a portion of the output of Plant Vogtle Units 3 and 4, two new nuclear generation units under construction in Burke County, Georgia. MEAG Power subsequently filed a breach of contract lawsuit against JEA in the Federal Court for the Northern District of Georgia. JEA and Jacksonville believe the agreement violates the Constitution of the State of Florida and should be declared void and unenforceable.

JEA filed a petition with FERC asking it to make a number of legal determinations related to the power purchase agreement between JEA and MEAG Power. In the petition, JEA asked FERC to declare that it has jurisdiction over the power purchase agreement (and the transactions therein) under Section 201(b)(1) of the Federal Power Act ("FPA"), even though MEAG Power and JEA are each exempt from regulation by FERC as "public utilities" under Section 201(f) of the FPA. FERC did not accept JEA's petition.

Other Risk Factors

The future financial condition of the System could be affected adversely by, among other things, legislation, environmental and other regulatory actions as set forth above, changes in demand for services, economic conditions, demographic changes, and litigation. In addition to those items listed in the

preceding sentence, some of the possible changes in the future may include, but not be limited to, the following:

1. The City's electric, water and wastewater facilities are subject to regulation and control by numerous federal and state governmental agencies. Neither the City nor its consultants can predict future policies such agencies may adopt. Future changes could result in the City having to discontinue operations at certain facilities or to make significant capital expenditures and could generate substantial litigation. See "THE SYSTEM" above for more information.

2. Estimates of revenues and expenses contained in this Official Statement and the realization of such estimates, are subject to, among other things, future economic and other conditions which are unpredictable and which may adversely affect such revenues and expenses, and in turn, the payment of the 2019 Bonds.

TAX EXEMPTION

General.

In the opinion of Bond Counsel, under existing law, interest on the 2019 Bonds is excludable from gross income for federal income tax purposes. Further, Bond Counsel has expressed no opinion regarding the state tax consequences that may arise with respect to the 2019 Bonds.

The Internal Revenue Code of 1986, as amended (the "Code") and the regulations promulgated thereunder contain a number of requirements that must be satisfied subsequent to the issuance of the 2019 Bonds in order for the interest thereon to be and remain excludable from gross income for federal income tax purposes. Examples include: the requirement that, unless an exception applies, the City rebates certain excess earnings on proceeds and amounts treated as proceeds of the 2019 Bonds to the United States Treasury Department; restrictions on the investment of such proceeds and other amounts; and certain restrictions on the ownership and use of the facilities financed or refinanced with the proceeds of the 2019 Bonds. The foregoing is not intended to be an exhaustive listing of the post-issuance tax compliance requirements of the Code, but is illustrative of the requirements that must be satisfied subsequent to the issuance of the 2019 Bonds to maintain the exclusion of interest on the 2019 Bonds from gross income for federal income tax purposes. Failure to comply with such requirements may cause the inclusion of interest on the 2019 Bonds in the gross income of the holders thereof for federal income tax purposes, retroactive to the date of issuance of the 2019 Bonds. The City has covenanted to comply with each such requirement of the Code that must be satisfied subsequent to the issuance of the 2019 Bonds in order that interest thereon be, or continue to be, excludable from gross income for federal income tax purposes. The opinion of Bond Counsel is subject to the condition that the City complies with all such requirements. Bond Counsel has not been retained to monitor compliance with the described post-issuance tax requirements subsequent to the issuance of the 2019 Bonds.

Bond Counsel gives no assurance that any future legislation or clarifications or amendments to the Code, if enacted into law or otherwise become effective, will not cause the interest on the 2019 Bonds to be subject, directly or indirectly, to federal income taxation, or otherwise prevent the 2019D Bondholders from realizing the full current benefit of the tax status of the interest on the 2019 Bonds. During recent years, legislative proposals have been introduced in Congress, and in some cases have been enacted, that have altered or could alter certain federal tax consequences of owning obligations similar to the 2019 Bonds. In some cases, these proposals have contained provisions that were to be applied on a retroactive basis. It is

possible that legislation could be introduced that, if enacted, could change the federal tax consequences of owning the 2019 Bonds and, whether or not enacted, could adversely affect their market value. Prospective purchasers of the 2019 Bonds are encouraged to consult their own tax advisors regarding any pending or proposed federal legislation, as to which Bond Counsel expresses no view.

As to certain questions of fact material to the opinion of Bond Counsel, Bond Counsel will rely upon representations and covenants made on behalf of the City and certificates of appropriate officers and public officials (including certifications as to the use of proceeds of the 2019 Bonds and of the property financed or refinanced thereby).

Reference is made to the proposed form of the opinion of Bond Counsel attached hereto as "APPENDIX E – Form of Opinion of Bond Counsel" for the complete text thereof. See also "LEGAL MATTERS" herein.

Alternative Minimum Tax.

An alternative minimum tax is imposed by the Code on certain taxpayers other than corporations (as defined for federal income tax purposes). Interest on the 2019 Bonds will not be treated as an item of tax preference for purposes of the alternative minimum tax. Interest on the 2019 Bonds will therefore not be included in the alternative minimum taxable income of taxpayers other than corporations.

Original Issue Premium.

The 2019 Bonds have been sold to the public at an original issue premium. Section 171(a) of the Code provides rules under which a bond premium may be amortized and a deduction allowed for the amount of the amortizable bond premium for a taxable year. Under Section 171(a)(2) of the Code, however, no deduction is allowable for the amortizable bond premium in the case of bonds, like the 2019 Bonds, the interest on which is excludable from gross income. Under Section 1016(a)(5) of the Code, the purchaser's basis in a 2019D Bond will be reduced by the amount of the amortizable bond premium disallowable as a deduction under Section 171(a)(2) of the Code. Proceeds received from the sale, exchange, redemption or payment of a 2019D Bond in excess of the owner's adjusted basis (as reduced pursuant to Section 1016(a)(5) of the Code), will be treated as a gain from the sale or exchange of such 2019D Bond and not as interest.

The federal income tax treatment of original issue premium under the Code, including the determination of the amount of amortizable bond premium that is allocable to each year, is complicated and holders of 2019 Bonds should consult their own tax advisors in order to determine the federal income tax consequences to them of purchasing, holding, selling or surrendering 2019 Bonds at their maturity.

Other Tax Consequences.

Prospective purchasers of the 2019 Bonds should be aware that ownership of the 2019 Bonds may result in collateral federal income tax consequences to certain taxpayers, including without limitation, financial institutions, property and casualty insurance companies, individual recipients of Social Security or Railroad Retirement benefits, certain S Corporations and foreign corporations, individuals entitled to receive the earned income tax credit and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry the 2019 Bonds. Prospective purchasers of the 2019 Bonds should also be aware that ownership of the 2019 Bonds may result in adverse tax consequences under the laws of various states. Bond Counsel has not expressed an opinion regarding the collateral federal income tax consequences that may arise with respect to the 2019 Bonds. Further, Bond Counsel has expressed no

opinion regarding the state tax consequences that may arise with respect to the 2019 Bonds. Prospective purchasers of the 2019 Bonds should consult their tax advisors as to the collateral federal income tax and state tax consequences to them of owning the 2019 Bonds.

The federal income tax consequences from the purchase, ownership and redemption, sale or other disposition of 2019 Bonds which are not purchased in the initial offering at the initial offering price may be determined according to rules which differ from those described above. Holders of 2019 Bonds, should consult their own tax advisors with respect to the consequences of owning 2019 Bonds, including the effect of such ownership under applicable state and local laws.

Information Reporting and Backup Withholding.

Interest paid on tax-exempt bonds, such as the 2019 Bonds, is subject to information reporting to the Internal Revenue Service in a manner similar to interest paid on taxable obligations. This reporting requirement does not affect the excludability of interest on the 2019 Bonds from gross income for federal income tax purposes. However, in conjunction with that information reporting requirement, the Code subjects certain non-corporate owners of 2019 Bonds, under certain circumstances, to "backup withholding" at the fourth lowest rate applicable to unmarried individuals with respect to payments on the 2019 Bonds and proceeds from the sale of 2019 Bonds. Any amounts so withheld would be refunded or allowed as a credit against the federal income tax of such owner of 2019 Bonds. This withholding generally applies if the owner of 2019 Bonds (i) fails to furnish the paying agent (or other person who would otherwise be required to withhold tax from such payments) such owner's social security number or other taxpayer identification number ("TIN"), (ii) furnishes the paying agent an incorrect TIN, (iii) fails to properly report interest, dividends, or other "reportable payments" as defined in the Code, or (iv) under certain circumstances, fails to provide the paying agent or such owner's securities broker with a certified statement, signed under penalty of perjury, that the TIN provided is correct and that such owner is not subject to backup withholding. Prospective purchasers of the 2019 Bonds may also wish to consult with their tax advisors with respect to the need to furnish certain taxpayer information in order to avoid backup withholding and the procedures for obtaining exemptions.

PURCHASE, OWNERSHIP, SALE OR DISPOSITION OF THE 2019 BONDS AND THE RECEIPT OR ACCRUAL OF THE INTEREST THEREON MAY HAVE ADVERSE FEDERAL TAX CONSEQUENCES FOR CERTAIN INDIVIDUAL AND CORPORATE 2019 BONDHOLDERS, INCLUDING, BUT NOT LIMITED TO, THE CONSEQUENCES DESCRIBED ABOVE. PROSPECTIVE 2019 BONDHOLDERS SHOULD CONSULT WITH THEIR TAX SPECIALISTS FOR INFORMATION IN THAT REGARD.

Reference is made to the proposed form of the opinion of Bond Counsel attached hereto as "APPENDIX E – Form of Opinion of Bond Counsel" for the complete text thereof. See also "LEGAL MATTERS" herein.

UNDERWRITING

_____ (collectively, the "Underwriters") are purchasing the 2019D Bonds from the City at an aggregate purchase price of \$_____ (representing the par amount of the 2019D Bonds of \$_____ [plus/less an original issue premium/discount] of \$_____ and less an Underwriters' discount of \$_____), and the 2019E Bonds from the City at an aggregate purchase price of \$_____ (representing the par amount of the 2019E Bonds of \$_____ less an Underwriters' discount of \$_____). The Underwriters' obligations are subject to certain

conditions precedent, and they will be obligated to purchase all the 2019 Bonds if any 2019 Bonds are purchased. The Underwriters have furnished the information on the inside cover page of this Official Statement pertaining to the offering prices of the 2019 Bonds. The 2019 Bonds may be offered and sold to certain dealers (including the Underwriters and other dealers depositing such 2019 Bonds into investment trusts) at prices lower than such public offering prices, and such public offering prices may be changed from time to time, by the Underwriters.

[The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the Underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the City and to persons and entities with relationships with the City, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the City (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the City. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments

The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, its responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.]

CONTINUING DISCLOSURE

The City has covenanted for the benefit of the 2019 Bondholders to provide certain financial information and operating data relating to the City and the 2019 Bonds in each year, and to provide notices of the occurrence of certain enumerated material events. The City has agreed to file annual financial information and operating data and the audited financial statements with each entity authorized and approved by the SEC to act as a repository (each a "Repository") for purposes of complying with the Rule either itself or through its dissemination agent. Effective July 1, 2009, the sole Repository is the Municipal Securities Rulemaking Board. The City has agreed to file notices of certain enumerated events, when and if they occur, with the Repository either itself or through its dissemination agent.

The specific nature of the financial information, operating data, and of the type of events which trigger a disclosure obligation, and other details of the undertaking are described in "APPENDIX F - Form of Continuing Disclosure Certificate" attached hereto. The Continuing Disclosure Certificate shall be

executed by the City upon the issuance of the 2019 Bonds. These covenants have been made in order to assist the Underwriters in complying with the continuing disclosure requirements of the Rule.

[With respect to the 2019 Bonds, no party other than the City is obligated to provide, nor is expected to provide, any continuing disclosure information with respect to the Rule. The City: (i) did not timely file its audited financial statements and notices of failure to file related thereto for Fiscal Years 2015 and 2016 with respect to its then outstanding loan from the proceeds of the then outstanding First Florida Governmental Financing Commission Revenue Bonds; (ii) did not timely file its audited financial statements and operating data and notices of failure to file related thereto for Fiscal Year 2015 with respect to certain of its Outstanding Utilities System Revenue Bonds; (iii) failed to file certain operating data and notice of failure to file related thereto for Fiscal Years 2015 and 2016 with respect to certain of its Outstanding Utilities System Revenue Bonds; and (iv) failed to file certain notices of defeasance and bond calls which occurred in Fiscal Years 2015 and 2016 with respect to certain of its Utilities System Revenue Bonds and its then outstanding loan from the proceeds of the then outstanding First Florida Governmental Financing Commission Revenue Bonds. In the past five years, except as described above, the City has never failed in any material respect to comply with any prior agreements to provide continuing disclosure information pursuant to the Rule. However, the City (i) filed certain operating data in a different format than required, failed to file certain operating data for Fiscal Years 2013, 2015 and 2016 and a failure to file notice related thereto with respect to certain of its outstanding Utilities System Revenue Bonds; (ii) failed to link certain operating data for Fiscal Year 2014 with respect to certain of its Outstanding Utilities System Revenue Bonds; (iii) did not timely file its audited financial statements for Fiscal Year 2017, and (iv) did not timely file certain operating data for Fiscal Year 2013 with respect to its then-outstanding Guaranteed Entitlement Revenue Refunding Bonds, Series 2004. All such required information has been filed as of this date. While the City does not believe that such failures constitute material failures to comply with any prior agreements to provide continuing disclosure information pursuant to the Rule, in order to demonstrate its continued commitment to continuing disclosure best practices, the City has included notice of this non-material instance of non-compliance in the interest of being fully transparent. With respect to the City's April 30, 2019 filing deadline the City's general purpose audited financial statements and related financial information and operating data was not available for timely filings, due to staff turnover in the City's General Government finance department and the hiring of a new auditor. A notice of failure to file was filed on April 30, 2019 and such audited financial statements and related financial information and audited financial data was filed on June 18, 2019.] Except for this, the City fully anticipates satisfying all future disclosure obligations required pursuant to the Rule. The City has entered into a contract with Digital Assurance Certification, LLC to provide continuing disclosure dissemination agent services for all of its outstanding bond issues.

ENFORCEABILITY OF REMEDIES

The remedies available to the owners of the 2019 Bonds upon an event of default under the Resolution are in many respects dependent upon judicial actions which are often subject to discretion and delay. Under existing constitutional and statutory law and judicial decisions, including specifically the federal bankruptcy code, the remedies specified by the Resolution and the 2019 Bonds may not be readily available or may be limited. The various legal opinions to be delivered concurrently with the delivery of the 2019 Bonds, including Bond Counsel's approving opinion, will be qualified, as to the enforceability of the remedies provided in the various legal instruments, by limitations imposed by bankruptcy, reorganization, insolvency or other similar laws affecting the rights of creditors enacted before or after such

delivery. See "APPENDIX C – Copy of the Resolution" attached hereto for a description of events of default and remedies.

RATINGS

S&P, Moody's and Fitch have assigned ratings of "___" (_____ outlook), "___" (_____ outlook) and "___" (_____ outlook), respectively, to the 2019 Bonds. Such ratings reflect only the views of such organizations and any desired explanation of the significance of such ratings should be obtained from the rating agency furnishing the same. Generally, a rating agency bases its ratings on information and material so furnished and on investigations, studies and assumptions made by the rating agency. The City furnished such ratings agencies with certain information and materials relating to the 2019 Bonds that have not been included in this Official Statement. The rating is not a recommendation to buy, sell or hold the 2019 Bonds. There is no assurance that the ratings will be in effect for any given period of time or that they will not be revised downward, suspended or withdrawn entirely by S&P, Moody's and Fitch or any of them if in their judgment, circumstances so warrant. The City does not undertake any responsibility to bring to the attention of the owners of the 2019 Bonds any proposed revision or withdrawal of a rating of the 2019 Bonds, or to oppose any such downward revision or withdrawal. Any such downward revision, suspension or withdrawal of the ratings given the 2019 Bonds may have an adverse effect on the liquidity or market price of the 2019 Bonds. An explanation of the significance of the ratings can be received from the rating agencies, at the following addresses: S&P Global Inc., 55 Water Street, New York, New York 10041, Moody's Investors Service, Inc., 7 World Trade Center, 250 Greenwich Street, New York, New York 10007 and Fitch Ratings, Inc., One State Street Plaza, New York, New York 10004.

LITIGATION

[There is no litigation or other proceeding pending or, to the knowledge of the City, threatened in any court, agency or other administrative body (either state or federal) in any way questioning or affecting (i) the proceedings under which the 2019 Bonds will be issued, (ii) the validity of any provision of the 2019 Bonds or the Resolution, (iii) the pledge by the City under the Resolution, (iv) the legal existence of the City or (v) the authority of the City to own and operate the System and to set utility rates.

In addition to the action described above, the City is also party to various federal, state and local claims, proceedings and lawsuits for damages claimed to result from the operation of the City and the System. Except as described above, neither the City Attorney believe that, individually or in the aggregate, the proceedings associated with these cases will materially adversely affect the Net Revenues of the System or materially adversely impair the business, operations, or financial condition of the System or the City's ability to pay debt service on the 2019 Bonds.]

LEGAL MATTERS

Certain legal matters incident to the issuance of the 2019 Bonds are subject to the legal opinion of Holland & Knight LLP, Lakeland, Florida, as Bond Counsel, a form of which is attached to this Official Statement as APPENDIX E. The signed legal opinion dated and premised on law in effect as of the date of original delivery of the 2019 Bonds, will be delivered to the Underwriters at the time of original delivery. Certain legal matters are also being passed upon for the City by Nicolle M. Shalley, Esq., City Attorney, Bryant Miller Olive P.A., Tampa, Florida, as Disclosure Counsel to the City, and _____, as Counsel to the Underwriters.

Holland & Knight LLP, Bond Counsel, has not undertaken independently to verify and therefore expresses no opinion with respect to the information or statements contained herein or in the Appendices attached hereto, except as to the accuracy of the portions thereof captioned "SECURITY FOR THE BONDS" and "THE 2019 BONDS" and the copy of the Resolution contained in Appendix C to the extent those sections purport to summarize certain provisions of the Resolution, and except as to the accuracy of the information under the caption "TAX EXEMPTION." No opinion is expressed by Bond Counsel as to any financial or statistical data or information included in such sections.

The proposed text of the legal opinion of Bond Counsel is set forth in APPENDIX E. The actual legal opinion to be delivered may vary from that text if necessary to reflect facts and law on the date of delivery. The opinion will speak only as of its date and subsequent distribution of it by recirculation of the Official Statement or otherwise shall create no implication that subsequent to the date of the opinion, Bond Counsel has reviewed or expresses any opinion concerning any of the matters referenced in the opinion. Bond Counsel's opinions are based on existing law, which is subject to change. Such opinions is further based on factual representations made to Bond Counsel as of the date thereof. Bond Counsel assumes no duty to update or supplement its opinions to reflect any facts or circumstances, including changes in law, which may thereafter occur or become effective.

The legal opinions delivered in connection with the 2019 Bonds express the professional judgment of the attorneys rendering the opinions regarding the legal issues expressly addressed therein. By rendering a legal opinion, the opinion giver does not become an insurer or guarantor of the result indicated by that expression of professional judgment of the transaction on which the opinion is rendered or of the future performance of the parties to the transaction. Nor does the rendering of an opinion guarantee the outcome of any legal dispute that may arise out of the transaction.

CONTINGENT FEES

The City has retained Bond Counsel, the Financial Advisor and Disclosure Counsel with respect to the authorization, sale, execution and delivery of the 2019 Bonds. Payment of the fees of such professionals and an underwriting discount to the Underwriters (which includes the fees of Underwriters' Counsel) are each contingent upon the issuance of the 2019 Bonds.

FINANCIAL STATEMENTS

The audited financial statements of the System as of September 30, 2018 and for the year then ended, included in APPENDIX B attached to this Official Statement as a matter of public record and the consent of Purvis, Gray & Company LLP, independent auditors (the "Auditor") to include such documents was not requested. The Auditor was not requested to perform and has not performed any services in connection with the preparation of this Official Statement or the issuance of the 2019 Bonds.

FINANCIAL ADVISOR

The City has retained PFM Financial Advisors LLC as Financial Advisor. The Financial Advisor is not obligated to undertake and has not undertaken to make an independent verification or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement.

as APPENDIX B. Such financial statements include comparisons to the prior fiscal year in certain instances. Since it is not customary, the City has not attached as an appendix the audited financial statements for the prior fiscal year. However, such audited financial statements, which are incorporated herein by reference, can be accessed through this link: <https://emma.msrb.org/ES1066371-ES832546-ES1233607.pdf>.

The City has not undertaken an independent review or investigation of securities for which it has served as conduit issuer. The City does not believe that any information about any default on such securities is appropriate and would be considered material by a reasonable investor in the 2019 Bonds because the City would not have been obligated to pay the debt service on any such securities except from payments made to it by the private companies on whose behalf such securities were issued and no funds of the City would have been pledged or used to pay such securities or the interest thereon.

ACCURACY AND COMPLETENESS OF OFFICIAL STATEMENT

The references, excerpts, and summaries of all documents, statutes, and information concerning the City and certain reports and statistical data referred to herein do not purport to be complete, comprehensive and definitive and each such summary and reference is qualified in its entirety by reference to each such document for full and complete statements of all matters of fact relating to the 2019 Bonds, the security for the payment of the 2019 Bonds and the rights and obligations of the owners thereof and to each such statute, report or instrument.

Any statements made in this Official Statement involving matters of opinion or of estimates, whether or not so expressly stated are set forth as such and not as representations of fact, and no representation is made that any of the estimates will be realized. Neither this Official Statement nor any statement that may have been made verbally or in writing is to be construed as a contract with the owners of the 2019 Bonds.

The appendices attached hereto are integral parts of this Official Statement and must be read in their entirety together with all foregoing statements.

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AUTHORIZATION OF OFFICIAL STATEMENT

The execution and delivery of this Official Statement has been duly authorized and approved by the City. At the time of delivery of the 2019 Bonds, the City will furnish a certificate to the effect that nothing has come to its attention which would lead it to believe that the Official Statement (other than information herein related to DTC and its book-entry only system of registration, information provided by the Underwriters under the caption "UNDERWRITING" and the information contained under the caption "TAX EXEMPTION" as to which no view shall be expressed), as of its date and as of the date of delivery of the 2019 Bonds, contains an untrue statement of a material fact or omits to state a material fact which should be included therein for the purposes for which the Official Statement is intended to be used, or which is necessary to make the statements contained therein, in the light of the circumstances under which they were made, not misleading.

CITY OF GAINESVILLE, FLORIDA

By: _____
General Manager for Utilities

APPENDIX A
GENERAL INFORMATION REGARDING THE CITY

APPENDIX A

GENERAL INFORMATION REGARDING THE CITY

General

The City of Gainesville (the "City"), home of the University of Florida, is located in North Central Florida midway between Florida's Gulf and the Atlantic coast. The City is approximately 125 miles north of Tampa, approximately 110 miles northwest of Orlando and approximately 75 miles southwest of Jacksonville. The Bureau of Economic and Business Research at the University of Florida estimated a 2018 population of 263,291 in the Alachua County (the "County") with an estimated 133,857 persons residing within the City limits. The economic base of the City consists primarily of light industrial, commercial, health care and educational activities. The University of Florida is the State's oldest university and, with approximately 50,000 students, is one of the largest universities in the nation.

Organization and Administration

The City was established in 1854, incorporated in 1869 and has operated under a Commission-Manager form of government since 1927. The City Commission consists of seven elected officials (a Mayor and six Commissioners) who are responsible for enacting the ordinances and adopting the resolutions which govern the City. The elected officials each serve for three-year terms. The Mayor presides over public meetings and ceremonial events.

The following are the current members of the City Commission:

	<u>Term Expires</u>
Mayor Lauren Poe, At Large	November, 2022
Mayor-Commissioner-Pro-Tem Harvey Ward, District 2	May 2020
Commissioner David Arreola, District 3.....	May 2020
Commissioner Adrian Hayes-Santos, District 4.....	November, 2022
Commissioner Gail Johnson, At Large.....	May 2021
Commissioner Gigi Simmons, District 1	May 2021
Commissioner Helen K. Warren, At Large.....	May 2020

The City Commission appoints the City Manager, General Manager for Utilities, City Auditor, City Attorney, Clerk of the City Commission and Equal Opportunity Director. As chief executive officers, the City Manager and General Manager for Utilities are charged with the enforcement of all ordinances and resolutions passed by the City Commission. They accomplish this task through the selection and supervision of two Assistant City Managers, Utilities Executive Team, and numerous department heads.

The City provides its constituents with a wide variety of public services: building inspections, code enforcement, community development, cultural affairs, economic development, electrical power generation and distribution, golf course, mass transit, natural gas distribution, parks and recreation, homeless services, police and fire protection, refuse collection, small business development, stormwater management, street maintenance, traffic engineering and parking, water and wastewater and telecommunications and data transfer.

Internal support services include the following: accounting and reporting, accounts payable and payroll, billing and collections, budgeting and budget monitoring, cash management, City-wide management, computer systems support, debt management, equal opportunity, fleet maintenance, facilities maintenance, human resources, information systems, investment management, labor relations, mail services, pension administration, property control, purchasing, risk management and strategic planning. In addition to these activities, the City exercises oversight responsibility for the Community Redevelopment Agency and the Gainesville Enterprise Zone Development Agency.

Population

The following table depicts historical and projected population growth of the City, the County and the State of Florida:

POPULATION GROWTH

<u>Year</u>	<u>City of Gainesville Population</u>	<u>Percentage Increase</u>	<u>Alachua County Population</u>	<u>Percentage Increase</u>	<u>State of Florida Population</u>	<u>Percentage Increase</u>
2018	133,857	--	263,291	--	20,840,568	--
2020	n/a ⁽¹⁾	n/a	267,727	4.1%	21,372,207	6.1%
2030	n/a ⁽¹⁾	n/a	289,502	8.1	24,070,978	12.6
2040	n/a ⁽¹⁾	n/a	309,385	6.9	26,252,141	9.1

⁽¹⁾ Information is no longer available through the U.S. Bureau of Census and University of Florida, Bureau of Business and Economic Research Florida Statistical Abstracts for the City.

Source: U.S. Bureau of Census and University of Florida, Bureau of Business and Economic Research Florida Statistical Abstracts.

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Employment

The following table sets forth the unemployment rate for the City over the past ten years.

EMPLOYMENT

<u>Year</u>	<u>Unemployment Rate</u>
2009	7.40
2010	8.30
2011	8.10
2012	6.90
2013	5.30
2014	4.90
2015	4.50
2016	4.20
2017	3.50
2018	2.70

Source: Source: Finance Department, City of Gainesville, Florida.

TEN LARGEST EMPLOYERS (SEPTEMBER 30, 2018)

<u>Firm</u>	<u>Product/Business</u>	<u>Employees</u>
University of Florida	Education	28,118
UF Health	Health Care	12,959
Veterans Affairs Medical Center	Health Care	6,250
Alachua County School Board	Education	3,943
City of Gainesville	Municipal Government	2,120
North Florida Regional Medical Center	Health Care	2,098
Gator Dining Services	Food Services	1,200
Nationwide Insurance Company	Insurance	973
Alachua County	Government	812
Publix Supermarkets	Grocer	783

Source: Finance Department, City of Gainesville, Florida.

Property Tax Data

The following data is provided for information and analytical purposes only. The Utilities System Variable Rate Bonds are not secured by ad valorem tax revenues of the City.

**ASSESSED VALUE OF TAXABLE PROPERTY
LAST TEN FISCAL YEARS**

Fiscal Year Ended	Just Value				Exemptions					Total Taxable Assessed Value	Total Direct Tax Rate
	Tax Year	Real Property	Personal Property	Centrally Assessed Property	Governmental	Agricultural	Institutional	Homestead	Other ⁽¹⁾		
2009	2008	10,599,500,250	1,732,004,529	1,149,322	4,195,267,980	35,549,700	647,733,978	1,773,423,757	14,341,607	5,666,337,079	4.2544
2010	2009	10,534,674,944	2,245,414,910	1,234,487	4,251,801,982	39,408,200	874,389,881	1,594,957,710	134,747,020	5,886,019,548	4.3963
2011	2010	10,570,350,300	2,241,373,073	987,726	4,815,548,071	37,517,700	896,937,822	1,313,405,085	141,081,893	5,608,220,528	4.2544
2012	2011	10,756,478,800	2,308,068,145	1,130,083	5,343,081,038	39,115,900	1,029,746,160	1,134,254,774	117,240,859	5,402,238,297	4.2544
2013	2012	10,437,604,712	2,386,565,278	1,073,991	5,408,327,315	37,576,500	1,112,522,902	993,996,869	109,161,684	5,163,658,711	4.4946
2014	2013	10,480,490,440	2,587,608,797	2,138,554	5,609,545,384	39,389,400	1,095,790,104	916,778,157	234,075,511	5,174,659,235	4.5780
2015	2014	10,508,455,900	2,979,114,148	2,210,823	5,603,063,413	39,298,000	1,129,921,784	895,414,243	178,766,271	5,643,317,160	4.5079
2016	2015	10,815,607,700	2,912,715,109	2,251,700	5,651,530,893	40,988,400	1,094,785,940	992,344,032	181,396,571	5,769,528,673	4.5079
2017	2016	11,183,742,495	3,179,982,350	2,303,808	5,923,396,413	42,466,700	1,065,499,494	1,041,502,131	267,520,476	6,025,643,439	4.5079
2018	2017	11,231,867,455	3,208,636,215	2,347,682	5,961,428,856	43,012,432	1,096,499,331	1,016,923,482	215,439,707	6,109,547,544	4.5079

⁽¹⁾ Includes non-homestead residential and certain nonresidential property differentials between just value and capped value.
Source: Finance Department, City of Gainesville, Florida and Alachua County Property Appraiser Final Ad Valorem Assessment Rolls.

**HISTORY OF LOCAL AD VALOREM
TAX RATES AND TAX LEVIES**

Tax Roll Year ⁽¹⁾	City Fiscal Year ⁽²⁾	Net Taxable Value for Local Levies ⁽³⁾	Local Property		Total Taxes Levied
			Tax Rates (Mills) General Government ⁽⁴⁾	Local Property Tax Levies (\$) General Government	
2008	2008-09	\$5,666,337,079	4.2544	\$24,106,864	\$24,106,864
2009	2009-10	5,886,019,548	4.3963	25,876,708	25,876,708
2010	2010-11	5,608,220,528	4.2544	23,859,613	23,859,613
2011	2011-12	5,402,238,297	4.2544	22,983,283	22,983,283
2012	2012-13	5,163,658,711	4.4946	23,208,580	23,208,580
2013	2013-14	5,174,659,235	4.5780	23,689,590	23,689,590
2014	2014-15	5,643,317,160	4.5079	25,439,509	25,439,509
2015	2015-16	5,769,528,673	4.5079	26,008,458	26,008,458
2016	2016-17	6,025,643,439	4.5079	26,153,549	26,153,549
2017	2017-18	6,109,547,544	4.5079	[]	[]

(1) Tax roll year as of January 1.

(2) Fiscal year beginning October 1 and ending the next September 30.

(3) Sum of real and personal property value.

(4) (a) Tax rates are set by the City Commission effective October 1.

(b) Chapter 200.181, Florida Statutes, allows unrestricted ad valorem tax rate levies for debt service for general obligation bonds approved by citizen referendum and imposes a 10 mill limitation on ad valorem tax rates levied for general government operations.

Source: Finance Department, City of Gainesville, Florida and Alachua County Property Appraiser Final Ad Valorem Assessment Rolls.

**PROPERTY TAX LEVIES AND COLLECTIONS
LAST TEN FISCAL YEARS**

Fiscal Year Ended September 30,	Total Tax Levy for Fiscal Year	Collected within the Fiscal Year of the Levy		Collections in Subsequent Years	Total Collections to Date	
		Amount	Percentage of Levy		Amount	Percentage of Levy
2009	\$24,020,009	\$23,191,605	96.6%	\$63,122	\$23,254,727	96.8%
2010	25,782,262	24,912,341	96.6	82,380	24,994,721	96.9
2011	23,802,971	23,007,885	96.7	30,552	23,038,437	96.8
2012	22,865,258	22,085,295	96.6	60,850	22,146,145	96.9
2013	23,068,205	22,259,404	96.5	93,905	22,353,309	96.9
2014	23,449,920	22,573,803	96.3	133,066	22,706,869	96.8
2015	25,292,699	24,342,225	96.2	69,006	24,411,231	96.5
2016	25,854,421	24,924,172	96.4	44,837	24,969,009	96.6
2017	26,996,390	26,030,596	96.4	20,629	26,051,225	99.5
2018	30,885,614	29,766,402	96.4	N/A	29,766,402	96.4

Source: Finance Department, City of Gainesville, Florida.

**PROPERTY TAX RATES
DIRECT AND OVERLAPPING GOVERNMENTS
LAST TEN FISCAL YEARS
(rate per \$1,000 assessed value)**

Fiscal <u>Year</u>	Tax <u>Year</u>	City of Gainesville Direct <u>Rate</u>	Alachua County <u>County</u>	Overlapping Rates			Total Direct & Overlapping <u>Rates</u>
				Alachua School <u>District</u>	St. Johns Water Management <u>District</u>	Alachua County Library <u>District</u>	
2009	2008	4.2544	7.8208	8.3590	0.4158	1.3406	22.1906
2010	2009	4.3963	8.2995	9.4080	0.4158	1.3771	23.8967
2011	2010	4.2544	8.6263	9.1070	0.4158	1.4736	23.8771
2012	2011	4.2544	8.5956	9.0920	0.3313	1.4790	23.7523
2013	2012	4.4946	8.5956	8.5490	0.3313	1.4768	23.4473
2014	2013	4.5780	8.7990	8.4020	0.3283	1.4588	23.5661
2015	2014	4.5079	8.7990	8.4100	0.3164	1.4588	23.4921
2016	2015	4.5079	8.7950	8.3420	0.3023	1.4538	23.3830
2017	2016	4.7474	8.4648	7.6250	0.2724	1.2655	22.3751
2018	2017	4.7474	8.2829	7.2640	0.2562	1.2303	21.7808

Source: Finance Department, City of Gainesville, Florida.

The following table sets forth certain information regarding direct and overlapping debt for the City, as of September 30, 2018.

[OVERLAPPING GENERAL OBLIGATION DEBT⁽¹⁾

<u>Taxing Authority</u>	<u>Taxable Property Value⁽²⁾</u>	<u>General Obligatio n Bonded Debt⁽³⁾</u>	<u>Percent of Debt Applicable to City⁽⁴⁾</u>	<u>City's Share of General Obligation Debt⁽⁵⁾</u>
City of Gainesville	\$6,109,547,544	\$0	100.00%	\$0
Alachua County	0	0	n/a	0
Alachua County School Board	0	0	0	0
Alachua County Library District	0	0	0	<u>0</u>
				<u>\$0</u>

(1) The above information on bonded debt does not include self supporting and non-self supporting revenue bonds, certificates, and notes (reserves and/or sinking fund balances have not been deducted).

(2) Homestead property of certain qualified residents is eligible for up to \$50,000 value exemption.

(3) Reserves and sinking fund balances have not been deducted.

(4) Percentages were recalculated by the Finance Department, City of Gainesville, Florida.

(5) Chapter 200.181, Florida Statutes, allows unrestricted ad valorem tax rate levies for debt service for general obligation bonds approved by voter referendum.

Source: Finance Department, City of Gainesville, Florida.]

**[OVERLAPPING SELF SUPPORTING AND
NON-SELF SUPPORTING DEBT
As of September 30, 2018**

<u>Taxing Authority</u>	<u>Self Supporting</u>	<u>Non-Self Supporting</u>	<u>Totals</u>
Alachua County ⁽¹⁾		\$64,777,220	\$64,777,220
Alachua County Schools		56,412,724	56,412,724
Alachua County Library District ⁽¹⁾		0	0
City of Gainesville:			
Utilities	930,440,000	0	930,440,000
Other than Utilities	1,502,220	125,524,025	127,026,265

Source: Finance Department, City of Gainesville, Florida.

**DEBT SUMMARY⁽¹⁾
AS OF SEPTEMBER 30, 2018**

	<u>Gross</u>	<u>Net</u>
General Obligation Debt	\$0	\$0
Debt Payable from Non-Ad Valorem Revenues ⁽²⁾	125,524,025	125,524,025
General Obligation Overlapping Debt ⁽³⁾	<u>0</u>	<u>0</u>
Total	\$125,524,025	\$125,524,025

Maximum Annual Debt Service on Debt Payable from Non-Ad Valorem Revenues after 10/01/2016	\$15,005,625
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⁽¹⁾ This includes only City of Gainesville general government debt. The City of Gainesville d/b/a Gainesville Regional Utilities and other self-liquidating debt are not included.

⁽²⁾ Includes all debt to which a pledge and/or lien on a specific non-ad valorem revenue source has been provided by the City, and all loans made by the First Florida Governmental Financing Commission to the City.

⁽³⁾ Includes general obligation debt of Alachua County School District.

Source: Finance Department, City of Gainesville, Florida.]

PRINCIPAL TAXPAYERS

Tax Roll Year 2018

<u>Owner/Taxpayer</u>	<u>Total Assessed</u>	<u>Percentage of Total Taxable Assessed</u>
Gainesville Renewable Energy Center Inc.	\$301,247,900	4.93%
Argos Cement LLC	151,760,610	2.48
Oaks Mall Gainesville LTD	137,760,630	2.25
Wal-Mart Stores East LP	98,911,970	1.62
HCA Health Services of Florida, Inc.	82,134,250	1.34
Duke Energy Florida Inc	77,893,413	1.27
AT&T Mobility LLC	67,961,543	1.11
Stanley Robert E	66,068,500	1.08
Bellsouth Telecommunications	63,788,606	N/A
North Florida Regional Medical Center Inc.	<u>59,142,690</u>	<u>0.97</u>
 TOTAL PRINCIPAL TAXPAYERS	 \$1,106,670,112	 17.07%

Source: Finance Department, City of Gainesville, Florida.

LIABILITIES OF THE CITY

Insurance Considerations Affecting the City

Risk Management

The City is exposed to various risks of loss related to theft of, damage to, and destruction of assets, errors and omissions, injuries to employees, and natural disasters. The City maintains a General Insurance Fund (an Internal Service Fund) to account for some of its uninsured risk of loss. Under the current program, the City is self-insured for workers' compensation claims in excess of \$350,000. Settlements have not exceeded insurance coverage for each of the last three years. Liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported (IBNRs), and are shown at the current dollar value.

All funds other than the System enterprise fund (the "Utility Fund") participate in the general insurance program. Risk management/insurance related activities of the Utility Fund are accounted for within the Utility Fund. The Utility Fund purchases plant and machinery insurance from a commercial carrier. There have been no significant reductions in insurance coverage from that in the prior year and settlements have not exceeded insurance coverage for the past three fiscal years. In addition, an actuarially computed liability of \$3,337,000 is recorded in the Utility Fund as a fully amortized deferred credit. The present value calculation assumes a rate of return of 4.5% with a confidence level of 75%. All claims for fiscal year 2018 were paid from current year's revenues.

Changes in the Utility Fund's claims liability for the last two years are as follows:

<u>Fiscal Year</u>	<u>Beginning of Fiscal Year Liability</u>	<u>Incurred</u>	<u>Payments</u>	<u>End of Fiscal Year Liability</u>
2017-2018	\$3,337,000	\$1,729,406	\$(1,729,406)	\$3,337,000
2016-2017	3,337,000	2,253,000	(2,253,000)	3,337,000

There is a claims liability of \$6,854,000 included in the General Insurance Fund as the result of actuarial estimates.

Changes in the General Insurance Fund's claims liability were as follows:

<u>Fiscal Year</u>	<u>Beginning of Fiscal Year Liability</u>	<u>Incurred</u>	<u>Payments</u>	<u>End of Fiscal Year Liability</u>
2017-2018	\$6,854,000	\$3,861,445	\$(3,861,445)	\$6,854,000
2016-2017	6,854,000	2,466,244	(2,466,244)	6,854,000

The City is also self-insured for its Employee Health and Accident Benefit Plan (the "Plan"). The Plan is accounted for in an Internal Service Fund and is externally administered, for an annually contracted amount that is based upon the volume of claims processed. Contributions for City employees and their dependents are shared by the City and the employee. Administrative fees are paid primarily out of this fund. Stop-loss insurance is maintained for this program at \$300,000 per individual. No claims have exceeded insurance coverage in the last three years.

Changes in claims liability for fiscal years 2016 and 2017 were as follows:

<u>Fiscal Year</u>	<u>Beginning of Fiscal Year Liability</u>	<u>Incurred</u>	<u>Payments</u>	<u>End of Fiscal Year Liability</u>
2017-2018	\$1,310,671	\$23,412,606	\$(23,412,606)	\$1,310,671
2016-2017	1,310,671	21,883,325	(21,883,325)	1,310,671

These claims liability amounts are all considered to be due within one year and are classified as current liabilities in the accompanying financial statements.

Other Post-Employment Benefits Plan

Plan Description.

By ordinance enacted by the City Commission, the City has established the Retiree Health Care Plan (RHCP), a single-employer defined benefit postemployment health care plan that covers eligible retired employees. RHCP, which is administered by the City, allows employees who retire and meet retirement eligibility requirements under one of the City's retirement plans to continue medical coverage as a participant in the City's plan. Administrative costs are financed through investment earnings.

The City issues a publicly available financial report that includes financial statements and required supplementary information for the RHCP. That report may be obtained by writing to City of Gainesville, Finance Department, P.O. Box 490, Gainesville, Florida 32627 or by calling (352) 334-5054.

[The RHCP has 746 retirees receiving benefits, 1,052 retirees not currently electing medical coverage and has a total of 1,867 active participants and 133 DROP participants for a total of 3,798. Ordinance 991457 of the City assigned the authority to establish and amend benefit provisions to the City Commission.

Annual OPEB Cost and Net OPEB Obligation

For the fiscal year ended September 30, 2017, the City's annual Other Post-Employment Benefit ("OPEB") cost for the RHCP was \$2,481,058. The City's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for the fiscal years ended September 30, 2017 were as follows:

Annual required contribution	\$1,820,901
Interest on net OPEB obligation	(1,531,517)
Adjustment to annual required contribution	<u>2,191,674</u>
Annual OPEB cost	<u>\$2,481,058</u>
Contributions made	<u>1,622,729</u>
Change in net OPEB obligation (asset)	\$858,329
Net OPEB obligation (asset), beginning of year	<u>(18,907,614)</u>
Net OPEB obligation (asset), end of year	<u>\$(18,049,285)</u>

<u>Year Ended</u>	<u>Annual OPEB Cost</u>	<u>Actual Employer Contribution</u>	<u>Percentage Contributed</u>	<u>Net Ending OPEB Obligation (Asset)</u>
09/30/15	\$3,585,790	\$2,972,451	82.90%	\$(17,669,214)
09/30/16	1,677,380	2,915,780	173.83	(18,907,614)
09/30/17	2,481,058	1,622,729	65.40	(18,049,284)

Fiscal year ended September 30, 2005 was the year of implementation of GASB 43 and 45 and the City elected to implement prospectively. The City's contributions include \$1,006,642, \$2,375,230 and \$2,441,107 in payments made by the City for the implicit rate subsidy included in the blended rate premiums for active employees which fund the implicit rate subsidy discount provided to the retirees for fiscal years ended September 30, 2017, 2016 and 2015, respectively.

Funding Policy

In 1995, the City instituted a cost sharing agreement with retired employees for individual coverage only, based on a formula taking into account age at the time the benefit is first accessed and service at time of retirement. The contribution requirements of plan members and the City are established and may be amended by the City Commission. These contributions are neither mandated nor guaranteed. The City has retained the right to unilaterally modify its payment for retiree health care benefits. Administrative costs are financed through investment earnings.

RHCP members receiving benefits contribute a percentage of the monthly insurance premium. Based on this plan, the RHCP pays up to 50% of the individual premium for each insured according to the age/service formula factor of the retiree. Spouses and other dependents are eligible for coverage, but the employee is responsible for the entire cost, there is no direct RHCP subsidy. The employee contributes the premium cost each month, less the RHCP subsidy calculated as a percentage of the individual premium.

The State prohibits the City from separately rating retirees and active employees. The City therefore charges both groups an equal, blended rate premium. Although both groups are charged the same blended rate premium, GAAP require the actuarial figures presented above to be calculated using age adjusted premiums approximating claim costs for retirees separate from active employees. The use of age adjusted premiums results in the addition of an implicit rate subsidy into the actuarial accrued liability. However, the City has elected to contribute to the RHCP at a rate that is based on an actuarial valuation prepared using the blended rate premium that is actually charged to the RHCP.

In July 2005, the City issued \$35,210,000 Taxable OPEB bonds to retire the unfunded actuarial accrued liability then existing in the RHCP Trust Fund which were fully paid in fiscal year 2015. This allowed the City to reduce its contribution rate. The City's actual regular contribution was less than the annual required contribution calculated using the age-adjusted premiums instead of the blended rate premiums. The difference between the annual required calculation and the City's actual regular contribution was due to two factors. The first is the amortization of the negative net OPEB obligation created in the fiscal year ended September 30, 2005 by the issuance of the OPEB bonds. The other factor is that the City has elected to contribute based on the blended rate premium instead of the age-adjusted premium, described above as the implicit rate subsidy.

In September 2008, the City approved Ordinance No. 0-08-52, terminating the existing program and trust and creating a new program and trust, effective January 1, 2009. This action changed the benefits provided to retirees, such that the City will contribute towards the premium of those who retire after August 31, 2008 under a formula that provides ten dollars per year of credited service, adjusted for age at first access of the benefit. Current retirees receive a similar benefit, however the age adjustment is modified to be set at the date the retiree first accesses the benefit or January 1, 2009, whichever is later. For current retirees that are 65 or older as of January 1, 2009, the City's contribution towards the premium will be the greater of the amount calculated under this method or the amount provided under the existing ordinance. The City's contribution towards the premium will be adjusted annually at the rate of 50% of the annual percentage change in the individual premium compared to the prior year.

Actuarial Methods and Assumptions

Calculations of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the October 1, 2015 actuarial valuation, the entry age normal actuarial cost method was used. The actuarial assumptions used included an 8.2% investment rate of return, compounded annually, net of investment expenses. The annual healthcare cost trend rate of 4.5% is the ultimate rate, which decreased from 6% from the prior year. The select rate was 12% but was decreased to the ultimate rate in 2002. Both the rate of return and the healthcare cost trend rate include an assumed inflation rate of 3.75%.

The actuarial valuation of RHCP assets was set at fair market value of investments as of the measurement date. The RHCP's initial unfunded actuarial accrued liability ("UAAL") as of 1994 is being amortized as a level percentage of projected payroll over a closed period of twenty years from 1994 and

changes in the UAAL from 1994 through 2003 are amortized over the remaining portion of the twenty-year period. Future changes in the UAAL will be amortized on an open period of ten years from inception.

Funded Status

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability (AAL) Entry Age (b)	Unfunded (UAAL) (b) - (a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll (b-a)/c
9/30/17	\$63,500,353	\$67,590,558	\$4,090,205	93.95%	\$122,798,859	3.33%

Ability to be Sued, Judgments Enforceable

Notwithstanding the liability limits described below, the laws of the State provide that each city has waived sovereign immunity for liability in tort to the extent provided in Section 768.28, Florida Statutes. Therefore, the City is liable for tort claims in the same manner and, subject to limits stated below, to the same extent as a private individual under like circumstances, except that the City is not liable for punitive damages or interest for the period prior to judgment. Such legislation also limits the liability of a city to pay a judgment in excess of \$200,000 to any one person or in excess of \$300,000 because of any single incident or occurrence. Judgments in excess of \$200,000 and \$300,000 may be rendered, but may be paid from City funds only pursuant to further action of the Florida Legislature in the form of a "claims bill." See "LIABILITIES OF THE CITY –Insurance Considerations Affecting the City" herein. Notwithstanding the foregoing, the City may agree, within the limits of insurance coverage provided, to settle a claim made or a judgment rendered against it without further action by the Florida Legislature, but the City shall not be deemed to have waived any defense or sovereign immunity or to have increased the limits of its liability as a result of its obtaining insurance coverage for tortuous acts in excess of the \$200,000 or \$300,000 waiver provided by Florida Statutes.

Debt Issuance and Management

The City utilizes a financing team when assessing the utilization of debt as a funding source for City capital projects. This team consists of the Assistant Finance Director, Finance Director, and the following external professionals: bond counsel, disclosure counsel, financial advisor, and underwriters. The City has multi-year contractual arrangements with bond counsel, disclosure counsel, and financial advisor.]

Direct Debt

The City has met certain of its financial needs through debt financing. The table which follows is a schedule of the outstanding debt of the City General Government as of October 1, 2018. This table is exclusive of the City's discretely reported component unit debt and all enterprise fund debt, including the debt of the System.

	Principal Amount Issued	[Principal Amount Outstanding as of October 1, 2018]
Revenue Bonds: ⁽¹⁾		
Guaranteed Entitlement Revenue and Refunding Bonds, Series 1994	\$15,892,220	
Taxable Pension Obligation Bonds, Series 2003A (Employees' Plan)	40,042,953	
Taxable Pension Obligation Bonds, Series 2003B (Consolidated Plan)	49,851,806	
Capital Improvement Revenue Bonds, Series 2010	3,036,907	
Capital Improvement Revenue Bonds, Series 2014	<u>12,535,000</u>	
Total Revenue Bonds ⁽²⁾	\$121,358,886	
Loans: ⁽³⁾		
Capital Improvement Revenue Note, Series 2009	\$11,500,000	
Refunding Revenue Note, Series 2011	6,230,000	
Capital Improvement Revenue Note, Series 2011A	3,730,000	
Refunding Revenue Note, Series 2014	14,715,000	
Revenue Refunding Note, Series 2016A	11,970,000	
Capital Improvement Revenue Note, Series 2016B	6,630,000	
Capital Improvement Revenue Note, Series 2017	<u>10,365,000</u>	
Total Loans	\$65,140,000	
Total Debt	<u>\$186,498,886</u>	

⁽¹⁾ The City's outstanding Guaranteed Entitlement Revenue and Refunding Bonds, Series 1994 is secured by a first lien upon and pledge of the guaranteed entitlement portion of the State Revenue Sharing funds. All other bonds listed below are secured by a covenant to budget and appropriate funds sufficient to pay the debt service on the loan from legally available non-ad valorem revenues of the City.

⁽²⁾ Does not include the Refunded CP Notes or STI Loan.

⁽³⁾ All loans listed below are secured by a covenant to budget and appropriate funds sufficient to pay the debt service on the loan from legally available non-ad valorem revenues of the City.

Defined Benefit Pension Plans

The City sponsors and administers two single-employer retirement plans, which are accounted for in separate Pension Trust Funds.

- Employees' Pension Plan (Employees' Plan)
- Consolidated Police Officers' and Firefighters' Retirement Plan (Consolidated Plan)

Employees' Plan

The Employees' Plan is a contributory defined benefit single-employer pension plan that covers all permanent employees of the City, including GRU, except certain personnel who elected to participate in the Defined Contribution Plan and who were grandfathered into that plan, and police officers and firefighters who participate in the Consolidated Plan. Benefits and refunds of the defined benefit pension plan are recognized when due and payable in accordance with the terms of the plan. The costs of administering the plan, like other plan costs, are captured within the plan itself and financed through contribution and investment income, as appropriate.

The City issues a publicly available financial report that includes financial statements and required supplementary information for the Employees' Plan. That report may be obtained by writing to City of Gainesville, Budget & Finance Department, P.O. Box 490, Gainesville, Florida 32627 or by calling (352) 334-5054.

Benefits Provided. The Employees' Plan provides retirement, disability and death benefits. Prior to April 2015, disability benefits were provided through a separate plan which was subsequently terminated. Existing and future pension assets and pension liabilities were transferred to the Employees' Plan at that time.

Retirement benefits for employees are calculated as a fixed percent (often referred to as "the multiplier") of the employee's final average earnings (FAE) times the employee's years of service. The fixed percentage and final average earnings vary depending on the date of hire as follows:

<u>Date of Hire</u>	<u>Fixed percent of FAE (multiplier)</u>	<u>Final Average Earnings</u>
On or before 10/01/2007	2.0%	Highest 36 consecutive months
10/02/2007 – 10/01/2012	2.0%	Highest 48 consecutive months
On or after 10/02/2012	1.8%	Highest 60 consecutive months

For service earned prior to 10/01/2012, the lesser number of unused sick leave or personal critical leave bank credits earned on or before 09/30/2012 or the unused sick leave or personal critical leave bank credits available at the time of retirement may be credited towards the employee's years of service for that calculation. For service earned on or after 10/01/2012, no additional months of service will be credited for unused sick leave or personal critical leave bank credits.

Retirement eligibility is also tiered based on date of hire as follows:

Employees are eligible for normal retirement:

- o If the date of hire occurred on or before 10/02/2007, after accruing 20 years of pension service credit, regardless of age or after accruing 10 years of pension service credit and reaching age 65 while still employed.
- o If the date of hire was between 10/02/2007 and 10/01/2012, after accruing 25 years of pension service credit, regardless of age or after accruing 10 years of pension service credit and reaching age 65 while still employed.
- o If the date of hire was on or after 10/02/2012, after accruing 30 years of pension service credit, regardless of age or after accruing 10 years of pension service credit and reaching age 65 while still employed.

Employees are eligible for early retirement:

- If the date of hire occurred on or before 10/01/2012, after accruing 15 years of pension service credit and reaching age 55 while still employed.
- If the date of hire was on or after 10/02/2012, after accruing 20 years of pension service credit and reaching age 60 while still employed.
- Under the early retirement option, the benefit is reduced by 5/12th of one percent for each month (5% for each year) by which the retirement date is less than the date the employee would reach age 65.

Employees receive a deferred vested benefit if they are terminated after accruing five years of pension service credit but prior to eligibility for regular retirement. Those employees will be eligible to receive a benefit starting at age 65.

A 2% cost of living adjustment (COLA) is applied to retirements benefits each October 1st if the retiree has reached eligibility for COLA prior to that date. Eligibility for COLA is determined as follows:

- If the retiree had at least 20 years of credited service prior to 10/01/2012 and had at least 20 years but less than 25 years of credited service upon retirement, COLA begins after reaching age 62.
- If the retiree had at least 20 years of credited service prior to 10/01/2012 and had at least 25 years of credited service upon retirement, COLA begins after reaching age 60.
- If the retiree was hired on or before 10/01/2012 and had less than 20 years of credited service on or before 10/01/2012 and 25 years or more of credited service upon retirement, COLA begins after reaching age 65.
- If the retiree was hired after 10/01/2012 and had 30 years or more of credited service upon retirement, COLA begins after age 65.

Employees hired on or before 10/01/2012 are eligible to participate in the deferred retirement option plan ("DROP") when they have completed 27 years of credited service and are still employed by the City. Such employees retire from the Employees' Plan but continue to work for the City. The retirement benefit is calculated as if the employee had terminated employment and is paid to a DROP account held within the pension plan until the employee actually leaves the employment of the City. While in DROP, these payments earn a guaranteed rate of annual interest, compounded monthly. For employees who entered DROP on or before 10/01/2012, DROP balances earn 6% annual interest. For employees who entered DROP on or after 10/02/2012, DROP balances earn 2.25% annual interest. Employees may continue in the DROP for a maximum of 5 years or until reaching 35 years of service, whichever occurs earlier. Upon actual separation from employment, the monthly retirement benefits begin being paid directly to the retiree and the retiree must take their DROP balance plus interest as a lump-sum cash disbursement, roll into a retirement account or choose a combination of the two options.

Death benefits are paid as follows:

- If an active member retires after reaching normal retirement eligibility and had selected a tentative benefit option, benefit payments will be made to the beneficiary in accordance with the option selected.
- If an active member who is married dies after reaching normal retirement eligibility and did not previously select a tentative benefit option, the plan assumes the employee retired the day prior to death and elected the Joint & Survivor option naming their spouse as their beneficiary.
- If an active member who is not married dies after reaching normal retirement eligibility and did not previously select a tentative benefit option, or if an active member dies prior to reaching normal retirement eligibility, or if a non-active member with a deferred vested benefit dies before age 65, the death benefit is a refund of the member's contributions without interest to the beneficiary on record.
- Continuation of retirement benefits after the death of a retiree receiving benefits is contingent on the payment option selected upon retirement. If the retiree has chosen a life annuity and dies prior to receiving benefits greater than the retiree's contributions to the plan, a lump sum equal to the difference is paid to the beneficiary on record.

Disability benefits are paid to eligible regular employees of the City who become totally and permanently unable to perform substantial work for pay within a 50-mile radius of the home or city hall, whichever is greater, and who is wholly and continuously unable to perform any and every essential duty of employment, with or without a reasonable accommodation, or of a position to which the employee may be assigned. The basic disability benefit is equal to the greater of the employee's years of service credit times 2% with a minimum 42% for in line of duty disability and a minimum 25% for other than in line of duty disability, times the employee's final average earnings as would be otherwise calculated under the plan. The benefit is reduced by any disability benefit percent up to a maximum of 50% multiplied by the monthly Social Security primary insurance amount to which the employee would be initially entitled to as a disabled worker, regardless of application status. The disability benefit is limited to the lesser of \$3,750 per month or an amount equal to the maximum benefit percent, less reductions above and the initially determined wage replacement benefit made under workers' compensation laws.

Employees covered by benefit terms. At September 30, 2018, the following employees were covered by the benefit terms:

Active employees	1,514
Inactive employees:	
Retirees and beneficiaries currently receiving benefits	1,316
Terminated Members and survivors of deceased members entitled to benefits but not yet receiving benefits	<u>441</u>
Total	3,271

Contribution Requirements. The contribution requirements of plan members and the City are established and may be amended by City Ordinance approved by the City Commission. The City is required to contribute at an actuarially determined rate recommended by an independent actuary. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The City contributes the difference between the actuarially determined rate and the contribution rate of employees.

Plan members are required to contribute 5% of their annual covered salary. The rate for fiscal year 2018 was 18.41% of covered payroll. This rate was influenced by the issuance of the Taxable Pension Obligation Bonds, Series 2003A. The proceeds from this issue were utilized to retire the unfunded actuarial accrued liability at that time in the Employees' Plan. Differences between the required contribution and actual contribution are due to actual payroll experiences varying from the estimated total payroll used in the generation of the actuarially required contribution rate. Administrative costs are financed through investment earnings.

Net Pension Liability. The net pension liability related to the Employee's Plan was measured as of September 30, 2018 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of October 1, 2017.

The components of the net pension liability at September 30, 2018 were as follows:

Components of Net Pension Liability

Total pension liability	\$556,402,274
Plan fiduciary net position	<u>(432,508,135)</u>
City's net pension liability	<u>\$123,894,139</u>
Plan fiduciary net position as a percentage of the total pension liability	77.73%

Significant Actuarial Assumptions. The total pension liability as of September 30, 2018 was determined based on a roll-forward of entry age normal liabilities from the October 1, 2017 actuarial valuation to the pension plan's fiscal year end of September 30, 2018, using the following actuarial assumptions, applied to all periods included in the measurement.

Actuarial Assumptions

Inflation	3.75%
Salary Increases	Service Based
Investment Rate of Return	8.00%
Discount Rate	8.00%

Mortality Rate:

Mortality rates were based on the RP-2000 Combined Healthy Mortality Table projected generationally with Mortality Improvement Scale BB.

Long-term Expected Rate of Return:

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. For 2018, the inflation rate assumption of the investment advisor was 2.50%. These ranges 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.

Best estimates of arithmetic real rates of return for each major asset class included in the Employees' Plan target asset allocation are summarized in the following table:

Development of Long Term Discount Rate for General Employees' Pension Plan

	<u>Target Allocation</u>	<u>Long-Term Expected Rate of Return</u>
Domestic Equity	47.00%	7.50%
International Equity	28.00	8.50
Broad Market Fixed Income	8.00	2.50
Real Estate	12.00	4.50
Alternatives	<u>5.00</u>	7.00
Total	100.00%	

Discount Rate:

The discount rate used to measure the total pension liability were 8.00%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the actuarially determined contribution rates less the member contributions. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on the pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

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Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balances at 10/01/2017	\$537,712,710	\$396,313,562	\$141,399,148
Changes for the year:			
Service cost	8,196,544	-	8,196,544
Interest	42,877,827	-	42,877,827
Differences between expected and actual experience	(5,088,593)	-	(5,088,593)
Changes to assumptions	5,721,214	-	5,721,214
Contributions – Buy Back	89,300	89,300	-
Benefit payments, including refunds of employee contributions	(33,106,728)	(33,106,728)	-
Contributions – Employer	-	16,372,689	(16,372,689)
Contributions – Employee	-	4,317,403	(4,317,403)
Net investment income	-	49,219,793	(49,219,793)
Administrative expense	-	(697,884)	697,884
Net changes	<u>18,689,564</u>	<u>36,194,573</u>	<u>(17,505,009)</u>
Balances at 09/30/2018	<u>\$556,402,274</u>	<u>\$432,508,135</u>	<u>\$123,894,139</u>

Sensitivity of the Net Pension Liability to Changes in the Discount Rate:

The following presents the net pension liability, calculated using the discount rate of (8.00%), as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1 percentage-point lower (7.00%) or 1 percentage-point higher (9.00%) than the current rate:

	1% Decrease (7.00%)	Current Discount Rate (8.00%)	1% Increase (9.00%)
Net pension liability	\$186,848,559	\$123,894,139	\$71,089,691

Pension plan fiduciary net position. Detailed information about the pension plan's fiduciary net position is available in the separately issued Employees' Plan financial report.

Pension expense and deferred outflows of resources and deferred inflows of resources. For the year ended September 30, 2018, the City recognized pension expense for the Employees' Plan of \$20,343,413. At September 30, 2018, the City reported deferred outflows of resources related to the Employees' Plan from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$5,598,683	\$4,028,469
Changes to assumptions	24,099,243	-
Net difference between projected and actual earnings on pension plan investments	-	30,795,642
Total	<u>\$29,697,926</u>	<u>\$34,824,111</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to the Employees' Plan will be recognized in pension expense as follows:

<u>Fiscal Year</u>	<u>Net Deferred Outflows/(Inflows) of Resources</u>
2019	\$4,462,439
2020	(2,015,017)
2021	(4,149,860)
2022	(3,423,747)
2023	-
Thereafter	-

Consolidated Plan

The Consolidated Plan is a contributory defined benefit single-employer pension plan that covers City sworn police officers and firefighters. The Plan is established under City of Gainesville Code of Ordinances, Article 7, Chapter 2, Division 8. It complies with the provisions of Chapter 112, Part VII, Florida Statutes; Chapter 22D-1 of the Florida Administrative Code; Chapters 175 and 185, Florida Statutes; and Article X, Section 14 of the Florida Constitution, governing the establishment, operation and administration of plans.

Benefits and refunds of the defined benefit pension plan are recognized when due and payable in accordance with the terms of the plan. The costs of administering the plan, like other plan costs, are captured within the plan itself and financed through contribution and investment income, as appropriate.

The City issues a publicly available financial report that includes financial statements and required supplementary information for the Consolidated Plan. That report may be obtained by writing to City of Gainesville, Finance Department, P.O. Box 490, Gainesville, Florida 32627 or by calling (352) 334-5054.

Benefits Provided for Police Officers. The Consolidated Plan provides retirement, disability and death benefits. Retirement benefits for employees are calculated as a fixed percent (often referred to as "the multiplier") of the employee's final average earnings (FAE) times the employee's years of service. For Police Officers, the final average monthly earnings (FAME) is the average of pensionable earnings during the 36 to 48 month period (depending on date of hire) that produces the highest earnings. For Police Officers, the benefit multiplier is 2.5% for credited service before 10/01/2005, 2.625% for credited service from 10/01/2005 to 07/01/2013 and 2.5% for credited service on and after 07/01/2013.

Retirement eligibility for Police Officers is tiered based on date of hire as follows:

Employees are eligible for normal retirement:

- If the date of hire occurred prior to 07/01/2013, after accruing 20 years of pension service credit, regardless of age or after accruing 10 years of pension service credit and reaching age 55 while still employed, or attaining a combination of credited service and age that equals seventy (Rule of Seventy).
- If the date of hire was on or after 07/01/2013, after accruing 25 years of pension service credit, regardless of age or after accruing 10 years of pension service credit

and reaching age 55 while still employed, or attaining a combination of credited service and age that equals seventy.

Employees are eligible for early retirement:

- After accruing 10 years of pension service credit and reaching age 50 while still employed.

Under the early retirement option, the benefit is reduced 3% for each year by which the retirement date is less than the date the employee would reach age 55.

Employees may choose to receive a refund on contributions to the plan or to receive a deferred vested benefit if they are terminated after accruing 10 years of pension service credit but prior to eligibility for regular retirement. Those employees will be eligible to receive a benefit starting at age 55 with no reduction or at age 50 with the early retirement penalty above.

A 1-2% cost of living adjustment (COLA) is applied to retirement benefits each October 1st if the retiree has reached eligibility for COLA prior to that date. Eligibility for COLA is determined as follows:

- If the retiree was eligible for retirement on or before 07/01/2013 and had at least 25 years of credited service upon retirement, 2% COLA begins after reaching age 55.
- If the retiree was eligible for retirement on or before 07/01/2013 had 20 years of credited service upon retirement, 2% COLA begins after reaching age 62.
- If the retiree was eligible for retirement after 07/01/2013 and had 25 years of credited service upon retirement 1% COLA begins after reaching age 55 and the COLA increases to 2% after reaching age 62.
- If the retiree retired under the Rule of Seventy with less than 20 years of credited service upon retirement, COLA begins after age 62. Effective July 1, 2013, Police Officers retiring under the Rule of Seventy are ineligible for COLA.

Benefits Provided for Firefighters. The Consolidated Plan provides retirement, disability and death benefits. Retirement benefits for employees are calculated as a fixed percent (often referred to as "the multiplier") of the employee's final average earnings (FAE) times the employee's years of service. For Firefighters, the final average monthly earnings (FAME) is the average of pensionable earnings during the 36 month period that produces the highest earnings. For Firefighters, the benefit multiplier is 2.5% for credited service before 10/01/2005, 2.625% for credited service from 10/01/2005 to 12/31/2013 and 2.5% for credited service on and after 01/01/2014.

For service earned prior to 01/01/2014, the lesser number of unused sick leave credits earned on or before 12/31/2013 or the unused sick leave bank credits available at the time of retirement may be credited towards the employee's years of service for that calculation. For service earned on or after 01/01/2014, no additional months of service will be credited for unused sick leave credits.

Retirement eligibility for Firefighters is as follows:

Employees are eligible for normal retirement:

- If the date of hire occurred prior to 01/01/2014, after accruing 20 years of pension service credit, regardless of age or after accruing 10 years of pension service credit

and reaching age 55 while still employed, or attaining a combination of credited service and age that equals seventy (Rule of Seventy).

- If the date of hire was on or after 01/01/2014, after accruing 25 years of pension service credit, regardless of age or after accruing 10 years of pension service credit and reaching age 55 while still employed, or attaining a combination of credited service and age that equals seventy.

Employees are eligible for early retirement:

- After accruing 10 years of pension service credit and reaching age 50 while still employed.
- Under the early retirement option, the benefit is reduced 3% for each year by which the retirement date is less than the date the employee would reach age 55.

Employees may choose to receive a refund on contributions to the plan or to receive a deferred vested benefit if they are terminated after accruing 10 years of pension service credit but prior to eligibility for regular retirement. Those employees will be eligible to receive a benefit starting at age 55 with no reduction or at age 50 with the early retirement penalty above.

A 2% cost of living adjustment (COLA) is applied to retirement benefits each October 1st if the retiree has reached eligibility for COLA prior to that date. Eligibility for COLA is determined as follows:

- If the retiree had at least 25 years of credited service upon retirement, COLA begins after reaching age 55.
- If the retiree had 20 years of credited service upon retirement, COLA begins after reaching age 62.
- If the retiree retired under the Rule of Seventy with less than 20 years of credited service upon retirement, COLA begins after age 62.

Benefits Provided to Both Police Officers and Firefighters. Employees are eligible to participate in the deferred retirement option plan (DROP) when they have completed 25 years of credited service and are still employed by the City (or meet the Rule of Seventy). Such employees retire from the Consolidated Plan but continue to work for the City. The retirement benefit is calculated as if the employee had terminated employment and is paid to a DROP account held within the pension plan until the employee actually leaves the employment of the City. While in DROP, these payments earn a guaranteed rate of annual interest, (5.5% for Firefighters and 4.5% for Police Officers) compounded monthly. Employees may continue in the DROP for a maximum of 5 years or until reaching 35 years of service, whichever occurs earlier.

Upon actual separation from employment, the monthly retirement benefits begin being paid directly to the retiree and the retiree must take their DROP balance plus interest as a lump-sum cash disbursement, roll into a retirement account or choose a combination of the two options. The Consolidated Plan also provides for a reverse DROP option.

Death benefits are paid as follows:

- If an active member retires after reaching normal retirement eligibility and had selected a tentative benefit option, benefit payments will be made to the beneficiary in accordance with the option selected.

- If an active member with less than ten years of service dies before reaching normal retirement eligibility, the death benefit is a refund to the beneficiary of 100% of the member contributions without interest.
- If an active member with at least ten years of service dies before reaching normal retirement eligibility, the beneficiary is entitled to the benefits otherwise payable to the employee at early or normal retirement age, based on the accrued benefit at the time of death.
- Continuation of retirement benefits after the death of a retiree receiving benefits is contingent on the payment option selected upon retirement. If the retiree has chosen a life annuity and dies prior to receiving benefits greater than the retiree's contributions to the plan, a lump sum equal to the difference is paid to the beneficiary on record.

Disability Benefits – The monthly benefit for a service-incurred disability is the greater of the employee's accrued benefit as of the date of disability or 42% of the FAME. The monthly benefit for a non-service-incurred disability is the greater of the accrued benefit as of the date of disability or 25% of the FAME. Payments continue until the death of the member or until the 120th payment, payable to the designated beneficiary if no option is elected. There is no minimum eligibility requirement if the injury or disease is service-incurred. If the injury or disease is not service-incurred, the employee must have at least five years of service to be eligible for disability benefits.

Employees covered by benefit terms. At September 30, 2018, the following employees were covered by the benefit terms:

Active employees	396
Inactive employees:	
Retirees and beneficiaries currently receiving benefits	20
Retirees and beneficiaries receiving benefits	<u>447</u>
Total	863

Contribution Requirements. The contribution requirements of plan members and the City are established and may be amended by City Ordinance approved by the City Commission in accordance with Part VII, Chapter 112, Florida Statutes.

The City is required to contribute at an actuarially determined rate recommended by an independent actuary. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The City is required to contribute the difference between the actuarially determined rate and the contribution rate of employees. Firefighters contribute 9.0% of gross pay and Police Officers contribute 7.5% of gross pay. The City's contribution rate for fiscal year 2018 was 16.75% of covered payroll for police personnel and 21.45% for fire personnel. This rate was influenced by the issuance of the Taxable Pension Obligation Bonds, Series 2003B. In addition, State contributions, which totaled \$1,366,304, are also made to the plan on behalf of the City under Chapters 175/185, Florida Statutes. These State contributions are recorded as revenue and personnel expenditures in the City's General Fund before they are recorded as contributions in the Consolidated Pension Fund. Differences between the required contribution and actual contribution are due to actual payroll experiences varying from the estimated total payroll used in the generation of the actuarially required contribution rate. Administrative costs are financed through investment earnings.

Net Pension Liability. The net pension liability related to the Consolidated Plan was measured as of September 30, 2018 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of October 1, 2017. This reflects a change in methodology from the September 30, 2017 financial statements, which recorded the net pension liability for the Consolidated Plan based on a prior year measurement date.

The components of the net pension liability at September 30, 2018, were as follows:

Components of Net Pension Liability

Total pension liability	\$285,979,686
Plan fiduciary net position	<u>(253,221,825)</u>
City's net pension liability	<u>\$32,757,861</u>
Plan fiduciary net position as a percentage of the total pension liability	88.55%

Significant Actuarial Assumptions. The total pension liability was determined based on entry age normal liabilities using the following actuarial assumptions, applied to all periods included in the measurement.

Actuarial Assumptions

Inflation	3.00%
Salary Increases	Service Based
Investment rate of return	8.00%
Discount Rate	8.00%

Mortality Rate:

Mortality rates were based on the RP-2000 Combined Healthy Mortality Table projected generationally with Mortality Improvement Scale BB.

Other Assumptions:

The actuarial assumptions used as of September 30, 2017 were based on the assumptions approved by the Board in conjunction with an experience study covering the 5 year period ending on September 30, 2010. Due to plan changes first valued in the October 1, 2012 actuarial valuation, changes to the assumed retirement rates and the valuation methodology for the assumed increase in benefit service for accumulated sick leave and accumulated vacation paid upon termination were made. Payroll growth assumptions were updated in 2012 and investments were reviewed by the Board in February of 2015 based on an asset liability study reflecting the current investment policy.

Long-Term Expected Rate of Return:

The long-term expected rate of return on pension plan investments can be determined using a building-block method in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expenses and inflation) are developed for each major asset class. For 2018 the inflation rate assumption of the investment advisor was 2.20%. These ranges 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.

Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of September 30, 2018 are summarized in the following table:

Development of Long Term Discount Rate – Arithmetic

	<u>Target Allocation</u>	<u>Long-Term Expected Rate of Return</u>
Large Cap Equity	35.00%	6.60%
Small Cap Equity	15.00	6.40
International Equity	15.00	6.90
Securitized Credit	6.00	4.50
High Yield	4.50	4.40
EMD Sovereign	4.50	4.00
Private Markets	5.00	5.50
Real Estate	10.00	5.60
TIPS	2.50	3.10
Intermediate Government	<u>2.50</u>	3.40
Total	100.00%	

Discount Rate:

The discount rate used to measure the total pension liability was 8.00%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the actuarially determined contribution rates less the member and State contributions. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on the pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balances at 10/01/2017	\$277,576,074	\$241,763,801	\$35,812,273
Changes for the year:			
Service cost	3,682,078	-	3,682,078
Interest	21,993,597	-	21,993,597
Differences between expected and actual experience	(2,419,821)	-	(2,419,821)
Changes to assumptions	4,612,282	-	4,612,282
Contributions – Buy Back	-	-	-
Benefit payments, including refunds of employee contributions	(19,464,524)	(19,464,524)	
Contributions – Employer	-	4,507,892	(4,507,892)
Contributions – State	-	1,366,304	(1,366,304)
Contributions – Employee	-	1,963,471	(1,963,471)
Net investment income	-	24,056,126	(24,056,126)
Administrative expense	-	(699,346)	699,346
Net changes	<u>8,403,612</u>	<u>11,729,923</u>	<u>(3,326,311)</u>
Adjustment to beginning of year	-	(271,899)	271,899
Balances at 09/30/2018	<u>\$285,979,686</u>	<u>\$253,221,825</u>	<u>\$32,757,861</u>

Sensitivity of the Net Pension Liability to Changes in the Discount Rate:

The following presents the net pension liability, calculated using the discount rate of 8.00%, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1 percentage-point lower (7.00%) or 1 percentage-point higher (9.00%) than the current rate:

	1% Decrease (7.00%)	Current Discount Rate (8.00%)	1% Increase (9.00%)
Net pension liability	\$66,361,485	\$32,757,861	\$4,917,902

Pension plan fiduciary net position. Detailed information about the pension plan's fiduciary net position is available in the separately issued Consolidated Plan financial report.

Pension expense and deferred outflows of resources and deferred inflows of resources. For the year ended September 30, 2018, the City recognized pension expense for the Consolidated Plan of 3,133,105. At September 30, 2018, the City reported deferred outflows of resources and deferred inflows of resources related to the Consolidated Plan from the following sources:

	Deferred Outflows of Resources	Deferred Inflow of Resources
Difference between expected and actual experience	\$1,439,353	\$4,593,511
Changes in assumptions	6,851,349	-
Net difference between projected and actual earnings on pension plan investments	<u>-</u>	<u>11,389,514</u>
Total	<u>\$8,290,702</u>	<u>\$15,983,025</u>

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in pension expense as follows:

<u>Fiscal Year</u>	Net Deferred Outflows/(Inflows) of Resources
2019	\$(395,418)
2020	(4,292,530)
2021	(2,790,582)
2022	(298,119)
2023	84,326
Thereafter	0