

**NORTH RIDGEVILLE CITY COUNCIL  
UTILITIES COMMITTEE MEETING MINUTES  
COUNCIL CHAMBERS – 6:00 p.m.  
MONDAY, JULY 20, 2020**

**To Order:**

Chairman Dennis Boose called the Utilities Committee meeting to order at 6:00 p.m.

**Attendance:**

Members present: Chairman Dennis Boose (via Zoom) and Councilman Clifford Winkel.

Also present: Mayor Kevin Corcoran, President Martin DeVries, Councilman Bruce Abens, Auditor April Wilkerson, Assistant Clerk of Council Tara Peet, Safety-Service Director Jeff Armbruster, Councilwoman Holly Swenk, Councilman Jim Maleski, Law Director Brian Moriarty, Engineer Dan Rodriguez and Justine Rose-Engineer with AECOM.

**Minutes:**

Chairman Boose asked for any corrections to the minutes of February 18, 2020. No discussion was offered.

Moved by Winkel and seconded by Boose to accept the meeting minutes.

A voice vote was taken and the motion carried.

Yes – 2

No – 0

**Discussion regarding T 81-2020:**

Chairman Boose asked Justine Rose, Engineer with AECOM to provide an overview of the sewer study.

Ms. Rose discussed future trends and further noted a projected four percent increase in future years. She stated she anticipated future capital improvements to include the Sugar Ridge sewer extension along with the Center Ridge sewer extension. The City is eliminating the Westfield Treatment Plant which is ongoing. As far as budgetary goals, the goal is to fund all anticipated O&M expenses and CIP projects as well as maintain funds with a reserve usually about four to six months of O&M costs (fund 640). Capital improvements should have \$1 million in reserve to fund capital projects (fund 660). The following year's debt service (fund 645) also needs to be maintained at the end of year.

The baseline scenario has no rate increase. Beginning in 2022, it leaves the City with less than two months reserve in O&M and depleting fund 660.

Scenario two is a ten percent rate increase in 2020 and a four percent increase each year until 2025. The ten percent for 2020 is to compensate for only six months. In 2023 the City can set aside six months of O&M reserve and a good balance in fund 660.

The current residential sewer rate is \$5.21. The commercial sewer rate is \$5.46 with a base charge of \$9.00. The average monthly cost for residential use assuming an average use of six CCF would be \$40.26. In 2020, with a ten percent increase the residential sewer rate per CFF would go to \$5.73 and the average monthly cost would go up to \$43.49. This is a monthly increase of \$3.13. In 2021, the average monthly increase is \$1.38. For the next few years it is less than \$2.00.

Chairman Boose asked for any questions from the Committee.

Councilman Winkel thanked Ms. Rose for her presentation and study and further stated he understood the information presented.

Chairman Boose stated he felt the administration and Council have done a good job in being proactive in studying increases in order to keep rates low unlike other communities. He highlighted the future trends noted in the sewer rate study which states:

“North Ridgeville appears to have weathered recent national trends affecting water and wastewater utilities such as decreased per account consumption, declining numbers of accounts, cost increases higher than inflation, and resistance to incur debt in tough economic times. The City has seen an increase in the fee to treat wastewater at the FCWWTP. With a modest local rate increase, North Ridgeville will be well-positioned financially to address future challenges facing wastewater utilities. Future trends and financial health must be monitored closely to ensure the City can react proactively when trends wander from expectation and assumptions inherent to this rate evaluation.”

Chairman Boose stated that ten percent may sound high, but it is only being taken for part of the year. The four percent covers what is being charged by the treatment plant.

Councilman Hung entered the room at 6:15 p.m.

Chairman Boose thanked the Superintendent of the wastewater treatment plant and employees to make certain the administration and Council are aware of what needs to be done.

He asked Councilwoman Hung if she had any comments or questions regarding the legislation or the study.

Councilwoman Hung stated she had no comments or questions.

Engineer Rodriguez stated he felt Justine did a great job. He noted they will continue with CIP projects if the legislation is passed.

Chairman Boose asked for any questions or comments from the Council members. No comments were offered.

Chairman Boose asked for any comments or questions from the YouTube Channel.

Assistant Clerk of Council Peet stated there were no comments or questions offered.

Moved by Winkel and seconded by Boose to send T 81-2020 to City Council for further consideration.

A voice vote was taken and the motion carried.

Yes – 3                      No – 0

**Adjournment:**

Chairman Boose adjourned the meeting at 6:20 p.m.

Date Approved: \_\_\_\_\_

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Tara L. Peet, MMC  
Assistant Clerk of Council

# North Ridgeville Local Rate Study

City of North Ridgeville, Ohio

July 17, 2020

### Quality information

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### Revision History

Revision	Revision date	Details	Authorized	Name	Position

### Distribution List

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Appendix A Baseline - No Rate Increase: Scenario 1

Appendix B 10% Rate Increase in 2020, 4% Rate Increase from 2021 to 2025:  
Scenario 2

# 1. Introduction

The City of North Ridgeville (the City) owns and operates the local sewer collection system which is divided into sixteen sub-basins and serves all but a handful of properties within the City. The City leverages a fixed fee of \$9.00 per month along with a consumption charge of \$5.21 per hundred cubic feet (ccf) of water consumption for residential properties and \$5.46 per ccf for commercial properties. Necessary upgrades have kept the system in reasonably good condition. Nevertheless, improvements are required to address repairs and replacement of local sewers, pump stations, and supporting critical equipment and to meet the concurrent impacts of increased inflow and infiltration (I&I), continued aging of the system, and increased charges from the French Creek Wastewater Treatment Plant (FCWWTP). These needs led the City to authorize a rate study performed by URS (now AECOM) in October 2013 to evaluate the revenues and expenditures required for a sound utility, as well as the rates and charges necessary to fund it properly. The rate study was completed in February 2014. Based on the results of the study, a fixed fee of \$9 per month and a modest rate increase of 3% was implemented in 2014. AECOM has been retained again in 2018 to evaluate the outcomes of the 2014 study and the impacts of an expanded Capital Improvement Program (CIP). The report which follows details the findings and recommendations of the most recent rate evaluation and the assumptions inherent to a successful system of rates and charges to support the local sewer system.

## 1.1 Scope of Services

The City issued a work order to AECOM on March 13, 2018, to undertake the rate evaluation. At the same time a work order was issued to evaluate the rates and charges required for the FCWWTP. This local study has been delayed in order to consider the outcomes and impacts of the FCWWTP rate evaluation. Principal aspects of the scope of services are listed below:

### **Task 1: Review Existing Sanitary Sewer Rate Study**

1. Facilitate a kickoff meeting with key leadership, operating, and financial staff to understand and refine goals and objectives of the rate evaluation.
2. Review the previous rate study and its updates, speak with key staff to understand questions and concerns with the rate study, and gather data sufficient to understand inputs to the rate study.
3. Review key expense assumptions and inputs to the rate model, including the following general categories of cost:
  - a. Operations and Maintenance (O&M) budgets and reserves
  - b. Capital Improvement Program (CIP) and relative split between cash contributions and debt
  - c. Existing and proposed debt service, and any required or desired reserves
  - d. Contributions to other funds for services rendered
4. Review key revenue assumptions and inputs to the rate model, including the following



- a. Water or sewer demand and trends reflecting increases or decreases in consumption and the revenue base
  - b. Population and business growth or decline
  - c. Revenue derived from fees and charges
  - d. Revenue derived from fixed fees or charges for service to other entities
5. Review the demand and rate models, the utility financial plan, and the cost of service model to fully understand the manner by which rates, fees and charges interact and provide desired revenues. Develop preliminary findings and observations about the rate assumptions, costs and revenues and the rate structure.
  6. Meet with key staff in a workshop setting to test findings and observations about assumptions, costs, revenues, and the rate structure.
  7. Recommend a rate structure and rates, including fees and charges for miscellaneous services, for the period 2020 – 2025.
  8. Compile a brief report detailing observations about the utility rate structure, including comments from staff, and present to the Mayor and Service Director.

## **TASK 2 – Workshop and Report**

1. Meet with key staff in a workshop setting to test findings and observations about assumptions, costs, revenues, and the rate structure.
2. Compile a brief report detailing observations of the utility rate structure, including comments from staff, and present the report to the Mayor and Service Director.

## **1.2 Goals and Objectives**

At the kickoff of this effort, City management and staff expressed some key objectives and issues for the evaluation and outcomes of our analysis:

- Are rate increases necessary to provide sufficient revenues to adequately maintain Funds 640 (Operating Fund), 645 (Debt Service) and 660 (CIP Fund) and improve the local sewer system?
- Can the ongoing and future CIP be properly funded?
- Does the debt service strategy continue to serve the City?
- What reserves are sufficient for the future CIP or emergencies?
- Are assumptions sufficiently accurate for good forecasts?

AECOM has undertaken this rate evaluation after meeting with staff on several occasions to better understand the capital improvement needs and operating issues and conducting a workshop to present rate scenarios and assumptions. The report which follows details the findings of this evaluation.

## 2. Background and Assumptions

### 2.1 Data Sources

The City of North Ridgeville has provided a host of data and information and has met with AECOM on several occasions to explain the data and the background information. Principal data sources utilized for this rate evaluation include the following:

- Previous Studies and Presentations
- Auditor's Financial and Budget Reports
- Interviews and Reviews with the City Engineer and Assistant Engineer, Service Director, Mayor and Utilities Department
- Debt Service Schedules
- Proposed Capital Improvement Project Schedule

### 2.2 Recent Trends (2012 – 2019)

The number of new connections to the sewer system and the resultant tap fees has diminished from the record early years of the 21<sup>st</sup> century, from an average increase of 6% prior to 2006, to an average increase of 2% since 2010. In 2014, a fixed fee of \$9 per month went into effect. This fixed fee plus a 3% rate increase in 2014, 2015 and 2016 led to an increase in revenue sufficient to provide adequate reserve balances and to fund capital improvement projects. Funds are high enough to allow the City to begin to pursue an aggressive capital improvement program beyond flow equalization storage (which was the capital improvement project which had been anticipated during the previous study in 2014). Moving forward, however, the City will need additional funding for upcoming Center Ridge and Sugar Ridge sewer extension projects.

Other trends affecting flows and revenues include the national phenomena of reduced per capita water consumption. Though not as pronounced as in other parts of the country and region, household use of water has declined as water conserving plumbing fixtures are installed in new construction and for repairs or remodeling of existing housing stock. Residents have also tended to cut back on lawn irrigation, car washing and other outside water use, and in general as conservation messages reach more of the populace, especially children. Commercial and industrial water use has also declined as business finds more expensive water and sewer rates to be an incentive for conservation, recycling and reuse, and pursuit of green alternatives.

Another trend affecting the wastewater collection system is the aging nature of the infrastructure. The original sewer system is more than ninety years old, beyond the design life of many pipes, and approaching the design life of some structures and facilities. Furthermore, EPA regulations, including updated discharge permit

requirements, and stricter enforcement measures may dictate allowable levels of I&I; and if not driven by regulatory requirements, the costs of I&I treatment will likely drive infrastructure repairs and replacement. Rates for the FCWWTP increased by 4% in 2019 and are expected to increase by 4% annually, a cost increase which will be taken on by the local sewer.

## 2.3 Previous Revenue and Expenditure Assumptions

The 2014 Rate Study performed by URS (now AECOM) relied upon a number of assumptions in order to estimate future revenue needs and operating and capital improvement costs. The most significant of the previous assumptions from the 2014 Rate Study are stated below and compared to actual outcomes:

### 2.3.1 O&M Cost Escalation @ 3.0%/Year W/ 2013 As Base Year:

URS (now AECOM) examined actual O&M costs for the period 2008 through 2014 to discern if there were working averages to use for purposes of projecting annual cost increases. O&M costs increased at a very consistent rate over the past six years, slightly above inflation, but at a very reasonable average of approximately 3%. Therefore based upon 2012 and 2013 cost figures and discussions with the Service Director and Operations management, we have projected that O&M costs will normalize at a rate of growth of 3% per year with 2013 as the base year. This assumption will be adjusted to reflect the increased cost of annual cleaning and inspection of 10% of the sewer system utilizing Contractors to do so. We have estimated that this work will cost \$150,000 per year initially and will also escalate at 3% per year. Similarly, the reimbursement of administrative costs associated with the budget and audit offices have not been increased for more than six years, and these have been projected to increase at the rate of 3% per year as well. These assumptions should be monitored closely in coming years to verify actual results.

**Actual Outcome:** *O&M costs increased at a rate very close to 3% per year from 2013 to 2018. There was, however, an increase in the reimbursement of administrative costs associated with the budget and audit offices, from \$72,000 in 2013 to approximately \$210,000 in 2017 and 2018 (both years paid in 2018). There were also additional costs associated with capital improvements, such as Center Ridge Sanitary Sewer Construction in 2016, Subbasin repairs in 2016, 2017 and 2018, and the purchase of a new sewer vacuum in 2016. Moving forward, these capital improvement costs will be associated with Fund 660 rather than Fund 640.*

### 2.3.2 Consumption Increases @ 2%/Year (Including New Accounts) With 2012 As Base Year:

Flows vary considerably from year to year. These fluctuations reflect factors as diverse as reduced water consumption by typical customers, increased flow due to new customer connections, increased flow due to I&I during wet weather, increased or decreased water consumption during hot/dry or cool/wet weather periods as

customers irrigate or cool correspondingly, and rather random rates of increase or decrease that defy total understanding of future consumption and flow patterns. Thus a 2% increase in consumption per year has been projected with 2012 as the base year, largely based upon projected growth of customers offset by with decreased average consumption. Again, these assumptions should be monitored very closely to test the growth and consumption estimates as well as the unpredictable weather and I&I components of flow.

**Actual Outcome:** *Based on the results of the previous study, a fixed fee of \$9 per month was implemented in 2014. A modest rate increase of 3% was implemented in 2014, 2015 and 2016. Increases in revenue associated with user charge increases of 14% and 22% were seen in 2014 and 2015, respectively. This was mainly due to the fixed fee. No rate increases were implemented in 2017, 2018 or 2019 and revenue saw only slight increases, at or below 2%.*

### 2.3.3 Other Revenues Increase @ 2%/Year With Average Of 2008-12 As Base

Other operating revenues do not constitute significant sources of income, yet the fees collected fluctuate significantly from year to year while increasing slightly on average over time. Thus, URS (now AECOM) calculated the average of other revenues for the period 2008 through 2013 and assumed that this average will increase at the rate of 2% per year in future years. Additionally, we have assumed that a small stream of assessment revenue will continue through the rate period. These assumptions should also be monitored, and fee increases considered for each of the other charge categories, should revenues fall below projections.

**Actual Outcome:** *Other revenue showed fluctuation from 2012 to 2018 and did not show a 2% increase from 2013 on. However, this revenue does not constitute a significant source of income.*

### 2.3.4 CIP Per Sub-Basin Repair Schedule; Purchase of Sewer Cleaning Equipment and Potential EQ Basin; Borrow All But Equipment Costs

During the course of discussions with City Engineering staff and the Service Director, we have concluded that repairs to the sewer collection system should be resumed at a relatively aggressive pace, with two Sub-Basins being repaired each year through the rate period (2014 – 2018). The City Engineer has compiled excellent records of past repair costs, and these have been applied to the actual lengths of pipe in each sub-basin, adjusted to reflect older parts of the City versus more recently constructed sewer areas. The City Engineer has also suggested construction of an equalization storage basin to collect and temporarily retain excess flows. Based upon a single storm event, URS (now AECOM) preliminarily sized a basin at 4.4 million gallons, with the full realization that such a figure must be thoroughly evaluated based upon other storm events, hydraulics of the interceptors, depth of the existing collection system,

and a number of other factors. We estimated this evaluation to cost \$50,000 for a preliminary engineering study, followed by the design ((\$440,000) and construction (\$5.5 million) of a first 2.2-million-gallon basin. Based upon the outcome of preliminary engineering, a second or expanded basin would then be considered. Additionally, the City's existing sewer cleaning equipment needs to be replaced and a second unit purchased over time. We have thus estimated the cost of the new unit at \$300,000 (\$400,000 purchase price less \$100,000 trade-in), and for the future unit at \$400,000 in 2018.

**Actual Outcome:** *Repairs were conducted for subbasins 5 through 15 in 2015 – 2018. A new sewer vacuum was purchased in 2016 at \$436,191. The City took out a bond in 2014 for Victory Lane sewer improvements, and bonds in 2016 for Center Ridge Sewer Repair, Dyke/Case, Westerlies, and Subbasin repairs. In order to complete the recommended amount of annual sewer cleaning, the City requires a second sewer vacuum. At the time of this report, a second sewer vacuum has not been purchased.*

### 2.3.5 Debt For Outstanding BAN (\$246,000) Retired in 2014 through Participation in Proposed Bond Issue:

The City Auditor has recommended the outstanding Bond Anticipation Note (BAN) be retired at the same time other City debt is incurred. Thus URS (now AECOM) assumed that the existing \$246,000 BAN would be paid off in 2014, concurrent with the issuance of the new bond with corresponding 20 year debt service, and with a corresponding small increase in future debt service.

**Actual Outcome:** *A \$246,000 BAN was retired in 2014. A new BAN was taken out for \$1,710,000 in 2015 and retired the same year.*

### 2.3.6 Debt Will Be Issued for All Capital Improvements

As projects develop, BAN's (2% interest rate) will be issued to cover interim design and construction costs. Once total cost are known, bonds will be issued based upon an assumed period of twenty years at 5% interest rates. The City may wish to consider EPA revolving loans (SRLF's) or Ohio Water Development Authority (OWDA) loans to gain slightly lower borrowing costs, or perhaps Ohio Public Works Commission (commonly known as Issue 1 or 2) grants and loans as alternative funding sources. Offsetting some degree of debt service expense is the retirement in 2013 of the 2003 Refunding Bond. However, no other debt consolidation is being considered.

**Actual Outcome:** *The City took out a bond in 2014 for Victory Lane sewer improvements, and bonds in 2016 for Center Ridge Sewer Repair, Dyke/Case, Westerlies, and Subbasin repairs. A \$246,000 BAN was retired in 2014. A new BAN was taken out for \$1,710,000 in 2015 and retired the same year.*

### 2.3.7 O&M Reserve to Cover 6 Months of O&M Costs; R/I Reserve @ \$1m, but allowed to Reach Desired Levels Over Rate Period

Utility best practices dictate that water and wastewater systems maintain reasonably large reserves to address financial and operational contingencies. The Water Environment Federation (WEF) Manual of Practice No. 27, which provides ratemaking guidelines, stipulates an operating reserve equivalent to six (or more) months' worth of operating expenses. This will provide a buffer due to recessionary pressures, unusual maintenance requirements, pandemics, accidents or destructive forces of nature and the like. Thus, URS (now AECOM) has assumed an O&M reserve equal to 50% of annual operating costs (not including charges from the FCWWTP). WEF also recommends that a capital reserve be maintained so that failure of critical components of the wastewater infrastructure could be addressed expeditiously. In North Ridgeville's case, we have recommended, and the Auditor has concurred, that a \$1 million reserve be maintained for this purpose. Because of current low fund balances, we find it unrealistic to reach these goals in the first years of the rate period; rather we have suggested that fund balances grow with time, reaching desired levels by 2017 or 2018.

**Actual Outcome:** Increased revenue due to a \$9 fixed fee have enabled the City to maintain O&M reserves of greater than 6 months from 2015 on. Starting in 2018, funds in excess of the 6 month O&M reserve are transferred from Fund 640 to Fund 660 for Capital Improvements. O&M reserves at the close of 2019 dropped to 4 months.

### 2.3.8 Tap Fees Increase @ 3%/ Year; New Connections Grow at 2%/ Year:

Tap fee increases have been instituted by Ordinance at the rate of 3% per year, and we have assumed that this will be the case for the foreseeable future. Recent building permit data indicates that new connections will recover to a rate of 2% per year. However, actual tap fees vary by the level of developer investment in trunk sewers, sewer extensions, and/or additional sewer capacity per developer agreements. Thus it is very difficult to estimate tap fee revenues because the location and timing of new connections cannot be projected with any degree of certainty. Thus tap fee revenues have been estimated based upon average connection income over the past four years, escalated to reflect tap fee increases and numbers of new connections.

**Actual Outcome:** Sewer Tap fees have a mandated increase of 2.5% per year. Tap fees have increased at a rate greater than 3% from a low point in 2015. 2018 saw an increase of 53% over revenues 2017, which may be an anomaly due to the high number of houses built.

### 2.3.9 User Charges Increase @ Varying Levels to Match Revenue Needs

The suggested rate of user charge increases is not really an assumption, but rather the result of an iterative process to balance revenues and operating costs with capital

investments, levels of debt service, reserve balances and the other assumptions described above. The City has suggested, and URS (now AECOM) confirmed, that the fixed charge component of the sewer bill should also be increased to fund significant portions of the debt service to be incurred for the Capital Improvement Program. Combinations of fixed fee increases varying from \$2 per month to \$10.18 per month and rate increases between 3% and 15% per year have been tested to confirm alternative combinations of capital investment, debt service, and fixed versus consumption charge approaches.

**Actual Outcome:** *The implementation of a \$9 fixed fee has enabled the City to grow its local sewer funds and begin to pursue necessary capital improvements. Moving forward, the City has laid out an aggressive CIP schedule over the next five years with planned projects (such as the Sugar Ridge Sewer Extension, the Center Ridge Sewer Extension, and the Becker Lift Station Replacement) that will expand and improve service to North Ridgeville Sewer Customers. The City will require additional revenue in order to fund these projects.*

## 2.4 Updated Assumptions

During the current rate evaluation, AECOM has proposed and tested several assumptions regarding future behavior of costs, revenues, flows, connections, capital investment and use of cash or debt to pay for improvements. We have looked back at actual revenue and expenditure figures for the period of 2012 through 2019 to serve as the basis of future projections and to test the assumptions which follow.

### 2.4.1 Fund 640 Revenue Assumptions

1. User charges had a relatively large increase in revenue in 2015 when a fixed fee of \$9/month for the sewer base charge went into effect. The user charges for 2019 through 2025 are predicted using the average revenue over the previous 5 years.
  - a. Revenue from User Charges is broken down between Fixed Fee and Consumption Charges.
    - i. Revenue from the Fixed Fee is estimated using the number of accounts (through 2019) and assuming each account is charged \$9 per month. The number of accounts is predicted to increase by 200 each year. The Fixed Fee will remain at \$9 per month and will not increase with any potential rate increase.
    - ii. Revenue from Consumption Charges is predicted by averaging over the previous five years and increasing by 2% per year.
2. Interest income will be calculated using the previous year's Operating Fund (Fund 640) at a rate of 1.5% using the following formula:

**$$\frac{[(\text{Previous year's beginning fund balance}) + (\text{Previous year's ending fund balance})]}{2} * 0.015$$**

3. Revenues from “Other Revenue” will be projected by averaging revenues over the previous five years and escalating at 2% per year.
4. No allowances for bad debt have been included.

## 2.4.2 Fund 640 Expense Assumptions

Operation and Maintenance (O&M) costs for 2020 and beyond have been estimated by applying assumptions to certain line items, as noted below, accepting some budget figures and escalating others from 2018 or averages of previous years' expenditures. Where appropriate, some items have been estimated using the 2020 Expenditure Analysis obtained from the City Auditor, which provides an estimated budget for 2020. Periods selected for averaging are based upon best judgement of reasonable data and trends from the budget report. In general, overall O&M costs are averaged over the previous five years and escalated at 2% per year.

1. Collections
  - a. Salary and Wages
    - i. Salary and wages costs have increased to accommodate new full-time positions. The projected costs for super and staff wages in 2021 and beyond are averaged from the 2019 expense and escalated at 3% above the average from 2020 to 2025.
    - ii. Retiree/Separation expenses will be reflected under “Operations.”
    - iii. CT Cash Out and Comp Absences are broken out from overtime for the first time in 2017. Projected expenses for these three subcategories are averaged from 2017 on and escalated at 3% above the average from 2020 to 2025.
  - b. Employee Fringe Benefits
    - i. From 2012 to 2019 Employee Benefit expenses have been an average of 30% of total wages (640.660.100101 and 640.660.100102). Future Employee Benefit expenses are projected at 30% of wages for that year.
    - ii. From 2012 to 2019 Retirement expenses have been an average of 20% of total wages (640.660.100101 and 640.660.100102). Future Retirement expenses are projected at 20% of wages for that year.
  - c. Materials and Supplies
    - i. Operating Supplies and Small Tools/Equipment expenses will be reflected under “Operations”
    - ii. Other Operating Supplies and Equip Maint/Repairs expenses will be averaged from 2019 and escalated at 2% above the average from 2020 on.



- d. Utilities
    - i. Electric expenses broken out from Utilities for the first time in 2017. Utility expenses are anticipated to decrease to \$0 and electric expenses are averaged from 2017 and escalated at 2% above the average from 2020 on.
  - e. Contractual Services
    - i. Communications expenses saw a rise in 2018 and 2019. These expenses are averaged from 2018 and escalated at 2% above the average from 2020 on.
    - ii. Phone expenses are broken out for the first time in 2019. Expenses will be averaged from 2019 and escalated at 2% above the average from 2020 on.
    - iii. Cellular Phone/ Data is broken out for the first time in 2017. Expenses will be averaged from 2017 and escalated at 2% above the average from 2020 on.
    - iv. Other Professional Services are broken out for the first time in 2018. Expenses will be averaged from 2018 and escalated at 2% above the average from 2020 on.
    - v. Account Service Fees and Merchant Service Fees are broken out for the first time in 2017. Account Service Fees will be averaged from 2017 and Merchant Service Fees will be averaged from 2018 and escalated at 2% above the average from 2020 on.
    - vi. IT Licenses and Support saw a rise in 2019. This expense will be averaged from 2019 and escalated at 2% above the average from 2020 on.
    - vii. Equipment Leasing and Maint/Svc Agreements are broken out for the first time in 2017. Expenses will be averaged from 2017 and escalated at 2% above the average from 2020 on.
    - viii. Copiers/Printers expenses are broken out for the first time in 2019. This expense will be averaged from 2019 and escalated at 2% above the average from 2020 on.
    - ix. Equipment outlay expenses will be estimated at \$25,000 per year beginning in 2020 and escalated at 2% per year above the average, per recommendations by the City Auditor.
2. Operations
- a. Salary and Wages
    - i. Super, Staff and Foreman Wages for 2020 have been estimated using the 2020 Expenditure Analysis obtained from the City Auditor. Staff wages have increased to accommodate new full-time positions. Wages will be averaged from 2020 and escalated at 3% above the average from 2021 to 2025.

- ii. Retiree/Separation expenses are projected at \$28,000 for 2020 and escalated at 3% over the average along with other salary/wage expenses.
  - iii. CT Cash Out and Comp Absences are broken out from overtime for the first time in 2017. Projected expenses for these three subcategories are averaged from 2017 on and escalated at 3% above the average from 2020 to 2025.
- b. Employee Benefits
  - i. From 2012 to 2019 Employee Benefit expenses have been an average of 38% of total wages (640.661.100101, 640.661.100102, and 640.661.100105). Future Employee Benefit expenses are projected at 38% of wages for that year.
  - ii. From 2012 to 2019 Retirement expenses have been an average of 20% of total wages (640.661.100101, 640.661.100102, and 640.661.100105). Future Retirement expenses are projected at 20% of wages for that year.
- c. Materials and Supplies
  - i. Operating Supplies expenses for 2020 are taken from the 2020 Expenditure Analysis obtained from the City Auditor. Expenses for 2020 include tablet and sewer pipe. From 2021 on, expenses are projected by averaging over the previous 5 years and escalating at 2% per year above the average.
  - ii. The Motor Vehicle Parts/Supplies expenses are being rolled into other categories and will no longer be charged after 2019.
  - iii. Small Tools/Equipment are broken out from Equip Maint/Repairs for the first time in 2017. Expenses for 2020 are taken from the 2020 Expenditure Analysis obtained from the City Auditor. From 2021 on, expenses are projected by averaging over the previous 5 years and escalating at 2% per year above the average.
  - iv. Equip Maint/Repairs and Facilities Maintenance expenses will both be rolled into other categories and will no longer be charged beginning in 2020.
- d. Utilities
  - i. Electric and Water are broken out from Utilities for the first time in 2017. Utility expenses will no longer be charged after 2018.
  - ii. Electric and Water charges have been set at \$30,000 and \$50,000, respectively, in 2020 per recommendations from the City Auditor. Expenses will be averaged from 2020 and escalated at 2% per year above the average
  - iii. Natural Gas/Oil expenses are broken out from Utilities for the first time in 2019. Expenses will be averaged from 2019 and escalated at 2% per year above the average.

#### e. Contractual Services

- i. Phone, Cellular Phone/Data, Network/Internet/Cable, and Elect Media Subscriptions are broken out from Communications Expenses for the first time in 2017 and 2018. Communication expenses are projected to decrease to \$0 while the other expenses are averaged from 2017 or 2018 and escalated at 2% per year above the average.
- ii. M&R Equip City Garage is broken out for the first time in 2018. Expenses will be averaged from 2018 and escalated at 2% per year above the average.
- iii. M&R Equipment is broken out for the first time in 2019. The expense for 2020 is taken from the 2020 Expenditure Analysis obtained from the City Auditor. Starting in 2021, expenses will be averaged from 2020 and escalated at 2% per year above the average.
- iv. M&R Vehicles expenses will both be rolled into other categories and will no longer be charged beginning in 2020.
- v. M&R Vehicles City Garage had an expense of \$175,546 for 2018 and an expense of \$144,288 for 2019. The expense for 2020 is taken from the 2020 Expenditure Analysis obtained from the City Auditor. Starting in 2021, expenses will be averaged from 2020 and escalated at 2% per year above the average.
- vi. M&R Buildings is broken out for the first time in 2019. The expense for 2020 is taken from the 2020 Expenditure Analysis obtained from the City Auditor. Starting in 2021, expenses will be averaged from 2020 and escalated at 2% per year above the average.
- vii. Equipment rental expenses for 2020 is taken from the 2020 Expenditure Analysis obtained from the City Auditor. Starting in 2021, expenses will be averaged from 2020 and escalated at 2% per year above the average.
- viii. Professional Service expenses will be rolled into other categories and will no longer be charged beginning in 2020.
- ix. Engineering Services is broken out for the first time in 2017. The expense for 2020 is taken from the 2020 Expenditure Analysis obtained from the City Auditor. Starting in 2021, expenses will be averaged from 2020 and escalated at 2% per year above the average, except for 2022, which will include an extra \$40,000 to cover an updated rate study analysis.
- x. Other Professional Services are broken out for the first time in 2017. The estimated expense for 2020 is taken from the 2020 Expenditure Analysis obtained from the City Auditor. Starting in

2021, expenses will be averaged from 2019 and escalated at 2% per year above the average.

- xi. Dumping Fees expenses for 2020 are taken from the 2020 Expenditure Analysis obtained from the City Auditor. Starting in 2021, expenses will be averaged from 2020 and escalated at 2% per year above the average.
- xii. Outside Services expenses will be rolled into other categories and will no longer be charged beginning in 2019.
- xiii. IT Licenses and Support are broken out for the first time in 2018. Expenses for 2020 are taken from the 2020 Expenditure Analysis obtained from the City Auditor. Starting in 2021, expenses will be averaged from 2020 and escalated at 2% above the average.
- xiv. FCWWTP Services were \$2.9 million in 2019, which is approximately 16% higher than the average of the previous five years, although the rate increase from French Creek was only 4%. This discrepancy was a result of an adjusted payment schedule which saw some costs from 2018 paid out in 2019. Costs moving forward are projected to escalate at an additional 4% (above 2% for inflation) above the average to account for a 4% increase in rate fees. Costs will be averaged from 2019.

f. Capital Outlay

- i. Equipment Leasing expenses for 2020 are taken from the 2020 Expenditure Analysis obtained from the City Auditor. Starting in 2021, expenses will be averaged from 2020.
- ii. Copiers/Printers expenses are broken out for the first time in 2019. Starting in 2020, expenses will be averaged from 2019 and escalated at 2% above the average.
- iii. Equipment Outlay expenses will fluctuate. Costs are based on estimates recommended from the City Auditor.
- iv. Administrative expenses are predicted to be \$250,000 in 2021 and will escalate at 2% per year.

3. Debt Service

- a. Starting in 2018 all Debt Service was paid from Fund 645. Funds to cover the following year's Debt Service Cost will be transferred into Fund 645 at the close of each year.

4. Transfers

- a. At the close of each year, funds above a 4-month O&M cost reserve will be transferred out of Fund 640 and into Fund 660. The 4-month cost reserve will not include Capital Outlay costs. If there is less than a 4-month cost reserve in Fund 640 at the close of the year, only the cost to cover Debt Service will be transferred.

### 2.4.3 Fund 645 Revenue Assumptions

1. Assume a 1.5% in interest income per year using the following formula:  
**$$\frac{[(\text{Previous year's beginning fund balance}) + (\text{Previous year's ending fund balance})] / 2 * 0.015}{}$$**
2. Assume the cost of debt service for the following year will be transferred into Fund 645 from Fund 640 at the close of each year.

### 2.4.4 Fund 660 Revenue Assumptions

1. Revenues from Special Assessments are projected to continue through 2025. Revenues are calculated by averaging revenues over the previous five years and will not include an escalation.
2. Sewer Tap Fees are projected by averaging revenues over the previous five years and escalating at a rate of 2.5% to account for the stipulated annual rate increase. The number of new homes added is expected to stabilize at approximately 200 homes per year, therefore the escalation rate will only account for the stipulated annual rate increase of 2.5%.
3. Interest income will be calculated using the previous year's Capital Improvement Fund (Fund 660) at a rate of 1.5% using the following formula:  
**$$\frac{[(\text{Previous year's beginning fund balance}) + (\text{Previous year's ending fund balance})] / 2 * 0.015}{}$$**
4. At the end of each year, funds above a 4 month O&M cost reserve will be transferred out of Fund 640 and into Fund 660.

### 2.4.5 Fund 660 Expense Assumptions

The 2020 – 2025 Capital Improvement Program (CIP) projection has been developed in conjunction with the City Engineer, City Service Director and reports from the City Auditor. These costs are estimates and should be revisited as necessary. Costs include Auditor/Treasurer fees (averaged over the previous 5 years and escalated at 2% above the average) and a 10% contingency. Costs for 2023, 2024 and 2025 include a placeholder for potential future projects to bring the total CIP cost (before contingency and Auditor/Treasurer fees) to \$1,000,000. These costs were taken from the City's 5-year Capital Projects/Capital Improvements Plan obtained from the City Auditor.

#### 1. 2020 Anticipated CIP

Luanne Lift Station	\$ 20,000
Broad, Main, Pleasant Sewer Reconstruction	700,000
Center Ridge Sewer Extension - Engineering	300,000
Westfield Construction (funds not paid in 2019)	1,223,180
Auditor/Treasurer Fees	593
Contingency (10%)	224,377
2020 Total	<u>\$ 2,468,150</u>
<b>2. 2021 Anticipated CIP</b>	
Sugar Ridge Sewer Extension - Engineering	\$ 300,000
Center Ridge Sewer Inspection	280,000
Center Ridge Sewer Extension - Construction	2,800,000
Auditor/Treasurer Fees	624
Contingency (10%)	338,062
2021 Total	<u>\$ 3,718,687</u>
<b>3. 2022 Anticipated CIP</b>	
Sugar Ridge Sewer Extension - Construction	\$ 2,900,000
Sugar Ridge Sewer Inspection	250,000
Becker Lift Station Replacement - Engineering	40,000
Auditor/Treasurer Fees	614
Contingency (10%)	319,061
2022 Total	<u>\$ 3,509,675</u>
<b>4. 2023 Anticipated CIP</b>	
Placeholder	\$ 1,000,000
Auditor/Treasurer Fees	614
Contingency (10%)	100,061
2023 Total	<u>\$ 1,100,675</u>
<b>5. 2024 Anticipated CIP</b>	
Becker Lift Station Replacement - Construction	\$ 440,000
Placeholder	560,000
Auditor/Treasurer Fees	600

Contingency (10%)	100,060
2024 Total	\$ 1,100,683

## 6. 2025 Anticipated CIP

Becker Lift Station Replacement - Construction	\$ 440,000
Placeholder	560,000
Auditor/Treasurer Fees	621
Contingency (10%)	100,062
2025 Total	\$ 1,100,683

Actual CIP expenditures through 2025 will depend upon the bidding schedule for several budgeted projects. The costs of these projects may be expended over the course of more than one year. However, the costs of these projects are incorporated into the anticipated annual expenses for the year in which funds are encumbered, regardless of the year in which spending occurs.

## 2.5 Uses of Funds 640, 645 and 660

### 2.5.1 Fund 640: Operating Fund

Fund 640 is used as the repository for all consumption revenues and other fees and charges as well as the source of funds for all operating expenses. Moving forward, Fund 640 will transfer Debt Service funds into Fund 645 to cover the following year's Debt Service payments. Funds above 4 months of O&M reserves will be transferred into Fund 660. (The 4 months of O&M reserves does not include Capital Outlay.) With a rate increase the City can grow the O&M reserves in Fund 640 back to the recommended 6 months by 2023.

### 2.5.2 Fund 645: Debt Service Fund

Fund 645 is used as the source of funding for all debt service payments and debt service coverage. Moving forward, Fund 645 will be financed with yearly transfers from Fund 640.

### 2.5.3 Fund 660: Repair and Improvement Fund

Fund 660 is used as the repository for sewer tap charges and special assessments as well as the source of funds for the Capital Improvement Program. Funds to cover the following year's CIP projects will be transferred from Fund 640 to Fund 660 at the close of each year.

## 2.6 Future Trends

North Ridgeville appears to have weathered recent national trends affecting water and wastewater utilities such as decreased per account consumption, declining numbers of

accounts, cost increases higher than inflation, and resistance to incur debt in tough economic times. The City has seen an increase in the fee to treat wastewater at the FCWWTP. With a modest local rate increase North Ridgeville will be well-positioned financially to address future challenges facing wastewater utilities. Future trends and financial health must be monitored closely to ensure the City can react proactively when trends wander from expectations and assumptions inherent to this rate evaluation. Among the most important trends to be followed, those listed below deserve particular attention:

- **Inflation rates will inevitably rise.** Should inflation exceed 3% annually, both operating and construction costs will increase with negative consequences to financial health and rate viability.
- **As inflation rates increase, so too will interest rates.** This may have positive effects on reserve funds, but negative effects on the cost of borrowing. Future debt projected under some of the rate alternatives could carry interest rates higher than the 4% assumed for bonds.
- **Per account consumption decreases in the service area may occur.** Even modest rate increases may have unforeseen elasticity effects that result in lesser consumption than forecast by this evaluation.
- **Growth in the service area has been maintained,** but unpredictable economic forces could result in a drop in residential and/or commercial construction with associated decreases in projected connection fee revenues. On the other hand, significant upticks in the economy would result in more tap revenues than projected. Reaction to such phenomena would have to be balanced between the extremes of deferring rate increases versus the opportunity to increase tap fees.
- **Funds 640, 645 and 660 have a balance high enough to begin to pursue an aggressive CIP for 2020 – 2025.** However, in order to cover the Westfield Wastewater Treatment Plant Elimination (an estimated \$3,059,000), the Broad, Main, Pleasant Sewer Reconstruction (an estimated \$700,000), the Center Ridge Sewer Extension (an estimated \$3,080,000), the Sugar Ridge Sewer Extension (an estimated \$3,450,000), and the Becker Lift Station Replacement (\$880,000) the City will need to raise the rate of user charges.
- **Inflow and infiltration (I/I) from the sewer system.** I/I will only increase with time unless measures are instituted to control such flows. Proposed local sewer repairs will help but repairs to worst case “private side” laterals, downspouts, drains, and the like may be necessary where I&I from these sources is the principal cause of local basement flooding or sewer backups.

### 3. Description of Rate Components

During the course of this rate evaluation, AECOM has progressed through periods of discovery, testing of assumptions, updates to the CIP, and broader understanding of North Ridgeville’s goals and future expectations. This process has enabled us to fine tune



assumptions, and narrow alternatives for further consideration. The components inherent to each of these considerations are explained in greater depth below:

### 3.1 Rates and Rate Structure

AECOM recommends modest annual increases in order to fund the City's future revenue needs. Rate increases are often neglected or deferred in the interest of keeping rates low, avoiding political conflict, or because growth provides sufficient revenues to defer action. However, when the time inevitably comes to address operating shortcomings, deferred maintenance or capital investment, necessary increases can pose major sticker shock to residents and businesses alike. One-time rate adjustments usually involve high double-digit rates of increase, and major increases in other fees, particularly for connections, inspection and service calls, industrial surcharges, and billing charges.

In 2014, North Ridgeville implemented a fixed fee of \$9/month which helped to build a revenue cushion for capital improvement over the past six years and helped the City begin to pursue necessary capital improvements. There are, however, upcoming projects such as the Center Ridge Sewer Extension and the Sugar Ridge Sewer Extension (at an estimated cost of approximately \$3 million each) which require further investment. A rate increase of 4% per year over the next several years will allow the City to invest in their infrastructure while maintaining sufficient O&M reserves. The City will require a higher rate increase in 2020 in order to account for the increase being in place for only 6 months.

The current CIP schedule does not include a Flow Equalization Basin, a capital improvement project which was visited during the previous rate study in 2014. Should the City decide to move forward with a flow equalization basin project, this rate study should be revisited.

### 3.2 Operating Costs

Operating costs for the Local Sewer are split into "Collections" and "Operations." "Collections" are the expenses associated with customer billing while "operations" are the expenses associated with the upkeep and maintenance of the system itself. "Operations" costs spiked in 2016 due to Debt Service Costs and Capital Improvement costs. These costs have been moved to Fund 645 and Fund 660, respectively. Expenses also saw an increase in 2017 and 2018 due to costs associated with Equipment Outlay and Administrative costs. The revenue from user charges, however, has so far covered the cost increase and provided a cushion to continue to fund capital improvement projects. Moving forward, however, the City will not be able to continue to cover these costs without a rate increase.

### 3.3 Capital Improvements

The increased revenue from the City's fixed fee implemented in 2014 allowed the Local Sewer to complete repairs on Subbasins 5-16 from 2015 to 2018. Moving forward, the City has put together an aggressive Capital Improvement Schedule of approximately \$2 million per year from 2020 through 2025 to address issues of aging infrastructure and

investing in new equipment. Current and future Capital Improvement Projects include the Westfield Wastewater Treatment Plant Elimination (an estimated \$3,059,000), the Broad, Main, Pleasant Sewer Reconstruction (an estimated \$700,000), the Center Ridge Sewer Extension (an estimated \$3,080,000), the Sugar Ridge Sewer Extension (an estimated \$3,450,000), and the Becker Lift Station Replacement (\$880,000). \$2.12 million is also included as a placeholder and spread through 2023, 2024 and 2025 for unforeseen CIP projects.

### 3.4 Debt Service

One of the conclusions of the previous Rate Study in 2014 was that North Ridgeville would need to borrow funds in order to continue to sustain their funds. Thus, bonds were taken out in 2014 and 2016. The cost for debt service is approximately \$975,000 per year from 2020 to 2025. At the currently proposed schedule of O&M and Capital Improvement costs, City will require either taking on additional debt within the next five years or implementing a modest rate increase. In terms of additional debt, it is worth mentioning that as inflation rates increase, interest rates will increase as well. Future debt may carry interest rates of greater than 4%.

### 3.5 Reserves

Reserve funds are an essential ingredient to the financial success of a utility, providing the equivalent of insurance in the event of catastrophic failures due to equipment breakdown, flooding, storm damage, or even financial recession. Most utilities plan for such contingencies by establishing operating and/or capital reserves. These funds can then be utilized to bridge funding gaps that may occur due to emergencies when rates and fees prove insufficient, collections lag, or a major capital investment is required on short notice.

Many utilities grow reserves over time to the point where 6 months' (or even 9 to 12 months') worth of operating costs are set aside. Similarly, capital reserves are deemed necessary so that a major piece of equipment or more vulnerable portion of a facility could be repaired or replaced following catastrophic failure or damage. At the close of 2018, North Ridgeville was in the enviable position of having reserves in excess of 6 months. However, the Capital Improvement Projects decreased reserves below 4 months at the close of 2019. The key strategy now is the degree to which reserves will be maintained in the future. After consultation with the Service Director, Auditor and City engineer it has been agreed that at least 4 months of O&M reserves will be maintained in Fund 640 at the close of each year, with the intent to grow the operating reserve back to the recommended 6 months. The 4 months of O&M reserve will include salary and wages, employee fringe benefits, materials and supplies, utilities, and contractual services. It will not include funds for the next year's Capital Outlay. Funds above the operating reserve will be transferred to Fund 660 at the close of each year. (Funds for the next years Debt Service will be transferred out of Fund 640 and into Fund 645 regardless of remaining reserves.) With a rate increase, City will be able to reach its goal of 6 months of O&M reserves.

## 3.6 Rate Scenarios

The rate study is designed to depict scenarios that fully fund operating expenses and various capital improvement needs and maintain operating and capital improvement reserves. The impact of the assumptions regarding the size and timing of a potential rate increase, conservative growth and revenue projections, willingness to incur debt and to maintain reserve funds, will enable the Local Sewer to fully fund O&M costs and the anticipated CIP schedule. Like all assumptions, these must be monitored closely to ensure that revenues remain sufficient to support operating and capital costs, and that costs remain under control and within the projections of this evaluation. In the same manner, future trends affecting the assumptions should be followed closely so that rate adjustments, cost controls, capital project acceleration, and debt strategy can be undertaken in a timely manner.

### 3.6.1 Scenario 1 - Baseline

The baseline scenario, with no rate increases and no additional debt incurred, was not enough to fund the current O&M and Capital Improvement Projects through 2025 while still maintaining a minimum of 4 months of O&M reserves. Beginning in 2022, this scenario leaves the City with less than 2 months of O&M reserves remaining in Fund 640. The spreadsheet for this scenario is included as **Appendix A**.

### 3.6.2 Scenario 2 – 4% Rate Increase Per Year

Scenario 2 includes a 10% rate increase to be put in place for the second half of 2020 and a 4% rate increase each year from 2021 to 2025. This scenario allows the City to fund all O&M and CIP requirements through 2025 and still maintain a minimum of 4 months of O&M reserves at the close of each year. By 2023 the City will be able to reach 6 months of O&M reserves with over \$1 million in reserve in Fund 660 by the end of the year. At the close of 2025, the analysis shows the City with 6 months of O&M reserve and a fund balance of over \$3 million in Fund 660 to plan new projects moving forward.

This scenario does, however, show a reserve of \$800,000 in Fund 660 at the close of 2022, which is less than the recommended reserve of \$1 million. This may hinder some of the CIP scheduled for the following year if the City sees less revenue than anticipated in Fund 660 (for example, if there are fewer sewer taps than expected). In this scenario, the City may want to consider taking on additional debt to cover CIP expenses, particularly for the Sugar Ridge Sewer Extension scheduled for 2022. The spreadsheet for this scenario is included as **Appendix B**.

## 4.0 Summary and Conclusions, Findings and Recommendations

North Ridgeville leadership has provided excellent direction to AECOM during the course of this rate evaluation. The combination of excellent historical data from which to gauge future revenue and expense projections, updating of the CIP to reflect current and future needs, sound judgments about future costs, and realistic projections about the service area and its growth, have allowed AECOM to refine the evaluation and make recommendations that reflect application of sound methodology to relatively complex variables and alternatives. A brief summary of the assumptions and findings of the rate evaluation follows, along with a brief description of the recommended rate scenarios.

### 4.1 Revenues and Rate Structure:

Revenues are assumed to be derived from the existing customer base plus a consistent number of new additional connections. Beginning in 2019, the sewer rate for FCWWTP began increasing by 4% annually. The local sewer should maintain a minimum annual rate increase of 4% for local users in order to mitigate this cost increase.

### 4.2 Expenditures

Operating costs have stabilized in the past two or three years but can be expected to increase nominally to continue to address deferred maintenance and inflation. A very detailed analysis of the operating budget and actual expenditures over the period of 2012 through 2019 has provided a sound basis for cost projections and serves as the basis for our projected operating costs through 2025.

### 4.3 Capital Improvements

The Capital Improvement Program has been revisited by the City Engineer and Service Director. Several projects have been updated or added to more thoroughly address investment needs. A capital program totaling approximately \$14 million is planned (and in some cases already underway) for the period of 2020 – 2025. Some of the projects may extend beyond the year anticipated, but the required funding will remain intact within Fund 660 which is the source of all CIP funds. \$2.12 million is also included as a placeholder and spread through 2023, 2024 and 2025 for unforeseen CIP projects.

### 4.4 Bond Issuance and Debt Service

The City currently holds a bond from for the Dyke/Case project from 2008 which will mature in 2028. Another bond from the Ohio Public Works Commission for the Bagley Road Sewer Extension will mature in 2020. A bond for Victory Lane Sewer Improvements was taken out in 2014 and will mature in 2034. Various other bonds were taken out in 2016 for the Center Ridge Sanitary Sewer Improvements (maturing in 2026), Dyke/Case (maturing in 2028), Westerlies Sanitary Sewer Improvements (maturing in 2026), and Center Ridge SS project and SS Subbasin repairs (maturing in 2036). Total debt service

payments for 2019 through 2025 are approximately \$975,000 annually. No additional debt is planned through 2025.

The City Auditor has begun to use Fund 645 Debt Service Fund to pay yearly debt service payments. At the close of each year, Fund 645 will retain enough funds to cover the Debt Service payment for the following year. These funds will be transferred from Fund 640 to Fund 645.

## 4.5 Fund Balances

Fund 640 and Fund 660 each have very high balances due to revenues following an implementation of a \$9/month fixed fee in 2014. These reserves will diminish over the next several years as the City pursues an aggressive CIP schedule. The Baseline Scenario shows Fund 660 being depleted at the close 2022 with less than 2 months of O&M reserves in Fund 640. Under Scenario 2 reserves the City will maintain a minimum of 4 months of O&M reserves in Fund 640 at the close of each year and more than \$3 million (by the close of 2025) for CIP reserves in Fund 660. Scenarios 2 will also grow O&M reserves to 6 months by the close of 2025. These reserves are consistent with industry best practices and the direction of City leadership.

## 4.6 Rate Recommendations

AECOM has explored rate scenarios in order to test assumptions and provide a rate recommendation consistent with the City's direction, sound ratemaking and financial practices, and the assumptions noted above. Our evaluation has concluded that a rate increase with a minimum of 4% per year, as depicted under Scenario 2, is necessary at this time in order to fund O&M operations, anticipated CIP, and recommended reserves through 2025. Furthermore, a rate increase of 10% in 2020 will compensate for the increase being in place for only 6 months and will help the City reach CIP and reserves goals by the end of 2023. The monthly increase and average monthly cost to local residential sewer customers (based on a usage of 600 cubic feet per month) are listed in the table below.

**Table 1: Monthly Increase and Average Residential Cost**

Year	Rate Increase	Residential Sewer Rate per CCF	Commercial Sewer Rate per CCF	Base Charge	Average Monthly Residential Cost*	Average Monthly Increase for Residential Customer
2019 (current)	0%	\$5.21	\$5.46	\$9	\$40.26	
2020	10%	\$5.73	\$6.01	\$9	\$43.39	\$3.13
2021	4%	\$5.96	\$6.25	\$9	\$44.76	\$1.38
2022	4%	\$6.20	\$6.50	\$9	\$46.19	\$1.43
2023	4%	\$6.45	\$6.76	\$9	\$47.68	\$1.49
2024	4%	\$6.70	\$7.03	\$9	\$49.23	\$1.55
2025	4%	\$6.97	\$7.31	\$9	\$50.84	\$1.61

\* Assumes an average use of 6 CCF per month

During the previous Rate Study in 2014 the recommended CIP included a flow equalization basin to store excess flows in locations above flooded sewers. As of now, this option has not been pursued. Should the City decide to revisit this option, they may want to consider putting aside funds to be used for the project and revisiting this rate study.

As noted several times in this report, the rate recommendation above is only as good as the assumptions upon which these findings are made. Thus, every assumption must be monitored so that the City may react promptly should one or more projection fail to materialize. With such a proactive strategy, the City can move quickly to control costs, defer or accelerate improvements, adjust rates, or incur more or less debt to maintain the financial integrity of the local sewer while serving its constituent communities responsibly and in a fiscally prudent manner. In conclusion, the local sewer is in a financially stable position, which can be maintained with modest rate increases, bond proceeds, and with prudent capital investment. AECOM is pleased to have reached these recommendations and stands ready to answer any questions you may have regarding the updated North Ridgeville Local Sewer rate evaluation.

# Appendix A Baseline - No Rate Increase: Scenario 1

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# Local Sewer Rate Study Evaluation: Actual, Budget, Projected and Updated Projections

Baseline

Item	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 (Actual)	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
<b>REVENUES</b>											
640 Total	\$5,591,481	\$5,798,253	\$5,946,228	\$5,942,865	\$6,064,666	\$6,027,056	\$6,134,858	\$6,250,228	\$6,361,923	\$6,475,726	\$6,597,286
645 Total	\$0	\$787,177	\$7,054	\$1,322,722	\$952,637	\$936,988	\$980,740	\$976,871	\$976,871	\$976,871	\$976,871
660 Total	\$2,911,215	\$10,037,727	\$932,782	\$5,109,771	\$2,354,526	\$1,109,530	\$1,145,515	\$1,758,449	\$1,165,734	\$1,100,393	\$1,119,976
Total Income	\$8,502,697	\$16,623,157	\$6,886,065	\$12,375,358	\$9,371,829	\$8,073,575	\$8,261,113	\$8,985,548	\$8,504,528	\$8,552,990	\$8,694,134
<b>EXPENSES</b>											
Collections Cost (640)	\$165,690	\$159,103	\$140,924	\$209,037	\$234,582	\$243,529	\$243,059	\$243,197	\$245,933	\$250,802	\$252,498
Operating Cost (640)	\$3,419,034	\$5,076,215	\$4,087,229	\$4,324,422	\$4,439,025	\$4,928,809	\$5,033,794	\$5,167,305	\$5,195,251	\$5,255,590	\$5,366,806
Total O&M Expenses (640)	\$3,584,724	\$5,235,318	\$4,228,154	\$9,473,459	\$6,913,607	\$6,094,358	\$6,242,912	\$6,972,228	\$6,403,373	\$6,468,610	\$6,581,522
Total Debt Service (645)	\$0	\$122,363	\$0	\$981,577	\$982,868	\$945,122	\$974,647	\$980,740	\$976,871	\$976,871	\$976,871
Total Sanitary Sewer Improvement (660)	\$2,928,467	\$11,334,850	\$990,575	\$76,019	\$2,375,368	\$2,468,151	\$3,718,687	\$3,509,675	\$1,100,675	\$1,100,660	\$1,100,683
TOTAL EXPENSES	\$6,513,191	\$16,692,531	\$5,218,729	\$10,531,056	\$10,271,844	\$9,507,631	\$10,936,245	\$11,462,644	\$8,480,919	\$8,546,140	\$8,659,076
NET REVENUES	\$1,989,506	(\$69,374)	\$1,667,335	\$1,844,302	(\$900,015)	(\$1,434,056)	(\$2,675,132)	(\$2,477,095)	\$23,609	\$6,850	\$35,057
<b>END-OF-YEAR BALANCES</b>											
Fund 640 End-of-Year Balance	\$3,649,570	\$4,212,505	\$5,930,579	\$2,399,985	\$1,551,044	\$1,483,742	\$1,375,689	\$653,689	\$612,239	\$619,355	\$635,119
Months of O&M Reserves	12.22	9.66	16.83	6.16	3.92	3.68	3.33	1.57	1.45	1.44	1.36
Fund 645 End-of-Year Balance	\$0	\$664,814	\$671,868	\$1,013,012	\$982,781	\$974,647	\$980,740	\$976,871	\$976,871	\$976,871	\$976,871
Fund 660 End-of-Year Balance	\$2,025,025	\$727,902	\$670,108	\$5,703,860	\$5,683,018	\$4,324,397	\$1,751,226	\$0	\$65,059	\$64,792	\$84,086
Total End-of-Year Balance	\$5,674,594	\$5,605,220	\$7,272,556	\$9,116,858	\$8,216,843	\$6,782,787	\$4,107,655	\$1,630,560	\$1,654,168	\$1,661,019	\$1,696,076



City of North Ridgeville  
Actual and Predicted Revenue

Baseline

	2015	2016	2017	2018	2019	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
<b>FUND 640</b>											
Number of Accounts	11,451	11,642	11,901	12,130	12,426	12,626	12,826	13,026	13,226	13,426	13,626
Fixed Fee Monthly Charge	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00
Calculated Fixed Fee Annual Revenue	\$1,236,708	\$1,257,336	\$1,285,308	\$1,310,040	\$1,342,008	\$1,363,608	\$1,385,208	\$1,406,808	\$1,428,408	\$1,450,008	\$1,471,608
Calculated Consumption User Charges	\$4,346,757	\$4,519,550	\$4,595,339	\$4,575,086	\$4,654,591	\$4,629,029.94	\$4,721,610.54	\$4,816,042.75	\$4,912,363.60	\$5,010,610.88	\$5,110,823.09
Rate Increase %					0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rate Increase Revenue					\$0	\$0	\$0	\$0	\$0	\$0	\$0
Calculated Consumption User Charges					\$4,654,591	\$4,629,030	\$4,721,611	\$4,816,043	\$4,912,364	\$5,010,611	\$5,110,823
640.000.500541 USER CHARGES Total:	\$5,583,465	\$5,776,886	\$5,880,647	\$5,885,126	\$5,996,599	\$5,992,638	\$6,106,819	\$6,222,851	\$6,340,772	\$6,460,619	\$6,582,431
640.000.700110 INTEREST INCOME Total:	\$5,648	\$19,288	\$59,647	\$50,250	\$62,479	\$29,633	\$22,761	\$21,446	\$15,220	\$9,494	\$9,237
640.000.800892 OTHER REVENUE Total:	\$2,368	\$2,079	\$5,935	\$7,490	\$5,588	\$4,786	\$5,279	\$5,932	\$5,931	\$5,613	\$5,618
640 TOTAL:	\$5,591,481	\$5,798,253	\$5,946,228	\$5,942,865	\$6,064,666	\$6,027,056	\$6,134,858	\$6,250,228	\$6,361,923	\$6,475,726	\$6,597,286
<b>FUND 645</b>											
645.000.700110 INTEREST INCOME Total:	\$0	\$2,090	\$7,054	\$22,722	\$12,637	\$14,968	\$14,681	\$14,665	\$14,682	\$14,653	\$14,653
645.000.900124 BOND ISSUE PREM (GAAP)		\$785,087									
TRANSFERS IN Total:				\$1,300,000	\$940,000	\$922,020	\$966,059	\$962,206	\$962,189	\$962,218	\$962,218
645 TOTAL:	\$0	\$787,177	\$7,054	\$1,322,722	\$952,637	\$936,988	\$980,740	\$976,871	\$976,871	\$976,871	\$976,871
<b>FUND 660</b>											
660.000.300330 SPECIAL ASSESSMENTS	\$12,727	\$14,311	\$14,269	\$19,913	\$14,341	\$15,112	\$15,589	\$15,845	\$16,160	\$15,409	\$15,623
660.000.570542 SEWER TAPS	\$785,339	\$846,837	\$907,652	\$1,389,823	\$992,381	\$1,009,016	\$1,054,870	\$1,097,517	\$1,136,440	\$1,084,496	\$1,103,380
660.000.700110 INTEREST INCOME	\$3,150	\$7,792	\$10,861	\$60,035	\$47,805	\$85,402	\$75,056	\$45,567	\$13,134	\$488	\$974
660.000.700225 REIMB INT/WESTERLIES											
660.000.700226 REIMB - VICTORY LN (POP)											
660.000.800892 OTHER REVENUE											
660.000.900111 BOND PROCEEDS		\$9,120,000									
660.000.900113 BOND ISSUE PREM (GAAP)		\$48,787									
660.000.900121 BAN'S PROCEEDS	\$1,710,000										
660.000.900122 BANS PREMIUMS											
660.000.900131 NOTE PROCEEDS	\$400,000										
660.000.950531 TRANSFERS-IN Total:				\$3,640,000	\$1,300,000	\$0.00	\$0.00	\$599,520.27	\$0.00	\$0.00	\$0.00
660 TOTAL:	\$2,911,215	\$10,037,727	\$932,782	\$5,109,771	\$2,354,526	\$1,109,530	\$1,145,515	\$1,758,449	\$1,165,734	\$1,100,393	\$1,119,976

Predicted Revenue  
 Future Increased Revenue

City of North Ridgeville  
Actual and Predicted Expenses

Baseline

		2015	2016	2017	2018	2019	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
<b>FUND 640 COLLECTIONS</b>												
<b>SALARY AND WAGES</b>												
640.660.100101	WAGES-SUPER Total:	\$19,323.12	\$18,992.25	\$19,807.58	\$20,694.92	\$26,431.00	\$27,223.93	\$27,632.29	\$27,908.61	\$28,117.93	\$28,552.31	\$28,894.37
640.660.100102	WAGES-STAFF Total:	\$38,411.52	\$37,179.81	\$39,017.38	\$39,433.85	\$52,727.00	\$54,308.81	\$55,123.44	\$55,674.68	\$56,092.24	\$56,958.79	\$57,641.15
670.690.100117	RETIREE/SEPARATION Total:	\$0.00	\$5,989.66	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.660.100120	OVERTIME Total:	\$6,862.53	\$6,497.61	\$5,044.36	\$4,037.58	\$1,901.00	\$5,014.67	\$4,634.02	\$4,250.12	\$4,086.50	\$4,096.58	\$4,548.87
640.660.100127	CT CASH OUT Total:	\$0.00	\$0.00	\$61.01	\$51.22	\$57.52	\$58.28	\$58.72	\$59.07	\$58.67	\$60.20	\$60.76
640.660.100128	COMP ABSENCES Total:	\$0.00	\$0.00	\$750.80	\$512.26	\$129.00	\$477.94	\$481.53	\$484.41	\$429.54	\$412.50	\$470.90
640.660.100130	LONGEVITY Total:	\$3,033.32	\$3,266.68	\$3,233.34	\$3,300.00	\$4,141.00	\$3,496.71	\$3,592.17	\$3,659.22	\$3,746.96	\$3,839.03	\$3,776.82
640.660.100140	CLOTHING ALLOWANCE Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>SALARY AND WAGES TOTAL:</b>		<b>\$67,630.49</b>	<b>\$71,926.01</b>	<b>\$67,914.47</b>	<b>\$68,029.83</b>	<b>\$85,386.52</b>	<b>\$90,580.35</b>	<b>\$91,522.16</b>	<b>\$92,036.11</b>	<b>\$92,531.83</b>	<b>\$93,919.41</b>	<b>\$95,392.87</b>
<b>EMPLOYEE FRINGE BENEFITS</b>												
640.660.120125	EMPLOYEE BENEFITS Total:	\$18,212.03	\$19,964.14	\$17,800.01	\$17,826.78	\$21,800.00	\$24,459.82	\$24,826.72	\$25,074.99	\$25,263.05	\$25,653.33	\$25,960.66
640.660.120155	RETIREMENT Total:	\$11,717.85	\$11,821.15	\$12,047.43	\$12,195.09	\$15,731.00	\$16,306.55	\$16,551.15	\$16,716.66	\$16,842.03	\$17,102.22	\$17,307.10
<b>EMPLOYEE FRINGE BENEFITS TOTAL:</b>		<b>\$29,929.88</b>	<b>\$31,785.29</b>	<b>\$29,847.44</b>	<b>\$30,021.87</b>	<b>\$37,531.00</b>	<b>\$40,766.37</b>	<b>\$41,377.87</b>	<b>\$41,791.64</b>	<b>\$42,105.08</b>	<b>\$42,755.55</b>	<b>\$43,267.76</b>
<b>MATERIALS AND SUPPLIES</b>												
640.660.210100	OFFICE SUPPLIES Total:	\$1,566.86	\$1,385.33	\$301.48	\$2,585.13	\$3,164.00	\$1,836.57	\$1,891.59	\$1,994.87	\$2,340.32	\$2,290.38	\$2,112.16
640.660.215100	OPERATING SUPPLIES Total:	\$0.00	\$0.00	\$0.00	\$293.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.660.215110	FORMS PRINT Total:	\$8,952.69	\$8,637.95	\$6,412.48	\$3,535.47	\$6,288.00	\$6,900.62	\$6,482.00	\$6,042.19	\$5,966.65	\$6,462.61	\$6,498.23
640.660.215270	SMALL TOOLS / EQUIPMENT Total:	\$0.00	\$0.00	\$24.55	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.660.215290	OTHER OPERATING SUPPLIES Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$1,085.00	\$1,106.70	\$1,117.77	\$1,125.22	\$1,130.84	\$1,135.37	\$1,145.64
640.660.220200	EQUIP MAINT / REPAIRS Total:	\$31.94	\$28.12	\$0.00	\$0.00	\$1,000.00	\$1,020.00	\$1,030.20	\$1,037.07	\$1,042.25	\$1,046.42	\$1,055.89
<b>MATERIALS AND SUPPLIES TOTAL:</b>		<b>\$10,551.49</b>	<b>\$10,051.40</b>	<b>\$6,738.51</b>	<b>\$6,413.60</b>	<b>\$11,537.00</b>	<b>\$10,863.90</b>	<b>\$10,521.56</b>	<b>\$10,199.35</b>	<b>\$10,480.07</b>	<b>\$10,934.78</b>	<b>\$10,811.93</b>
<b>UTILITIES</b>												
640.660.310100	UTILITIES Total:	\$211.81	\$2,340.73	\$192.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.660.310110	ELECTRIC Total:	\$0.00	\$0.00	\$2,289.13	\$1,193.68	\$2,609.00	\$2,071.22	\$2,081.57	\$2,089.90	\$2,049.25	\$2,223.79	\$2,145.21
<b>UTILITIES TOTAL:</b>		<b>\$211.81</b>	<b>\$2,340.73</b>	<b>\$2,481.59</b>	<b>\$1,193.68</b>	<b>\$2,609.00</b>	<b>\$2,071.22</b>	<b>\$2,081.57</b>	<b>\$2,089.90</b>	<b>\$2,049.25</b>	<b>\$2,223.79</b>	<b>\$2,145.21</b>
<b>CONTRACTUAL SERVICES</b>												
640.660.315100	COMMUNICATIONS Total:	\$153.14	\$262.81	\$18.89	\$1,632.07	\$4,390.00	\$3,071.26	\$3,091.73	\$3,107.19	\$3,119.62	\$3,423.08	\$3,225.83
640.660.315110	PHONE Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$105.00	\$107.10	\$108.17	\$108.89	\$109.44	\$109.87	\$110.87
640.660.315120	CELLULAR PHONE / DATA Total:	\$0.00	\$0.00	\$300.00	\$538.93	\$585.00	\$484.14	\$486.56	\$488.50	\$490.13	\$522.45	\$519.65
640.660.315300	POSTAGE Total:	\$20,531.12	\$14,484.46	\$14,075.00	\$14,034.00	\$22,077.00	\$17,381.12	\$16,738.52	\$17,198.35	\$17,835.52	\$18,611.02	\$17,903.97
640.660.330190	OTHER PROFESSIONAL SVCS Total:	\$0.00	\$0.00	\$0.00	\$3,039.96	\$64.00	\$1,583.02	\$1,593.57	\$1,601.54	\$1,607.95	\$1,315.82	\$1,571.19
640.660.350111	ACCOUNT SERVICE FEES Total:	\$0.00	\$0.00	\$1,699.11	\$239.41	\$0.00	\$659.10	\$662.39	\$665.04	\$454.09	\$497.89	\$599.46
640.660.350112	MERCHANT SERVICE FEES Total:	\$0.00	\$0.00	\$1,479.32	\$20,831.99	\$19,628.00	\$20,634.59	\$20,772.16	\$20,876.02	\$20,959.52	\$20,985.54	\$21,262.48
640.660.350120	ELECTRONIC COLLECTIONS Total:	\$17,801.73	\$20,375.24	\$13,701.89	\$12,893.76	\$17,402.00	\$16,763.62	\$16,551.85	\$15,771.88	\$16,194.15	\$16,867.43	\$16,758.38
640.660.350230	OUTSIDE SVCS LOCK BOX Total:	\$0.00	\$270.20	\$130.00	\$10.00	\$0.00	\$104.60	\$105.02	\$71.32	\$59.35	\$69.42	\$83.58
640.660.350800	IT LICENSES & SUPPORT Total:	\$716.67	\$145.69	\$652.33	\$679.67	\$5,443.65	\$5,552.52	\$5,608.05	\$5,645.44	\$5,673.66	\$5,696.36	\$5,747.91
640.660.400030	EQUIPMENT LEASING Total:	\$0.00	\$0.00	\$623.28	\$693.93	\$80.00	\$475.05	\$477.43	\$479.34	\$449.97	\$400.20	\$465.53
640.660.400031	MAINT/SVC AGREEMENTS Total:	\$0.00	\$0.00	\$202.41	\$46.38	\$8.00	\$87.31	\$87.75	\$88.10	\$64.78	\$68.53	\$80.88
640.660.400033	COPIERS/PRINTERS Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$1,005.00	\$1,025.10	\$1,035.35	\$1,042.25	\$1,047.46	\$1,051.65	\$1,061.17
640.660.400050	EQUIPMENT OUTLAY Total:	\$4,091.00	\$0.00	\$0.00	\$46,335.81	\$20,801.00	\$25,000.00	\$25,500.00	\$25,755.00	\$25,926.70	\$26,056.33	\$26,325.70
640.660.510050	REFUNDS Total:	\$14,072.26	\$7,461.13	\$1,277.92	\$2,233.89	\$5,930.00	\$6,318.94	\$4,737.26	\$4,181.59	\$4,773.94	\$5,292.12	\$5,161.99
640.660.590860	BANK SERVICE CHARGES Total:	\$0.00	\$0.00	(\$217.74)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.00	\$2.00
<b>CONTRACTUAL SERVICES TOTAL:</b>		<b>\$57,365.92</b>	<b>\$42,999.53</b>	<b>\$33,942.41</b>	<b>\$103,378.00</b>	<b>\$97,518.65</b>	<b>\$99,247.47</b>	<b>\$97,555.81</b>	<b>\$97,080.45</b>	<b>\$98,766.29</b>	<b>\$100,968.72</b>	<b>\$100,880.57</b>
<b>COLLECTIONS TOTAL</b>		<b>\$165,689.59</b>	<b>\$159,102.96</b>	<b>\$140,924.42</b>	<b>\$209,036.98</b>	<b>\$234,582.17</b>	<b>\$243,529.30</b>	<b>\$243,058.97</b>	<b>\$243,197.46</b>	<b>\$245,932.53</b>	<b>\$250,802.25</b>	<b>\$252,498.34</b>
<b>FUND 640 SEWER OPERATIONS</b>												
<b>SALARY AND WAGES</b>												
640.661.100101	WAGES-SUPER Total:	\$27,685.96	\$27,211.38	\$28,243.09	\$29,544.75	\$24,004.00	\$25,700.00	\$25,597.56	\$25,853.54	\$26,047.44	\$26,573.62	\$26,798.58
640.661.100102	WAGES-STAFF Total:	\$179,557.92	\$176,796.01	\$182,064.99	\$176,106.15	\$293,456.00	\$405,800.00	\$417,974.00	\$424,243.61	\$428,486.05	\$436,274.92	\$442,558.24
640.661.100105	FOREMAN Total:	\$64,452.49	\$63,347.42	\$65,992.17	\$68,374.00	\$22,291.00	\$35,300.00	\$36,359.00	\$36,904.39	\$37,273.43	\$37,552.98	\$37,778.30
640.661.100117	RETIREE/SEPARATION Total:	\$0.00	\$0.00	\$0.00	\$41,808.74	\$27,164.00	\$28,000.00	\$28,409.46	\$28,693.55	\$28,908.76	\$29,358.03	\$29,707.72
640.661.100120	OVERTIME Total:	\$36,575.61	\$32,717.58	\$23,153.68	\$32,165.01	\$16,989.00	\$24,825.64	\$25,011.83	\$25,161.90	\$25,575.60	\$24,218.18	\$25,707.39

City of North Ridgeville  
Actual and Predicted Expenses

Baseline

		2015	2016	2017	2018	2019	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
640.661.100127	CT CASH OUT Total:	\$0.00	\$0.00	\$2,278.91	\$8,352.03	\$2,389.00	\$4,470.18	\$4,503.71	\$4,530.73	\$4,994.60	\$4,302.97	\$4,697.25
640.661.100128	COMP ABSENCES Total:	\$0.00	\$0.00	\$4,653.85	\$926.00	\$1,364.00	\$2,384.06	\$2,401.94	\$2,416.35	\$1,955.42	\$2,167.48	\$2,333.00
640.661.100130	LONGEVITY Total:	\$12,666.67	\$13,066.67	\$13,433.33	\$15,200.00	\$11,342.00	\$13,535.99	\$13,715.07	\$13,848.63	\$13,934.19	\$13,673.43	\$14,153.70
640.661.100190	OTHER COMP Total:	\$0.00	\$0.00	\$336.42	\$237.66	\$2,996.00	\$1,500.00	\$1,044.44	\$1,259.59	\$1,449.76	\$1,699.46	\$1,432.37
SALARY AND WAGES TOTAL:		\$320,938.65	\$313,139.06	\$320,156.44	\$372,714.34	\$401,995.00	\$541,515.86	\$555,017.00	\$562,912.29	\$568,625.24	\$575,821.07	\$585,166.55
EMPLOYEE FRINGE BENEFITS												
640.661.120125	EMPLOYEE BENEFITS Total:	\$93,731.05	\$108,416.44	\$107,596.15	\$107,421.19	\$145,410.00	\$177,384.00	\$182,373.61	\$185,060.58	\$186,886.63	\$190,152.58	\$192,711.34
640.661.120155	RETIREMENT Total:	\$55,188.62	\$55,408.41	\$56,468.61	\$57,963.63	\$70,140.00	\$93,360.00	\$95,986.11	\$97,400.31	\$98,361.38	\$100,080.30	\$101,427.02
640.661.130100	MEMBERSHIP/EDUCATION Total:	\$189.00	\$1,120.16	\$405.66	\$471.91	\$632.00	\$575.02	\$653.77	\$558.63	\$589.83	\$613.89	\$610.19
640.661.130120	TRAVEL/TRANSPORTATION Total:	\$132.32	\$18.78	\$0.00	\$0.00	\$0.00	\$30.82	\$10.12	\$8.35	\$10.06	\$12.11	\$14.58
640.661.130130	UNIFORMS Total:	\$1,310.16	\$2,316.83	\$1,578.39	\$2,087.22	\$4,021.33	\$2,308.04	\$2,511.61	\$2,551.34	\$2,749.83	\$2,885.00	\$2,653.19
640.661.130150	PHYSICAL EXAMS Total:	\$643.00	\$494.34	\$924.68	\$459.67	\$2,379.00	\$999.74	\$1,072.52	\$1,190.46	\$1,244.68	\$1,404.83	\$1,206.10
EMPLOYEE FRINGE BENEFITS TOTAL:		\$151,194.15	\$167,774.96	\$166,973.49	\$168,403.62	\$222,582.33	\$274,657.63	\$282,607.74	\$286,769.67	\$289,842.41	\$295,148.70	\$298,622.42
MATERIALS AND SUPPLIES												
640.661.210100	OFFICE SUPPLIES Total:	\$5,311.93	\$5,327.49	\$1,296.06	\$1,430.91	\$909.00	\$2,912.18	\$2,422.63	\$1,830.04	\$1,938.97	\$2,042.62	\$2,273.87
640.661.215100	OPERATING SUPPLIES Total:	\$52,771.37	\$46,813.42	\$45,843.95	\$56,105.80	\$53,683.00	\$70,000.00	\$55,579.02	\$57,367.20	\$59,717.94	\$60,454.82	\$61,836.27
640.661.215240	FUEL Total:	\$36,719.79	\$27,842.47	\$35,771.32	\$43,612.17	\$43,844.00	\$38,309.11	\$38,633.33	\$40,834.67	\$41,867.59	\$41,511.69	\$41,035.90
640.661.215247	MOTOR VEHICLE PARTS / SUPPLIES Total:	\$0.00	\$0.00	\$25,184.44	\$5,808.70	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.215270	SMALL TOOLS / EQUIPMENT Total:	\$0.00	\$0.00	\$4,532.30	\$1,113.87	\$4,562.00	\$11,000.00	\$5,408.08	\$5,429.72	\$5,612.79	\$6,530.57	\$6,932.16
640.661.220100	FACILITIES MAINTENANCE Total:	\$3,769.53	\$20,605.98	\$8,447.59	\$22,820.19	\$13.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.220200	EQUIP MAINT / REPAIRS Total:	\$69,531.48	\$92,801.86	\$38,630.25	\$12,516.95	\$7,450.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MATERIALS AND SUPPLIES TOTAL:		\$168,104.10	\$193,391.22	\$159,705.91	\$143,408.59	\$110,461.24	\$122,221.29	\$102,043.06	\$105,461.62	\$109,137.29	\$110,539.70	\$112,078.20
UTILITIES												
640.661.310100	UTILITIES Total:	\$96,375.87	\$71,649.95	\$4,375.89	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.310110	ELECTRIC Total:	\$0.00	\$0.00	\$12,650.83	\$19,401.73	\$26,828.00	\$30,000.00	\$30,600.00	\$30,906.00	\$31,112.04	\$31,267.60	\$31,590.84
640.661.310120	WATER / SEWER Total:	\$0.00	\$0.00	\$76,273.53	\$80,299.24	\$48,373.00	\$50,000.00	\$51,000.00	\$51,510.00	\$51,853.40	\$52,112.67	\$52,651.40
640.661.310130	NATURAL GAS/OIL Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$211.00	\$215.22	\$217.37	\$218.82	\$219.92	\$220.80	\$222.79
UTILITIES TOTAL:		\$96,375.87	\$71,649.95	\$93,300.25	\$99,700.97	\$75,412.00	\$80,215.22	\$81,817.37	\$82,634.82	\$83,185.36	\$83,601.06	\$84,465.03
CONTRACTUAL SERVICES												
640.661.315100	COMMUNICATIONS Total:	\$1,264.17	\$2,207.04	\$86.49	\$0.00	(\$10.54)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.315110	PHONE Total:	\$0.00	\$0.00	\$0.00	\$1,045.16	\$449.00	\$762.02	\$767.10	\$770.94	\$774.02	\$718.71	\$773.73
640.661.315120	CELLULAR PHONE / DATA Total:	\$0.00	\$0.00	\$1,007.22	\$1,163.28	\$1,478.00	\$1,240.49	\$1,246.69	\$1,251.68	\$1,301.55	\$1,329.76	\$1,299.51
640.661.315130	NETWORK / INTERNET / CABLE Total:	\$0.00	\$0.00	\$2,855.64	\$1,961.25	\$3,523.00	\$3,593.46	\$3,629.39	\$3,653.59	\$3,671.86	\$3,709.82	\$3,739.49
640.661.315140	ELECT MEDIA SUBSCRIPTIONS Total:	\$0.00	\$0.00	\$0.00	\$475.92	\$0.00	\$242.72	\$244.34	\$245.56	\$246.54	\$199.75	\$240.50
640.661.315200	ADVERTISING Total:	\$0.00	\$0.00	\$0.00	\$258.38	\$100.00	\$182.77	\$183.99	\$184.91	\$185.65	\$170.82	\$185.26
640.661.320110	M&R EQUIP CITY GARAGE Total:	\$0.00	\$0.00	\$0.00	\$44,801.54	\$21,671.00	\$33,901.00	\$34,127.00	\$34,297.64	\$34,434.83	\$32,320.02	\$34,492.42
640.661.320120	M&R EQUIPMENT Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$5,324.00	\$33,000.00	\$33,660.00	\$33,996.60	\$34,223.24	\$34,639.15	\$34,972.06
640.661.320200	M&R Vehicles Total:	\$0.00	\$0.00	\$1,586.00	\$86.11	\$6,750.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.320210	M&R VEHICLES CITY GARAGE Total:	\$0.00	\$0.00	\$0.00	\$175,546.03	\$144,288.00	\$135,000.00	\$137,700.00	\$139,077.00	\$140,004.18	\$140,704.20	\$142,158.77
640.661.320420	M&R BUILDINGS Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$16,789.00	\$40,000.00	\$40,800.00	\$41,208.00	\$41,482.72	\$41,690.13	\$42,121.12
640.661.325100	EQUIPMENT RENTAL Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$600.00	\$612.00	\$618.12	\$622.24	\$625.35	\$627.85
640.661.330100	PROFESSIONAL SERVICE Total:	\$164,059.32	\$39,053.45	\$1,098.00	\$2,550.00	\$1,638.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.330130	ENGINEERING SERVICES Total:	\$0.00	\$0.00	\$5,252.00	\$7,640.00	\$82,670.00	\$90,000.00	\$88,061.70	\$129,822.93	\$90,811.47	\$91,416.88	\$91,873.96
640.661.330190	OTHER PROFESSIONAL SVCS Total:	\$0.00	\$0.00	\$3,175.76	\$16,564.20	\$18,334.00	\$31,000.00	\$25,160.34	\$25,328.08	\$25,454.72	\$27,270.50	\$26,319.48
640.661.340100	INSURANCE Total:	\$13,884.10	\$7,000.00	\$6,098.90	\$12,191.30	\$11,744.00	\$12,207.00	\$12,288.38	\$12,349.82	\$12,399.22	\$12,441.64	\$12,583.96
640.661.350105	NPDES PERMIT Total:	\$0.00	\$0.00	\$0.00	\$200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.350133	DUMPING FEES Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$850.00	\$867.00	\$875.67	\$881.51	\$885.92	\$889.46	\$897.51
640.661.350230	OUTSIDE SERVICES Total:	\$45,631.26	\$31,706.53	\$7,346.15	\$198.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.350800	IT LICENSES & SUPPORT Total:	\$0.00	\$0.00	\$0.00	\$5,116.08	\$11,435.00	\$11,663.70	\$11,780.34	\$11,858.87	\$11,918.17	\$12,041.37	\$12,137.68
640.661.350980	FR CK SERV Total:	\$2,357,942.73	\$2,530,677.85	\$2,656,252.62	\$2,562,649.64	\$2,910,507.00	\$3,087,465.83	\$3,181,324.79	\$3,245,799.64	\$3,295,135.79	\$3,335,204.64	\$3,425,308.49
CONTRACTUAL SERVICES TOTAL:		\$2,582,781.58	\$2,610,644.87	\$2,684,758.78	\$2,832,447.69	\$3,237,539.46	\$3,481,725.99	\$3,572,461.74	\$3,681,344.89	\$3,693,552.11	\$3,735,372.19	\$3,829,731.79
CAPITAL OUTLAY												
640.661.400030	EQUIPMENT LEASING Total:	\$0.00	\$0.00	\$547.20	\$630.53	\$5,054.00	\$33,200.00	\$33,864.00	\$34,202.64	\$34,430.66	\$34,849.08	\$35,184.01

City of North Ridgeville  
Actual and Predicted Expenses

Baseline

		2015	2016	2017	2018	2019	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
640.661.400031	MAINT/SVC AGREEMENTS Total:	\$0.00	\$0.00	\$177.24	\$186.72	\$6.10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.400033	COPIERS/PRINTERS Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$953.88	\$972.96	\$982.69	\$989.24	\$994.18	\$998.16	\$1,007.19
640.661.400050	EQUIPMENT OUTLAY Total:	\$27,639.98	\$75,372.54	\$480,616.67	\$225,423.39	\$162,876.00	\$144,300.00	\$150,000.00	\$155,439.84	\$156,217.04	\$156,841.91	\$155,610.95
640.661.415704	CTR RDG SS CONSTRUCTION Total:	\$0.00	\$112,102.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.415708	SS SUBBASIN 5-8 REPAIRS Total:	\$0.00	\$29,672.68	\$50,026.32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.416305	NEW SEWER VAC Total:	\$0.00	\$436,191.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.416705	SS SUBBASIN 9,1015&16 TEST/ENG Total:	\$0.00	\$119,920.40	\$19,061.60	\$62,037.00	\$6,448.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.417018	LUANNE RD LIFT STATION Total:	\$0.00	\$0.00	\$1,961.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.590899	OTHER EXPENDITURES Total:	\$0.00	\$0.00	\$0.00	\$3,053.40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.605106	ADMINISTRATIVE COSTS	\$72,000.00	\$72,000.00	\$0.00	\$416,416.00	\$215,697.00	\$250,000.00	\$255,000.00	\$257,550.00	\$259,267.00	\$262,417.78	\$264,939.83
CAPITAL OUTLAY TOTAL:		\$99,639.98	\$845,258.82	\$552,390.53	\$707,747.04	\$391,034.98	\$428,472.96	\$439,846.69	\$448,181.72	\$450,908.88	\$455,106.93	\$456,741.98
DEBT SERVICE												
640.661.610201	BOND PRINCIPAL Total:	\$0.00	\$700,000.00	\$84,000.00								
640.661.610202	BOND INTEREST Total:	\$0.00	\$174,356.25	\$25,944.00								
DEBT SERVICE TOTAL:		\$0.00	\$874,356.25	\$109,944.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OPERATIONS TOTAL		\$3,419,034.33	\$5,076,215.13	\$4,087,229.40	\$4,324,422.25	\$4,439,025.01	\$4,928,808.94	\$5,033,793.59	\$5,167,305.01	\$5,195,251.29	\$5,255,589.66	\$5,366,805.97
640 SUBTOTAL:		\$3,584,723.92	\$5,235,318.09	\$4,228,153.82	\$4,533,459.23	\$4,673,607.18	\$5,172,338.25	\$5,276,852.56	\$5,410,502.47	\$5,441,183.82	\$5,506,391.91	\$5,619,304.31
640.900910	Transfers Out				\$4,940,000.00							
	End-of-year Transfer					\$2,240,000.00	\$922,019.90	\$966,059.29	\$1,561,725.87	\$962,188.92	\$962,217.94	\$962,217.94
640 TOTAL:		\$3,584,723.92	\$5,235,318.09	\$4,228,153.82	\$9,473,459.23	\$6,913,607.18	\$6,094,358.15	\$6,242,911.86	\$6,972,228.34	\$6,403,372.73	\$6,468,609.84	\$6,581,522.25
FUND 645												
	OPWC Principal: (2020)				\$8,451.00	\$4,225.42	\$4,226.00					
	CIE Dyke/Case & Other Principal: (2018)				\$155,000.00							
	DIE Dyke/Case & Other Interest: (2018)				\$7,363.00							
	Various Purpose Victory Lane Principal: (2034)				\$2,314.00	\$2,314.00	\$2,468.00	\$2,468.00	\$2,622.00	\$2,622.00	\$2,622.00	\$2,622.00
	Various Purpose Victory Lane Interest: (2034)				\$1,772.00	\$1,772.00	\$1,662.00	\$1,588.00	\$1,527.00	\$1,448.00	\$1,448.00	\$1,448.00
	Sani Swr Imp-E/W Ctr Rdg Principal: (2026)				\$370,000.00	\$375,000.00	\$345,000.00	\$385,000.00	\$405,000.00	\$410,000.00	\$410,000.00	\$410,000.00
	Sani Swr Imp-E/W Ctr Rdg Interest: (2026)				\$103,325.00	\$95,925.00	\$91,950.00	\$86,175.00	\$70,775.00	\$64,700.00	\$64,700.00	\$64,700.00
	Dyke/Case&Other Principal: (2028)				\$20,000.00	\$185,000.00	\$185,000.00	\$190,000.00	\$195,000.00	\$200,000.00	\$200,000.00	\$200,000.00
	Dyke/Case&Other Interest: (2028)				\$58,874.00	\$58,474.00	\$56,513.00	\$53,738.00	\$46,138.00	\$43,213.00	\$43,213.00	\$43,213.00
	Sani Swr Imp-Westerlies Principal: (2026)				\$86,000.00	\$90,000.00	\$90,000.00	\$90,000.00	\$96,000.00	\$94,000.00	\$94,000.00	\$94,000.00
	Sani Swr Imp-Westerlies Interest: (2026)				\$24,264.00	\$22,544.00	\$21,590.00	\$20,240.00	\$16,640.00	\$15,200.00	\$15,200.00	\$15,200.00
	Ctr Rdg Rd SS Proj/SS Subbasin Eng/Repairs Principal: (2036)				\$80,000.00	\$85,000.00	\$85,000.00	\$85,000.00	\$90,000.00	\$90,000.00	\$90,000.00	\$90,000.00
	Ctr Rdg Rd SS Proj/SS Subbasin Eng/Repairs Interest: (2036)				\$64,214.00	\$62,614.00	\$61,713.00	\$60,438.00	\$57,038.00	\$55,688.00	\$55,688.00	\$55,688.00
	Interest		\$122,363.11									
645 TOTAL		\$0.00	\$122,363.11	\$0.00	\$981,577.00	\$982,868.42	\$945,122.00	\$974,647.00	\$980,740.00	\$976,871.00	\$976,871.00	\$976,871.00
FUND 660												
660.675.510050	REFUNDS Total:			\$3,458.25								
660.675.610201	BOND PRINCIPAL Total:	\$532,160.00	\$7,645,888.75	\$617,313.75								
660.675.610202	BOND INTEREST Total:	\$415,547.00	\$39,839.99	\$252,056.63								
660.675.610205	BOND COSTS Total:		\$48,787.42									
660.675.610211	BAN'S PRINCIPAL Total:		\$1,710,000.00									
660.675.610212	BAN'S INTEREST Total:	\$1,710,000.00	\$17,052.50									
660.675.610311	NOTE PRINCIPAL Total:		\$400,000.00									
660.675.610312	NOTE INTEREST Total:		\$2,310.00									
660.678.610401	OPWC PRINCIPAL Total:	\$8,450.84	\$8,450.84	\$8,450.84								
660.675.330100	PROFESSIONAL SERVICE Total:											
660.675.330300	AUDITOR/TREASURER Fees Total:	\$441.55	\$674.89	\$614.82	\$682.21	\$494.43	\$593.21	\$624.15	\$613.80	\$613.59	\$599.59	\$621.05
660.675.400050	EQUIPMENT OUTLAY Total:	\$441.55	\$674.89	\$614.82	\$0.00	\$49,585.00						
660.675.415704	CTR RDG SS CONSTRUCTION Total:	\$4,930.00	\$1,206,517.80	\$58,979.21								
660.675.415706	SS SUB-BASIN 11, 12, &13 REPAIRS Total:	\$256,496.00	\$236,165.80									
660.675.415708	SS SUB-BASIN 5-8 ENGINEERING Total:		\$18,487.00									
660.675.418015	LUANNE LIFT STATION EASEMENT Total:				\$1,000.00	\$12,350.00						

City of North Ridgeville  
Actual and Predicted Expenses

Baseline

	2015	2016	2017	2018	2019	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
660.675.418014 Luanne Lift Station Construction					\$392,664.00	\$20,000.00					
660.675.418023 WESTFIELD DESIGN Total:				\$53,852.17	\$14,777.00						
660.675.418024 WESTFIELD RTWAY Total:				\$8,202.17	\$30,423.00						
660.675.417014 WESTFIELD WW ENGINEERING Total:			\$49,087.11	\$12,282.89	\$4,555.00						
660.675.418025 WESTFIELD WETLANDS					\$18,200.00						
660.675.418026 WESTFIELD CONSTRUCTION					\$1,718,452.00	\$1,223,180.00					
660.675.418027 WESTFIELD CONSTR ADMINISTRATION					\$96,368.00						
660.675.419028 PURCHASE OF PROPERTY					\$37,500.00						
660.675.419029 MAIN BROAD PLEASANT SEWER						\$640,000.00					
Broad, Main, Pleasant Sewer Reconstruction - Inspection						\$60,000.00					
Sugar Ridge Sewer Extension Engineering							\$300,000.00				
Sugar Ridge Sewer Extension Construction								\$2,900,000.00			
Sugar Ridge Sewer Extension Inspection								\$250,000.00			
Center Ridge Sewer Extension Engineering						\$300,000.00					
Center Ridge Sewer Inspection							\$280,000.00				
Center Ridge Sewer Extension Construction							\$2,800,000.00				
Becker Lift Station Replacement - Engineering								\$40,000.00			
Becker Lift Station Replacement - Construction										\$440,000.00	\$440,000.00
Placeholder									\$1,000,000.00	\$560,000.00	\$560,000.00
660 subtotal	\$2,928,466.94	\$11,334,849.88	\$990,575.43	\$76,019.44	\$2,375,368.43	\$2,243,773.21	\$3,380,624.15	\$3,190,613.80	\$1,000,613.59	\$1,000,599.59	\$1,000,621.05
CONTINGENCY (10%):						\$224,377.32	\$338,062.42	\$319,061.38	\$100,061.36	\$100,059.96	\$100,062.10
660 TOTAL	\$2,928,466.94	\$11,334,849.88	\$990,575.43	\$76,019.44	\$2,375,368.43	\$2,468,150.53	\$3,718,686.57	\$3,509,675.18	\$1,100,674.95	\$1,100,659.55	\$1,100,683.15

Items added from CIP 5-year schedule  
Predicted Expenses

# Appendix B 10% Rate Increase in 2020, 4% Rate Increase from 2021 to 2025: Scenario 2

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# Local Sewer Rate Study Evaluation: Actual, Budget, Projected and Updated Projections

Scenario 2 - 10% Rate Increase in 2020, 4% Rate Increase from 2021 to 2025

Item	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
<b>REVENUES</b>											
640 Total	\$5,591,481	\$5,798,253	\$5,946,228	\$5,942,865	\$6,064,666	\$6,258,508	\$6,806,106	\$7,152,646	\$7,517,553	\$7,908,871	\$8,322,670
645 Total	\$0	\$787,177	\$7,054	\$1,322,722	\$952,637	\$936,988	\$980,740	\$976,871	\$976,871	\$976,871	\$976,871
660 Total	\$2,911,215	\$10,037,727	\$932,782	\$5,109,771	\$2,354,526	\$1,212,389	\$1,667,709	\$1,935,008	\$1,428,396	\$2,499,010	\$2,883,453
Total Income	\$8,502,697	\$16,623,157	\$6,886,065	\$12,375,358	\$9,371,829	\$8,407,885	\$9,454,556	\$10,064,525	\$9,922,820	\$11,384,752	\$12,182,994
<b>EXPENSES</b>											
Collections Cost (640)	\$165,690	\$159,103	\$140,924	\$209,037	\$234,582	\$243,529	\$243,059	\$243,197	\$245,933	\$250,801	\$252,496
Operating Cost (640)	\$3,419,034	\$5,076,215	\$4,087,229	\$4,324,422	\$4,439,025	\$4,928,809	\$5,033,794	\$5,167,305	\$5,195,251	\$5,255,591	\$5,366,808
Total O&M Expenses (640)	\$3,584,724	\$5,235,318	\$4,228,154	\$9,473,459	\$6,913,607	\$6,197,217	\$6,764,335	\$7,143,328	\$6,655,336	\$7,853,233	\$8,322,670
Total Debt Service (645)	\$0	\$122,363	\$0	\$981,577	\$982,868	\$945,122	\$974,647	\$980,740	\$976,871	\$976,871	\$976,871
Total Sanitary Sewer Improvement (660)	\$2,928,467	\$11,334,850	\$990,575	\$76,019	\$2,375,368	\$2,468,151	\$3,718,687	\$3,509,675	\$1,100,675	\$1,650,660	\$1,650,683
TOTAL EXPENSES	\$6,513,191	\$16,692,531	\$5,218,729	\$10,531,056	\$10,271,844	\$9,610,489	\$11,457,668	\$11,633,743	\$8,732,882	\$10,480,763	\$10,950,224
NET REVENUES	\$1,989,506	(\$69,374)	\$1,667,335	\$1,844,302	(\$900,015)	(\$1,202,605)	(\$2,003,113)	(\$1,569,218)	\$1,189,939	\$903,989	\$1,232,770
<b>END-OF-YEAR BALANCES</b>											
Fund 640 End-of-Year Balance	\$3,649,570	\$4,212,505	\$5,930,579	\$2,399,985	\$1,551,044	\$1,612,335	\$1,654,107	\$1,663,425	\$2,525,642	\$2,581,280	\$2,581,280
Months of O&M Reserves	12.22	9.66	16.83	6.16	3.92	4.00	4.00	4.00	6.00	6.00	6.00
Fund 645 End-of-Year Balance	\$0	\$664,814	\$671,868	\$1,013,012	\$982,781	\$974,647	\$980,740	\$976,871	\$976,871	\$976,871	\$976,871
Fund 660 End-of-Year Balance	\$2,025,025	\$727,902	\$670,108	\$5,703,860	\$5,683,018	\$4,427,256	\$2,376,279	\$801,611	\$1,129,333	\$1,977,684	\$3,210,454
Total End-of-Year Balance	\$5,674,594	\$5,605,220	\$7,272,556	\$9,116,858	\$8,216,843	\$7,014,238	\$5,011,126	\$3,441,907	\$4,631,846	\$5,535,835	\$6,768,605

City of North Ridgeville  
Actual and Predicted Revenue

Scenario 2 - 10% Rate Increase in 2020, 4% Rate Increase from 2021 to 2025

	2015	2016	2017	2018	2019	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
<b>FUND 640</b>											
Number of Accounts	11,451	11,642	11,901	12,130	12,426	12,626	12,826	13,026	13,226	13,426	13,626
Fixed Fee Monthly Charge	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00
Calculated Fixed Fee Annual Revenue	\$1,236,708	\$1,257,336	\$1,285,308	\$1,310,040	\$1,342,008	\$1,363,608	\$1,385,208	\$1,406,808	\$1,428,408	\$1,450,008	\$1,471,608
Calculated Consumption User Charges	\$4,346,757	\$4,519,550	\$4,595,339	\$4,575,086	\$4,654,591	\$4,629,029.94	\$5,184,513.53	\$5,495,584.34	\$5,825,319.40	\$6,174,838.57	\$6,545,328.88
Rate Increase %					0.00	10.00	4.00	4.00	4.00	4.00	4.00
Rate Increase Revenue					\$0	\$231,451*	\$207,381	\$219,823	\$233,013	\$246,994	\$261,813
Calculated Consumption User Charges					\$4,654,591	\$4,860,481	\$5,391,894	\$5,715,408	\$6,058,332	\$6,421,832	\$6,807,142
640.000.500541 USER CHARGES Total:	\$5,583,465	\$5,776,886	\$5,880,647	\$5,885,126	\$5,996,599	\$6,224,089	\$6,777,102	\$7,122,216	\$7,486,740	\$7,871,840	\$8,278,750
640.000.700110 INTEREST INCOME Total:	\$5,648	\$19,288	\$59,647	\$50,250	\$62,479	\$29,633	\$23,725	\$24,498	\$24,881	\$31,418	\$38,302
640.000.800892 OTHER REVENUE Total:	\$2,368	\$2,079	\$5,935	\$7,490	\$5,588	\$4,786	\$5,279	\$5,932	\$5,931	\$5,613	\$5,618
640 TOTAL:	\$5,591,481	\$5,798,253	\$5,946,228	\$5,942,865	\$6,064,666	\$6,258,508	\$6,806,106	\$7,152,646	\$7,517,553	\$7,908,871	\$8,322,670
<b>FUND 645</b>											
645.000.700110 INTEREST INCOME Total:	\$0	\$2,090	\$7,054	\$22,722	\$12,637	\$14,968	\$14,681	\$14,665	\$14,682	\$14,653	\$14,653
645.000.900124 BOND ISSUE PREM (GAAP)		\$785,087									
TRANSFERS IN Total:				\$1,300,000	\$940,000	\$922,020	\$966,059	\$962,206	\$962,189	\$962,218	\$962,218
645 TOTAL:	\$0	\$787,177	\$7,054	\$1,322,722	\$952,637	\$936,988	\$980,740	\$976,871	\$976,871	\$976,871	\$976,871
<b>FUND 660</b>											
660.000.300330 SPECIAL ASSESSMENTS	\$12,727	\$14,311	\$14,269	\$19,913	\$14,341	\$15,112	\$15,589	\$15,845	\$16,160	\$15,409	\$15,623
660.000.570542 SEWER TAPS	\$785,339	\$846,837	\$907,652	\$1,389,823	\$992,381	\$1,009,016	\$1,054,870	\$1,097,517	\$1,136,440	\$1,084,496	\$1,103,380
660.000.700110 INTEREST INCOME	\$3,150	\$7,792	\$10,861	\$60,035	\$47,805	\$85,402	\$75,827	\$51,027	\$23,834	\$14,482	\$23,303
660.000.700225 REIMB INT/WESTERLIES											
660.000.700226 REIMB - VICTORY LN (POP)											
660.000.800892 OTHER REVENUE											
660.000.900111 BOND PROCEEDS		\$9,120,000									
660.000.900113 BOND ISSUE PREM (GAAP)		\$48,787									
660.000.900121 BAN'S PROCEEDS	\$1,710,000										
660.000.900122 BANS PREMIUMS											
660.000.900131 NOTE PROCEEDS	\$400,000										
660.000.950531 TRANSFERS-IN Total:				\$3,640,000	\$1,300,000	\$102,858.63	\$521,422.81	\$770,619.52	\$251,962.86	\$1,384,623.07	\$1,741,147.87
660 TOTAL:	\$2,911,215	\$10,037,727	\$932,782	\$5,109,771	\$2,354,526	\$1,212,389	\$1,667,709	\$1,935,008	\$1,428,396	\$2,499,010	\$2,883,453

Predicted Revenue

Future Increased Revenue

\* Rate Increase Revenue for 2020 assumes the rate increase will be in effect for only 6 months



City of North Ridgeville  
Actual and Predicted Expenses

Scenario 2 - 10% Rate Increase in 2020, 4% Rate Increase from 2021 to 2025

		2015	2016	2017	2018	2019	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
<b>FUND 640 COLLECTIONS</b>												
<b>SALARY AND WAGES</b>												
640.660.100101	WAGES-SUPER Total:	\$19,323.12	\$18,992.25	\$19,807.58	\$20,694.92	\$26,431.00	\$27,223.93	\$27,632.29	\$27,908.61	\$28,117.93	\$28,552.31	\$28,894.37
640.660.100102	WAGES-STAFF Total:	\$38,411.52	\$37,179.81	\$39,017.38	\$39,433.85	\$52,727.00	\$54,308.81	\$55,123.44	\$55,674.68	\$56,092.24	\$56,958.79	\$57,641.15
670.690.100117	RETIREE/SEPARATION Total:	\$0.00	\$5,989.66	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.660.100120	OVERTIME Total:	\$6,862.53	\$6,497.61	\$5,044.36	\$4,037.58	\$1,901.00	\$5,014.67	\$4,634.02	\$4,250.12	\$4,086.50	\$4,096.58	\$4,548.87
640.660.100127	CT CASH OUT Total:	\$0.00	\$0.00	\$61.01	\$51.22	\$57.52	\$58.28	\$58.72	\$59.07	\$58.67	\$60.20	\$60.76
640.660.100128	COMP ABSENCES Total:	\$0.00	\$0.00	\$750.80	\$512.26	\$129.00	\$477.94	\$481.53	\$484.41	\$429.54	\$412.50	\$470.90
640.660.100130	LONGEVITY Total:	\$3,033.32	\$3,266.68	\$3,233.34	\$3,300.00	\$4,141.00	\$3,496.71	\$3,592.17	\$3,659.22	\$3,746.96	\$3,839.03	\$3,776.82
<b>SALARY AND WAGES TOTAL:</b>		<b>\$67,630.49</b>	<b>\$71,926.01</b>	<b>\$67,914.47</b>	<b>\$68,029.83</b>	<b>\$85,386.52</b>	<b>\$90,580.35</b>	<b>\$91,522.16</b>	<b>\$92,036.11</b>	<b>\$92,531.83</b>	<b>\$93,919.41</b>	<b>\$95,392.87</b>
<b>EMPLOYEE FRINGE BENEFITS</b>												
640.660.120125	EMPLOYEE BENEFITS Total:	\$18,212.03	\$19,964.14	\$17,800.01	\$17,826.78	\$21,800.00	\$24,459.82	\$24,826.72	\$25,074.99	\$25,263.05	\$25,653.33	\$25,960.66
640.660.120155	RETIREMENT Total:	\$11,717.85	\$11,821.15	\$12,047.43	\$12,195.09	\$15,731.00	\$16,306.55	\$16,551.15	\$16,716.66	\$16,842.03	\$17,102.22	\$17,307.10
<b>EMPLOYEE FRINGE BENEFITS TOTAL:</b>		<b>\$29,929.88</b>	<b>\$31,785.29</b>	<b>\$29,847.44</b>	<b>\$30,021.87</b>	<b>\$37,531.00</b>	<b>\$40,766.37</b>	<b>\$41,377.87</b>	<b>\$41,791.64</b>	<b>\$42,105.08</b>	<b>\$42,755.55</b>	<b>\$43,267.76</b>
<b>MATERIALS AND SUPPLIES</b>												
640.660.210100	OFFICE SUPPLIES Total:	\$1,566.86	\$1,385.33	\$301.48	\$2,585.13	\$3,164.00	\$1,836.57	\$1,891.59	\$1,994.87	\$2,340.32	\$2,290.38	\$2,112.16
640.660.215100	OPERATING SUPPLIES Total:	\$0.00	\$0.00	\$0.00	\$293.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.660.215110	FORMS PRINT Total:	\$8,952.69	\$8,637.95	\$6,412.48	\$3,535.47	\$6,288.00	\$6,900.62	\$6,482.00	\$6,042.19	\$5,966.65	\$6,462.61	\$6,498.23
640.660.215270	SMALL TOOLS / EQUIPMENT Total:	\$0.00	\$0.00	\$24.55	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.660.215290	OTHER OPERATING SUPPLIES Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$1,085.00	\$1,106.70	\$1,117.77	\$1,125.22	\$1,130.84	\$1,135.37	\$1,145.64
640.660.220200	EQUIP MAINT / REPAIRS Total:	\$31.94	\$28.12	\$0.00	\$0.00	\$1,000.00	\$1,020.00	\$1,030.20	\$1,037.07	\$1,042.25	\$1,046.42	\$1,055.89
<b>MATERIALS AND SUPPLIES TOTAL:</b>		<b>\$10,551.49</b>	<b>\$10,051.40</b>	<b>\$6,738.51</b>	<b>\$6,413.60</b>	<b>\$11,537.00</b>	<b>\$10,863.90</b>	<b>\$10,521.56</b>	<b>\$10,199.35</b>	<b>\$10,480.07</b>	<b>\$10,934.78</b>	<b>\$10,811.93</b>
<b>UTILITIES</b>												
640.660.310100	UTILITIES Total:	\$211.81	\$2,340.73	\$192.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.660.310110	ELECTRIC Total:	\$0.00	\$0.00	\$2,289.13	\$1,193.68	\$2,609.00	\$2,071.22	\$2,081.57	\$2,089.90	\$2,049.25	\$2,223.79	\$2,145.21
<b>UTILITIES TOTAL:</b>		<b>\$211.81</b>	<b>\$2,340.73</b>	<b>\$2,481.59</b>	<b>\$1,193.68</b>	<b>\$2,609.00</b>	<b>\$2,071.22</b>	<b>\$2,081.57</b>	<b>\$2,089.90</b>	<b>\$2,049.25</b>	<b>\$2,223.79</b>	<b>\$2,145.21</b>
<b>CONTRACTUAL SERVICES</b>												
640.660.315100	COMMUNICATIONS Total:	\$153.14	\$262.81	\$18.89	\$1,632.07	\$4,390.00	\$3,071.26	\$3,091.73	\$3,107.19	\$3,119.62	\$3,423.08	\$3,225.83
640.660.315110	PHONE Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$105.00	\$107.10	\$108.17	\$108.89	\$109.44	\$109.87	\$110.87
640.660.315120	CELLULAR PHONE / DATA Total:	\$0.00	\$0.00	\$300.00	\$538.93	\$585.00	\$484.14	\$486.56	\$488.50	\$490.13	\$522.45	\$519.65
640.660.315300	POSTAGE Total:	\$20,531.12	\$14,484.46	\$14,075.00	\$14,034.00	\$22,077.00	\$17,381.12	\$16,738.52	\$17,198.35	\$17,835.52	\$18,611.02	\$17,903.97
640.660.320830	SRV PLANS OFFICE EQUIP Total:	\$0.00	\$0.00	\$0.00	\$168.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.660.330190	OTHER PROFESSIONAL SVCS Total:	\$0.00	\$0.00	\$0.00	\$3,039.96	\$64.00	\$1,583.02	\$1,593.57	\$1,601.54	\$1,607.95	\$1,315.82	\$1,571.19
640.660.350111	ACCOUNT SERVICE FEES Total:	\$0.00	\$0.00	\$1,699.11	\$239.41	\$0.00	\$659.10	\$662.39	\$665.04	\$454.09	\$497.89	\$599.46
640.660.350112	MERCHANT SERVICE FEES Total:	\$0.00	\$0.00	\$1,479.32	\$20,831.99	\$19,628.00	\$20,634.59	\$20,772.16	\$20,876.02	\$20,959.52	\$20,985.54	\$21,262.48
640.660.350120	ELECTRONIC COLLECTIONS Total:	\$17,801.73	\$20,375.24	\$13,701.89	\$12,893.76	\$17,402.00	\$16,763.62	\$16,551.85	\$15,771.88	\$16,194.15	\$16,867.43	\$16,758.38
640.660.350230	OUTSIDE SVCS LOCK BOX Total:	\$0.00	\$270.20	\$130.00	\$10.00	\$0.00	\$104.60	\$105.02	\$71.32	\$59.35	\$69.42	\$83.58
640.660.350800	IT LICENSES & SUPPORT Total:	\$716.67	\$145.69	\$652.33	\$679.67	\$5,443.65	\$5,552.52	\$5,608.05	\$5,645.44	\$5,673.66	\$5,696.36	\$5,747.91
640.660.400030	EQUIPMENT LEASING Total:	\$0.00	\$0.00	\$623.28	\$693.93	\$80.00	\$475.05	\$477.43	\$479.34	\$449.97	\$400.20	\$465.53
640.660.400031	MAINT/SVC AGREEMENTS Total:	\$0.00	\$0.00	\$202.41	\$46.38	\$8.00	\$87.31	\$87.75	\$88.10	\$64.78	\$68.53	\$80.88
640.660.400033	COPIERS/PRINTERS Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$1,005.00	\$1,025.10	\$1,035.35	\$1,042.25	\$1,047.46	\$1,051.65	\$1,061.17
640.660.400050	EQUIPMENT OUTLAY Total:	\$4,091.00	\$0.00	\$0.00	\$46,335.81	\$20,801.00	\$25,000.00	\$25,500.00	\$25,755.00	\$25,926.70	\$26,056.33	\$26,325.70
640.660.510050	REFUNDS Total:	\$14,072.26	\$7,461.13	\$1,277.92	\$2,233.89	\$5,930.00	\$6,318.94	\$4,737.26	\$4,181.59	\$4,773.94	\$5,292.12	\$5,161.99
640.660.590860	BANK SERVICE CHARGES Total:	\$0.00	\$0.00	(\$217.74)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>CONTRACTUAL SERVICES TOTAL:</b>		<b>\$57,365.92</b>	<b>\$42,999.53</b>	<b>\$33,942.41</b>	<b>\$103,378.00</b>	<b>\$97,518.65</b>	<b>\$99,247.47</b>	<b>\$97,555.81</b>	<b>\$97,080.45</b>	<b>\$98,766.29</b>	<b>\$100,967.72</b>	<b>\$100,878.57</b>
<b>COLLECTIONS TOTAL</b>		<b>\$165,689.59</b>	<b>\$159,102.96</b>	<b>\$140,924.42</b>	<b>\$209,036.98</b>	<b>\$234,582.17</b>	<b>\$243,529.30</b>	<b>\$243,058.97</b>	<b>\$243,197.46</b>	<b>\$245,932.53</b>	<b>\$250,801.25</b>	<b>\$252,496.34</b>
<b>FUND 640 SEWER OPERATIONS</b>												
<b>SALARY AND WAGES</b>												
640.661.100101	WAGES-SUPER Total:	\$27,685.96	\$27,211.38	\$28,243.09	\$29,544.75	\$24,004.00	\$25,700.00	\$25,597.56	\$25,853.54	\$26,047.44	\$26,573.62	\$26,798.58
640.661.100102	WAGES-STAFF Total:	\$179,557.92	\$176,796.01	\$182,064.99	\$176,106.15	\$293,456.00	\$405,800.00	\$417,974.00	\$424,243.61	\$428,486.05	\$436,274.92	\$442,558.24
640.661.100105	FOREMAN Total:	\$64,452.49	\$63,347.42	\$65,992.17	\$68,374.00	\$22,291.00	\$35,300.00	\$36,359.00	\$36,904.39	\$37,273.43	\$37,552.98	\$37,778.30
640.661.100117	RETIREE/SEPARATION Total:	\$0.00	\$0.00	\$0.00	\$41,808.74	\$27,164.00	\$28,000.00	\$28,409.46	\$28,693.55	\$28,908.76	\$29,358.03	\$29,707.72
640.661.100120	OVERTIME Total:	\$36,575.61	\$32,717.58	\$23,153.68	\$32,165.01	\$16,989.00	\$24,825.64	\$25,011.83	\$25,161.90	\$25,575.60	\$24,218.18	\$25,707.39

City of North Ridgeville  
Actual and Predicted Expenses

Scenario 2 - 10% Rate Increase in 2020, 4% Rate Increase from 2021 to 2025

	2015	2016	2017	2018	2019	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
640.661.100127 CT CASH OUT Total:	\$0.00	\$0.00	\$2,278.91	\$8,352.03	\$2,389.00	\$4,470.18	\$4,503.71	\$4,530.73	\$4,994.60	\$4,302.97	\$4,697.25
640.661.100128 COMP ABSENCES Total:	\$0.00	\$0.00	\$4,653.85	\$926.00	\$1,364.00	\$2,384.06	\$2,401.94	\$2,416.35	\$1,955.42	\$2,167.48	\$2,333.00
640.661.100130 LONGEVITY Total:	\$12,666.67	\$13,066.67	\$13,433.33	\$15,200.00	\$11,342.00	\$13,535.99	\$13,715.07	\$13,848.63	\$13,934.19	\$13,673.43	\$14,153.70
640.661.100190 OTHER COMP Total:	\$0.00	\$0.00	\$336.42	\$237.66	\$2,996.00	\$1,500.00	\$1,044.44	\$1,259.59	\$1,449.76	\$1,699.46	\$1,432.37
<b>SALARY AND WAGES TOTAL:</b>	<b>\$320,938.65</b>	<b>\$313,139.06</b>	<b>\$320,156.44</b>	<b>\$372,714.34</b>	<b>\$401,995.00</b>	<b>\$541,515.86</b>	<b>\$555,017.00</b>	<b>\$562,912.29</b>	<b>\$568,625.24</b>	<b>\$575,821.07</b>	<b>\$585,166.55</b>
<b>EMPLOYEE FRINGE BENEFITS</b>											
640.661.120125 EMPLOYEE BENEFITS Total:	\$93,731.05	\$108,416.44	\$107,596.15	\$107,421.19	\$145,410.00	\$177,384.00	\$182,373.61	\$185,060.58	\$186,886.63	\$190,152.58	\$192,711.34
640.661.120155 RETIREMENT Total:	\$55,188.62	\$55,408.41	\$56,468.61	\$57,963.63	\$70,140.00	\$93,360.00	\$95,986.11	\$97,400.31	\$98,361.38	\$100,080.30	\$101,427.02
640.661.130100 MEMBERSHIP/EDUCATION Total:	\$189.00	\$1,120.16	\$405.66	\$471.91	\$632.00	\$575.02	\$653.77	\$558.63	\$589.83	\$613.89	\$610.19
640.661.130120 TRAVEL/TRANSPORTATION Total:	\$132.32	\$18.78	\$0.00	\$0.00	\$0.00	\$30.82	\$10.12	\$8.35	\$10.06	\$12.11	\$14.58
640.661.130130 UNIFORMS Total:	\$1,310.16	\$2,316.83	\$1,578.39	\$2,087.22	\$4,021.33	\$2,308.04	\$2,511.61	\$2,551.34	\$2,749.83	\$2,885.00	\$2,653.19
640.661.130150 PHYSICAL EXAMS Total:	\$643.00	\$494.34	\$924.68	\$459.67	\$2,379.00	\$999.74	\$1,072.52	\$1,190.46	\$1,244.68	\$1,404.83	\$1,206.10
<b>EMPLOYEE FRINGE BENEFITS TOTAL:</b>	<b>\$151,194.15</b>	<b>\$167,774.96</b>	<b>\$166,973.49</b>	<b>\$168,403.62</b>	<b>\$222,582.33</b>	<b>\$274,657.63</b>	<b>\$282,607.74</b>	<b>\$286,769.67</b>	<b>\$289,842.41</b>	<b>\$295,148.70</b>	<b>\$298,622.42</b>
<b>MATERIALS AND SUPPLIES</b>											
640.661.210100 OFFICE SUPPLIES Total:	\$5,311.93	\$5,327.49	\$1,296.06	\$1,430.91	\$909.00	\$2,912.18	\$2,422.63	\$1,830.04	\$1,938.97	\$2,042.62	\$2,273.87
640.661.215100 OPERATING SUPPLIES Total:	\$52,771.37	\$46,813.42	\$45,843.95	\$56,105.80	\$53,683.00	\$70,000.00	\$55,579.02	\$57,367.20	\$59,717.94	\$60,454.82	\$61,836.27
640.661.215240 FUEL Total:	\$36,719.79	\$27,842.47	\$35,771.32	\$43,612.17	\$43,844.00	\$38,309.11	\$38,633.33	\$40,834.67	\$41,867.59	\$41,511.69	\$41,035.90
640.661.215247 MOTOR VEHICLE PARTS / SUPPLIES Total:	\$0.00	\$0.00	\$25,184.44	\$5,808.70	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.215270 SMALL TOOLS / EQUIPMENT Total:	\$0.00	\$0.00	\$4,532.30	\$1,113.87	\$4,562.00	\$11,000.00	\$5,408.08	\$5,429.72	\$5,612.79	\$6,530.57	\$6,932.16
640.661.220100 FACILITIES MAINTENANCE Total:	\$3,769.53	\$20,605.98	\$8,447.59	\$22,820.19	\$13.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.220200 EQUIP MAINT / REPAIRS Total:	\$69,531.48	\$92,801.86	\$38,630.25	\$12,516.95	\$7,450.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>MATERIALS AND SUPPLIES TOTAL:</b>	<b>\$168,104.10</b>	<b>\$193,391.22</b>	<b>\$159,705.91</b>	<b>\$143,408.59</b>	<b>\$110,461.24</b>	<b>\$122,221.29</b>	<b>\$102,043.06</b>	<b>\$105,461.62</b>	<b>\$109,137.29</b>	<b>\$110,539.70</b>	<b>\$112,078.20</b>
<b>UTILITIES</b>											
640.661.310100 UTILITIES Total:	\$96,375.87	\$71,649.95	\$4,375.89	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.310110 ELECTRIC Total:	\$0.00	\$0.00	\$12,650.83	\$19,401.73	\$26,828.00	\$30,000.00	\$30,600.00	\$30,906.00	\$31,112.04	\$31,267.60	\$31,590.84
640.661.310120 WATER / SEWER Total:	\$0.00	\$0.00	\$76,273.53	\$80,299.24	\$48,373.00	\$50,000.00	\$51,000.00	\$51,510.00	\$51,853.40	\$52,112.67	\$52,651.40
640.661.310130 NATURAL GAS/OIL Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$211.00	\$215.22	\$217.37	\$218.82	\$219.92	\$220.80	\$222.79
<b>UTILITIES TOTAL:</b>	<b>\$96,375.87</b>	<b>\$71,649.95</b>	<b>\$93,300.25</b>	<b>\$99,700.97</b>	<b>\$75,412.00</b>	<b>\$80,215.22</b>	<b>\$81,817.37</b>	<b>\$82,634.82</b>	<b>\$83,185.36</b>	<b>\$83,601.06</b>	<b>\$84,465.03</b>
<b>CONTRACTUAL SERVICES</b>											
640.661.315100 COMMUNICATIONS Total:	\$1,264.17	\$2,207.04	\$86.49	\$0.00	(\$10.54)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.315110 PHONE Total:	\$0.00	\$0.00	\$0.00	\$1,045.16	\$449.00	\$762.02	\$767.10	\$770.94	\$774.02	\$718.71	\$773.73
640.661.315120 CELLULAR PHONE / DATA Total:	\$0.00	\$0.00	\$1,007.22	\$1,163.28	\$1,478.00	\$1,240.49	\$1,246.69	\$1,251.68	\$1,301.55	\$1,329.76	\$1,299.51
640.661.315130 NETWORK / INTERNET / CABLE Total:	\$0.00	\$0.00	\$2,855.64	\$1,961.25	\$3,523.00	\$3,593.46	\$3,629.39	\$3,653.59	\$3,671.86	\$3,709.82	\$3,739.49
640.661.315140 ELECT MEDIA SUBSCRIPTIONS Total:	\$0.00	\$0.00	\$0.00	\$475.92	\$0.00	\$242.72	\$244.34	\$245.56	\$246.54	\$199.75	\$240.50
640.661.315200 ADVERTISING Total:	\$0.00	\$0.00	\$0.00	\$258.38	\$100.00	\$182.77	\$183.99	\$184.91	\$185.65	\$170.82	\$185.26
640.661.320110 M&R EQUIP CITY GARAGE Total:	\$0.00	\$0.00	\$0.00	\$44,801.54	\$21,671.00	\$33,901.00	\$34,127.00	\$34,297.64	\$34,434.83	\$32,320.02	\$34,492.42
640.661.320120 M&R EQUIPMENT Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$5,324.00	\$33,000.00	\$33,660.00	\$33,996.60	\$34,223.24	\$34,639.15	\$34,972.06
640.661.320200 M&R Vehicles Total:	\$0.00	\$0.00	\$1,586.00	\$86.11	\$6,750.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.320210 M&R VEHICLES CITY GARAGE Total:	\$0.00	\$0.00	\$0.00	\$175,546.03	\$144,288.00	\$135,000.00	\$137,700.00	\$139,077.00	\$140,004.18	\$140,704.20	\$142,158.77
640.661.320420 M&R BUILDINGS Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$16,789.00	\$40,000.00	\$40,800.00	\$41,208.00	\$41,482.72	\$41,690.13	\$42,121.12
640.661.325100 EQUIPMENT RENTAL Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$600.00	\$612.00	\$618.12	\$622.24	\$625.35	\$627.85
640.661.330100 PROFESSIONAL SERVICE Total:	\$164,059.32	\$39,053.45	\$1,098.00	\$2,550.00	\$1,638.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.330130 ENGINEERING SERVICES Total:	\$0.00	\$0.00	\$5,252.00	\$7,640.00	\$82,670.00	\$90,000.00	\$88,061.70	\$129,822.93	\$90,811.47	\$91,416.88	\$91,873.96
640.661.330190 OTHER PROFESSIONAL SVCS Total:	\$0.00	\$0.00	\$3,175.76	\$16,564.20	\$18,334.00	\$31,000.00	\$25,160.34	\$25,328.08	\$25,454.72	\$27,270.50	\$26,319.48
640.661.340100 INSURANCE Total:	\$13,884.10	\$7,000.00	\$6,098.90	\$12,191.30	\$11,744.00	\$12,207.00	\$12,288.38	\$12,349.82	\$12,399.22	\$12,441.64	\$12,583.96
640.661.350105 NPDES PERMIT Total:	\$0.00	\$0.00	\$0.00	\$200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.350133 DUMPING FEES Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$850.00	\$867.00	\$875.67	\$881.51	\$885.92	\$889.46	\$897.51
640.661.350230 OUTSIDE SERVICES Total:	\$45,631.26	\$31,706.53	\$7,346.15	\$198.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.350800 IT LICENSES & SUPPORT Total:	\$0.00	\$0.00	\$0.00	\$5,116.08	\$11,435.00	\$11,663.70	\$11,780.34	\$11,858.87	\$11,918.17	\$12,041.37	\$12,137.68
640.661.350980 FR CK SERV Total:	\$2,357,942.73	\$2,530,677.85	\$2,656,252.62	\$2,562,649.64	\$2,910,507.00	\$3,087,465.83	\$3,181,324.79	\$3,245,799.64	\$3,295,135.79	\$3,335,204.64	\$3,425,308.49
<b>CONTRACTUAL SERVICES TOTAL:</b>	<b>\$2,582,781.58</b>	<b>\$2,610,644.87</b>	<b>\$2,684,758.78</b>	<b>\$2,832,447.69</b>	<b>\$3,237,539.46</b>	<b>\$3,481,725.99</b>	<b>\$3,572,461.74</b>	<b>\$3,681,344.89</b>	<b>\$3,693,552.11</b>	<b>\$3,735,372.19</b>	<b>\$3,829,731.79</b>
<b>CAPITAL OUTLAY</b>											
640.661.400030 EQUIPMENT LEASING Total:	\$0.00	\$0.00	\$547.20	\$630.53	\$5,054.00	\$33,200.00	\$33,864.00	\$34,202.64	\$34,430.66	\$34,849.08	\$35,184.01

City of North Ridgeville  
Actual and Predicted Expenses

Scenario 2 - 10% Rate Increase in 2020, 4% Rate Increase from 2021 to 2025

		2015	2016	2017	2018	2019	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
640.661.400031	MAINT/SVC AGREEMENTS Total:	\$0.00	\$0.00	\$177.24	\$186.72	\$6.10	\$0.00	\$0.00	\$0.00	\$0.00	\$1.00	\$2.00
640.661.400033	COPIERS/PRINTERS Total:	\$0.00	\$0.00	\$0.00	\$0.00	\$953.88	\$972.96	\$982.69	\$989.24	\$994.18	\$998.16	\$1,007.19
640.661.400050	EQUIPMENT OUTLAY Total:	\$27,639.98	\$75,372.54	\$480,616.67	\$225,423.39	\$162,876.00	\$144,300.00	\$150,000.00	\$155,439.84	\$156,217.04	\$156,841.91	\$155,610.95
640.661.415704	CTR RDG SS CONSTRUCTION Total:	\$0.00	\$112,102.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.415708	SS SUBBASIN 5-8 REPAIRS Total:	\$0.00	\$29,672.68	\$50,026.32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.416305	NEW SEWER VAC Total:	\$0.00	\$436,191.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.416705	SS SUBBASIN 9,1015&16 TEST/ENG Total:	\$0.00	\$119,920.40	\$19,061.60	\$62,037.00	\$6,448.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.417018	LUANNE RD LIFT STATION Total:	\$0.00	\$0.00	\$1,961.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.590899	OTHER EXPENDITURES Total:	\$0.00	\$0.00	\$0.00	\$3,053.40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640.661.605106	ADMINISTRATIVE COSTS	\$72,000.00	\$72,000.00	\$0.00	\$416,416.00	\$215,697.00	\$250,000.00	\$255,000.00	\$257,550.00	\$259,267.00	\$262,417.78	\$264,939.83
CAPITAL OUTLAY TOTAL:		\$99,639.98	\$845,258.82	\$552,390.53	\$707,747.04	\$391,034.98	\$428,472.96	\$439,846.69	\$448,181.72	\$450,908.88	\$455,107.93	\$456,743.98
DEBT SERVICE												
640.661.610201	BOND PRINCIPAL Total:	\$0.00	\$700,000.00	\$84,000.00								
640.661.610202	BOND INTEREST Total:	\$0.00	\$174,356.25	\$25,944.00								
DEBT SERVICE TOTAL:		\$0.00	\$874,356.25	\$109,944.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OPERATIONS TOTAL		\$3,419,034.33	\$5,076,215.13	\$4,087,229.40	\$4,324,422.25	\$4,439,025.01	\$4,928,808.94	\$5,033,793.59	\$5,167,305.01	\$5,195,251.29	\$5,255,590.66	\$5,366,807.97
640 SUBTOTAL:		\$3,584,723.92	\$5,235,318.09	\$4,228,153.82	\$4,533,459.23	\$4,673,607.18	\$5,172,338.25	\$5,276,852.56	\$5,410,502.47	\$5,441,183.82	\$5,506,391.91	\$5,619,304.31
640.900910	Transfers Out				\$4,940,000.00							
	End-of-year Transfer					\$2,240,000.00	\$1,024,878.53	\$1,487,482.10	\$1,732,825.12	\$1,214,151.78	\$2,346,841.01	\$2,703,365.81
640 TOTAL:		\$3,584,723.92	\$5,235,318.09	\$4,228,153.82	\$9,473,459.23	\$6,913,607.18	\$6,197,216.78	\$6,764,334.66	\$7,143,327.58	\$6,655,335.59	\$7,853,232.91	\$8,322,670.12
FUND 645												
	OPWC Principal: (2020)				\$8,451.00	\$4,225.42	\$4,226.00					
	CIE Dyke/Case & Other Principal: (2018)				\$155,000.00							
	DIE Dyke/Case & Other Interest: (2018)				\$7,363.00							
	Various Purpose Victory Lane Principal: (2034)				\$2,314.00	\$2,468.00	\$2,468.00	\$2,622.00	\$2,622.00	\$2,622.00	\$2,622.00	\$2,622.00
	Various Purpose Victory Lane Interest: (2034)				\$1,772.00	\$1,772.00	\$1,662.00	\$1,588.00	\$1,527.00	\$1,448.00	\$1,448.00	\$1,448.00
	Sani Swr Imp-E/W Ctr Rdg Principal: (2026)				\$370,000.00	\$375,000.00	\$345,000.00	\$385,000.00	\$405,000.00	\$410,000.00	\$410,000.00	\$410,000.00
	Sani Swr Imp-E/W Ctr Rdg Interest: (2026)				\$103,325.00	\$95,925.00	\$91,950.00	\$86,175.00	\$70,775.00	\$64,700.00	\$64,700.00	\$64,700.00
	Dyke/Case&Other Principal: (2028)				\$20,000.00	\$185,000.00	\$185,000.00	\$190,000.00	\$195,000.00	\$200,000.00	\$200,000.00	\$200,000.00
	Dyke/Case&Other Interest: (2028)				\$58,874.00	\$58,474.00	\$56,513.00	\$53,738.00	\$46,138.00	\$43,213.00	\$43,213.00	\$43,213.00
	Sani Swr Imp-Westerlies Principal: (2026)				\$86,000.00	\$90,000.00	\$90,000.00	\$90,000.00	\$96,000.00	\$94,000.00	\$94,000.00	\$94,000.00
	Sani Swr Imp-Westerlies Interest: (2026)				\$24,264.00	\$22,544.00	\$21,590.00	\$20,240.00	\$16,640.00	\$15,200.00	\$15,200.00	\$15,200.00
	Ctr Rdg Rd SS Proj/SS Subbasin Eng/Repairs Principal: (2036)				\$80,000.00	\$85,000.00	\$85,000.00	\$85,000.00	\$90,000.00	\$90,000.00	\$90,000.00	\$90,000.00
	Ctr Rdg Rd SS Proj/SS Subbasin Eng/Repairs Interest: (2036)				\$64,214.00	\$62,614.00	\$61,713.00	\$60,438.00	\$57,038.00	\$55,688.00	\$55,688.00	\$55,688.00
	Interest		\$122,363.11									
645 TOTAL		\$0.00	\$122,363.11	\$0.00	\$981,577.00	\$982,868.42	\$945,122.00	\$974,647.00	\$980,740.00	\$976,871.00	\$976,871.00	\$976,871.00
FUND 660												
660.675.510050	REFUNDS Total:			\$3,458.25								
660.675.610201	BOND PRINCIPAL Total:	\$532,160.00	\$7,645,888.75	\$617,313.75								
660.675.610202	BOND INTEREST Total:	\$415,547.00	\$39,839.99	\$252,056.63								
660.675.610205	BOND COSTS Total:		\$48,787.42									
660.675.610211	BAN'S PRINCIPAL Total:		\$1,710,000.00									
660.675.610212	BAN'S INTEREST Total:	\$1,710,000.00	\$17,052.50									
660.675.610311	NOTE PRINCIPAL Total:		\$400,000.00									
660.675.610312	NOTE INTEREST Total:		\$2,310.00									
660.678.610401	OPWC PRINCIPAL Total:	\$8,450.84	\$8,450.84	\$8,450.84								
660.675.330300	AUDITOR/TREASURER Fees Total:	\$441.55	\$674.89	\$614.82	\$682.21	\$494.43	\$593.21	\$624.15	\$613.80	\$613.59	\$599.59	\$621.05
660.675.400050	EQUIPMENT OUTLAY Total:	\$441.55	\$674.89	\$614.82	\$0.00	\$49,585.00						
660.675.415704	CTR RDG SS CONSTRUCTION Total:	\$4,930.00	\$1,206,517.80	\$58,979.21								
660.675.415706	SS SUB-BASIN 11, 12, &13 REPAIRS Total:	\$256,496.00	\$236,165.80									
660.675.415708	SS SUB-BASIN 5-8 ENGINEERING Total:		\$18,487.00									
660.675.418015	LUANNE LIFT STATION EASEMENT Total:				\$1,000.00	\$12,350.00						
660.675.418014	Luanne Lift Station Construction					\$392,664.00	\$20,000.00					

City of North Ridgeville  
Actual and Predicted Expenses

Scenario 2 - 10% Rate Increase in 2020, 4% Rate Increase from 2021 to 2025

	2015	2016	2017	2018	2019	2020 (Predicted)	2021 (Predicted)	2022 (Predicted)	2023 (Predicted)	2024 (Predicted)	2025 (Predicted)
660.675.418023 WESTFIELD DESIGN Total:				\$53,852.17	\$14,777.00						
660.675.418024 WESTFIELD RTWAY Total:				\$8,202.17	\$30,423.00						
660.675.417014 WESTFIELD WW ENGINEERING Total:			\$49,087.11	\$12,282.89	\$4,555.00						
660.675.418025 WESTFIELD WETLANDS					\$18,200.00						
660.675.418026 WESTFIELD CONSTRUCTION					\$1,718,452.00	\$1,223,180.00					
660.675.418027 WESTFIELD CONSTR ADMINISTRATION					\$96,368.00						
660.675.419028 PURCHASE OF PROPERTY					\$37,500.00						
660.675.419029 MAIN BROAD PLEASANT SEWER						\$640,000.00					
Broad, Main, Pleasant Sewer Reconstruction - Inspection						\$60,000.00					
Sugar Ridge Sewer Extension Engineering							\$300,000.00				
Sugar Ridge Sewer Extension Construction								\$2,900,000.00			
Sugar Ridge Sewer Extension Inspection								\$250,000.00			
Center Ridge Sewer Extension Engineering						\$300,000.00					
Center Ridge Sewer Inspection							\$280,000.00				
Center Ridge Sewer Extension Construction							\$2,800,000.00				
Becker Lift Station Replacement - Engineering								\$40,000.00			
Becker Lift Station Replacement - Construction										\$440,000.00	\$440,000.00
Placeholder									\$1,000,000.00	\$1,060,000.00	\$1,060,000.00
660 subtotal	\$2,928,466.94	\$11,334,849.88	\$990,575.43	\$76,019.44	\$2,375,368.43	\$2,243,773.21	\$3,380,624.15	\$3,190,613.80	\$1,000,613.59	\$1,500,599.59	\$1,500,621.05
CONTINGENCY (10%):						\$224,377.32	\$338,062.42	\$319,061.38	\$100,061.36	\$150,059.96	\$150,062.10
660 TOTAL	\$2,928,466.94	\$11,334,849.88	\$990,575.43	\$76,019.44	\$2,375,368.43	\$2,468,150.53	\$3,718,686.57	\$3,509,675.18	\$1,100,674.95	\$1,650,659.55	\$1,650,683.15

Items added from CIP 5-year schedule  
Predicted Expenses

