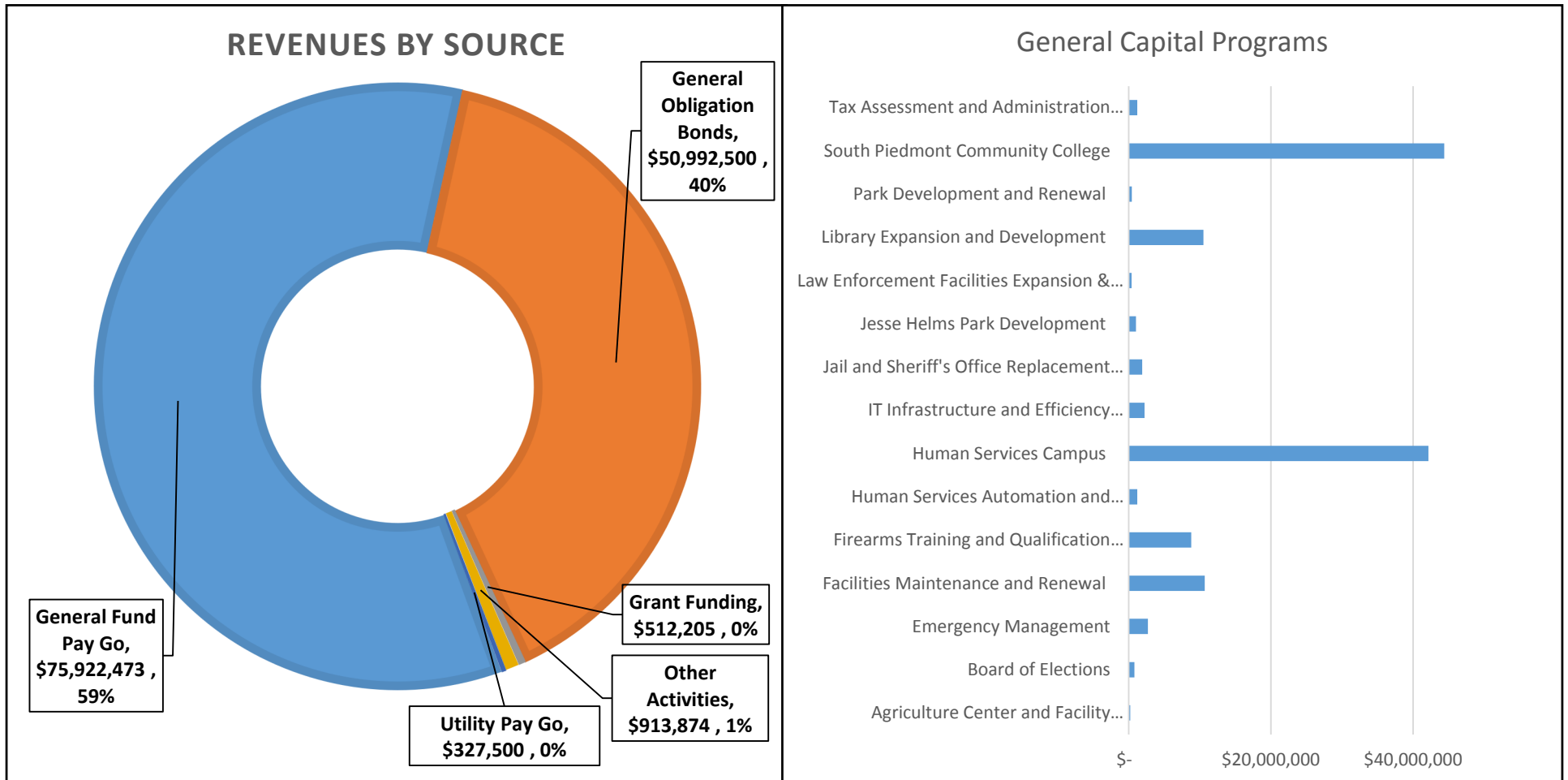


# General Capital Program—Six year CIP Plan

## \$128,668,552



# General Capital Program

# CIP Summary Report

Funding Sources	Appropriation To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-68,126,411	-6,146,062	-350,000	-350,000	-350,000	-350,000	-250,000	-75,922,473
General Obligation Bonds	-2,665,000	-25,295,000	-20,732,500	-184,000	-2,116,000	0	0	-50,992,500
Grant Funding	-512,205	0	0	0	0	0	0	-512,205
Other activities	-913,874	0	0	0	0	0	0	-913,874
Utility Pay Go	-327,500	0	0	0	0	0	0	-327,500
<b>Total Funding Sources</b>	<b>-72,544,990</b>	<b>-31,441,062</b>	<b>-21,082,500</b>	<b>-534,000</b>	<b>-2,466,000</b>	<b>-350,000</b>	<b>-250,000</b>	<b>-128,668,552</b>

Program No.	Program	Program To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80000	Agriculture Center and Facility Expansion and Improvements	219,000	0	0	0	0	0	0	219,000
80001	Board of Elections	0	807,630	0	0	0	0	0	807,630
80002	Emergency Management	0	2,700,000	0	0	0	0	0	2,700,000
80003	Facilities Maintenance and Renewal	8,056,865	1,000,000	350,000	350,000	350,000	350,000	250,000	10,706,865
80004	Firearms Training and Qualification Range	8,805,665	0	0	0	0	0	0	8,805,665
80006	Human Services Automation and Record Management	1,199,410	0	0	0	0	0	0	1,199,410
80007	Human Services Campus	42,150,000	0	0	0	0	0	0	42,150,000
80008	IT Infrastructure and Efficiency Enhancement	2,243,238	0	0	0	0	0	0	2,243,238
80009	Jail and Sheriff's Office Replacement and Expansion	1,895,045	0	0	0	0	0	0	1,895,045
80010	Jesse Helms Park Development	938,402	75,000	0	0	0	0	0	1,013,402
80011	Law Enforcement Facilities Expansion & Renovations	357,700	50,000	0	0	0	0	0	407,700
80012	Library Expansion and Development	0	2,353,332	8,150,000	0	0	0	0	10,503,332
80013	Park Development and Renewal	226,750	208,600	0	0	0	0	0	435,350
80014	South Piedmont Community College	5,252,915	24,246,500	12,582,500	184,000	2,116,000	0	0	44,381,915
80015	Tax Assessment and Administration Software Replacement	1,200,000	0	0	0	0	0	0	1,200,000
<b>Total Uses</b>		<b>72,544,990</b>	<b>31,441,062</b>	<b>21,082,500</b>	<b>534,000</b>	<b>2,466,000</b>	<b>350,000</b>	<b>250,000</b>	<b>128,668,552</b>

# Agriculture Center and Facility Expansion and Improvements

# Capital Program Detail

**Program Scope**

Program provides for expansion or improvements at the Union County Agriculture Center. Expansion items include a feasibility study, design, and construction for a Pavilion and Ancillary Facilities to serve the equestrian, livestock, and greater area needs of the community. Improvement items include the purchase of a digital display sign on Hwy 74.

**Program Operating Budget Impact**

After the study is complete, if the direction of the Commission is to construct the 4H Pavilion it would require that General Fund fund balance be appropriated. The operating impact of operating cost for staff, utilities, and occupancy cost are not determined at this time.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-219,000	0	0	0	0	0	0	-219,000
<b>Total Funding Sources</b>		<b>-219,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-219,000</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80065	4H Pavilion/Ancillary Facilities	119,000	0	0	0	0	0	0	119,000
80074	Ag Center Display Sign	100,000	0	0	0	0	0	0	100,000
<b>Total Agriculture Center and Facility Expansion and Improvements</b>		<b>219,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>219,000</b>

# 4H Pavilion/Ancillary Facilities

# Capital Project Detail

### Project Justification

During the initial discussions about the Union County Agricultural Services Center, opened in 2005, the topic of an event center (Pavilion) at the site was included. After the construction of the Services and Conference Center, discussions about the Pavilion continued. Some conversations between interested parties were held, but with very little formal planning. The end result was that there was community interest in a facility to potentially hold livestock shows, horse shows, tractor shows and pull events, indoor concerts and other community events that could be held in an enclosed but non-climate controlled facility. Operational expectations related to potential uses and governing policies should also be generated. In the limited previous discussions about the facility there has been an assumption that the best site is on the present Agricultural Center property. The discussion should allow for open input as to thoughts about this site and/or others and the study should provide an interpretation of these thoughts. Even though they may be very preliminary, cost projections for the size, configuration and function of such a facility should be estimated. Also, any potential for a phased construction process should be considered and outlined.

### Project Scope

Project provides for a feasibility study, design, and construction for a Pavilion and Ancillary Facilities to serve the equestrian, livestock, and greater area needs.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-119,000	0	0	0	0	0	0	-119,000
Total Funding Sources		-119,000	0	0	0	0	0	0	-119,000
<b>Uses</b>									
5381	Professional Services	119,000	0	0	0	0	0	0	119,000
Total Uses		119,000	0	0	0	0	0	0	119,000

# Ag Center Display Sign

# Capital Project Detail

**Project Justification**

In order to facilitate the advertising of programs and events at the Ag Center a modern display sign is needed. Consumers seek different methods of information today. Thousands, if not tens of thousands, of motor vehicles pass the Ag Center entrance twice per day and perhaps 40% or less have ever seen the Ag Center or been to a program or event. Limited size and type of signage are allowed by local governments. The amount of information we could convey in this format is significant. With remote programmability, we can change the engagement level of viewers and push the limits of potential clientele. This could be a significant piece of a total marketing plan for many county efforts.

**Project Scope**

This project provides for the purchase of a digital display sign located on Hwy 74 at the Union County Agriculture Center (Ag Center).

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-100,000	0	0	0	0	0	0	-100,000
Total Funding Sources		-100,000	0	0	0	0	0	0	-100,000
<b>Uses</b>									
5550	FF&E	100,000	0	0	0	0	0	0	100,000
Total Uses		100,000	0	0	0	0	0	0	100,000

# Board of Elections

# Capital Program Detail

**Program Scope**

Program will provide for the ongoing need to update, implement, and purchase voting equipment as required by the State Board of Elections.

**Program Operating Budget Impact**

The operating expenditures associated with voting equipment for Board of Elections will include annual maintenance and renewal.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		0	-807,630	0	0	0	0	0	-807,630
<b>Total Funding Sources</b>		<b>0</b>	<b>-807,630</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-807,630</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80084	Board of Elections Voting Machines	0	807,630	0	0	0	0	0	807,630
<b>Total Board of Elections</b>		<b>0</b>	<b>807,630</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>807,630</b>

# Board of Elections Voting Machines

# Capital Project Detail

### Project Justification

Session Law 2015-103 (HB836), counties which use any direct record electronic (DRE) voting systems currently certified by the State Board of Elections which do not use paper ballots shall be decertified and shall not be used in any election held on or after September 1, 2019, for counties that use direct record electronic voting machines on election day as of January 1, 2015, and January 1, 2018 for all other counties. Union County uses direct record electronic voting systems only for one-stop voting and not on Election Day. The State Board of Elections has confirmed to the Board of Elections via email that Union County must use the decertification date of January 1, 2018. Union County Board of Elections has determined that the new voting system for Union County should be purchased for arrival in early 2017 for training the precinct workers during the summer months before being used for the October and November Municipal Elections. This enables the Board of Elections to be trained and prepared for the spring 2018 Primary. The Express Vote units are in the final stages of approval by the SBOE.

### Project Scope

Replace Union County Board of Election's voting equipment that will be decertified on January 1, 2018.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4010	General Fund Pay Go	0	-807,630	0	0	0	0	0	-807,630	
Total Funding Sources		0	-807,630	0	0	0	0	0	-807,630	
<b>Uses</b>										
5550	FF&E	0	807,630	0	0	0	0	0	807,630	
Total Uses		0	807,630	0	0	0	0	0	807,630	

# Emergency Management

# Capital Program Detail

**Program Scope**

Program provides for the capital improvement needs of Emergency Management Services including Communications and Fire Services.

**Program Operating Budget Impact**

These expenditures primarily represent improvements to Emergency Management capital equipment and new infrastructure for E911. The operating impact for improvements to capital equipment should be minimal.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		0	-2,700,000	0	0	0	0	0	-2,700,000
<b>Total Funding Sources</b>		<b>0</b>	<b>-2,700,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-2,700,000</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80085	Radios	0	1,400,000	0	0	0	0	0	1,400,000
80086	Radio Installation Facility	0	850,000	0	0	0	0	0	850,000
80087	School Radio Bi-Directional	0	450,000	0	0	0	0	0	450,000
<b>Total Emergency Management</b>		<b>0</b>	<b>2,700,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,700,000</b>



# Radios

# Capital Project Detail

### Project Justification

CCOM and Union EMS has been working for two years to develop a method of GPS tracking which would give up to date locations of ambulances to be used by the Automated Vehicle Locator (AVL) system within the county's CAD. Over this time period there have been delays in time and periods when the system was not communicating due to passing through the CHS server firewalls. This upgrade in technology will allow the mobile radios to be tracked through a CEN unit directly off the radio system to track ambulances in virtual real time. This proposal requires the purchase of new mobile radios for all units plus the activation of the CEN unit. The Union County Sheriff's Office has requested the ability to track deputies via GPS on their portable radios for officer safety considerations. This will allow deputies to be tracked through the radio system when they exit their vehicles during foot chases, manhunts and associated incidents allowing for rapid location of personnel if placed in compromising positions. In order to provide this service the majority of their current portable radio stock will require replacement as they are too old to upgrade with GPS technology. Therefore, 262 portable radios will need to be replaced at a cost of \$1,128,499.50 and the remainder of their newer style portables (66) will require a software upgrade of \$11,418.00.

### Project Scope

Provides replacement of mobile radios including GPS tracking and upgrade for CEN unit. The project allows Union EMS to enhance unit GPS signals for enhanced Automated Vehicle Locator (AVL) tracking. Provides replacement of XTS2500 portable radios and software updates for APX 6000 portable radios for Union County Sheriff's Office including GPS tracking to enhance officer safety.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	0	-1,400,000	0	0	0	0	0	-1,400,000
Total Funding Sources		0	-1,400,000	0	0	0	0	0	-1,400,000
<b>Uses</b>									
5550	FF&E	0	1,400,000	0	0	0	0	0	1,400,000
Total Uses		0	1,400,000	0	0	0	0	0	1,400,000

# Radio Installation Facility

# Capital Project Detail

**Project Justification**

Each year the County purchases numerous vehicles for use by the Sheriff’s Office, Emergency Services, Public Works, and Transportation in addition, buses and other vehicles are purchased by the Union County Public Schools. Currently emergency lighting, radio, computer, radar, video camera, inverters, scene lighting and prisoner cages are installed by private vendors. As the vendors have multiple customers, many of the vehicles sit on lots as installations are completed. This results in extended periods of the cars not being available for use as they are not “built out” and ready for service. Each vehicle being removed from service requires dismantling of these same specialized components for reuse or surplus. As a function of Emergency Services, Radio and Equipment Installations and repairs can be made in a more responsive format as County departments will be the primary customer base.

**Project Scope**

Project provides for a pre-engineered (60' x 140') metal building to house Emergency Services Radio Shop/Install Shop and Warehouse.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4010	General Fund Pay Go	0	-850,000	0	0	0	0	0	-850,000	
Total Funding Sources		0	-850,000	0	0	0	0	0	-850,000	
<b>Uses</b>										
5580	Buildings and Improvements	0	850,000	0	0	0	0	0	850,000	
Total Uses		0	850,000	0	0	0	0	0	850,000	

# School Radio Bi-Directional

# Capital Project Detail

**Project Justification**

The Union County Sheriff’s Office notified Emergency Services of difficulty in communicating on the 800 MHz system with their portable radios from inside certain school facilities. As a result radio shop personnel evaluated each school in the system, conducting on-site testing of the system. As a result, 15 schools were determined to have sufficient problems with communications from the sites to County radio towers. To improve communications from these facilities, a plan has been developed to install Bi-directional antennas (BDA’s) at 1/3 of the schools identified each of the next three years. A joint working group involving UCPS, UCSO and UCES personnel will meet to determine the priority order of the installations.

**Project Scope**

Project provides funding to install bi-directional antennas for the schools.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	0	-450,000	0	0	0	0	0	-450,000
Total Funding Sources		0	-450,000	0	0	0	0	0	-450,000
<b>Uses</b>									
5550	FF&E	0	450,000	0	0	0	0	0	450,000
Total Uses		0	450,000	0	0	0	0	0	450,000

# Facilities Maintenance and Renewal Capital Program Detail

## Program Scope

Program provides for facilities maintenance and renewal at existing County facilities. Projects in this program include items such as chiller replacements, various energy savings projects, and other facility related items. Additionally, a study is recommended that will provide a long-term renovation plan for the Historic County Courthouse.

## Program Operating Budget Impact

These expenditures primarily represent routine improvements and renovations to existing County facilities, it is assumed that operating expenses will remain constant with current operating costs for the existing spaces. In cases where efficiencies are made with building renovations, or systems are replaced with those that are more energy-efficient, there may be annual energy savings.

## Program Summary

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-7,206,934	-1,000,000	-350,000	-350,000	-350,000	-350,000	-250,000	-9,856,934
Other activities	-849,931	0	0	0	0	0	0	-849,931
<b>Total Funding Sources</b>	<b>-8,056,865</b>	<b>-1,000,000</b>	<b>-350,000</b>	<b>-350,000</b>	<b>-350,000</b>	<b>-350,000</b>	<b>-250,000</b>	<b>-10,706,865</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80026	Government Facilities Renovations	5,811,064	0	0	0	0	0	0	5,811,064
80054	Energy Savings Projects	168,235	0	0	0	0	0	0	168,235
80062	Historic Courthouse Renovations	75,000	575,000	100,000	100,000	100,000	100,000	0	1,050,000
80068	Monroe Main Library Chiller Replacement	200,000	0	0	0	0	0	0	200,000
80069	County Facilities Repair	375,000	125,000	125,000	125,000	125,000	125,000	125,000	1,125,000
80070	Comm Services Replacement And Renewal	375,000	125,000	125,000	125,000	125,000	125,000	125,000	1,125,000
80072	Facilities AV Equipment	550,000	175,000	0	0	0	0	0	725,000
80081	Monroe Library Carpet Replacement	360,000	0	0	0	0	0	0	360,000
80083	Union Village Roof	142,566	0	0	0	0	0	0	142,566
<b>Total Facilities Maintenance and Renewal</b>		<b>8,056,865</b>	<b>1,000,000</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>250,000</b>	<b>10,706,865</b>

# Government Facilities Renovations

# Capital Project Detail

*Project Justification*

Previously approved capital project.

*Project Scope*

Project provides for renovations to existing County Government Facilities.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-840,614	0	0	0	0	0	0	-840,614
4015	General Fund Pay Go	-4,136,882	0	0	0	0	0	0	-4,136,882
4812	Other activities	-833,568	0	0	0	0	0	0	-833,568
Total Funding Sources		-5,811,064	0	0	0	0	0	0	-5,811,064
<b>Uses</b>									
5121	Salaries, Wages, & Benefits	321,736	0	0	0	0	0	0	321,736
5260	Other activities	10,923	0	0	0	0	0	0	10,923
5351	Buildings and Improvements	105,368	0	0	0	0	0	0	105,368
5580	Buildings and Improvements	5,373,037	0	0	0	0	0	0	5,373,037
Total Uses		5,811,064	0	0	0	0	0	0	5,811,064

# Energy Savings Projects

# Capital Project Detail

## Project Justification

HVAC Units at Public School Administration, Group Home and Transportation building are reaching the end of their life expectancy. Replacing these units with more efficient systems will produce significant energy savings. Current units use a cooling medium that is obsolete.

Energy Savings Grant funds were used to install lighting controls in the Judicial Center; unfortunately the individual floors were not connected into one controller. These funds are requested to make necessary changes, tying all floors together.

Renovations in the Government Center began in 2006. Lighting Control was not installed when the first through fifth floors were complete. Since that time energy code has changed and lighting controls have become mandatory.

Union County was allocated \$751,800 through an Energy Efficiency and Conservation Community Block Grant (EECBG) from the Department of Energy. The previously unfunded program received stimulus appropriation from the federal American Recovery and Reinvestment Act of 2009 (ARRA). Using the funds, Union County was required to develop and implement projects to improve energy efficiency and reduce emissions. Union County has implemented several energy saving strategies at a number of their facilities. Utility consumption data taken over fiscal years 2009-2012 show an energy savings of 4,134,315 kBtu / \$44,997. The strategy is to reinvest these energy savings from those projects into additional projects.

## Project Scope

Project provides for the replacement of heating, ventilation, and air conditioning units (HVAC), installation of lighting controls, and other energy saving technologies at various County facilities.

## Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-151,872	0	0	0	0	0	0	-151,872
4851	Other activities	-16,363	0	0	0	0	0	0	-16,363
Total Funding Sources		-168,235	0	0	0	0	0	0	-168,235
<b>Uses</b>									
5381	Professional Services	158,235	0	0	0	0	0	0	158,235
5382	Legal Services	10,000	0	0	0	0	0	0	10,000
Total Uses		168,235	0	0	0	0	0	0	168,235

# Historic Courthouse Renovations

# Capital Project Detail

### Project Justification

The Historic Courthouse was constructed in 1886 and serves as an iconic community asset. In recent years as County services have transitioned to more modern spaces, the usage of the Courthouse has been greatly diminished. There are a number of possibilities for future uses. The proposed study will provide the options for those uses and provide guidance concerning renovations and restorations, including needed safety enhancements, based on the final determined use. The study is the first step in the long-term renovation and restoration process. Currently the Historic Courthouse has issues with water infiltration in the clock tower as well as the basement. Additionally, the HCH needs to have a fire sprinkler system installed and ADA accessibility needs improvements. The courtroom needs the ceiling refurbished to its original smooth finish and the frieze is badly damaged in many places. Additional roof repair will be necessary in the future. A study was completed during FY 2017 and recommendations were given for restoration and renovations.

### Project Scope

Project provides for restoration and renovation of the Historic County Courthouse based on recommendations as outlined in the study of the facility.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-75,000	-575,000	-100,000	-100,000	-100,000	-100,000	0	-1,050,000
Total Funding Sources		-75,000	-575,000	-100,000	-100,000	-100,000	-100,000	0	-1,050,000
<b>Uses</b>									
5381	Professional Services	75,000	0	0	0	0	0	0	75,000
5580	Buildings and Improvements	0	575,000	100,000	100,000	100,000	100,000	0	975,000
Total Uses		75,000	575,000	100,000	100,000	100,000	100,000	0	1,050,000

# Monroe Main Library Chiller Replacement

# Capital Project Detail

**Project Justification**

The existing chiller was installed during Library renovations in late 2001. The chiller is a unit that produces the cooling needs for the main Library located in Monroe. Average life expectancy of a chiller is about fifteen years. The chiller will be at the end of its service life in fiscal year 2015 and the cooling medium the unit uses is already obsolete. Numerous repairs have made to the current chiller over the past two years. The current chiller could potentially require costly repairs should it go down during the summer months. Replacing the chiller as scheduled should eliminate a disruption of service. Technology has advanced significantly in the past ten years and the increased efficiency would help mitigate the purchase cost.

**Project Scope**

Replace existing chiller at Monroe Main Library.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-200,000	0	0	0	0	0	0	-200,000
Total Funding Sources		-200,000	0	0	0	0	0	0	-200,000
<b>Uses</b>									
5580	Buildings and Improvements	200,000	0	0	0	0	0	0	200,000
Total Uses		200,000	0	0	0	0	0	0	200,000



# County Facilities Repair

# Capital Project Detail

**Project Justification**

The funds appropriated in this project will roll from year to year if funding is unspent. These funds will ensure the County has adequate funding in place for ongoing maintenance, repairs, and emergencies repairs that may arise.

**Project Scope**

Project provides working capital for ongoing maintenance and repairs for County facilities.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-375,000	-125,000	-125,000	-125,000	-125,000	-125,000	-125,000	-1,125,000
Total Funding Sources		-375,000	-125,000	-125,000	-125,000	-125,000	-125,000	-125,000	-1,125,000
<b>Uses</b>									
5580	Buildings and Improvements	375,000	125,000	125,000	125,000	125,000	125,000	125,000	1,125,000
Total Uses		375,000	125,000	125,000	125,000	125,000	125,000	125,000	1,125,000

# Comm Services Replacement And Renewal

# Capital Project Detail

*Project Justification*

The funds appropriated in this project can be used for any Community Services infrastructure or Facility needs.

*Project Scope*

Project provides funding for ongoing Community Services Infrastructure and Facilities.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-375,000	-125,000	-125,000	-125,000	-125,000	-125,000	-125,000	-1,125,000
Total Funding Sources		-375,000	-125,000	-125,000	-125,000	-125,000	-125,000	-125,000	-1,125,000
<b>Uses</b>									
5580	Buildings and Improvements	375,000	125,000	125,000	125,000	125,000	125,000	125,000	1,125,000
Total Uses		375,000	125,000	125,000	125,000	125,000	125,000	125,000	1,125,000

# Facilities AV Equipment

# Capital Project Detail

## Project Justification

The majority of the AV equipment in County facilities is at least ten years old. AV equipment typically has about an eight year life expectancy due to potential failure and the equipment becoming obsolete due to improvements in technology. The AV equipment in the courtrooms at the Union County Judicial Center is especially critical and is in almost constant use. A major failure in any of the courtrooms would have a significant impact on the Courts ability to conduct their daily operations. The AV equipment in the Government Center, especially in the Commissioners' meeting chambers, is in need of upgrades to improve both reliability and broadcast quality.

## Project Scope

Audio Visual Equipment replacement in County Facilities.

## Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4010	General Fund Pay Go	-425,000	-175,000	0	0	0	0	0	-600,000	
4026	General Fund Pay Go	-125,000	0	0	0	0	0	0	-125,000	
Total Funding Sources		-550,000	-175,000	0	0	0	0	0	-725,000	
<b>Uses</b>										
5580	Buildings and Improvements	550,000	175,000	0	0	0	0	0	725,000	
Total Uses		550,000	175,000	0	0	0	0	0	725,000	

# Monroe Library Carpet Replacement Capital Project Detail

**Project Justification**

The carpet at the Monroe Library has been in place since the early 2000s. The carpet is discolored and worn in several areas throughout the library.

**Project Scope**

Project provides for 43,000 square foot of carpet replacement at the Main Library in Monroe.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-360,000	0	0	0	0	0	0	-360,000
Total Funding Sources		-360,000	0	0	0	0	0	0	-360,000
<b>Uses</b>									
5580	Buildings and Improvements	360,000	0	0	0	0	0	0	360,000
Total Uses		360,000	0	0	0	0	0	0	360,000

# Union Village Roof

# Capital Project Detail

**Project Justification**

Expenses incurred in repairing and replacing portions of the roof and canopy systems for Union Village as agreed upon in the lease agreement. The County agreed to maintain the roof.

**Project Scope**

Project provides for replacement of the roof at Union Village.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4010	General Fund Pay Go	-142,566	0	0	0	0	0	0	-142,566	
Total Funding Sources		-142,566	0	0	0	0	0	0	-142,566	
<b>Uses</b>										
5381	Professional Services	142,566	0	0	0	0	0	0	142,566	
Total Uses		142,566	0	0	0	0	0	0	142,566	

# Firearms Training and Qualification Range Capital Program Detail

**Program Scope**

Program provides for the development of a Union County Sheriff's Office Firearms Training and Qualifications Range.

**Program Operating Budget Impact**

The Firearms Training and Qualification Range is currently under construction. The current staff in the Training Bureau at the Sheriff's Office will be responsible for operating the Firearms Range and a part time deputy Range Master will be required. The total annual operating cost for the Firing Range is estimated to be around \$600,000.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-8,246,838	0	0	0	0	0	0	-8,246,838
General Obligation Bonds		-525,000	0	0	0	0	0	0	-525,000
Other activities		-33,827	0	0	0	0	0	0	-33,827
<b>Total Funding Sources</b>		<b>-8,805,665</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-8,805,665</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80019	Firearms Range	8,805,665	0	0	0	0	0	0	8,805,665
<b>Total Firearms Training and Qualification Range</b>		<b>8,805,665</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,805,665</b>

# Firearms Range

# Capital Project Detail

### Project Justification

The Sheriff's Training and Standards Commission (STSC) requires annual firearms qualification for all authorized Officers. This requirement includes daytime handgun, shotgun, and combat courses and nighttime handgun, shotgun, and combat courses. It also includes qualifications with all specialty weapons. As this Agency's staffing grows, the need for our own range grows. Officers and SRT personnel must practice fire at least monthly in order to maintain a higher level of proficiency commensurate with the liability associated with those particular job functions.

### Project Scope

This project provides for the construction of the Union County Sheriff's Office Firearms Training and Qualification Range. Project provides for the detailed design, necessary infrastructure and facilities development including backstops, flood lights, range house, target stand system, and related development needs.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-4,763,838	0	0	0	0	0	0	-4,763,838
4051	General Fund Pay Go	-3,483,000	0	0	0	0	0	0	-3,483,000
4710	General Obligation Bonds	-525,000	0	0	0	0	0	0	-525,000
4812	Other activities	-33,827	0	0	0	0	0	0	-33,827
Total Funding Sources		-8,805,665	0	0	0	0	0	0	-8,805,665
<b>Uses</b>									
5570	Land and Improvements	1,302,142	0	0	0	0	0	0	1,302,142
5580	Buildings and Improvements	7,503,523	0	0	0	0	0	0	7,503,523
Total Uses		8,805,665	0	0	0	0	0	0	8,805,665

# Human Services Automation and Record Management

# Capital Program Detail

**Program Scope**

Program provides for the automation and technology enhancements necessary to address the changing needs of the Human Services record keeping requirements as the Patient Protection and Affordability Care Act and other changing federal and state requirements are implemented.

**Program Operating Budget Impact**

The DSS Business Automation project will have an operational budget impact of \$178,496 on an annual basis. These cost include software maintenance of \$175,130 and hardware support of \$3,366.

The Electronic Medical Records project will have an operational budget impact of \$50,000 on an annual basis for maintenance fees.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-687,205	0	0	0	0	0	0	-687,205
Grant Funding		-512,205	0	0	0	0	0	0	-512,205
<b>Total Funding Sources</b>		<b>-1,199,410</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1,199,410</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80059	DSS Business Automation Phase II	1,024,410	0	0	0	0	0	0	1,024,410
80061	Electronic Medical Records	175,000	0	0	0	0	0	0	175,000
<b>Total Human Services Automation and Record Management</b>		<b>1,199,410</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,199,410</b>



# DSS Business Automation Phase II

# Capital Project Detail

## Project Justification

Document imaging at Union County Department of Social Services (UCDSS) is required due to the mandatory roll out of NC Fast (North Carolina Families Accessing Services through Technology) State software initiative. NC Fast is a comprehensive case management system designed to improve the business processes Social Services perform by creating an electronic client record. This enables caseworkers to spend less time performing administrative tasks and more time assisting families. NC Fast automation tools assist in determining eligibility, evaluating outcomes and ensuring accountability across all programs and counties in North Carolina. Implementation of Phase I and Phase II is complete. Phase III implementation of NC Fast will include Adult and Children Services and should be implemented by the end of 2014.

Union County DSS has completed document imaging of current client records in Food and Nutrition Services, Medicaid, Work First and the Day Care units. With approval of the CIP, UCDSS will be able to implement NC Fast successfully in these departments.

Union County DSS is scheduled to implement document imaging for the Adult Protective Services units in June, 2013.

According to the State’s record retention policy the Adoption and Child Protective Service client files must be kept indefinitely. Scanning of these files will provide a secure setting to store the documents. Once scanning is complete, these files can be imported into our Document Imaging Software at Union County Department of Social Services (UCDSS), for easy access and is a requirement of the NC Fast State software initiative.

## Project Scope

To continue implementation of document imaging to a paperless system; ensuring efficiency and timeliness in delivery of services provided to the citizens of Union County. To effectively manage client appointments and improve client business flow; reducing wait times for Union County citizens.

## Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-512,205	0	0	0	0	0	0	-512,205
4342	Grant Funding	-512,205	0	0	0	0	0	0	-512,205
Total Funding Sources		-1,024,410	0	0	0	0	0	0	-1,024,410
<b>Uses</b>									
5354	FF&E	31,350	0	0	0	0	0	0	31,350
5510	FF&E	993,060	0	0	0	0	0	0	993,060
Total Uses		1,024,410	0	0	0	0	0	0	1,024,410

# Electronic Medical Records

# Capital Project Detail

## Project Justification

EHR regulations detail the manner in which health care providers qualify for Medicare and Medicaid HER “meaningful use” payments under The Health Information Technology for Economic and Clinical Health (HITECH) Act, which in turn is part of the American Recovery and Reinvestment Act of 2009 (ARRA). Providers who fall behind in achieving meaningful use will eventually receive lower reimbursement rates for treating Medicare patients. Medicaid has currently not implemented a rate reduction schedule but is anticipated to do so although as part of the Act, Medicaid will provide incentive payments for compliance.

EHRs pull together all of a patient's medical information into one central database within an organization. These systems provide up-to-date clinical information and decision support tools in “real time”. These electronic records track team performance measures such as like infections, medical errors, and even prevention compliance. As with any HER, the identified strengths and vulnerabilities quickly stand out to be corrected.

Electronic records enable specialists who see a patient to work more as a team. Over time, most patients see several specialists in addition to their primary care physician. Until now, each doctor has kept his own chart for each patient, leading to duplicate tests and time wasted by answering the same questions from different doctors. By giving all of a patient's physicians' access to one unified patient file, an HER system wipes out longstanding bottlenecks in healthcare. There are no paper records that a patient's primary care doctor might forget to send to the specialist. The attending views everything up on his screen.

The Medicare HER Incentive Program provides incentive payments to eligible professionals, eligible hospitals, and critical access hospitals (CAHs) that demonstrate meaningful use of certified EHR technology.

Eligible professionals can receive up to \$44,000 over five years under the Medicare EHR Incentive Program. There's an additional incentive for eligible professionals who provide services in a Health Professional Shortage Area (HSPA). To get the maximum incentive payment, Medicare eligible professionals must begin participation by 2012.

The Program provides incentive payments to the eligible groups listed above as they adopt, implement, upgrade, or demonstrate meaningful use of certified HER technology in their first year of participation and demonstrate meaningful use for up to five remaining participation years.

Eligible professionals can receive up to \$63,750 over the six years that they choose to participate in the program. Prior to HER implementation, an agency must be prepared to involve all levels of agency staff. This involves training, hardware platforms that comply with the software requirements and training prior to and including support after implementation.

Many vendors currently offer products that will meet meaningful use but the price ranges, depending on the platforms and levels of detail needed by each clinic, are complex. Values assigned to each product, based on our findings, range from the low \$100K's to the mid \$200K's.

Since 2009 staff has progressed within our new state Medicaid billing system (Health Information System or HIS). The conversion has not been a smooth transition and has delayed much of our practice flow. It is the State's intention to have HIS “meaningful use” ready and eligible for us to receive incentive payments by the end of this fiscal year.

Due to the history and uncertainty of the product, it is our intention to keep the option open of purchasing an alternative system in the future.

# Electronic Medical Records

# Capital Project Detail

*Project Scope*

Project provides for the implementation of an electronic health records management system including related consulting, equipment, and related expenses.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-175,000	0	0	0	0	0	0	-175,000
Total Funding Sources		-175,000	0	0	0	0	0	0	-175,000
<b>Uses</b>									
5510	Other activities	175,000	0	0	0	0	0	0	175,000
Total Uses		175,000	0	0	0	0	0	0	175,000

# Human Services Campus

# Capital Program Detail

**Program Scope**

Program provides for the replacement of the leased Human Services Facility through the construction of a Human Services Campus including parking, clinical space, administrative space, record storage, and related other necessary service areas.

**Program Operating Budget Impact**

The Human Services Campus will house the Department of Social Services and the Health Department which receive federal and state grant funding. It is anticipated that the cost of the Human Service Campus will be offset by federal and state funding. The amount of federal and state reimbursement is undetermined at this time.

Since 1998 the County has leased space for the Human Service Departments. The annual lease payment currently is \$511,754 annually. The lease will expire in FY 2018 and beginning in late FY 2018 there will be a reduction in the operating budget for lease payments.

It is anticipated that the operating budget impact of the new facility would require additional utility and occupancy cost. The amount of these cost are undetermined at this time.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-42,150,000	0	0	0	0	0	0	-42,150,000
<b>Total Funding Sources</b>		<b>-42,150,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-42,150,000</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80057	Human Services Campus	42,150,000	0	0	0	0	0	0	42,150,000
<b>Total Human Services Campus</b>		<b>42,150,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42,150,000</b>

# Human Services Campus

# Capital Project Detail

## Project Justification

Union County, since 1998, has leased space for the Health Department, Social Services, and Juvenile Services. With the unprecedented growth in population, the County has outgrown the existing space and needs to expand into a permanent facility that will meet the long-term needs. The current lease expires on June 30, 2017.

In mid-2010, Solutions for Local Government, Inc., completed a Space Needs Study of the Health Department, Social Services, Child Support Enforcement, Veterans Services, and Juvenile Services in anticipation of a capital project to replace the existing Union Village facility. With the economic downturn, this project was delayed. In anticipation of the revival of this project, the Study was updated in May, 2012 to reflect the changed service demands resulting from the downturn.

County staff reviewed options for housing these departments in a new building after expiration of the Union Village lease. If the County were to construct a new facility, there are several traditional and non-traditional methods of bidding and contracting that could be utilized. The most common traditional construction method, and that used by Union County on all but two major construction projects, is the standard design-bid-build model. Other construction methods that are currently allowed by general statute include: separate or multi-prime (bidding general, HVAC, electrical and plumbing separately), dual contracting (a combination of single and separate prime bidding) and construction management at risk.

## Project Scope

Based on the updated space needs study, a new Human Services Campus will require a site of approximately 20 acres, will initially be approximately 130,000 square feet in size, and will require staff parking of 400 spaces and separate client parking of 250 spaces. The projected facility will be in the category of a Class B office building and the site plan will allow space for 70,000 square feet of expansion. Between September and December 2012, Solutions for Local Government completed a detailed Architectural Space Program which defined specific spaces, quantities of offices and open office areas, square footages of each space and space adjacencies. The program identified a need for 112,016 net square feet to meet the County’s projected ten (10) year need. To realistically estimate the gross square footage needed a multiplier of 30-40% was applied to the net square footage to account for interior circulation space, interior and exterior walls, mechanical and electrical spaces, elevators, and various structural and internal systems requirements. The resulting square footage estimates are in the range of 145,620 – 156,822.

## Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-42,150,000	0	0	0	0	0	0	-42,150,000
Total Funding Sources		-42,150,000	0	0	0	0	0	0	-42,150,000
<b>Uses</b>									
5381	Professional Services	3,650,000	0	0	0	0	0	0	3,650,000
5580	Buildings and Improvements	38,500,000	0	0	0	0	0	0	38,500,000
Total Uses		42,150,000	0	0	0	0	0	0	42,150,000

# IT Infrastructure and Efficiency Enhancement

# Capital Program Detail

**Program Scope**

Program provides for upgrades to the information technology infrastructure at County facilities. Upgrades include items such as network storage expansion, conversion to voice over internet protocol (VoIP) phone system, countywide document imaging, and other efficiency enhancements.

**Program Operating Budget Impact**

The operating budgeted expenditures associated with the IT program consist of software and hardware maintenance for Document Imaging at a cost of approximately \$80,000 per year. The software maintenance will be 20% of the purchase price on an annual basis or approximately \$80,000.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-1,915,738	0	0	0	0	0	0	-1,915,738
Utility Pay Go		-327,500	0	0	0	0	0	0	-327,500
<b>Total Funding Sources</b>		<b>-2,243,238</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-2,243,238</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80046	I.T. Infrastructure	1,588,238	0	0	0	0	0	0	1,588,238
80060	Phone System Upgrade	655,000	0	0	0	0	0	0	655,000
<b>Total IT Infrastructure and Efficiency Enhancement</b>		<b>2,243,238</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,243,238</b>

# I.T. Infrastructure

# Capital Project Detail

## Project Justification

In March of 2008, Union County contracted with eVisory to perform an assessment of the document imaging (electronic content management) needs of the County. That document imaging assessment showed that DSS would benefit the most of any other department within the County, by implementing a document imaging system. The assessment then identified the other departments within the County that would recognize significant benefit. The findings of that document imaging assessment were shared with the Board of Commissioners at a Commissioners meeting in 2008.

In February of 2011, an RFP for document imaging was sent out that would satisfy the document imaging needs of DSS. The responses to that RFP were received by the County in March of 2011.

The State has been working on a new application for the DSS agencies in North Carolina. The new application is called NCFast. This new State application will centralize all DSS client information in one central repository located at the State. In conjunction with this new application, the State is looking for the Counties to implement a document imaging system that will capture the necessary supporting documentation of the client. The State is looking for the County provided document imaging system to tie in with the client information stored in the State system. The State was looking for several Counties to be a pilot for this new application. Union County was chosen to be one of the pilot Counties. The first pilot phase will be implemented in the Food Stamp group at DSS. This phase of NCFast was installed at Union County in June of 2012.

To meet the requirement of providing document imaging for this new State application, the County in December of 2011, sent out another RFP that could satisfy the requirements of document imaging for DSS as well as other departments within the County. The responses to that RFP were received in January of 2012 and document imaging is still an ongoing process.

## Project Scope

Project provides the needed consulting, software, hardware, and other project cost related to a Countywide document imaging program.

## Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-1,588,238	0	0	0	0	0	0	-1,588,238
Total Funding Sources		-1,588,238	0	0	0	0	0	0	-1,588,238
<b>Uses</b>									
5021	Other activities	52,000	0	0	0	0	0	0	52,000
5265	FF&E	171,051	0	0	0	0	0	0	171,051
5354	FF&E	4,400	0	0	0	0	0	0	4,400
5510	FF&E	1,360,787	0	0	0	0	0	0	1,360,787
Total Uses		1,588,238	0	0	0	0	0	0	1,588,238

# Phone System Upgrade

# Capital Project Detail

### Project Justification

The present phone system provides dial tone, voicemail and auto attendant. The business requirements of the County are demanding more communications capabilities from the phone system. Departments are requesting ACD (automatic call distribution) capability, conference bridging, IVR (integrated voice response), and unified communications.

The vendor of the current phone system is Nortel, whom went bankrupt in January of 2009. Avaya acquired those assets and promised support for six years provided the customer keep the phone system upgraded. The County's systems have not been upgraded. As organizations replace legacy phone systems like the County has, parts will become more readily available; however, those qualified to install the parts are already in short supply.

### Project Scope

Project provides for the upgrade of the County's existing phone system to a voice over internet protocol (VoIP). The upgrade includes needed project management, equipment, infrastructure upgrades, training, software, and other project related costs.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-327,500	0	0	0	0	0	0	-327,500
4061	Utility Pay Go	-327,500	0	0	0	0	0	0	-327,500
Total Funding Sources		-655,000	0	0	0	0	0	0	-655,000
<b>Uses</b>									
5510	Other activities	655,000	0	0	0	0	0	0	655,000
Total Uses		655,000	0	0	0	0	0	0	655,000



# Jail and Sheriff's Office Replacement and Expansion Capital Program Detail

**Program Scope**

Program provides for the replacement or expansion of existing office and detention facilities including but not limited to medical space, office space, housing for female and juvenile detainees, housing for male detainees, related ancillary services, and other necessary services.

**Program Operating Budget Impact**

The operating budget impact of a new facility or expansion of the existing facility is undetermined at this time. After a facilities space study is complete, if the direction of the Commission is to construct a new jail or expand the existing jail it would require the issuance of voter approved General Obligation Bonds. The operating impact and additional utilities and occupancy cost are not determined at this time.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-1,397,429	0	0	0	0	0	0	-1,397,429
General Obligation Bonds		-467,500	0	0	0	0	0	0	-467,500
Other activities		-30,116	0	0	0	0	0	0	-30,116
<b>Total Funding Sources</b>		<b>-1,895,045</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1,895,045</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80018	Law Enforcement Jail Expansion	1,895,045	0	0	0	0	0	0	1,895,045
<b>Total Jail and Sheriff's Office Replacement and Expansion</b>		<b>1,895,045</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,895,045</b>

# Law Enforcement Jail Expansion

# Capital Project Detail

## Project Justification

The current Union County Jail Facility opened in 1994 after the County settled a Federal Lawsuit regarding the conditions under which inmates were being housed. Over the last 18 years, the inmate population has grown steadily and beyond the capacities designed for the current facility. Population growth, coupled with aging of the structure has resulted in a facility that is inadequate to meet current inmate housing needs.

There are often more inmates than there are available beds and inmates are required to sleep on the floor. Several federal court cases (including in our U.S. 4th Circuit) have upheld that requiring inmates to sleep on the floor of a detention facility, for any reason, is cruel and unusual punishment and a violation of their Constitutional protections. Giving the history, the County risks additional lawsuits given current conditions.

Furthermore, insufficient housing for inmates puts the safety of our employees in jeopardy. Overcrowding and inadequate facilities both lend to a more stressful environment that could easily erupt into a dangerous situation for our officer. Depending on the shift, there could be as few officers working as eight (8) or ten (10) or as many as twenty-four (24). Considering that on a day in November of 2012 there were 299 inmates in custody, the inmate to officer ratio could be dangerously high.

Inmate population issues are not the only obstacles that make a new jail facility a necessity for the Sheriff’s Office and the County. Over the past 18 years, the Union County Sheriff’s Office has grown, not only in numbers, but in the way it conducts the County’s business on a daily basis. Procedures within the jail have changed to meet the needs of a changing society and the process by which the jail operates is more involved. The current available space is not conducive to the daily operation of the jail. Many of the changes were made with the public’s safety in mind, from ensuring the identity of a detainee to providing an accurate accounting of a person’s criminal record so that an appropriate bond decision can be made.

Outside of the jail, changes in legislation have required operational modifications within the Sheriff’s Office. Evidence and property storage laws dictate that we store more, longer. The current evidence room, a renovated training room, is not adequate conform to the mandated changes.

The ever-changing world of law enforcement technology is yet another issue the Office has encountered. As we try to keep up with the automation of many of our processes, our Information Technology needs and equipment are constantly growing and changing. Unfortunately, the space to accommodate this growth does not exist within our current structure. Overall, the Sheriff’s Office is critically short of the office space needed to conduct business in an efficient and effective manner.

Changes in our service model, Federal and State Regulations and an increasing population have altered the way the Sheriff’s Office must provide service to the citizens of Union County. This construction project will address and solve the deficiencies we encounter in our daily operations and will mitigate the constant liability exposure we face should a lawsuit occur. An expansion of this magnitude, while costly, will only increase in cost the longer it is set aside. Our constraints will only increase with time, making the expansion of the Sheriff’s Office and Jail imperative to the continued quality of service we provide to the citizens of Union County.

## Project Scope

Project provides for the replacement and expansion of existing office and detention facilities including but not limited to medical space, office space, housing for female and juvenile detainees, housing for male detainees, related ancillary services, and other necessary services. A space study is currently ongoing to determine the facilities needs. Once the study is complete the project cost will be further defined.

## Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
-------------	-------	-----------------	------------------	-----------------	-----------------	-----------------	-----------------	-----------------	-------

# Law Enforcement Jail Expansion

# Capital Project Detail

**Funding Sources**

4010	General Fund Pay Go	-1,397,429	0	0	0	0	0	0	-1,397,429
4710	General Obligation Bonds	-467,500	0	0	0	0	0	0	-467,500
4812	Other activities	-30,116	0	0	0	0	0	0	-30,116
Total Funding Sources		-1,895,045	0	0	0	0	0	0	-1,895,045

**Uses**

5580	FF&E	0	0	0	0	0	0	0	0
5580	Design & Engineering	0	0	0	0	0	0	0	0
5580	Construction	0	0	0	0	0	0	0	0
5580	Buildings and Improvements	1,895,045	0	0	0	0	0	0	1,895,045
Total Uses		1,895,045	0	0	0	0	0	0	1,895,045

# Jesse Helms Park Development

# Capital Program Detail

**Program Scope**

Program provides for the development of Jesse Helms Park as outlined in the various phases of the Jesse Helms Park Master Plan. Development includes completing the park's passive areas, trail systems, pavilions and shelters, park maintenance facilities, and other enhancements to improve the recreational offerings at the park.

**Program Operating Budget Impact**

Once the development of Jesse Helms Park is complete it is anticipated that the operating budget impact will be \$180,839 on an annual basis. The additional operating budget expenditures approximate costs includes additional personnel and benefits of \$161,178, additional utility cost of \$7,855, and maintenance cost of \$3,000 on an annual basis.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-938,402	-75,000	0	0	0	0	0	-1,013,402
<b>Total Funding Sources</b>		<b>-938,402</b>	<b>-75,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1,013,402</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80041	JHP Passive Area Phase 2	938,402	75,000	0	0	0	0	0	1,013,402
<b>Total Jesse Helms Park Development</b>		<b>938,402</b>	<b>75,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,013,402</b>

# JHP Passive Area Phase 2

# Capital Project Detail

### Project Justification

The recreational items slated for this project were identified in the Jesse Helms Park Master Plan. The construction documents for this project were completed in early fall 2011. At that point, the project was placed out for bid. The bids received were well above budget and the project was “tabled”.

The Board of County Commissioners requested the Advisory Committee review the items in the project to see if they were still relevant based on the citizens’ needs. At the March 2012 Advisory Committee, all elements of the project were reviewed, and the committee felt that the items were still needed and were highly sought recreational activities “statewide”. They suggested that we move forward with the project when monies become available. At the January 2013 Advisory Committee Meeting, the committee selected this as their Number One Priority CIP Project due to the fact that the property is available, the construction documents are complete, and in order to meet the recreational needs of the public (walking, hiking, biking, picnicking).

### Project Scope

Project provides for Phase II Development of Jesse Helms Park Passive Area, which includes the needed infrastructure to address the needs of the community, walking, running, biking, and other passive recreational activities.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-938,402	-75,000	0	0	0	0	0	-1,013,402
Total Funding Sources		-938,402	-75,000	0	0	0	0	0	-1,013,402
<b>Uses</b>									
5570	Land and Improvements	938,402	75,000	0	0	0	0	0	1,013,402
Total Uses		938,402	75,000	0	0	0	0	0	1,013,402

# Law Enforcement Facilities Expansion & Renovations

# Capital Program Detail

**Program Scope**

Program provides for a facilities space needs study, renovation and/or expansion of existing law enforcement offices and for the construction of climate controlled storage facilities for the County's special and tactical vehicles. Once the facilities space study is complete the funding for renovation or expansion will become further defined.

**Program Operating Budget Impact**

The Storage Garage for Special Response Vehicles will have an operating budget impact for additional utility cost.

A facilities space needs study is currently ongoing for the Sheriff's Office Renovation project to determine what facility improvements are needed. Once the study is complete the operating budget impact will be further defined.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-357,700	-50,000	0	0	0	0	0	-407,700
<b>Total Funding Sources</b>		<b>-357,700</b>	<b>-50,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-407,700</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80063	Storage Garage-Spec Resp Vehicles	277,700	0	0	0	0	0	0	277,700
80080	Sheriff's Office Renovations	80,000	50,000	0	0	0	0	0	130,000
<b>Total Law Enforcement Facilities Expansion &amp; Renovations</b>		<b>357,700</b>	<b>50,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>407,700</b>

# Storage Garage-Spec Resp Vehicles Capital Project Detail

**Project Justification**

The Union County Sheriff’s Office has a number of specialty vehicles, used mainly for emergency response situations. Currently these vehicles are stored in a 3 sided structure that offers limited protection from the elements and limited security. The County’s investment in these expensive vehicles would be better protected with a 4 sided, climate controlled structure. Not only would they be kept from the deterioration that nature causes, they would be more secure. These vehicles hold ammunition, weapons and other items that not only need to be secure; they are best stored in a climate controlled environment. Letting these items get too hot or cold can degrade the effectiveness.

**Project Scope**

Project provides for the construction of an enclosed, climate controlled storage facility for the County's specialty and tactical vehicles.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-277,700	0	0	0	0	0	0	-277,700
Total Funding Sources		-277,700	0	0	0	0	0	0	-277,700
<b>Uses</b>									
5580	Buildings and Improvements	277,700	0	0	0	0	0	0	277,700
Total Uses		277,700	0	0	0	0	0	0	277,700

# Sheriff's Office Renovations

# Capital Project Detail

## Project Justification

The Union County Sheriff's Office facility is in need of a complete renovation. This renovation becomes even more important if the decision is made not to move on with a Jail Expansion. The current space is not adequate to meet the needs of an ever changing Law Enforcement environment. Changes in legislation have required operational modifications within the Sheriff's Office. Evidence and property storage laws dictate that we store more, longer. Our current evidence room, a renovated training room, is not an adequate conform to the mandated changes. The ever-changing world of law enforcement technology is yet another issue the Office has encountered. As we try to keep up with the automation of many of our processes, our Information Technology needs and equipment are constantly growing and changing. Unfortunately, the space to accommodate this growth does not exist within our current structure. Overall, the Sheriff's Office is critically short of the office space needed to conduct business in an efficient and effective manner. Offices originally built for one employee now house two or three. The interview rooms are not soundproof and suspects are able to hear the daily business going on in the hallways.

Changes in our service model, Federal and State Regulations and an increasing population have altered the way the Sheriff's Office must provide service to the citizens of Union County. This construction project will address the deficiencies we encounter in our daily operations. This project is essential for the Sheriff's Office to provide the quality of service that the citizens of Union County expect and deserve.

## Project Scope

Project provides for the full renovation of the Sheriff's offices to include evidence storage, administrative offices, training space, technology upgrades, and other needed upgrades. A facilities space study needs is currently ongoing and once the study is complete the cost of renovations will become further defined.

## Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-80,000	-50,000	0	0	0	0	0	-130,000
Total Funding Sources		-80,000	-50,000	0	0	0	0	0	-130,000
<b>Uses</b>									
5381	Professional Services	80,000	0	0	0	0	0	0	80,000
5580	FF&E	0	0	0	0	0	0	0	0
5580	Design & Engineering	0	50,000	0	0	0	0	0	50,000
5580	Construction	0	0	0	0	0	0	0	0
Total Uses		80,000	50,000	0	0	0	0	0	130,000



# Library Expansion and Development Capital Program Detail

**Program Scope**

Program provides for the expansion of existing library space as well as the construction of additional libraries, including the needed design, construction, and related cost of expansion and new library spaces.

**Program Operating Budget Impact**

The Library Expansion and Development Program will be primarily funded from the issuance of General Obligation Bonds of \$10,000,000 in FY 2018. The maximum annual debt service impact for this program will be \$1,015,000 and is projected to begin in FY 2019 and retire in FY 2038.

The South West Regional Library will require additional personnel and additional operating expenditures. The additional personnel for the new facility would require seven full time employees at a cost of \$367,097 and five part time employees equivalent to 3.38 FTEs at \$114,805. Additional operating expenditures include office supplies, books and electronic material of \$139,325 and occupancy cost of \$300,000 per year. It is anticipated that this facility would open in FY 2020.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	0	-503,332	0	0	0	0	0	-503,332
General Obligation Bonds	0	-1,850,000	-8,150,000	0	0	0	0	-10,000,000
<b>Total Funding Sources</b>	<b>0</b>	<b>-2,353,332</b>	<b>-8,150,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-10,503,332</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80088	Library RFID	0	250,000	0	0	0	0	0	250,000
80089	Monroe Library Redesign	0	253,332	0	0	0	0	0	253,332
80096	Southwest Union Library	0	1,850,000	8,150,000	0	0	0	0	10,000,000
<b>Total Library Expansion and Development</b>		<b>0</b>	<b>2,353,332</b>	<b>8,150,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,503,332</b>

# Library RFID

# Capital Project Detail

### Project Justification

RFID allows material barcodes to be read by an antenna instead of a scanner. By instituting RFID in all 4 of our library locations we will be offering a more efficient workflow by providing expedited service through self check-out and automated check-in which will decrease wait times. We can also manage our inventory and provide material tracking and security. This will allow materials to never be missing and patrons will be able to find the exact location of an item on our shelves, which will greatly enhance our customer service. It will improve loss prevention resulting from a patron’s failure to check out materials, and we will easily be able to accommodate increases to circulation without needing more circulation staff.

### Project Scope

Installation of Radio Frequency Identification (RFID) in all 4 library locations.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	0	-250,000	0	0	0	0	0	-250,000
Total Funding Sources		0	-250,000	0	0	0	0	0	-250,000
<b>Uses</b>									
5510	FF&E	0	250,000	0	0	0	0	0	250,000
Total Uses		0	250,000	0	0	0	0	0	250,000

# Monroe Library Redesign

# Capital Project Detail

### Project Justification

The Library was awarded a planning grant from the State Library in July of 2016 to conduct a space needs assesment of the Main Library. Kimberly Bolan Cullin and Associates were chosen as the consultants. The consultant's recommendations was for capital items needing to be purchased. These recommendations are based off of community input and staff input combined with the consultants' expertise.

### Project Scope

Redesign of the Main Library's space specifically replace the adult/teen shelving in one year and replaces the children's shelving in the following year. Total units of shelving to be purchased is approximately 223 units.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	0	-253,332	0	0	0	0	0	-253,332
Total Funding Sources		0	-253,332	0	0	0	0	0	-253,332
<b>Uses</b>									
5510	Design & Engineering	0	253,332	0	0	0	0	0	253,332
Total Uses		0	253,332	0	0	0	0	0	253,332

# Southwest Union Library

# Capital Project Detail

### Project Justification

During the Election of November 2016 a Bond Referendum was approved to issue General Obligation Bonds, in the amount of \$10,000,000, to build a library. One super-regional library to serve the entire southwestern quadrant of the County is part of the Library's master facilities plan and the recommendation of the Library Board of Trustees. This 35,000-square-foot campus will be a full-service facility with one hundred seventy-five parking spaces; housing 87,500 pieces of material. It will also include public computers and wireless internet access, a community meeting room, a children's library with a story time room, a teen room to house collections and provide space for programs and activities, as well as comfortable seating; newspaper and magazine display shelving, study tables with seating, study rooms, and a conference room.

### Project Scope

This project provides for the land acquisition, construction, furnishing, and opening day collection for a new full-service 35,000 sq. ft. regional library to serve the southwest side of the County.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4710	General Obligation Bonds	0	-1,850,000	-8,150,000	0	0	0	0	-10,000,000
Total Funding Sources		0	-1,850,000	-8,150,000	0	0	0	0	-10,000,000
<b>Uses</b>									
5570	Land Acquisition	0	1,000,000	0	0	0	0	0	1,000,000
5580	Design & Engineering	0	850,000	0	0	0	0	0	850,000
5580	Construction	0	0	8,150,000	0	0	0	0	8,150,000
Total Uses		0	1,850,000	8,150,000	0	0	0	0	10,000,000

# Park Development and Renewal

# Capital Program Detail

**Program Scope**

Program provides for the maintenance and renewal of existing parks as well as for future park development planning. Activities include master planning, facility replacement, and other related projects.

**Program Operating Budget Impact**

The operating cost for Park Development and Renewal will be minimal.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-226,750	-208,600	0	0	0	0	0	-435,350
<b>Total Funding Sources</b>		<b>-226,750</b>	<b>-208,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-435,350</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80075	Parks and Recreation Paving	104,500	83,600	0	0	0	0	0	188,100
80090	Cane Creek Park Lake Enhancements	0	125,000	0	0	0	0	0	125,000
80097	Cane Creek Park Arcade Renovation	122,250	0	0	0	0	0	0	122,250
<b>Total Park Development and Renewal</b>		<b>226,750</b>	<b>208,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>435,350</b>

# Parks and Recreation Paving

# Capital Project Detail

### Project Justification

These funds are for the repairs of deteriorating asphalt surfaces within the Parks and Recreation System. These projects include two major areas. (1) Cane Creek Park's Boat Ramp Area (\$95,000) which has not been resurfaced since the original installation (estimated at 1985 or before). (2) Fred Kirby Park's Park Lot (\$76,000) which has not been resurfaced since the park was established in the mid-90s. The worst of these projects is the Cane Creek Park's Boat Ramp which shows excessive signs of deterioration, to include the edges breaking away causing "drop-offs" in several locations. It's condition is becoming a safety issue. Projected costs are based on a local paver's estimate.

### Project Scope

Parks and Recreation paving needs.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-104,500	-83,600	0	0	0	0	0	-188,100
Total Funding Sources		-104,500	-83,600	0	0	0	0	0	-188,100
<b>Uses</b>									
5570	Land and Improvements	104,500	83,600	0	0	0	0	0	188,100
Total Uses		104,500	83,600	0	0	0	0	0	188,100

# Cane Creek Park Lake Enhancements Capital Project Detail

**Project Justification**

In 2016 Park Staff had to close the lake at Cane Creek Park to boat traffic on numerous occasions (approximately 7) due to excessive rainfall and the water level in the lake rising above our fixed docks. The closure of the lake is for safety reasons. In the event of heavy rainfall and a rise in the level of the lake (16" above full pond) our main boat dock in the Day Use Area becomes submerged and can not be seen by boaters. The floating dock system that staff has been transitioning to at other locations in the lake for several years can alleviate the need for lake closures. As stated above, we need four floating dock systems for a 100% change over to the new floating dock system. During this transition, we would like to add a kayak/canoe launch to the main dock in the Day Use Area. This launch would be ADA Accessible as well. Kayaks/Canoes are becoming increasingly popular leisure activity for guests. The addition of this launch (a part of the floating dock system) would make the launch of Kayaks/Canoes much easier for guests. As part of the lake enhancement project staff would like to add and ADA path from our boat ramp parking lot to the main boat dock in the Day Use Area. This would include professional services to provide A&E drawings for the pathway to the dock to ensure that it meets ADA compliance. Park staff had a professional ADA audit performed in 2015 and the audit shows no current ADA accessibility to our docks.

**Project Scope**

Cane Creek Park has seven docks in our lake. Currently, three are new floating dock systems, two are old wooden floating docks, and two are wooden fixed docks. Park staff would like to complete the transition to all floating dock systems for the remaining four docks. In addition to these floating docks we would like to install an ADA compatible kayak/canoe launch system on one of the floating docks in our Day Use Area and build an ADA accessible trail to the main boat ramp in the Day Use Area as well.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	0	-125,000	0	0	0	0	0	-125,000
Total Funding Sources		0	-125,000	0	0	0	0	0	-125,000
<b>Uses</b>									
5570	Land and Improvements	0	125,000	0	0	0	0	0	125,000
Total Uses		0	125,000	0	0	0	0	0	125,000

# Cane Creek Park Arcade Renovation Capital Project Detail

*Project Justification*

The Cane Creek Arcade building has exceeded its useful life as an arcade for campground patrons. In recent years, the arcade equipment has been removed due to lack of use and the building has been used to occasionally store maintenance equipment. Improvements to the building will provide a lakefront rental facility for parties, meetings, and other special events. This utilization will provide an additional amenity for campground patrons as well another revenue stream for the park.

*Project Scope*

Renovation of the Cane Creek Park Arcade building will include both interior and exterior improvements. Two restrooms and a kitchenette will be added; floors, the ceiling and lighting will be replaced; four bay doors will be removed and replaced with large windows; a lakeside patio will be added; and the exterior of the building will receive a new facade.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-122,250	0	0	0	0	0	0	-122,250
Total Funding Sources		-122,250	0	0	0	0	0	0	-122,250
<b>Uses</b>									
5580	Buildings and Improvements	122,250	0	0	0	0	0	0	122,250
Total Uses		122,250	0	0	0	0	0	0	122,250



# South Piedmont Community College Capital Program Detail

**Program Scope**

Capital program to provide for the ongoing improvement, renovation, renewal, replacement, and development of South Piedmont Community College. The program specifically provides for renovations to accommodate the Americans with Disabilities Act requirements, changing technology needs, facility safety and security concerns, facility improvements, and expansion to accommodate student growth at South Piedmont Community College.

**Program Operating Budget Impact**

These expenditures primarily represent routine improvements, renovations to existing school facilities, and expansion to SPCC. It is assumed that operating expenses will remain constant with current operating costs for the existing spaces. In cases where efficiencies are made with building renovations, or systems are replaced with those that are more energy-efficient, there may be annual energy savings.

The SPCC program is primarily funded from the issuance of General Obligation Bonds of \$40,000,000 in FY 2018. The maximum annual debt service impact for this program will be \$4,051,500 and is projected to begin in FY 2019 and retire in FY 2038.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-3,580,415	-801,500	0	0	0	0	0	-4,381,915
General Obligation Bonds	-1,672,500	-23,445,000	-12,582,500	-184,000	-2,116,000	0	0	-40,000,000
<b>Total Funding Sources</b>	<b>-5,252,915</b>	<b>-24,246,500</b>	<b>-12,582,500</b>	<b>-184,000</b>	<b>-2,116,000</b>	<b>0</b>	<b>0</b>	<b>-44,381,915</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80066	SPCC- Welding Lab	765,352	0	0	0	0	0	0	765,352
80067	SPCC-Deferred Capital Maintenance	984,648	171,500	0	0	0	0	0	1,156,148
80076	SPCC Technology	868,315	475,000	0	0	0	0	0	1,343,315
80077	SPCC HVAC And Security	150,000	155,000	0	0	0	0	0	305,000
80078	SPCC Resurfacing Of Parking Lot	467,100	0	0	0	0	0	0	467,100
80079	SPCC Parking	345,000	0	0	0	0	0	0	345,000
80091	SPCC-Tyson Family Center for Technology	392,000	4,508,000	0	0	0	0	0	4,900,000
80092	SPCC-STEM building	1,280,500	18,419,500	0	0	0	0	0	19,700,000
80093	SPCC-Renovation - Building A	0	517,500	6,382,500	0	0	0	0	6,900,000
80094	SPCC-Renovation - Building B	0	0	0	184,000	2,116,000	0	0	2,300,000
80095	SPCC-Classroom Building, Western Union County	0	0	6,200,000	0	0	0	0	6,200,000
<b>Total South Piedmont Community College</b>		<b>5,252,915</b>	<b>24,246,500</b>	<b>12,582,500</b>	<b>184,000</b>	<b>2,116,000</b>	<b>0</b>	<b>0</b>	<b>44,381,915</b>

# SPCC- Welding Lab

# Capital Project Detail

**Project Justification**

Requested by SPCC and recommended by the Board of County Commissioners.

**Project Scope**

Project provides for a welding lab at the SPCC Center for Technology and Health Education.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-765,352	0	0	0	0	0	0	-765,352
Total Funding Sources		-765,352	0	0	0	0	0	0	-765,352
<b>Uses</b>									
5580	Buildings and Improvements	765,352	0	0	0	0	0	0	765,352
Total Uses		765,352	0	0	0	0	0	0	765,352

# SPCC-Deferred Capital Maintenance

# Capital Project Detail

*Project Justification*

Requested by SPCC and recommended by the Board of County Commissioners.

*Project Scope*

Project provides for ongoing/deferred capital maintenance needs at SPCC.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-984,648	-171,500	0	0	0	0	0	-1,156,148
Total Funding Sources		-984,648	-171,500	0	0	0	0	0	-1,156,148
<b>Uses</b>									
5580	Buildings and Improvements	984,648	171,500	0	0	0	0	0	1,156,148
Total Uses		984,648	171,500	0	0	0	0	0	1,156,148

# SPCC Technology

# Capital Project Detail

**Project Justification**

Requested by SPCC and recommended by the County Manager. Project includes Storage Area Network, PC monitors and classroom computers, upgrade wireless to AC Standards, Data Center switches, Network Identity Services Systems, fiber rewiring, projector system, classroom whiteboards, etc.

**Project Scope**

Project provides for ongoing technology needs at SPCC.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-868,315	-475,000	0	0	0	0	0	-1,343,315
Total Funding Sources		-868,315	-475,000	0	0	0	0	0	-1,343,315
<b>Uses</b>									
5699	Other activities	868,315	475,000	0	0	0	0	0	1,343,315
Total Uses		868,315	475,000	0	0	0	0	0	1,343,315

# SPCC HVAC And Security

# Capital Project Detail

**Project Justification**

Requested by SPCC and recommended by the County Manager.

**Project Scope**

Project provides for replacement, consolidation, and/or upgrades to old Security, Fire, and HVAC Building Automation.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-150,000	-155,000	0	0	0	0	0	-305,000
Total Funding Sources		-150,000	-155,000	0	0	0	0	0	-305,000
<b>Uses</b>									
5699	Other activities	150,000	155,000	0	0	0	0	0	305,000
Total Uses		150,000	155,000	0	0	0	0	0	305,000

# SPCC Resurfacing Of Parking Lot

# Capital Project Detail

*Project Justification*

Requested by SPCC and recommended by the County Manager.

*Project Scope*

Project provides for resurfacing existing parking lot of Building A at Old Charlotte Highway SPCC Campus.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-467,100	0	0	0	0	0	0	-467,100
Total Funding Sources		-467,100	0	0	0	0	0	0	-467,100
<b>Uses</b>									
5699	Other activities	467,100	0	0	0	0	0	0	467,100
Total Uses		467,100	0	0	0	0	0	0	467,100

# SPCC Parking

# Capital Project Detail

*Project Justification*

Requested by SPCC and recommended by the County Manager.

*Project Scope*

Project provides for an additional 100 parking place at the Old Charlotte Highway SPCC Campus.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-345,000	0	0	0	0	0	0	-345,000
Total Funding Sources		-345,000	0	0	0	0	0	0	-345,000
<b>Uses</b>									
5699	Other activities	345,000	0	0	0	0	0	0	345,000
Total Uses		345,000	0	0	0	0	0	0	345,000

# SPCC-Tyson Family Center for Technology

# Capital Project Detail

**Project Justification**

During the Election of November 2016 a Bond Referendum was approved to provide funding for SPCC. This project was requested by SPCC and recommended by the Board of County Commissioners.

**Project Scope**

Initial renovation of former warehouse/distribution center was completed in 2013, providing 12,000 square feet for classrooms and specialty labs for Advanced Manufacturing, Industrial Maintenance, and Construction Technologies. Renovation plans include a second floor for the bay warehouse area, bringing total useable area to 75,000 square feet.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4710	General Obligation Bonds	-392,000	-4,508,000	0	0	0	0	0	-4,900,000
Total Funding Sources		-392,000	-4,508,000	0	0	0	0	0	-4,900,000
<b>Uses</b>									
5630	Payment to Other Gov Units	392,000	4,508,000	0	0	0	0	0	4,900,000
Total Uses		392,000	4,508,000	0	0	0	0	0	4,900,000



# SPCC-STEM building

# Capital Project Detail

*Project Justification*

During the Election of November 2016 a Bond Referendum was approve to provide funding for SPCC. This project was requested by SPCC and recommended by the Board of County Commissioners.

*Project Scope*

STEM (Science, Technology, Engineering, and Math) Building will become the focal point on SPCC's Old Charlotte Highway Campus for developing local talent in support of high-skill, high wage jobs for Union County. The STEM Building will be 75,000 square feet with three stories and will include the following: Biology, Microbiology, Biotechnology labs, computer labs, classrooms, Basic Skills and Developmental Educational labs, bookstore, student activity space, and cafeteria.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4710	General Obligation Bonds	-1,280,500	-18,419,500	0	0	0	0	0	-19,700,000
Total Funding Sources		-1,280,500	-18,419,500	0	0	0	0	0	-19,700,000
<b>Uses</b>									
5630	Payment to Other Gov Units	1,280,500	18,419,500	0	0	0	0	0	19,700,000
Total Uses		1,280,500	18,419,500	0	0	0	0	0	19,700,000

# SPCC-Renovation - Building A

# Capital Project Detail

### Project Justification

During the Election of November 2016 a Bond Referendum was approved to provide funding for SPCC. This project was requested by SPCC and recommended by the Board of County Commissioners.

### Project Scope

Built in 1981 as a bank operations center, Building A was partially modified in 2005 to create a conference/instruction center. The majority of the building has not been upgraded for its current functions. Renovations to Building A would include bringing the building into compliance with current building, accessibility, and energy codes. The renovations will also accommodate the growth for Union County Early College programs housed in Building A.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4710	General Obligation Bonds	0	-517,500	-6,382,500	0	0	0	0	-6,900,000
Total Funding Sources		0	-517,500	-6,382,500	0	0	0	0	-6,900,000
<b>Uses</b>									
5630	Payment to Other Gov Units	0	517,500	6,382,500	0	0	0	0	6,900,000
Total Uses		0	517,500	6,382,500	0	0	0	0	6,900,000

# SPCC-Renovation - Building B

# Capital Project Detail

**Project Justification**

During the Election of November 2016 a Bond Referendum was approve to provide funding for SPCC. This project was requested by SPCC and recommended by the Board of County Commissioners.

**Project Scope**

Building B was built in 2003 and has not been renovated or modified since. New instructional space at the renovated CTHE and new STEM Building would allow Building B to accommodate new academic programming and better service existing programs.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4710	General Obligation Bonds	0	0	0	-184,000	-2,116,000	0	0	-2,300,000
Total Funding Sources		0	0	0	-184,000	-2,116,000	0	0	-2,300,000
<b>Uses</b>									
5630	Payment to Other Gov Units	0	0	0	184,000	2,116,000	0	0	2,300,000
Total Uses		0	0	0	184,000	2,116,000	0	0	2,300,000

# SPCC-Classroom Building, Western Union County

# Capital Project Detail

**Project Justification**

During the Election of November 2016 a Bond Referendum was approved to provide funding for SPCC. This project was requested by SPCC and recommended by the Board of County Commissioners. A dual purpose project would meet the college's need for an enhanced presence in western Union County as well as meeting the need for a lending library in that part of the County.

**Project Scope**

Build a Classroom Building, approximately 25,000-30,000 square feet, to include a full service lending library, six to eight classrooms, and Administrative Office space.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4710	General Obligation Bonds	0	0	-6,200,000	0	0	0	0	-6,200,000
Total Funding Sources		0	0	-6,200,000	0	0	0	0	-6,200,000
<b>Uses</b>									
5630	Payment to Other Gov Units	0	0	6,200,000	0	0	0	0	6,200,000
Total Uses		0	0	6,200,000	0	0	0	0	6,200,000

# Tax Assessment and Administration Software Replacement Capital Program Detail

**Program Scope**

Program provides for the upgrade or replacement of the Tax Assessor's Software used for Property Tax Records, Billings, and Collections. The County has chosen Devnet as the new software provider. Installation of the new software is currently underway and is expected to be completed in FY 2018.

**Program Operating Budget Impact**

Replacement software for the Tax Assessor's Office will require an annual software maintenance fee. The operating budget impact for the software maintenance fee will be \$212,000 per year based on the current contract with Devnet.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-1,200,000	0	0	0	0	0	0	-1,200,000
<b>Total Funding Sources</b>		<b>-1,200,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1,200,000</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
80082	Tax Administration Software	1,200,000	0	0	0	0	0	0	1,200,000
<b>Total Tax Assessment and Administration Software Replacement</b>		<b>1,200,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,200,000</b>

# Tax Administration Software

# Capital Project Detail

**Project Justification**

The current Manatron System was installed in FY 2002. Since that time there have been numerous functional improvements as well as additional vendors providing the needed software. This software bills more than \$150,000,000 annually and it is imperative that the billing be reliable and accurate software in needed to ensure the accuracy of the assessment and billing process is critical to protect the County. The County has selected Devnet as the new software provider and installation is currently underway.

**Project Scope**

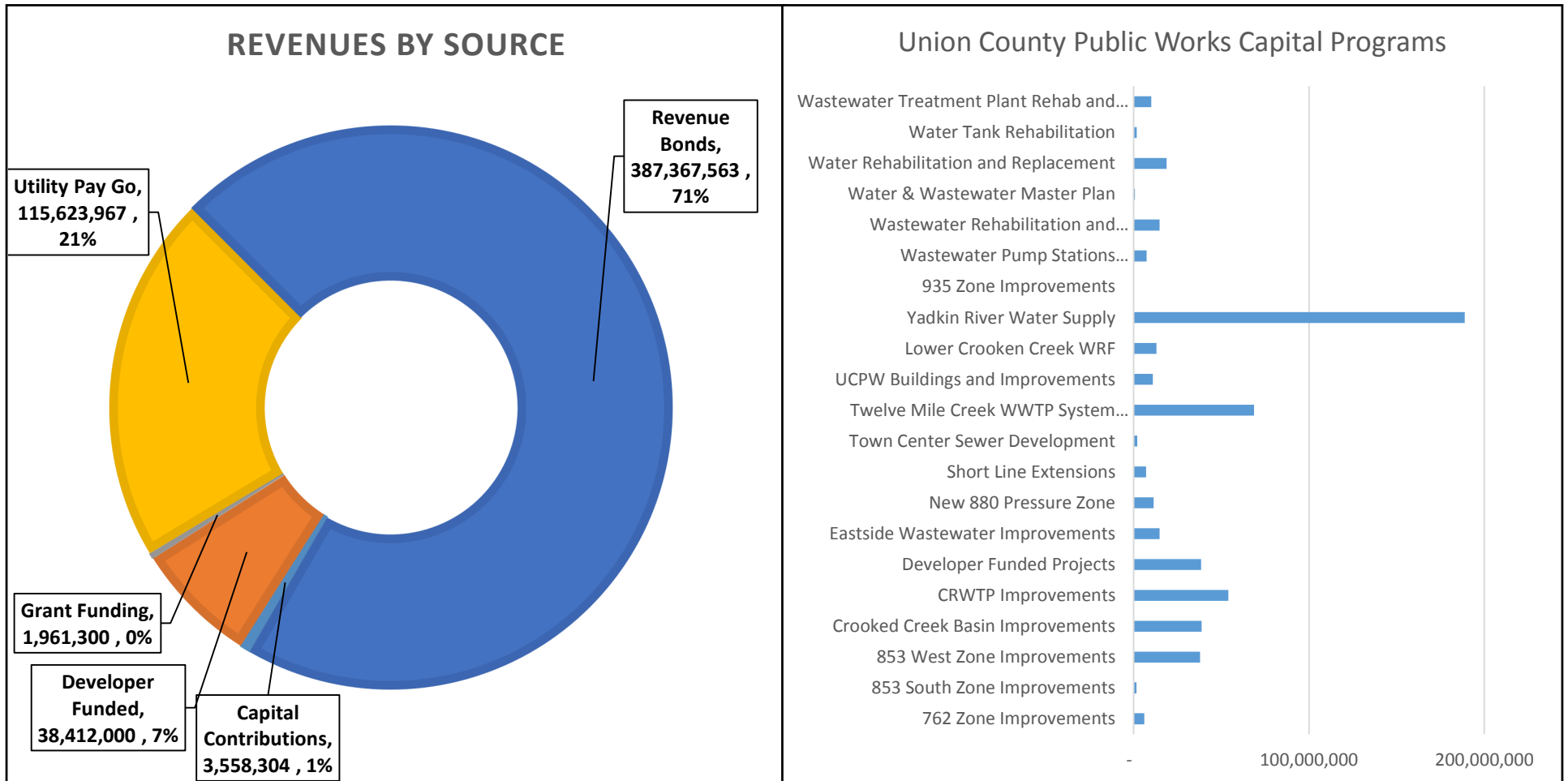
Project provides for the needed consulting, software, and hardware to upgrade or replace the County's existing assessment and billing software.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4010	General Fund Pay Go	-1,200,000	0	0	0	0	0	0	-1,200,000
Total Funding Sources		-1,200,000	0	0	0	0	0	0	-1,200,000
<b>Uses</b>									
5510	Other activities	1,200,000	0	0	0	0	0	0	1,200,000
Total Uses		1,200,000	0	0	0	0	0	0	1,200,000

# Public Works Capital Program—Six year CIP Plan

## \$546,923,134



# Public Works Capital Program

# CIP Summary Report

Funding Sources	Appropriation To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Capital Contributions	-3,558,304	0	0	0	0	0	0	-3,558,304
Developer Funded	0	0	0	0	0	0	-38,412,000	-38,412,000
Grant Funding	-1,961,300	0	0	0	0	0	0	-1,961,300
Revenue Bonds - 2015	-24,588,532	0	0	0	0	0	0	-24,588,532
Revenue Bonds - 2017	-61,658,293	0	0	0	0	0	0	-61,658,293
Revenue Bonds - 2019	-21,001,838	-34,600,000	-54,900,000	0	0	0	0	-110,501,838
Revenue Bonds - 2020	-18,900	-13,600,000	-67,700,000	-93,200,000	0	0	0	-174,518,900
Revenue Bonds - 2022	0	0	0	-1,900,000	-7,000,000	-1,500,000	-1,000,000	-11,400,000
Revenue Bonds - 2023+	0	0	0	0	0	0	-4,700,000	-4,700,000
Utility Pay Go	-75,023,967	-5,800,000	-5,400,000	-7,700,000	-5,100,000	-6,100,000	-10,500,000	-115,623,967
<b>Total Funding Sources</b>	<b>-187,811,134</b>	<b>-54,000,000</b>	<b>-128,000,000</b>	<b>-102,800,000</b>	<b>-12,100,000</b>	<b>-7,600,000</b>	<b>-54,612,000</b>	<b>-546,923,134</b>

Program No.	Program	Program To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85000	762 Zone Improvements	5,382,700	400,000	0	0	300,000	0	0	6,082,700
85001	853 South Zone Improvements	412,000	0	0	0	0	200,000	1,000,000	1,612,000
85002	853 West Zone Improvements	1,695,000	0	18,000,000	18,200,000	0	0	0	37,895,000
85003	Crooked Creek Basin Improvements	16,888,800	1,600,000	1,200,000	2,900,000	6,700,000	1,100,000	8,300,000	38,688,800
85004	CRWTP Improvements	35,598,522	18,400,000	0	0	0	0	0	53,998,522
85005	Developer Funded Projects	0	0	0	0	0	0	38,412,000	38,412,000
85006	Eastside Wastewater Improvements	14,837,957	0	0	0	0	0	0	14,837,957
85007	New 880 Pressure Zone	10,900,245	400,000	0	0	0	0	0	11,300,245
85008	Short Line Extensions	3,216,000	600,000	600,000	600,000	700,000	700,000	700,000	7,116,000
85009	Town Center Sewer Development	2,107,440	0	0	0	0	0	0	2,107,440
85010	Twelve Mile Creek WWTP System Improvements	57,906,030	900,000	9,800,000	0	0	0	0	68,606,030
85011	UCPW Buildings and Improvements	10,915,376	0	0	0	0	0	0	10,915,376
85012	Lower Crooked Creek WRF	1,500,000	1,100,000	10,400,000	0	0	0	0	13,000,000
85013	Yadkin River Water Supply	6,173,040	25,500,000	81,900,000	75,300,000	0	0	0	188,873,040
85016	935 Zone Improvements	0	100,000	0	0	0	0	0	100,000
86000	Wastewater Pump Station Improvements	2,745,000	300,000	1,700,000	900,000	300,000	400,000	1,000,000	7,345,000



# Public Works Capital Program

# CIP Summary Report

Program No.	Program	Program To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
86001	Wastewater Rehabilitation and Replacement	7,429,045	1,200,000	1,200,000	1,200,000	700,000	1,500,000	1,500,000	14,729,045
86002	Water & Wastewater Master Plan	318,000	0	0	400,000	0	0	0	718,000
86003	Water Rehabilitation and Replacement	8,828,979	1,600,000	1,600,000	1,700,000	1,300,000	1,900,000	1,900,000	18,828,979
86004	Water Tank Rehabilitation	957,000	400,000	0	0	400,000	0	0	1,757,000
86005	Waste Water Treatment Plant Rehab and Replacement	0	1,500,000	1,600,000	1,600,000	1,700,000	1,800,000	1,800,000	10,000,000
<b>Total Uses</b>		<b>187,811,134</b>	<b>54,000,000</b>	<b>128,000,000</b>	<b>102,800,000</b>	<b>12,100,000</b>	<b>7,600,000</b>	<b>54,612,000</b>	<b>546,923,134</b>

# 762 Zone Improvements

# Capital Program Detail

**Program Scope**

Program provides for system improvements as outlined in detail in the Comprehensive Water & Wastewater Master Plan. These improvements include the installation of water mains, pump modifications, elevated storage tanks, and other necessary improvements to provides sufficient water supply and fire flow in the area.

**Program Operating Budget Impact**

The project within the 762 Zone Improvements program that will have the most significant operating budget impact is the construction of the new Wingate Tank. The new tank is funded from issuance of Revenue Bonds of \$4,401,000 in 2019. The maximum annual debt service impact for this program will be \$440,045 beginning in 2020 and will retire in twenty-five years. The new tank should have some minor operating costs (less than \$2,000 per year) related to utilities and inspections. There will also be more significant expenses related to repainting the tank every 8 to 15 years. There are no operating budget impacts related to other projects in this program as they are all “in the ground” line work.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2019	-3,701,000	-400,000	0	0	0	0	0	-4,101,000
Utility Pay Go	-1,681,700	0	0	0	-300,000	0	0	-1,981,700
<b>Total Funding Sources</b>	<b>-5,382,700</b>	<b>-400,000</b>	<b>0</b>	<b>0</b>	<b>-300,000</b>	<b>0</b>	<b>0</b>	<b>-6,082,700</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84014	762 Zone Transmission Main (Bypass)	1,681,700	0	0	0	0	0	0	1,681,700
84084	New Additional Marshville Tank	3,701,000	0	0	0	0	0	0	3,701,000
84095	762 Zone Miscellaneous Improvements	0	400,000	0	0	0	0	0	400,000
84096	762 Zone Expansion	0	0	0	0	300,000	0	0	300,000
<b>Total 762 Zone Improvements</b>		<b>5,382,700</b>	<b>400,000</b>	<b>0</b>	<b>0</b>	<b>300,000</b>	<b>0</b>	<b>0</b>	<b>6,082,700</b>

# 762 Zone Transmission Main (Bypass) Capital Project Detail

**Project Justification**

In conjunction with the construction of the Monroe Bypass, various improvements will be needed within the Anson County Service Area to increase system capacity and improve system hydraulics. These improvements will be installed by the Monroe Bypass project and be administered through a contract with NCDOT.

**Project Scope**

Project provides for increased Anson County system capacity by making improvements to system hydraulics including but not limited to the installation of additional transmission mains and other necessary improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-1,681,700	0	0	0	0	0	0	-1,681,700
Total Funding Sources		-1,681,700	0	0	0	0	0	0	-1,681,700
<b>Uses</b>									
5594	Design & Engineering	199,700	0	0	0	0	0	0	199,700
5595	Construction	1,482,000	0	0	0	0	0	0	1,482,000
Total Uses		1,681,700	0	0	0	0	0	0	1,681,700

# New Additional Marshville Tank

# Capital Project Detail

**Project Justification**

Various improvements will be needed within the Anson County Service Area to increase system capacity and improve system hydraulics. A new 1.0 MG Elevated Storage Tank will be required in the Wingate/Marshville Area to provide water pressure and storage. Installation of a pressure reducing valve is also required.

**Project Scope**

Project provides for improvements within the Anson County Service Area including 1.0 MG Elevated Storage Tank and other necessary improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2019	-3,701,000	0	0	0	0	0	0	-3,701,000
Total Funding Sources		-3,701,000	0	0	0	0	0	0	-3,701,000
<b>Uses</b>									
5570	Land and Improvements	412,000	0	0	0	0	0	0	412,000
5594	Design & Engineering	601,000	0	0	0	0	0	0	601,000
5595	Construction	2,688,000	0	0	0	0	0	0	2,688,000
Total Uses		3,701,000	0	0	0	0	0	0	3,701,000

# 762 Zone Miscellaneous Improvements Capital Project Detail

**Project Justification**

Project includes the installation of approximately 1,500 LF of 6-inch distribution system piping to alleviate low system pressures between Windsong Way and Wade-Rorie Road and the replacement of a PRV (853/762 Zone) station on Hargette Road.

**Project Scope**

Project provides for various improvements to the 762 Zone to improve system hydraulics, reliability, and redundancy.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4720	Revenue Bonds - 2019	0	-400,000	0	0	0	0	0	-400,000	
Total Funding Sources		0	-400,000	0	0	0	0	0	-400,000	
<b>Uses</b>										
5594	Design & Engineering	0	100,000	0	0	0	0	0	100,000	
5595	Construction	0	300,000	0	0	0	0	0	300,000	
Total Uses		0	400,000	0	0	0	0	0	400,000	

# 762 Zone Expansion

# Capital Project Detail

**Project Justification**

Project includes the installation of two PRV stations at Old Camden and New Salem Roads and NC 218 and NC 601 to expand the 762 service area boundary.

**Project Scope**

Project provides for an expansion of the 762 Zone service area boundary to alleviate excessive system pressures in the eastern portion of the 853 Zone.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4720	Utility Pay Go	0	0	0	0	-300,000	0	0	-300,000	
Total Funding Sources		0	0	0	0	-300,000	0	0	-300,000	
<b>Uses</b>										
5594	Design & Engineering	0	0	0	0	100,000	0	0	100,000	
5595	Construction	0	0	0	0	200,000	0	0	200,000	
Total Uses		0	0	0	0	300,000	0	0	300,000	

# 853 South Zone Improvements

# Capital Program Detail

**Program Scope**

Program provides for system improvements as outlined in detail in the Comprehensive Water & Wastewater Master Plan. These improvements include the installation of pressure reducing valves, 12-inch water mains, elevated storage tanks, and other necessary improvements to provides sufficient water supply and fire flow in the area.

**Program Operating Budget Impact**

The 853 South Zone Improvements program consists of two projects: 853 South Zone Tank and 853 Zone Transmission Main Improvements. Currently there has only been funding appropriated for the land purchase related to the 853 Tank. Design, engineering and construction expenses are not budgeted for in the current planning period window; therefore, it is difficult to determine any operating budget impact at this time. There are no operating budget impacts related to the transmission main as this is all “in the ground” line work.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Utility Pay Go		-412,000	0	0	0	0	-200,000	-1,000,000	-1,612,000
Total Funding Sources		-412,000	0	0	0	0	-200,000	-1,000,000	-1,612,000

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84082	853 South Zone Tank	412,000	0	0	0	0	0	0	412,000
84092	Hwy 75 Pump Station Upgrades	0	0	0	0	0	200,000	1,000,000	1,200,000
Total 853 South Zone Improvements		412,000	0	0	0	0	200,000	1,000,000	1,612,000

# 853 South Zone Tank

# Capital Project Detail

**Project Justification**

The 2011 Master Plan identified various improvements needed within the 853 South Zone Service Area to increase fire flow and system capacity.

**Project Scope**

Project provides for the construction of a 1.0 million gallon elevated storage tank and related design, construction, and related improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-412,000	0	0	0	0	0	0	-412,000
Total Funding Sources		-412,000	0	0	0	0	0	0	-412,000
<b>Uses</b>									
5570	Land and Improvements	412,000	0	0	0	0	0	0	412,000
Total Uses		412,000	0	0	0	0	0	0	412,000



# Hwy 75 Pump Station Upgrades

# Capital Project Detail

**Project Justification**

This pump station improvement project will enable projected maximum day demands to be supplied to the 853 South Zone through the 2030 planning horizon.

**Project Scope**

Based on the demand projections the pumping capacity of the Highway 75 BPS should be increased to approximately 2.0 mgd.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	0	0	0	0	0	-200,000	-1,000,000	-1,200,000	
Total Funding Sources		0	0	0	0	0	-200,000	-1,000,000	-1,200,000	
<b>Uses</b>										
5594	Design & Engineering	0	0	0	0	0	200,000	0	200,000	
5595	Construction	0	0	0	0	0	0	1,000,000	1,000,000	
Total Uses		0	0	0	0	0	200,000	1,000,000	1,200,000	

# 853 West Zone Improvements

# Capital Program Detail

### Program Scope

Program provides for system improvements as outlined in detail in the Comprehensive Water & Wastewater Master Plan. These improvements include the installation of 16-inch and 36-inch water mains, pump modifications, elevated storage tanks, and other necessary improvements to provide sufficient water supply and fire flow in the area.

### Program Operating Budget Impact

The 853 West Zone Improvements program consists of two projects: Indian Trail Additional Tank #1 & Watkins BPS Improvements and 853 West Zone Transmission Main. The new tank should have some minor operating costs (less than \$2,000 per year) related to utilities and inspections. There will also be more significant expenses related to repainting the tank every 8 to 15 years. There are no operating budget impacts related to the transmission main as this is all “in the ground” line work.

The 853 West Zone Improvements is primarily funded from the issuance of Revenue Bonds of \$36,256,803. The estimated maximum annual debt service impact for this program will be \$3,493,637. Debt service payments will begin within two years following each issuance and will retire in no more than twenty-five years.

### Program Summary

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2015	-44,803	0	0	0	0	0	0	-44,803
Revenue Bonds - 2019	-393,100	0	-2,600,000	0	0	0	0	-2,993,100
Revenue Bonds - 2020	-18,900	0	-15,300,000	-17,900,000	0	0	0	-33,218,900
Utility Pay Go	-1,238,197	0	-100,000	-300,000	0	0	0	-1,638,197
<b>Total Funding Sources</b>	<b>-1,695,000</b>	<b>0</b>	<b>-18,000,000</b>	<b>-18,200,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-37,895,000</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84085	IT Additional Tank 1/Watkins BPS Improvements	393,100	0	900,000	6,400,000	0	0	0	7,693,100
84086	853 West Transmission Main	1,301,900	0	15,300,000	0	0	0	0	16,601,900
84093	853 West Zone Transmission Main Phase 2	0	0	1,700,000	11,500,000	0	0	0	13,200,000
84094	Billy Howey Waterline Extension	0	0	100,000	300,000	0	0	0	400,000
<b>Total</b>	<b>853 West Zone Improvements</b>	<b>1,695,000</b>	<b>0</b>	<b>18,000,000</b>	<b>18,200,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>37,895,000</b>

# IT Additional Tank 1/Watkins BPS Improvements

# Capital Project Detail

### Project Justification

The 2011 Master Plan identified various improvements needed within the 853 West Zone Service Area to increase fire flow and system capacity. Included in these improvements is the construction of a new 2.0 MG elevated Storage Tank to be located near the Town of Indian Trail.

### Project Scope

Project provides for the Indian Trail Additional Tank at 2.0 MGD Elevated Storage, Watkins Booster Pump Station Pump Modifications - Modify Pumps with new impellers, and other necessary improvements.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2020	0	0	0	-6,400,000	0	0	0	-6,400,000
4720	Revenue Bonds - 2019	-393,100	0	-900,000	0	0	0	0	-1,293,100
Total Funding Sources		-393,100	0	-900,000	-6,400,000	0	0	0	-7,693,100
<b>Uses</b>									
5570	Land and Improvements	393,100	0	0	0	0	0	0	393,100
5594	Design & Engineering	0	0	900,000	0	0	0	0	900,000
5595	Construction	0	0	0	6,400,000	0	0	0	6,400,000
Total Uses		393,100	0	900,000	6,400,000	0	0	0	7,693,100

# 853 West Transmission Main

# Capital Project Detail

## Project Justification

The 2011 Master Plan identified various improvements needed within the 853 West Zone Service Area to increase system hydraulics and capacity. Included in these improvements are modifications to the Watkins Booster Pump Station Pump Modifications and installation of 22,000 LF of 36" main and 53,000 LF of 16" main to improve distribution within the Service Area.

## Project Scope

Project provides for the installation of the 853 West Zone Transmission Main Phase I provides 22,000 LF of 36" Main; 9,000 LF of 16" Main. Phase II provides for the installation of 44,000 LF of 16" Main.

## Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-1,238,197	0	0	0	0	0	0	-1,238,197
4720	Revenue Bonds - 2020	-18,900	0	-15,300,000	0	0	0	0	-15,318,900
4720	Revenue Bonds - 2015	-44,803	0	0	0	0	0	0	-44,803
Total Funding Sources		-1,301,900	0	-15,300,000	0	0	0	0	-16,601,900
<b>Uses</b>									
5592	Capital Legal Land Easements	0	0	100,000	0	0	0	0	100,000
5594	Design & Engineering	1,301,900	0	900,000	0	0	0	0	2,201,900
5595	Construction	0	0	14,300,000	0	0	0	0	14,300,000
Total Uses		1,301,900	0	15,300,000	0	0	0	0	16,601,900

# 853 West Zone Transmission Main Phase 2

# Capital Project Detail

**Project Justification**

The 2011 Master Plan identified various improvements needed within the 853 West Zone Service Area to increase system hydraulics and capacity. Included in these improvements are 53,000 LF of 16" main to improve distribution within the Service Area.

**Project Scope**

Project provides for the installation of the 853 West Zone Transmission Main. Phase II includes for the installation of 53,000 LF of 16" Main.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2020	0	0	0	-11,500,000	0	0	0	-11,500,000
4720	Revenue Bonds - 2019	0	0	-1,700,000	0	0	0	0	-1,700,000
Total Funding Sources		0	0	-1,700,000	-11,500,000	0	0	0	-13,200,000
<b>Uses</b>									
5594	Design & Engineering	0	0	1,700,000	0	0	0	0	1,700,000
5595	Construction	0	0	0	11,500,000	0	0	0	11,500,000
Total Uses		0	0	1,700,000	11,500,000	0	0	0	13,200,000

# Billy Howey Waterline Extension

# Capital Project Detail

**Project Justification**

There are currently customers located on a long, dead-end 8-inch in the southern portion of the 853 West / East Zone which experience low pressures under peak hour demand conditions.

**Project Scope**

To eliminate low pressure and provide redundant service an 8 inch line is proposed from the intersection of New Town Rd and Billy Howey Rd approximately 2,000 feet north.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	0	0	-100,000	-300,000	0	0	0	-400,000	
Total Funding Sources		0	0	-100,000	-300,000	0	0	0	-400,000	
<b>Uses</b>										
5594	Design & Engineering	0	0	100,000	0	0	0	0	100,000	
5595	Construction	0	0	0	300,000	0	0	0	300,000	
Total Uses		0	0	100,000	300,000	0	0	0	400,000	

# Crooked Creek Basin Improvements Capital Program Detail

## Program Scope

Program provides for various improvements needed within the Crooked Creek Sewer Basin to reduce inflow and infiltration into the Crooked Creek Waste Water Treatment Plant and to improve the hydraulics for wastewater flow. These projects include an Inflow and Infiltration Study, Headworks Improvements at the Plant, a phased series of Interceptor Improvements, upgrades for replacement of the Forest Park Pump Station, and other necessary improvements.

## Program Operating Budget Impact

The projects within the Crooked Creek Basin Improvements program will have some marginal operating budget impacts. An increase in costs related to utilities, chemicals and bio-solids removal could be expected. Until the preliminary design and engineering studies are complete it is difficult to quantify what those impacts might be. The costs will be influenced by what technology and processes are established during the design phase.

The Crooked Creek Basin Improvement program is primarily funded from the issuance of Revenue Bonds of \$27,163,922. One issuance took place in FY 2016, in the amount of \$1,040,334, with a maximum annual debt service impact of \$79,529 beginning in FY 2017. The remaining issuances will take place approximately every sixteen months beginning in 2017 for a total of \$26,123,588, with a maximum debt service impact of \$2,524,772. Debt service payments will begin within two years following each issuance and will retire in no more than twenty-five years.

## Program Summary

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2015	-1,040,334	0	0	0	0	0	0	-1,040,334
Revenue Bonds - 2017	-5,368,088	0	0	0	0	0	0	-5,368,088
Revenue Bonds - 2019	-4,755,500	-1,600,000	-900,000	0	0	0	0	-7,255,500
Revenue Bonds - 2022	0	0	0	-1,000,000	-6,700,000	-1,100,000	0	-8,800,000
Revenue Bonds - 2023+	0	0	0	0	0	0	-4,700,000	-4,700,000
Utility Pay Go	-5,724,878	0	-300,000	-1,900,000	0	0	-3,600,000	-11,524,878
<b>Total Funding Sources</b>	<b>-16,888,800</b>	<b>-1,600,000</b>	<b>-1,200,000</b>	<b>-2,900,000</b>	<b>-6,700,000</b>	<b>-1,100,000</b>	<b>-8,300,000</b>	<b>-38,688,800</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85039	CC I&I Study & Remediation	2,538,300	0	0	0	0	0	0	2,538,300
85040	CC Interceptor Improvements PH I	2,215,500	0	0	1,000,000	6,700,000	0	0	9,915,500
85049	Forest Park PS Replacement & II	2,540,000	0	0	0	0	0	0	2,540,000
85051	Suburban Estates Pump Station & Force Main	0	100,000	900,000	0	0	0	0	1,000,000
85053	Forest Park Forcemain & Interceptor Improvements	0	0	0	0	0	600,000	3,900,000	4,500,000
85054	Crooked Creek Diversion Pumping Improvements	0	0	300,000	1,900,000	0	0	0	2,200,000
85057	Crooked Creek Interceptor Improvements Ph 2	0	0	0	0	0	500,000	3,700,000	4,200,000

# Crooked Creek Basin Improvements Capital Program Detail

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85058	Crooked Creek Interceptor Improvements Ph 3	0	0	0	0	0	0	700,000	700,000
85515	CC Headworks Improvements	9,595,000	1,500,000	0	0	0	0	0	11,095,000
<b>Total Crooked Creek Basin Improvements</b>		<b>16,888,800</b>	<b>1,600,000</b>	<b>1,200,000</b>	<b>2,900,000</b>	<b>6,700,000</b>	<b>1,100,000</b>	<b>8,300,000</b>	<b>38,688,800</b>



# CC I&I Study & Remediation

# Capital Project Detail

**Project Justification**

This project constitutes one of six subprojects included in the Crooked Creek Basin Improvements. An Inflow and Infiltration Study and remediation of the Crooked Creek Basin will be performed resulting in specific recommendations for reducing the I & I. These recommendations may include, but not limited to, pipe replacement, trenchless rehabilitation, manhole lining, pipe bursting, etc. Based on the study the Suburban Estates Sewershed was the 1st priority.

**Project Scope**

Project provides for the Inflow and Infiltration Study and remediation of the Crooked Creek Basin.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-2,127,878	0	0	0	0	0	0	-2,127,878
4720	Revenue Bonds - 2015	-410,422	0	0	0	0	0	0	-410,422
Total Funding Sources		-2,538,300	0	0	0	0	0	0	-2,538,300
<b>Uses</b>									
5594	Design & Engineering	613,300	0	0	0	0	0	0	613,300
5595	Construction	1,925,000	0	0	0	0	0	0	1,925,000
Total Uses		2,538,300	0	0	0	0	0	0	2,538,300

# CC Interceptor Improvements PH I

# Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan recommended various interceptor improvements within the Crooked Creek Basin. These improvements will reduce inflow and infiltration, and provide additional capacity for current and future wet weather flows.

**Project Scope**

Project provides for 40,000 LF of comprehensive sewer rehabilitation and related improvements in the South Fork Sewershed. Given the size of these improvements the project will be split into two construction contracts over a two year timeframe.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2022	0	0	0	-1,000,000	-6,700,000	0	0	-7,700,000
4720	Revenue Bonds - 2019	-2,215,500	0	0	0	0	0	0	-2,215,500
Total Funding Sources		-2,215,500	0	0	-1,000,000	-6,700,000	0	0	-9,915,500
<b>Uses</b>									
5594	Design & Engineering	257,500	0	0	1,000,000	6,700,000	0	0	7,957,500
5595	Construction	1,958,000	0	0	0	0	0	0	1,958,000
Total Uses		2,215,500	0	0	1,000,000	6,700,000	0	0	9,915,500

# Forest Park PS Replacement & II

# Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan identified various interceptor improvements within the Crooked Creek Basin. These improvements will reduce Inflow and infiltration and provide additional capacity for current and future wet weather flows.

**Project Scope**

Project provides for the replacement of the Forest Park Pump Station with a new 3 MGD pumps and replacement of 14,000 LF of 12” and 400 LF of 15” of Gravity Sewer line along a South Tributary to Crooked Creek and other related improvements. A future phase will include approximately 7,900 LF of 12" forcemain replacement in 2022.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2019	-2,540,000	0	0	0	0	0	0	-2,540,000
Total Funding Sources		-2,540,000	0	0	0	0	0	0	-2,540,000
<b>Uses</b>									
5594	Design & Engineering	314,000	0	0	0	0	0	0	314,000
5595	Construction	2,226,000	0	0	0	0	0	0	2,226,000
Total Uses		2,540,000	0	0	0	0	0	0	2,540,000

# Suburban Estates Pump Station & Force Main

# Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan recommended various system improvements within the Crooked Creek Basin. These improvements will reduce inflow and infiltration and provide additional capacity for current and future wet weather flows. This is further detailed in the Crooked Creek Inflow and Infiltration Study dated March 2015 performed by CDM Smith.

**Project Scope**

Project provides for upgrading the Suburban Estates Pump Station No. 1 to a firm capacity of 0.43MGD and the replacement of approximately 3,200 LF of 4-inch force main with 6-inch piping

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2019	0	-100,000	-900,000	0	0	0	0	-1,000,000
Total Funding Sources		0	-100,000	-900,000	0	0	0	0	-1,000,000
<b>Uses</b>									
5594	Design & Engineering	0	100,000	0	0	0	0	0	100,000
5595	Construction	0	0	900,000	0	0	0	0	900,000
Total Uses		0	100,000	900,000	0	0	0	0	1,000,000

# Forest Park Forcemain & Interceptor Improvements Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan recommended various system improvements within the Crooked Creek Basin. These improvements will reduce inflow and infiltration and provide additional capacity for current and future wet weather flows. This is further detailed in the Crooked Creek Inflow and Infiltration Study dated March 2015 performed by CDM Smith.

**Project Scope**

Project provides for upgrading the Forest Park Pump Station to a firm capacity of 1.9MGD and the replacement of approximately 8,000 LF of 8-inch force main with 10-inch piping

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2023+	0	0	0	0	0	0	-3,900,000	-3,900,000
4720	Revenue Bonds - 2022	0	0	0	0	0	-600,000	0	-600,000
Total Funding Sources		0	0	0	0	0	-600,000	-3,900,000	-4,500,000
<b>Uses</b>									
5594	Design & Engineering	0	0	0	0	0	600,000	0	600,000
5595	Construction	0	0	0	0	0	0	3,900,000	3,900,000
Total Uses		0	0	0	0	0	600,000	3,900,000	4,500,000

# Crooked Creek Diversion Pumping Improvements

# Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan recommended various system improvements within the Crooked Creek Basin. These improvements will reduce inflow and infiltration and provide additional capacity for current and future wet weather flows. This is further detailed in the Crooked Creek Inflow and Infiltration Study dated March 2015 performed by CDM Smith.

**Project Scope**

Project provides for the addition of scalping pumps and necessary piping to connect the existing CCWRF influent Pump Station to the existing Poplin Road Force Main to transfer flows from the upper Crooked Creek basin to the 12-Mile basin. Transfer pumping equipment will be sized to transfer sufficient flow to keep the CCWRF below its permitted maximum monthly flow limits.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	0	0	-300,000	-1,900,000	0	0	0	-2,200,000	
Total Funding Sources		0	0	-300,000	-1,900,000	0	0	0	-2,200,000	
<b>Uses</b>										
5594	Design & Engineering	0	0	300,000	0	0	0	0	300,000	
5595	Construction	0	0	0	1,900,000	0	0	0	1,900,000	
Total Uses		0	0	300,000	1,900,000	0	0	0	2,200,000	

# Crooked Creek Interceptor Improvements Ph 2

# Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan recommended various system improvements within the Crooked Creek Basin. These improvements will reduce inflow and infiltration and provide additional capacity for current and future wet weather flows. This is further detailed in the Crooked Creek Inflow and Infiltration Study dated March 2015 performed by CDM Smith.

**Project Scope**

Project provides for the design and construction of approximately 6,400 LF of 18-inch gravity sanitary sewer between Prebble Creek GC to Indian Trail Road along US 74, approximately 1,800 LF of 15-inch gravity sanitary sewer between Indian Trail Road and the Forest Park Pump Station discharge manhole, and approximately 2,350 LF of 27-inch gravity sanitary sewer from the Crooked Creek WWTP to Faith Church Road.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	0	0	0	0	0	0	-2,900,000	-2,900,000
4720	Revenue Bonds - 2023+	0	0	0	0	0	0	-800,000	-800,000
4720	Revenue Bonds - 2022	0	0	0	0	0	-500,000	0	-500,000
Total Funding Sources		0	0	0	0	0	-500,000	-3,700,000	-4,200,000
<b>Uses</b>									
5594	Design & Engineering	0	0	0	0	0	500,000	0	500,000
5595	Construction	0	0	0	0	0	0	3,700,000	3,700,000
Total Uses		0	0	0	0	0	500,000	3,700,000	4,200,000

# Crooked Creek Interceptor Improvements Ph 3

# Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan recommended various system improvements within the Crooked Creek Basin. These improvements will reduce inflow and infiltration and provide additional capacity for current and future wet weather flows. This is further detailed in the Crooked Creek Inflow and Infiltration Study dated March 2015 performed by CDM Smith.

**Project Scope**

Project provides for comprehensive sewer rehabilitation on approximately 22,000 LF of sewer within the basin (Sewershed #11 in the I&I Study Document). Given the extent of these improvements, the project will be split into multiple contracts.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	0	0	0	0	0	0	-700,000	-700,000	
Total Funding Sources		0	0	0	0	0	0	-700,000	-700,000	
<b>Uses</b>										
5594	Design & Engineering	0	0	0	0	0	0	700,000	700,000	
Total Uses		0	0	0	0	0	0	700,000	700,000	



# CC Headworks Improvements

# Capital Project Detail

**Project Justification**

An Inflow and Infiltration Study and remediation of the Crooked Creek Basin will be performed resulting in specific recommendations for reducing the I & I. To reduce the inflow and infiltration causing surcharging going into the CCWWTP four projects have been recommended at the headworks of the plant: An 10.5 MGD Influent Pumping and Screening facility, 3 MGD Equalization Basin, replacement of 1,200 LF of 15" Gravity Sewer and 1,500 LF of 16" Gravity Sewer.

**Project Scope**

Project provides for Crooked Creek Headwork Improvements consisting of 10.5 MGD influent pumping and screening, 3 MG equalization basin, 1,200 ft of 15-in replacement gravity sewer, 1,500 ft of 16-in replacement force main, and related improvements. As flows increase future transfer pumps will be installed along with minor forcemain improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-3,597,000	0	0	0	0	0	0	-3,597,000
4720	Revenue Bonds - 2019	0	-1,500,000	0	0	0	0	0	-1,500,000
4720	Revenue Bonds - 2017	-5,368,088	0	0	0	0	0	0	-5,368,088
4720	Revenue Bonds - 2015	-629,912	0	0	0	0	0	0	-629,912
Total Funding Sources		-9,595,000	-1,500,000	0	0	0	0	0	-11,095,000
<b>Uses</b>									
5594	Design & Engineering	1,072,200	200,000	0	0	0	0	0	1,272,200
5595	Construction	8,522,800	1,300,000	0	0	0	0	0	9,822,800
Total Uses		9,595,000	1,500,000	0	0	0	0	0	11,095,000

# CRWTP Improvements

# Capital Program Detail

### Program Scope

Program provides for the Catawba River Water Treatment Plant (CRWTP) Improvements that are needed to increase the capacity of the existing plant to meet future population demands based on current growth projections. This project include process improvements, CRWTP expansion of 9mgd, and other necessary improvements. In addition a new 1 BGD raw water reservoir is proposed for on-site storage to reduce withdrawals from the Catawba River during low flow conditions.

### Program Operating Budget Impact

The CRWTP Improvement program is primarily funded from the issuance of Revenue Bonds of \$47,086,982. One issuance took place in FY 2016, in the amount of \$3,284,583, with a maximum annual debt service impact of \$223,476 beginning in FY 2017. The remaining issuance will be in 2017 for \$43,802,399, with a maximum debt service impact of \$4,221,955 beginning in FY 2019, and will retire in twenty years.

### Program Summary

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Capital Contributions	-1,829,829	0	0	0	0	0	0	-1,829,829
Revenue Bonds - 2015	-3,284,583	0	0	0	0	0	0	-3,284,583
Revenue Bonds - 2017	-22,176,302	0	0	0	0	0	0	-22,176,302
Revenue Bonds - 2019	-5,395,721	-18,400,000	0	0	0	0	0	-23,795,721
Utility Pay Go	-2,912,087	0	0	0	0	0	0	-2,912,087
<b>Total Funding Sources</b>	<b>-35,598,522</b>	<b>-18,400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-53,998,522</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84502	CRWTP Reservoir Expansion	27,440,916	0	0	0	0	0	0	27,440,916
84503	CRWTP Process Improvements	6,247,606	0	0	0	0	0	0	6,247,606
84506	CRWTP Plant Expansion	1,910,000	18,400,000	0	0	0	0	0	20,310,000
<b>Total CRWTP Improvements</b>		<b>35,598,522</b>	<b>18,400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53,998,522</b>

# CRWTP Reservoir Expansion

# Capital Project Detail

### Project Justification

CRWTP Improvements are needed to increase the capacity of the existing plant to meet future population demands based on current growth projections. In order to reduce withdrawals from the Catawba River during low flow conditions a new 1 BGD raw water reservoir is proposed.

### Project Scope

Project provides for Environmental Mitigation for new 1 BG raw water reservoir at Catawba Raw Water Treatment Plant, subsequent design and construction of 1 BG raw water reservoir, and a new raw water intake and pump station along the Catawba River.

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-2,129,547	0	0	0	0	0	0	-2,129,547
4720	Revenue Bonds - 2017	-22,176,302	0	0	0	0	0	0	-22,176,302
4720	Revenue Bonds - 2015	-1,305,238	0	0	0	0	0	0	-1,305,238
4845	Capital Contributions	-1,829,829	0	0	0	0	0	0	-1,829,829
Total Funding Sources		-27,440,916	0	0	0	0	0	0	-27,440,916
<b>Uses</b>									
5570	Land and Improvements	181,280	0	0	0	0	0	0	181,280
5592	Legal and Land Easements	2,424,000	0	0	0	0	0	0	2,424,000
5594	Design & Engineering	3,771,986	0	0	0	0	0	0	3,771,986
5595	Construction	21,063,650	0	0	0	0	0	0	21,063,650
Total Uses		27,440,916	0	0	0	0	0	0	27,440,916

# CRWTP Process Improvements

# Capital Project Detail

**Project Justification**

CRWTP Improvements are needed to increase the capacity of the existing plant to meet future population demands based on current growth projections. These improvements include process improvements to improve water quality at CRWTP.

**Project Scope**

Project provides a series of redundancy and reliability improvements to the existing water treatment facility to meet the needs of its existing customer base. These improvements include a new raw water transmission/bypass main, expansion of the residuals handling facility, installation of approximately 1,000 LF of effluent discharge line and improvements to the existing finished water pumping station.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-782,540	0	0	0	0	0	0	-782,540
4720	Revenue Bonds - 2019	-3,485,721	0	0	0	0	0	0	-3,485,721
4720	Revenue Bonds - 2015	-1,979,345	0	0	0	0	0	0	-1,979,345
Total Funding Sources		-6,247,606	0	0	0	0	0	0	-6,247,606
<b>Uses</b>									
5594	Design & Engineering	782,540	0	0	0	0	0	0	782,540
5595	Construction	5,465,066	0	0	0	0	0	0	5,465,066
Total Uses		6,247,606	0	0	0	0	0	0	6,247,606

# CRWTP Plant Expansion

# Capital Project Detail

**Project Justification**

CRWTP Improvements are needed to increase the capacity of the existing plant to meet future population demands based on current growth projections. One of the needed improvements is to increase the capacity by 9MGD to bring the total treatment capacity to 27mgd.

**Project Scope**

Project provides a 9.0 MGD expansion of the CRWTP and expand the County’s allocation at the facility from 18 MGD to 27 MGD. The project consists of new treatment trains and chemical storage and feed facilities.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2019	-1,910,000	-18,400,000	0	0	0	0	0	-20,310,000
Total Funding Sources		-1,910,000	-18,400,000	0	0	0	0	0	-20,310,000
<b>Uses</b>									
5594	Design & Engineering	1,910,000	3,100,000	0	0	0	0	0	5,010,000
5595	Construction	0	15,300,000	0	0	0	0	0	15,300,000
Total Uses		1,910,000	18,400,000	0	0	0	0	0	20,310,000

# Developer Funded Projects

# Capital Program Detail

**Program Scope**

Program provides for the new infrastructure required to meet potential new development in areas of the sewer collection system currently not served. These developer funded projects represent the combined cost to implement new infrastructure into these undeveloped areas. The timeline and funding for these projects will be accomplished in accordance with the Union County Line Extension Policy.

**Program Operating Budget Impact**

There are no operating budget impacts related to this program as the projects are all “in the ground” line work.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Developer Funded		0	0	0	0	0	0	-38,412,000	-38,412,000
Total Funding Sources		0	0	0	0	0	0	-38,412,000	-38,412,000

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84099	Developer Funded Projects	0	0	0	0	0	0	38,412,000	38,412,000
Total Developer Funded Projects		0	0	0	0	0	0	38,412,000	38,412,000

# Developer Funded Projects

# Capital Project Detail

**Project Justification**

The Comprehensive Master Plan identified new infrastructure required to meet potential new development in areas of the sewer collection system currently not served. These Developer Funded Projects represent the combined cost to implement new infrastructure into these undeveloped areas. The timeline and funding for these projects will be accomplished in accordance with the Union County Line Extension Policy.

**Project Scope**

Project provides for new infrastructure for developer funded projects

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4895	Developer Funded	0	0	0	0	0	0	-38,412,000	-38,412,000
Total Funding Sources		0	0	0	0	0	0	-38,412,000	-38,412,000
<b>Uses</b>									
5595	Developer Funded	0	0	0	0	0	0	38,412,000	38,412,000
Total Uses		0	0	0	0	0	0	38,412,000	38,412,000

# Eastside Wastewater Improvements Capital Program Detail

**Program Scope**

Program provides for various improvements needed in the Eastside Service Area to reduce inflow and infiltration and to improve the hydraulics for the wastewater flow. These projects include the Eastside Pump Stations 1, 2 and 3 and the force main replacement project; a new interceptor along Rays Fork and a future expansion of the City of Monroe’s Waste Water Treatment Plant, as well as other necessary improvements.

**Program Operating Budget Impact**

It is anticipated to see a small decline in utilities related to the Rays Fork Interceptor project. We expect no operating impact related to the East Side Improvements program.

Revenue Bonds were issued in FY 2016 to fund a small portion of this program in the amount of \$804,088. The maximum annual debt service impact for this program will be \$64,377 beginning in FY 2017 and will retire in twenty-two years.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Grant Funding	-1,961,300	0	0	0	0	0	0	-1,961,300
Revenue Bonds - 2015	-804,088	0	0	0	0	0	0	-804,088
Utility Pay Go	-12,072,569	0	0	0	0	0	0	-12,072,569
<b>Total Funding Sources</b>	<b>-14,837,957</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-14,837,957</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85011	East Side Improvements	8,657,957	0	0	0	0	0	0	8,657,957
85012	Rays Fork Interceptor	6,180,000	0	0	0	0	0	0	6,180,000
<b>Total Eastside Wastewater Improvements</b>		<b>14,837,957</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,837,957</b>



# East Side Improvements

# Capital Project Detail

**Project Justification**

Active Project to reduce Inflow and Infiltration in the Eastside Sewer Service Area. Consists of replacing Eastside Pump Stations 1, 2 and 3 and the force main servicing the pump stations.

**Project Scope**

Project provides for East Side Sewer Improvements including upgrades to all three Pump Stations and construction of approximately 14,300 LF of 24-inch and 9,000 LF of 18-inch force main that will convey the purchased capacity of 2.65 MGD to the City of Monroe Waste Water Treatment Plant and other necessary improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-6,262,572	0	0	0	0	0	0	-6,262,572
4326	Grant Funding	-1,961,300	0	0	0	0	0	0	-1,961,300
4720	Revenue Bonds - 2015	-434,085	0	0	0	0	0	0	-434,085
Total Funding Sources		-8,657,957	0	0	0	0	0	0	-8,657,957
<b>Uses</b>									
5592	Legal and Land Easements	80,000	0	0	0	0	0	0	80,000
5593	Construction Administration	179	0	0	0	0	0	0	179
5594	Design & Engineering	1,331,404	0	0	0	0	0	0	1,331,404
5595	Construction	7,246,374	0	0	0	0	0	0	7,246,374
Total Uses		8,657,957	0	0	0	0	0	0	8,657,957

# Rays Fork Interceptor

# Capital Project Detail

**Project Justification**

This project will provide an improvement to the wastewater system located within the Eastside Service Area. Two existing Pump Stations maintained by UCPW will be abandoned and a new service area will become available.

**Project Scope**

Project provides for the installation of: 12,600 LF of 12" sewer main, 6,100 LF of 15" sewer main, and other needed improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-5,809,997	0	0	0	0	0	0	-5,809,997
4720	Revenue Bonds - 2015	-370,003	0	0	0	0	0	0	-370,003
Total Funding Sources		-6,180,000	0	0	0	0	0	0	-6,180,000
<b>Uses</b>									
5594	Design & Engineering	680,000	0	0	0	0	0	0	680,000
5595	Construction	5,500,000	0	0	0	0	0	0	5,500,000
Total Uses		6,180,000	0	0	0	0	0	0	6,180,000

# New 880 Pressure Zone

# Capital Program Detail

### Program Scope

Program provides for the creation of a new pressure zone for the high elevation customers in the north-west portion of the 853 West Zone, projects required to develop the 880 Pressure Zone, including construction of a new 6.4 MGD Booster Pump Station, installation of pressure reducing valves, the decommissioning of the existing Waxhaw-Marvin Booster Pumping Station, and other necessary improvements.

### Program Operating Budget Impact

The New 880 Pressure Zone program consists of two projects: Weddington Elevated Storage Tank and 880 Pressure Zone Pump Station. The new tank should have some minor operating costs (less than \$2,000 per year) related to utilities and inspections. There will also be more significant expenses related to repainting the tank every 8 to 15 years. The composite base on this specific tank will decrease the amount of painting expense. Additional utility expense associated with the 880 Pressure Zone Pump Station could be expected but utility costs should decrease with the decommission of the Waxhaw-Marvin Tank once the projects in this program are complete.

The New 880 Pressure Zone program is partially funded from the issuance of Revenue Bonds of \$3,709,187 in FY 2016. The maximum annual debt service for this program will be \$250,710 beginning in FY 2017 and retire in twenty-two years.

### Program Summary

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2015		-3,709,187	0	0	0	0	0	0	-3,709,187
Utility Pay Go		-7,191,058	-400,000	0	0	0	0	0	-7,591,058
<b>Total Funding Sources</b>		<b>-10,900,245</b>	<b>-400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-11,300,245</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84070	Weddington Elevated Storage Tank	5,774,045	0	0	0	0	0	0	5,774,045
84079	Development of 880 Pressure Zone	5,126,200	0	0	0	0	0	0	5,126,200
85052	Waxhaw Marvin PS Decommission	0	400,000	0	0	0	0	0	400,000
<b>Total New 880 Pressure Zone</b>		<b>10,900,245</b>	<b>400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,300,245</b>

# Weddington Elevated Storage Tank

# Capital Project Detail

**Project Justification**

The new elevated storage tank in Weddington is needed to improve water pressure for UCPW customers on the western side of the city. This project will help establish the 880 Pressure Zone which will create a new pressure zone for all customers in high elevations of the current 853 West Zone.

**Project Scope**

Project provides for 1.5 MG Elevated Storage Tank including land acquisition and other related cost.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-3,351,316	0	0	0	0	0	0	-3,351,316
4720	Revenue Bonds - 2015	-2,422,729	0	0	0	0	0	0	-2,422,729
Total Funding Sources		-5,774,045	0	0	0	0	0	0	-5,774,045
<b>Uses</b>									
5382	Legal Services	5,247	0	0	0	0	0	0	5,247
5570	Land and Improvements	415,900	0	0	0	0	0	0	415,900
5592	Legal and Land Easements	2,900	0	0	0	0	0	0	2,900
5594	Design & Engineering	624,998	0	0	0	0	0	0	624,998
5595	Construction	4,725,000	0	0	0	0	0	0	4,725,000
Total Uses		5,774,045	0	0	0	0	0	0	5,774,045

# Development of 880 Pressure Zone

# Capital Project Detail

### Project Justification

This project will create a new pressure zone for the high elevation customers in the north-west portion of the 853 West Zone which currently experiences low and inconsistent water pressure. There is also limited available effective storage for the Indian Trail and Stallings Tanks which serve the 853 Zone. Projects required to develop the 880 Pressure Zone will include construction of a new 6.4 MGD Booster Pump Station, installation of several new pressure reducing valves and the decommissioning of the existing Waxhaw-Marvin Booster Pumping Station.

### Project Scope

Project provides for improvements to 880 Zone BPS - 6.4 MGD Booster Pump Station including land acquisition, 853 South/762 PRV to supply 762 zone (emergencies), 880/853 West PRV's to supply 853 zone (emergencies), 880/821 Check Valve to supply 880 zone (emergencies), 853 West/821 PRV to supply 821 zone (emergencies).

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-3,839,742	0	0	0	0	0	0	-3,839,742
4720	Revenue Bonds - 2015	-1,286,458	0	0	0	0	0	0	-1,286,458
Total Funding Sources		-5,126,200	0	0	0	0	0	0	-5,126,200
<b>Uses</b>									
5570	Land and Improvements	412,000	0	0	0	0	0	0	412,000
5594	Design & Engineering	450,000	0	0	0	0	0	0	450,000
5595	Construction	4,264,200	0	0	0	0	0	0	4,264,200
Total Uses		5,126,200	0	0	0	0	0	0	5,126,200

# Waxhaw Marvin PS Decommission

# Capital Project Detail

**Project Justification**

Development of the 880 Pressure Zone and the completion of the 6.4 MGD Booster Pump Station (Project WT053), the existing Waxhaw-Marvin Booster Pumping Station is no longer required.

**Project Scope**

Project provides for the demolition of the existing Waxhaw-Marvin booster pump station.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	0	-400,000	0	0	0	0	0	-400,000	
Total Funding Sources		0	-400,000	0	0	0	0	0	-400,000	
<b>Uses</b>										
5594	Design & Engineering	0	100,000	0	0	0	0	0	100,000	
5595	Construction	0	300,000	0	0	0	0	0	300,000	
Total Uses		0	400,000	0	0	0	0	0	400,000	

# Short Line Extensions

# Capital Program Detail

**Program Scope**

Program provides projects as outlined in the Extension Ordinance to allow Union County Public Works to extend water service and provide an environmental benefit to qualifying applicants in Union County.

**Program Operating Budget Impact**

The Short Line Extensions program is partially funded from the issuance of Revenue Bonds of \$862,559 in FY 2016. The maximum annual debt service impact for this issuance will be \$68,127 beginning in FY 2017 and will retire in twenty two years.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Capital Contributions	-34,825	0	0	0	0	0	0	-34,825
Revenue Bonds - 2015	-862,559	0	0	0	0	0	0	-862,559
Utility Pay Go	-2,318,616	-600,000	-600,000	-600,000	-700,000	-700,000	-700,000	-6,218,616
<b>Total Funding Sources</b>	<b>-3,216,000</b>	<b>-600,000</b>	<b>-600,000</b>	<b>-600,000</b>	<b>-700,000</b>	<b>-700,000</b>	<b>-700,000</b>	<b>-7,116,000</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84016	Short Line Extensions Water	672,473	0	0	0	0	0	0	672,473
84017	Short Line Extensions Water FY 14	637,592	0	0	0	0	0	0	637,592
84021	Short Line Ext to County Facilities	240,843	0	0	0	0	0	0	240,843
84022	Short Line Extensions Water FY 15	601,546	0	0	0	0	0	0	601,546
84025	Short Line Extensions Water FY 16	588,546	0	0	0	0	0	0	588,546
84030	Short Line Extensions Water FY 17 - Forward	475,000	600,000	600,000	600,000	700,000	700,000	700,000	4,375,000
<b>Total Short Line Extensions</b>		<b>3,216,000</b>	<b>600,000</b>	<b>600,000</b>	<b>600,000</b>	<b>700,000</b>	<b>700,000</b>	<b>700,000</b>	<b>7,116,000</b>

# Short Line Extensions Water

# Capital Project Detail

**Project Justification**

Annual program included in the Extension Ordinance to allow Union County Public Works to extend water service and provide an environmental benefit to qualifying applicants in Union County.

**Project Scope**

Project provides for water main extensions (<1000 LF) for qualifying customers.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-559,824	0	0	0	0	0	0	-559,824
4727	Revenue Bonds - 2015	-77,824	0	0	0	0	0	0	-77,824
4845	Capital Contributions	-34,825	0	0	0	0	0	0	-34,825
Total Funding Sources		-672,473	0	0	0	0	0	0	-672,473
<b>Uses</b>									
5594	Design & Engineering	164,824	0	0	0	0	0	0	164,824
5595	Construction	507,649	0	0	0	0	0	0	507,649
Total Uses		672,473	0	0	0	0	0	0	672,473



# Short Line Extensions Water FY 14

# Capital Project Detail

**Project Justification**

Annual program included in the Extension Ordinance to allow Union County Public Works to extend water service and provide an environmental benefit to qualifying applicants in Union County.

**Project Scope**

Project provides for water main extensions (<1000 LF) for qualifying customers.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2015	-345,956	0	0	0	0	0	0	-345,956
4727	Revenue Bonds - 2015	-291,636	0	0	0	0	0	0	-291,636
Total Funding Sources		-637,592	0	0	0	0	0	0	-637,592
<b>Uses</b>									
5594	Design & Engineering	72,425	0	0	0	0	0	0	72,425
5595	Construction	565,167	0	0	0	0	0	0	565,167
Total Uses		637,592	0	0	0	0	0	0	637,592

# Short Line Ext to County Facilities

# Capital Project Detail

**Project Justification**

This project will create the off site infrastructure needed to serve county facilities.

**Project Scope**

Project provides for various water or sewer extensions to service existing or proposed county facilities. Current projects include water line extensions to service Jesse Helms Park and the future shooting range for the Sheriff's Office.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	-240,843	0	0	0	0	0	0	-240,843	
Total Funding Sources		-240,843	0	0	0	0	0	0	-240,843	
<b>Uses</b>										
5595	Construction	240,843	0	0	0	0	0	0	240,843	
Total Uses		240,843	0	0	0	0	0	0	240,843	

# Short Line Extensions Water FY 15

# Capital Project Detail

**Project Justification**

Annual program included in the Extension Ordinance to allow Union County Public Works to extend water service and provide an environmental benefit to qualifying applicants in Union County.

**Project Scope**

Project provides for water main extensions (<1000 LF) for qualifying customers.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-454,403	0	0	0	0	0	0	-454,403
4720	Revenue Bonds - 2015	-147,143	0	0	0	0	0	0	-147,143
Total Funding Sources		-601,546	0	0	0	0	0	0	-601,546
<b>Uses</b>									
5594	Design & Engineering	61,694	0	0	0	0	0	0	61,694
5595	Construction	539,852	0	0	0	0	0	0	539,852
Total Uses		601,546	0	0	0	0	0	0	601,546

# Short Line Extensions Water FY 16

# Capital Project Detail

**Project Justification**

Annual program included in the Extension Ordinance to allow Union County Public Works to extend water service and provide an environmental benefit to qualifying applicants in Union County.

**Project Scope**

Project provides for water main extensions (<1000 LF) for qualifying customers.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	-588,546	0	0	0	0	0	0	-588,546	
Total Funding Sources		-588,546	0	0	0	0	0	0	-588,546	
<b>Uses</b>										
5594	Design & Engineering	82,000	0	0	0	0	0	0	82,000	
5595	Construction	506,546	0	0	0	0	0	0	506,546	
Total Uses		588,546	0	0	0	0	0	0	588,546	

# Short Line Extensions Water FY 17 - Capital Project Detail Forward

**Project Justification**

Annual program included in the Extension Ordinance to allow Union County Public Works to extend water service and provide an environmental benefit to qualifying applicants in Union County.

**Project Scope**

Project provides for water main extensions (<1000 LF) for qualifying customers.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-475,000	-600,000	-600,000	-600,000	-700,000	-700,000	-700,000	-4,375,000
Total Funding Sources		-475,000	-600,000	-600,000	-600,000	-700,000	-700,000	-700,000	-4,375,000
<b>Uses</b>									
5594	Design & Engineering	754	100,000	100,000	100,000	100,000	100,000	100,000	600,754
5595	Construction	474,246	500,000	500,000	500,000	600,000	600,000	600,000	3,774,246
Total Uses		475,000	600,000	600,000	600,000	700,000	700,000	700,000	4,375,000

# Town Center Sewer Development

# Capital Program Detail

## Program Scope

Program provides for Town Center Sewer Development and consists of community outreach programs to various towns located within the Union County Public Works service area. These programs will improve existing wastewater infrastructure or provide solutions for addressing new wastewater service in these towns. The towns of Mineral Springs, Stallings, and Fairview were identified in the 2011 Master Plan for service and infrastructure improvements.

## Program Operating Budget Impact

The Town Center Sewer Development program is partially funded from the issuance of Revenue Bonds of \$1,180,806 in FY 2016. The maximum annual debt service for this program will be \$88,539 beginning in FY 2017 and retire in twenty two years.

## Program Summary

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2015		-1,180,806	0	0	0	0	0	0	-1,180,806
Utility Pay Go		-926,634	0	0	0	0	0	0	-926,634
Total Funding Sources		-2,107,440	0	0	0	0	0	0	-2,107,440

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85036	Stallings- Collection System	431,200	0	0	0	0	0	0	431,200
85038	Mineral Springs-Collection System	1,267,240	0	0	0	0	0	0	1,267,240
85043	Indian Trail Town Center WW Service	103,000	0	0	0	0	0	0	103,000
85044	Fairview Downtown WW Service	206,000	0	0	0	0	0	0	206,000
85048	Weddington Downtown Development	100,000	0	0	0	0	0	0	100,000
Total Town Center Sewer Development		2,107,440	0	0	0	0	0	0	2,107,440

# Stallings- Collection System

# Capital Project Detail

**Project Justification**

General upgrades for existing pump stations identified in the Comprehensive Water and Wastewater Master Plan. This includes upgrading or replacing the motors, drives, pumps, telemetry, generators, force mains, addressing odors, etc.

**Project Scope**

Project provides for rehabilitation of aging and inadequate wastewater infrastructure, manhole and sewer SSES, condition assessment, and reduce sanitary sewer overflows within the collection system.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-367,000	0	0	0	0	0	0	-367,000
4720	Revenue Bonds - 2015	-64,200	0	0	0	0	0	0	-64,200
Total Funding Sources		-431,200	0	0	0	0	0	0	-431,200
<b>Uses</b>									
5594	Design & Engineering	106,200	0	0	0	0	0	0	106,200
5595	Construction	325,000	0	0	0	0	0	0	325,000
Total Uses		431,200	0	0	0	0	0	0	431,200

# Mineral Springs-Collection System

# Capital Project Detail

**Project Justification**

Mineral Springs Downtown Wastewater Service is identified as part of the Town Center Sewer Development from the Comprehensive Water and Wastewater Master Plan. This Community Outreach Program will provide solutions for addressing new wastewater service within the Mineral Springs town limits.

**Project Scope**

Project provides a study of the Town of Mineral Springs and how the town can best be served with Water and Sewer. Provide a `mini-master plan` for the Town of Mineral Springs.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-150,634	0	0	0	0	0	0	-150,634
4720	Revenue Bonds - 2015	-1,116,606	0	0	0	0	0	0	-1,116,606
Total Funding Sources		-1,267,240	0	0	0	0	0	0	-1,267,240
<b>Uses</b>									
5594	Design & Engineering	265,540	0	0	0	0	0	0	265,540
5595	Construction	1,001,700	0	0	0	0	0	0	1,001,700
Total Uses		1,267,240	0	0	0	0	0	0	1,267,240



# Indian Trail Town Center WW Service Capital Project Detail

**Project Justification**

Indian Trail Town Center Wastewater Service will provide solutions for addressing new wastewater service for the Indian Trail Town Center.

**Project Scope**

Project provides a community outreach project. Study to best provide wastewater service to Indian Trail Town Center.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-103,000	0	0	0	0	0	0	-103,000
Total Funding Sources		-103,000	0	0	0	0	0	0	-103,000
<b>Uses</b>									
5594	Design & Engineering	103,000	0	0	0	0	0	0	103,000
Total Uses		103,000	0	0	0	0	0	0	103,000

# Fairview Downtown WW Service

# Capital Project Detail

**Project Justification**

Project provides a study to determine the best method to service downtown Fairview.

**Project Scope**

Project provides a study to determine the best method to service downtown Fairview.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-206,000	0	0	0	0	0	0	-206,000
Total Funding Sources		-206,000	0	0	0	0	0	0	-206,000
<b>Uses</b>									
5594	Design & Engineering	206,000	0	0	0	0	0	0	206,000
Total Uses		206,000	0	0	0	0	0	0	206,000

# Weddington Downtown Development Capital Project Detail

*Project Justification*

As a part of the Community Outreach Program that was established as part of the Comprehensive Water and Wastewater Master Plan, this project will provide solutions for addressing wastewater service within Weddington's Downtown Development.

*Project Scope*

Project provides a study to determine the best method to service downtown Weddington with wastewater service.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-100,000	0	0	0	0	0	0	-100,000
Total Funding Sources		-100,000	0	0	0	0	0	0	-100,000
<b>Uses</b>									
5594	Design & Engineering	100,000	0	0	0	0	0	0	100,000
Total Uses		100,000	0	0	0	0	0	0	100,000

# Twelve Mile Creek WWTP System Improvements

# Capital Program Detail

### Program Scope

Program provides for Twelve Mile Creek Waste Water Treatment Plant (WWTP) System Improvements that involve various improvements needed within the Twelve Mile Creek WWTP Service Area to reduce inflow and infiltration into the Twelve Mile Creek WWTP and to improve the hydraulics for the wastewater flow. These projects include the Twelve Mile WWTP conceptual design and interim improvements study, subsequent expansion of the WWTP, a phased series of Interceptor Improvements along both the East Fork and West Fork tributaries; installation of new diversion pump station and force main and the decommission of the Hunley Creek WWTP.

### Program Operating Budget Impact

The projects within the Twelve Mile Creek WWTP System Improvements program will have some marginal operating budget impacts. An increase in costs related to utilities, chemicals and bio-solids removal could be expected. Until the preliminary design and engineering studies are complete it is difficult to quantify what those impacts might be. The costs will be influenced by what technology and processes are established during the design phase.

The Twelve Mile Creek WWTP System Improvements program is primarily funded for the issuance of Revenue Bonds of \$50,025,487. One issuance took place in FY 2016 of \$5,211,584 with a maximum annual debt service impact of \$347,073 beginning in FY 2017. The remaining issuances will take place approximately every sixteen months beginning in 2017 for a total of \$44,813,903, with a maximum debt service impact of \$2,524,772. Debt service payments will begin within two years following each issuance and will retire in no more than twenty five years.

### Program Summary

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Capital Contributions	-1,693,650	0	0	0	0	0	0	-1,693,650
Revenue Bonds - 2015	-5,211,584	0	0	0	0	0	0	-5,211,584
Revenue Bonds - 2017	-34,113,903	0	0	0	0	0	0	-34,113,903
Revenue Bonds - 2019	-741,600	-900,000	-9,800,000	0	0	0	0	-11,441,600
Utility Pay Go	-16,145,293	0	0	0	0	0	0	-16,145,293
<b>Total Funding Sources</b>	<b>-57,906,030</b>	<b>-900,000</b>	<b>-9,800,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-68,606,030</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85032	East Fork 12M Creek Parallel Trunk	8,127,760	0	0	0	0	0	0	8,127,760
85042	Blythe Creek Sewer Improvements	3,083,200	0	0	0	0	0	0	3,083,200
85047	West Fork 12ML Interceptor Improvements	698,400	400,000	7,100,000	0	0	0	0	8,198,400
85056	Waxhaw Interceptor	0	500,000	2,700,000	0	0	0	0	3,200,000
85509	12 ML WWTP Design & Interim Improvements	3,490,093	0	0	0	0	0	0	3,490,093

# Twelve Mile Creek WWTP System Improvements

## Capital Program Detail

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85516	Hunley Creek WWTP Decommission	127,000	0	0	0	0	0	0	127,000
85517	12 Mile Creek WWTP Expansion	42,379,577	0	0	0	0	0	0	42,379,577
<b>Total Twelve Mile Creek WWTP System Improvements</b>		<b>57,906,030</b>	<b>900,000</b>	<b>9,800,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>68,606,030</b>

# East Fork 12M Creek Parallel Trunk

# Capital Project Detail

### Project Justification

Twelve Mile Creek WWTP System Improvements involves various improvements needed within the Twelve Mile Creek WWTP Service Area to reduce Inflow and Infiltration into the 12 Mile WWTP and to improve the hydraulics for the wastewater flow. A big contributor to the inflow and infiltration coming into 12 Mile WWTP results from extensive growth in the Weddington/Wesley Chapel area. The East Fork and Davis Mine interceptors serving these sewer basins are near capacity and often surcharge during rain events. Replacing and paralleling these interceptors with a larger diameter sewer line will help improve the I & I for these respective basins.

### Project Scope

Project provides for improvements to East Fork Twelve Mile and tributaries with the installation of 16,000 LF of 24" lines, 5,800 LF of 18" lines, 300 LF of 15" lines, 12,400 LF of 12" lines, and improvements to Davis Mine Creek Gravity flow with the inst

### Project Summary

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-1,731,423	0	0	0	0	0	0	-1,731,423
4720	Revenue Bonds - 2015	-4,702,687	0	0	0	0	0	0	-4,702,687
4845	Capital Contributions	-1,693,650	0	0	0	0	0	0	-1,693,650
Total Funding Sources		-8,127,760	0	0	0	0	0	0	-8,127,760
<b>Uses</b>									
5592	Legal and Land Easements	60,000	0	0	0	0	0	0	60,000
5594	Design & Engineering	1,100,000	0	0	0	0	0	0	1,100,000
5595	Construction	6,967,760	0	0	0	0	0	0	6,967,760
Total Uses		8,127,760	0	0	0	0	0	0	8,127,760

# Blythe Creek Sewer Improvements

# Capital Project Detail

**Project Justification**

WWTP Service Area to reduce Inflow and Infiltration into the 12 Mile WWTP and to improve the hydraulics for the wastewater flow. A contributor to the excessive I & I coming into the plant is the existing grey water system servicing a portion of the Town of Waxhaw. These lines are old and deteriorating and overflow during rain events. Two new sewer lines along Blythe Creek would help eliminate these old sewer lines as well as get rid of the old grinder pumps accompanying the greywater system.

**Project Scope**

Project provides for improvements to the Blythe Creek Tributary Sewer - Local sewers and 2,200 LF of 12" new sewer line (Waxhaw Grinder Pumps), Blythe Creek Sewer Extension - Local sewers and 2,600 LF of 12" new sewer (Wysacky grinder pumps) and related improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-3,040,000	0	0	0	0	0	0	-3,040,000
4720	Revenue Bonds - 2019	-43,200	0	0	0	0	0	0	-43,200
Total Funding Sources		-3,083,200	0	0	0	0	0	0	-3,083,200
<b>Uses</b>									
5592	Legal and Land Easements	150,000	0	0	0	0	0	0	150,000
5594	Design & Engineering	415,200	0	0	0	0	0	0	415,200
5595	Construction	2,518,000	0	0	0	0	0	0	2,518,000
Total Uses		3,083,200	0	0	0	0	0	0	3,083,200

# West Fork 12ML Interceptor Improvements

# Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan identified the need to provide new sewer infrastructure to the northern part of the Twelve Mile Service Basin. These improvements will provide additional capacity for current and future wet weather sewer flows. In addition this project will alleviate the existing South Fork Interceptor which is currently at capacity by eliminating the existing Brookhaven Pump Station and extending the existing Poplin Road force main to the West Fork of Twelve Mile Creek.

**Project Scope**

Project provides for approximately 12,200 LF of 30" and 12,300 LF of 18" Gravity Sewer line along the West Fork of Twelve Mile Creek and 5,300 LF of 21" Gravity Sewer line along a Tributary to West Fork. In addition approximately 3,700 LF of 16" force main will be extended to the West Fork of Twelve Mile Creek and other related improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2019	-698,400	-400,000	-7,100,000	0	0	0	0	-8,198,400
Total Funding Sources		-698,400	-400,000	-7,100,000	0	0	0	0	-8,198,400
<b>Uses</b>									
5592	Capital Legal Land Easements	0	100,000	0	0	0	0	0	100,000
5594	Design & Engineering	698,400	300,000	0	0	0	0	0	998,400
5595	Construction	0	0	7,100,000	0	0	0	0	7,100,000
Total Uses		698,400	400,000	7,100,000	0	0	0	0	8,198,400



# Waxhaw Interceptor

# Capital Project Detail

**Project Justification**

Continued growth in accordance with the adopted comprehensive plan for the Town of Waxhaw will require additional capacity in the interceptor sewer between Highway 75 and the 12-Mile WWTP along the 12-Mile Creek tributary between Waxhaw Marvin Road and Providence Road.

**Project Scope**

Project provides for the design and construction of approximately 12,000 LF of 10-inch through 30-inch diameter gravity sanitary sewer piping.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2019	0	-500,000	-2,700,000	0	0	0	0	-3,200,000
Total Funding Sources		0	-500,000	-2,700,000	0	0	0	0	-3,200,000
<b>Uses</b>									
5594	Design & Engineering	0	500,000	0	0	0	0	0	500,000
5595	Construction	0	0	2,700,000	0	0	0	0	2,700,000
Total Uses		0	500,000	2,700,000	0	0	0	0	3,200,000

# 12 ML WWTP Design & Interim Improvements

# Capital Project Detail

**Project Justification**

Twelve Mile Creek WWTP System Improvements involves various improvements needed within the Twelve Mile Creek WWTP Service Area to reduce Inflow and Infiltration into the 12 Mile WWTP and to improve the hydraulics for the wastewater flow. To accommodate Union County’s growth rate, the 12 Mile WWTP will require expansion. A conceptual design and facility layout detailing the expansion needs to begin in FY `14 for construction to begin in FY `16. Near term improvements are needed to improve the treatment reliability. These interim improvements can accommodate the projected growth rate until the additional capacity from the expansion becomes available.

**Project Scope**

Project provides for 12 Mile Waste Water Treatment Plant Interim Improvements to replace the existing filters.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-3,490,093	0	0	0	0	0	0	-3,490,093
Total Funding Sources		-3,490,093	0	0	0	0	0	0	-3,490,093
<b>Uses</b>									
5594	Design & Engineering	1,973,717	0	0	0	0	0	0	1,973,717
5595	Construction	1,516,376	0	0	0	0	0	0	1,516,376
Total Uses		3,490,093	0	0	0	0	0	0	3,490,093

# Hunley Creek WWTP Decommission

# Capital Project Detail

**Project Justification**

Hunley Creek WWTP is an offline plant owned by UCPW. The plant became a liability and bypassed as a result of Poplin Road Pump Station Project. Complete decommission and demolition of the plant is needed as the structure is a safety hazard.

**Project Scope**

Project provides for the Demolition of Hunley Creek Wastewater Treatment Plant.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	-127,000	0	0	0	0	0	0	-127,000	
Total Funding Sources		-127,000	0	0	0	0	0	0	-127,000	
<b>Uses</b>										
5594	Design & Engineering	19,000	0	0	0	0	0	0	19,000	
5595	Construction	108,000	0	0	0	0	0	0	108,000	
Total Uses		127,000	0	0	0	0	0	0	127,000	

# 12 Mile Creek WWTP Expansion

# Capital Project Detail

**Project Justification**

Twelve Mile Creek WWTP System Improvements involves various improvements needed within the Twelve Mile Creek WWTP Service Area to reduce Inflow and Infiltration into the 12 Mile WWTP and to improve the hydraulics for the wastewater flow. To accommodate Union County’s growth rate, the 12 Mile WWTP will require expansion. The expansion will expand the treatment capacity of 12 Mile WWTP by 1.5 MGD, from 6 MGD to 7.5 MGD.

**Project Scope**

Project provides for 1.5 MGD capacity expansion from 6 MGD to 7.5 MGD (Phase 1) and related improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-7,756,777	0	0	0	0	0	0	-7,756,777
4720	Revenue Bonds - 2017	-34,113,903	0	0	0	0	0	0	-34,113,903
4720	Revenue Bonds - 2015	-508,897	0	0	0	0	0	0	-508,897
Total Funding Sources		-42,379,577	0	0	0	0	0	0	-42,379,577
<b>Uses</b>									
5594	Design & Engineering	5,515,998	0	0	0	0	0	0	5,515,998
5595	Construction	36,863,579	0	0	0	0	0	0	36,863,579
Total Uses		42,379,577	0	0	0	0	0	0	42,379,577

# UCPW Buildings and Improvements Capital Program Detail

**Program Scope**

Program provides for the Union County Public Works Buildings and improvements, including facility renovations within the 4th and 5th floors of the Government Center, and the design, engineering and construction of a new Operations Center, and other necessary improvements.

**Program Operating Budget Impact**

We expect additional operating expenses related to expanding the Operations Center. The expected costs are associated with utilities and maintenance.

The UCPW Building and Improvements program is primarily funded from the issuance of Revenue Bonds of \$4,030,965 in FY 2016. The maximum annual debt service impact for this program will be \$271,348 beginning in FY 2017 and will retire in twenty two years.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2015		-4,030,965	0	0	0	0	0	0	-4,030,965
Utility Pay Go		-6,884,411	0	0	0	0	0	0	-6,884,411
<b>Total Funding Sources</b>		<b>-10,915,376</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-10,915,376</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
86005	PW (GOV) Facilities Renovations	1,457,050	0	0	0	0	0	0	1,457,050
86006	Expand Operations Center	9,458,326	0	0	0	0	0	0	9,458,326
<b>Total UCPW Buildings and Improvements</b>		<b>10,915,376</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,915,376</b>

# PW (GOV) Facilities Renovations

# Capital Project Detail

**Project Justification**

UCPW buildings and improvements will fund existing facility renovations within the 4th and 5th floors of the Government Center. These improvements will provide facilities designed to promote increased work efficiencies.

**Project Scope**

Project provides for facility renovations to the fourth and fifth floors of the Government Center including needed design, construction, furnishings, and other necessary components.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-1,269,762	0	0	0	0	0	0	-1,269,762
4720	Revenue Bonds - 2015	-187,288	0	0	0	0	0	0	-187,288
Total Funding Sources		-1,457,050	0	0	0	0	0	0	-1,457,050
<b>Uses</b>									
5580	Buildings and Improvements	1,457,050	0	0	0	0	0	0	1,457,050
Total Uses		1,457,050	0	0	0	0	0	0	1,457,050

# Expand Operations Center

# Capital Project Detail

**Project Justification**

The design, engineering and construction for a new Operations Center to provide facilities promoting increased work efficiencies for Operations.

**Project Scope**

Project provides for the redevelopment of approximately 18 acres of the existing 100 acre site currently used as the departments Operation Center. Project elements include a new Administration Building including Staff Support and Training Facility, a new Warehouse, Fueling Station, Vehicle wash, renovation of two existing buildings and demolition of various existing structures on site. Also included will be the development of all required infrastructure on site including a new entrance, water, sewer, power, parking and storm water management.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-5,614,649	0	0	0	0	0	0	-5,614,649
4720	Revenue Bonds - 2015	-3,843,677	0	0	0	0	0	0	-3,843,677
Total Funding Sources		-9,458,326	0	0	0	0	0	0	-9,458,326
<b>Uses</b>									
5594	Design & Engineering	880,000	0	0	0	0	0	0	880,000
5595	Construction	8,578,326	0	0	0	0	0	0	8,578,326
Total Uses		9,458,326	0	0	0	0	0	0	9,458,326

# Lower Crooked Creek WRF

# Capital Program Detail

### Program Scope

Program provides for a new Lower Crooked Creek WRF in the Yadkin Basin. This involves improvements needed within the Crooked Creek Service Area to improve wastewater treatment and improve the hydraulics for wastewater flow.

### Program Operating Budget Impact

The projects within the program will have some operating budget impacts. Until the preliminary design and engineering studies are complete it is difficult to quantify what those impacts might be. The cost will be influenced by what technology and processes are established during the design phase.

The Lower Crooked Creek WRF program is primarily funded from the issuance of Revenue Bonds of \$13,000,000. The issuance will take place in 2020 with a maximum annual debt service impact of \$1,264,773 beginning in 2021 and will retire in twenty-five years.

### Program Summary

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2019		-1,500,000	0	0	0	0	0	0	-1,500,000
Revenue Bonds - 2020		0	-1,100,000	-10,400,000	0	0	0	0	-11,500,000
Total Funding Sources		-1,500,000	-1,100,000	-10,400,000	0	0	0	0	-13,000,000

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85050	Poplin Road Pump Station Interim Improvements	0	1,100,000	10,400,000	0	0	0	0	11,500,000
85520	Lower Crooked Creek WRF	1,500,000	0	0	0	0	0	0	1,500,000
Total Lower Crooked Creek WRF		1,500,000	1,100,000	10,400,000	0	0	0	0	13,000,000



# Poplin Road Pump Station Interim Improvements

# Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan Addendum identified the need to provide additional wastewater treatment capacity in the Crooked Creek Basin. This project will convey wastewater flow from the existing Poplin Road PS to the new Crooked Creek WRF.

**Project Scope**

Project provides for approximately 400 LF of 48" and 18,400 LF of 30" gravity sewer along Crooked Creek.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2020	0	-1,100,000	-10,400,000	0	0	0	0	-11,500,000
Total Funding Sources		0	-1,100,000	-10,400,000	0	0	0	0	-11,500,000
<b>Uses</b>									
5594	Design & Engineering	0	1,100,000	0	0	0	0	0	1,100,000
5595	Construction	0	0	10,400,000	0	0	0	0	10,400,000
Total Uses		0	1,100,000	10,400,000	0	0	0	0	11,500,000

# Lower Crooked Creek WRF

# Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan Addendum identified the need to provide additional wastewater treatment capacity in the Crooked Creek service area. This project will provide the treatment capacity for the Yadkin Basin and will be expandable to accommodate future growth.

**Project Scope**

Project consist of a new 4.0 MGD Water Reclamation Facility and related improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2019	-1,500,000	0	0	0	0	0	0	-1,500,000
Total Funding Sources		-1,500,000	0	0	0	0	0	0	-1,500,000
<b>Uses</b>									
5570	Land and Improvements	500,000	0	0	0	0	0	0	500,000
5594	Design & Engineering	1,000,000	0	0	0	0	0	0	1,000,000
Total Uses		1,500,000	0	0	0	0	0	0	1,500,000

# Yadkin River Water Supply

# Capital Program Detail

## Program Scope

Program provides for the initial efforts to increase the long-term water supply. The 2011 Master Plan identified several long-term water supply alternative scenarios to meet expected future water demands through 2040. Due to the lack of an adequate water supply source within Union County's borders, all of the alternative scenarios require a new Inner Basin Transfer (IBT) certificate from the Yadkin-Pee Dee River Basin and additional IBT from Catawba River Basin. In an effort to leverage usage of the CRWTP for maximum available supply, additional water needs to be permitted for IBT within both the Catawba and Yadkin basins.

## Program Operating Budget Impact

The projects with the YRWSP program will have significant operating budget impacts. The costs associated with the water treatment plant could be expected to be approximately .68 per thousand gallons produced. With a 4MGD capacity, the costs would be about one million dollars a year (in today's dollars).

The YRWSP program is primarily funded from the issuance of Revenue Bonds of \$188,873,040. Issuances will take place approximately every sixteen months beginning in 2019 through 2022. The maximum annual debt service impact will be \$18,148,773. Debt service payments will begin within two years following each issuance and will retire in no more than twenty five years.

## Program Summary

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2015	-1,658,123	0	0	0	0	0	0	-1,658,123
Revenue Bonds - 2019	-4,514,917	-13,000,000	-39,900,000	0	0	0	0	-57,414,917
Revenue Bonds - 2020	0	-12,500,000	-42,000,000	-75,300,000	0	0	0	-129,800,000
<b>Total Funding Sources</b>	<b>-6,173,040</b>	<b>-25,500,000</b>	<b>-81,900,000</b>	<b>-75,300,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-188,873,040</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84089	Yadkin Distribution System Improvements	0	4,300,000	29,500,000	0	0	0	0	33,800,000
84090	Raw Water Intake & Pump Station	0	900,000	5,300,000	0	0	0	0	6,200,000
84091	Raw Water Transmission Main	0	12,500,000	2,000,000	75,300,000	0	0	0	89,800,000
84504	Yadkin Water Supply	4,730,410	0	0	0	0	0	0	4,730,410
84507	New Yadkin Water Treatment Plant	1,442,630	7,800,000	45,100,000	0	0	0	0	54,342,630
<b>Total Yadkin River Water Supply</b>		<b>6,173,040</b>	<b>25,500,000</b>	<b>81,900,000</b>	<b>75,300,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>188,873,040</b>

# Yadkin Distribution System Improvements

# Capital Project Detail

**Project Justification**

The 2011 Master Plan identified the need for a long term water supply from the Yadkin River Basin. This project will create the needed infrastructure to supplement the new Water Treatment Plant.

**Project Scope**

Project provides for various system improvements within Union County's existing distribution system to adequately deliver the required capacity from the new water treatment plant. Projects include additional booster pumping stations and large transmission mains.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2019	0	-4,300,000	-29,500,000	0	0	0	0	-33,800,000
Total Funding Sources		0	-4,300,000	-29,500,000	0	0	0	0	-33,800,000
<b>Uses</b>									
5594	Design & Engineering	0	4,300,000	0	0	0	0	0	4,300,000
5595	Construction	0	0	29,500,000	0	0	0	0	29,500,000
Total Uses		0	4,300,000	29,500,000	0	0	0	0	33,800,000

# Raw Water Intake & Pump Station

# Capital Project Detail

**Project Justification**

The 2011 Master Plan identified the need for a long term water supply from the Yadkin River Basin. This project is one of several that will supplement the new Water Treatment Plant.

**Project Scope**

Project provides for the design and construction of a new raw water intake and pump station in Lake Tillery.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2019	0	-900,000	-5,300,000	0	0	0	0	-6,200,000
Total Funding Sources		0	-900,000	-5,300,000	0	0	0	0	-6,200,000
<b>Uses</b>									
5594	Design & Engineering	0	900,000	0	0	0	0	0	900,000
5595	Construction	0	0	5,300,000	0	0	0	0	5,300,000
Total Uses		0	900,000	5,300,000	0	0	0	0	6,200,000

# Raw Water Transmission Main

# Capital Project Detail

**Project Justification**

The 2011 Master Plan identified the need for a long term water supply from the Yadkin River Basin. This project is one of several that will supplement the new Water Treatment Plant.

**Project Scope**

Project consist of approximately 29 miles of 36" raw water transmission main from Lake Tillery to Union County.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2020	0	-12,500,000	-2,000,000	-75,300,000	0	0	0	-89,800,000
Total Funding Sources		0	-12,500,000	-2,000,000	-75,300,000	0	0	0	-89,800,000
<b>Uses</b>									
5570	Land Acquisition	0	0	2,000,000	0	0	0	0	2,000,000
5594	Design & Engineering	0	12,500,000	0	0	0	0	0	12,500,000
5595	Construction	0	0	0	75,300,000	0	0	0	75,300,000
Total Uses		0	12,500,000	2,000,000	75,300,000	0	0	0	89,800,000

# Yadkin Water Supply

# Capital Project Detail

**Project Justification**

The 2011 Master Plan identified several long term water supply alternative scenarios to meet expected future water demands (to 2040). Due to the lack of an adequate water supply source within Union County's borders, all of the alternative scenarios require a new IBT certificate from the Yadkin-Pee Dee River Basin.

**Project Scope**

Project provides for the Yadkin Inter Basin Transfer Permit of 26 MGD, Yadkin IBT/FERC permitting of a new raw water supply system and water treatment plant to provide additional water supply.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2019	-3,072,287	0	0	0	0	0	0	-3,072,287
4720	Revenue Bonds - 2015	-1,658,123	0	0	0	0	0	0	-1,658,123
Total Funding Sources		-4,730,410	0	0	0	0	0	0	-4,730,410
<b>Uses</b>									
5592	Legal and Land Easements	225,000	0	0	0	0	0	0	225,000
5594	Design & Engineering	4,505,410	0	0	0	0	0	0	4,505,410
Total Uses		4,730,410	0	0	0	0	0	0	4,730,410

# New Yadkin Water Treatment Plant

# Capital Project Detail

**Project Justification**

The 2011 Master Plan identified the need for a long term water supply from the Yadkin River Basin. This project will provide additional Water Treatment Capacity to meet expected future water demands.

**Project Scope**

Project provides for a new 12.0 MGD Water Treatment Plant

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4720	Revenue Bonds - 2020	0	0	-40,000,000	0	0	0	0	-40,000,000
4720	Revenue Bonds - 2019	-1,442,630	-7,800,000	-5,100,000	0	0	0	0	-14,342,630
Total Funding Sources		-1,442,630	-7,800,000	-45,100,000	0	0	0	0	-54,342,630
<b>Uses</b>									
5594	Design & Engineering	1,442,630	7,800,000	0	0	0	0	0	9,242,630
5595	Construction	0	0	45,100,000	0	0	0	0	45,100,000
Total Uses		1,442,630	7,800,000	45,100,000	0	0	0	0	54,342,630



# 935 Zone Improvements

# Capital Program Detail

**Program Scope**

Program provides for system improvements as outlined in detail in the Comprehensive Water & Wastewater Master Plan. These improvements include the installation booster pumping station, storage tanks, and other necessary improvements to provides sufficient water supply and fire flow in the area.

**Program Operating Budget Impact**

The New Stallings BPS Expansion will have a minor operating budget impact mostly related to a small increase in utility costs.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Utility Pay Go		0	-100,000	0	0	0	0	0	-100,000
Total Funding Sources		0	-100,000	0	0	0	0	0	-100,000

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84100	935 Zone Study	0	100,000	0	0	0	0	0	100,000
Total 935 Zone Improvements		0	100,000	0	0	0	0	0	100,000

# 935 Zone Study

# Capital Project Detail

*Project Justification*

The 935 Zone boundary is proposed to be modified to provide consistent, reliable system pressure to customers and optimize the operation and energy use at the New Stallings BPS.

*Project Scope*

The project provides for the evaluation of the service area boundary for the 935 Zone as recommended in the Water System Planning Update.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	0	-100,000	0	0	0	0	0	-100,000	
Total Funding Sources		0	-100,000	0	0	0	0	0	-100,000	
<b>Uses</b>										
5594	Design & Engineering	0	100,000	0	0	0	0	0	100,000	
Total Uses		0	100,000	0	0	0	0	0	100,000	

# Wastewater Pump Station Improvements

# Capital Program Detail

### Program Scope

Program provides for Wastewater Pump Station Improvements as an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Wastewater Pump Stations. This program includes upgrades of the existing pump stations including, but not limited to, motors, drives, pumps, telemetry, generators, force mains and odors. Four pump stations have been identified that need significant improvements and require an individual operating general ledger account organizational code for each station: Suburban Estates, Helmsville, Forest Park and 21-25 Pump Stations. In addition, this project will provide for rehabilitation of aging and inadequate wastewater infrastructure, manholes and sewer system evaluation and survey, condition assessment and reduction of sanitary sewer overflows within the collection system.

### Program Operating Budget Impact

The Wastewater Pump Station Improvements program is primarily funding through issuance of Revenue Bonds in 2019 and 2022 in the amount of \$4,600,000. The maximum annual debt service impact for this issuance will be \$459,136. Debt service payments will begin within two years following each issuance and will retire in no more than twenty five years.

### Program Summary

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2015	-62,459	0	0	0	0	0	0	-62,459
Revenue Bonds - 2019	0	-300,000	-1,700,000	0	0	0	0	-2,000,000
Revenue Bonds - 2022	0	0	0	-900,000	-300,000	-400,000	-1,000,000	-2,600,000
Utility Pay Go	-2,682,541	0	0	0	0	0	0	-2,682,541
<b>Total Funding Sources</b>	<b>-2,745,000</b>	<b>-300,000</b>	<b>-1,700,000</b>	<b>-900,000</b>	<b>-300,000</b>	<b>-400,000</b>	<b>-1,000,000</b>	<b>-7,345,000</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85041	Wastewater Pump Station Improvements	1,503,000	0	1,300,000	0	0	0	0	2,803,000
85045	Collection System SSES & Rehab	580,000	0	100,000	600,000	0	100,000	700,000	2,080,000
85046	Pumping Station Upgrades	662,000	300,000	300,000	300,000	300,000	300,000	300,000	2,462,000
<b>Total Wastewater Pump Station Improvements</b>		<b>2,745,000</b>	<b>300,000</b>	<b>1,700,000</b>	<b>900,000</b>	<b>300,000</b>	<b>400,000</b>	<b>1,000,000</b>	<b>7,345,000</b>

# Wastewater Pump Station Improvements

# Capital Project Detail

**Project Justification**

Project will be performed under the Wastewater Improvements annual program identified as a part of the Comprehensive Water and Wastewater Master Plan. The Helmsville Pumping Station replacement was a recommended project identified from the Crooked Creek I&I Study.

**Project Scope**

Project provides for the replacement of the Helmsville Pumping Station including approximately 4,600 LF of 8" forcemain replacement.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-1,440,541	0	0	0	0	0	0	-1,440,541
4720	Revenue Bonds - 2019	0	0	-1,300,000	0	0	0	0	-1,300,000
4720	Revenue Bonds - 2015	-62,459	0	0	0	0	0	0	-62,459
Total Funding Sources		-1,503,000	0	-1,300,000	0	0	0	0	-2,803,000
<b>Uses</b>									
5594	Design & Engineering	196,000	0	200,000	0	0	0	0	396,000
5595	Construction	1,307,000	0	1,100,000	0	0	0	0	2,407,000
Total Uses		1,503,000	0	1,300,000	0	0	0	0	2,803,000

# Collection System SSES & Rehab

# Capital Project Detail

**Project Justification**

Collection System Rehabilitation is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing wastewater collection systems. This program will provide for rehabilitation of aging and inadequate wastewater infrastructure, manhole and sewer SSES, condition assessment and reduce sanitary sewer overflows within the collection system.

**Project Scope**

Project provides for rehabilitation of aging and inadequate wastewater infrastructure, manhole and sewer SSES, condition assessment and reduce sanitary sewer overflows within the collection system.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-580,000	0	0	0	0	0	0	-580,000
4720	Revenue Bonds - 2022	0	0	0	-600,000	0	-100,000	-700,000	-1,400,000
4720	Revenue Bonds - 2019	0	0	-100,000	0	0	0	0	-100,000
Total Funding Sources		-580,000	0	-100,000	-600,000	0	-100,000	-700,000	-2,080,000
<b>Uses</b>									
5594	Design & Engineering	0	0	100,000	0	0	100,000	0	200,000
5595	Construction	580,000	0	0	600,000	0	0	700,000	1,880,000
Total Uses		580,000	0	100,000	600,000	0	100,000	700,000	2,080,000

# Pumping Station Upgrades

# Capital Project Detail

**Project Justification**

General upgrades for existing pump stations identified in the Comprehensive Water and Wastewater Master Plan. This includes upgrading or replacing the motors, drives, pumps, telemetry, generators, force mains, addressing odors, etc.

**Project Scope**

Project provides for rehabilitation of aging and inadequate wastewater infrastructure, manhole and sewer SSES, condition assessment, and reduce sanitary sewer overflows within the collection system.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-662,000	0	0	0	0	0	0	-662,000
4720	Revenue Bonds - 2022	0	0	0	-300,000	-300,000	-300,000	-300,000	-1,200,000
4720	Revenue Bonds - 2019	0	-300,000	-300,000	0	0	0	0	-600,000
Total Funding Sources		-662,000	-300,000	-300,000	-300,000	-300,000	-300,000	-300,000	-2,462,000
<b>Uses</b>									
5594	Design & Engineering	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
5595	Construction	562,000	200,000	200,000	200,000	200,000	200,000	200,000	1,762,000
Total Uses		662,000	300,000	300,000	300,000	300,000	300,000	300,000	2,462,000

# Wastewater Rehabilitation and Replacement

# Capital Program Detail

## Program Scope

Program provides for Wastewater Rehabilitation and Replacement as an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Wastewater Facilities. The initial projects identified are the Tallwood Waste Water Treatment Plant (WWTP) replacement and the Olde Sycamore WWTP Improvements. The Tallwood WWTP replacement is replacing an aging and deteriorating existing plant while the Olde Sycamore WWTP Improvements address existing problems affecting functionality of the existing plant.

## Program Operating Budget Impact

The projects within this program will have little or no operating budget impact.

## Program Summary

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2015	-459,681	0	0	0	0	0	0	-459,681
Utility Pay Go	-6,969,364	-1,200,000	-1,200,000	-1,200,000	-700,000	-1,500,000	-1,500,000	-14,269,364
<b>Total Funding Sources</b>	<b>-7,429,045</b>	<b>-1,200,000</b>	<b>-1,200,000</b>	<b>-1,200,000</b>	<b>-700,000</b>	<b>-1,500,000</b>	<b>-1,500,000</b>	<b>-14,729,045</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85006	Wastewater R&R Program	2,353,860	700,000	700,000	700,000	700,000	1,500,000	1,500,000	8,153,860
85007	Wastewater R&R-Waxhaw Sewer Line	695,000	0	0	0	0	0	0	695,000
85008	MS-Manhole Rehab 12ML & Grassy Branch	614,565	0	0	0	0	0	0	614,565
85009	SCADA Master Plan Update - Sewer	800,000	500,000	500,000	500,000	0	0	0	2,300,000
85513	Tallwood WWTP Replacement	2,381,745	0	0	0	0	0	0	2,381,745
85518	Grassy Branch WWTP	313,875	0	0	0	0	0	0	313,875
85519	Olde Sycamore WWTP Improvements	270,000	0	0	0	0	0	0	270,000
<b>Total Wastewater Rehabilitation and Replacement</b>		<b>7,429,045</b>	<b>1,200,000</b>	<b>1,200,000</b>	<b>1,200,000</b>	<b>700,000</b>	<b>1,500,000</b>	<b>1,500,000</b>	<b>14,729,045</b>

# Wastewater R&R Program

# Capital Project Detail

*Project Justification*

Wastewater rehabilitation and replacement is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing wastewater facilities. UCPW's facilities` will be assessed and analyzed on a yearly basis and rehabilitated based on the condition and need.

*Project Scope*

Project provides for the annual wastewater rehabilitation program.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-2,353,860	-700,000	-700,000	-700,000	-700,000	-1,500,000	-1,500,000	-8,153,860
Total Funding Sources		-2,353,860	-700,000	-700,000	-700,000	-700,000	-1,500,000	-1,500,000	-8,153,860
<b>Uses</b>									
5594	Design & Engineering	405,500	100,000	100,000	100,000	100,000	200,000	200,000	1,205,500
5595	Construction	1,948,360	600,000	600,000	600,000	600,000	1,300,000	1,300,000	6,948,360
Total Uses		2,353,860	700,000	700,000	700,000	700,000	1,500,000	1,500,000	8,153,860



# Wastewater R&R-Waxhaw Sewer Line Capital Project Detail

**Project Justification**

Wastewater rehabilitation and replacement is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing wastewater facilities. UCPW's facilities` will be assessed and analyzed on a yearly basis and rehabilitated based on the condition and need.

**Project Scope**

Project provides for the replacement and rehabilitation of the Waxhaw Sewer Line.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	-695,000	0	0	0	0	0	0	-695,000	
Total Funding Sources		-695,000	0	0	0	0	0	0	-695,000	
<b>Uses</b>										
5594	Design & Engineering	45,000	0	0	0	0	0	0	45,000	
5595	Construction	650,000	0	0	0	0	0	0	650,000	
Total Uses		695,000	0	0	0	0	0	0	695,000	

# MS-Manhole Rehab 12ML & Grassy Branch

# Capital Project Detail

**Project Justification**

Wastewater manhole rehabilitation is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing wastewater facilities. UCPW's facilities` will be assessed and analyzed on a yearly basis and rehabilitated based on the condition and need.

**Project Scope**

Project provides for the annual wastewater manhole rehabilitation.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-315,067	0	0	0	0	0	0	-315,067
4727	Revenue Bonds - 2015	-299,498	0	0	0	0	0	0	-299,498
Total Funding Sources		-614,565	0	0	0	0	0	0	-614,565
<b>Uses</b>									
5594	Design & Engineering	135,000	0	0	0	0	0	0	135,000
5595	Construction	479,565	0	0	0	0	0	0	479,565
Total Uses		614,565	0	0	0	0	0	0	614,565

# SCADA Master Plan Update - Sewer Capital Project Detail

**Project Justification**

As system growth continues so does the importance of operating the utility as efficiently as possible, and making use of staff resources and software tools to support operational strategies. The existing SCADA system is proprietary equipment and has operational limitations, therefore the renewal and replacement of the existing SCADA system is needed to upgrade our collection of data communication and provide for a more intelligent network.

**Project Scope**

This project will develop a master plan for the replacement of the existing Wastewater SCADA System that will identify an implementation strategy for the next 5 years.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-800,000	-500,000	-500,000	-500,000	0	0	0	-2,300,000
Total Funding Sources		-800,000	-500,000	-500,000	-500,000	0	0	0	-2,300,000
<b>Uses</b>									
5594	Design & Engineering	300,000	0	0	0	0	0	0	300,000
5595	Construction	500,000	500,000	500,000	500,000	0	0	0	2,000,000
Total Uses		800,000	500,000	500,000	500,000	0	0	0	2,300,000

# Tallwood WWTP Replacement

# Capital Project Detail

**Project Justification**

Wastewater rehabilitation and replacement is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing wastewater facilities. Replacement of the Tallwood WWTP is active project to be completed before FY 2014. The poor condition of the existing plant increased concerns of failure prompting the replacement.

**Project Scope**

Project provides for the replacement of existing Tallwood Wastewater Treatment Plant.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-2,297,282	0	0	0	0	0	0	-2,297,282
4720	Revenue Bonds - 2015	-84,463	0	0	0	0	0	0	-84,463
Total Funding Sources		-2,381,745	0	0	0	0	0	0	-2,381,745
<b>Uses</b>									
5594	Design & Engineering	332,171	0	0	0	0	0	0	332,171
5595	Construction	2,049,574	0	0	0	0	0	0	2,049,574
Total Uses		2,381,745	0	0	0	0	0	0	2,381,745

# Grassy Branch WWTP

# Capital Project Detail

**Project Justification**

Wastewater rehabilitation and replacement is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing wastewater facilities. UCPW's facilities` will be assessed and analyzed on a yearly basis and rehabilitated based on the condition and need.

**Project Scope**

Project provides for the annual wastewater rehabilitation program. Included as a priority according to UCPW Operations for FY '14 is to perform a study on the Grassy Branch WWTP accessing treatability issues, age, efficiency, etc.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-268,069	0	0	0	0	0	0	-268,069
4720	Revenue Bonds - 2015	-45,806	0	0	0	0	0	0	-45,806
Total Funding Sources		-313,875	0	0	0	0	0	0	-313,875
<b>Uses</b>									
5594	Design & Engineering	69,666	0	0	0	0	0	0	69,666
5595	Construction	244,209	0	0	0	0	0	0	244,209
Total Uses		313,875	0	0	0	0	0	0	313,875

# Olde Sycamore WWTP Improvements Capital Project Detail

**Project Justification**

Wastewater rehabilitation and replacement is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing wastewater facilities. UCPW's facilities` will be assessed and analyzed on a yearly basis and rehabilitated based on the condition and need.

**Project Scope**

Project provides for the annual wastewater rehabilitation program. Included as a priority according to UCPW Operations for FY '14 is to perform a study on the Olde Sycamore WWTP accessing treatability issues, age, efficiency, etc.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-240,086	0	0	0	0	0	0	-240,086
4720	Revenue Bonds - 2015	-29,914	0	0	0	0	0	0	-29,914
Total Funding Sources		-270,000	0	0	0	0	0	0	-270,000
<b>Uses</b>									
5594	Design & Engineering	54,000	0	0	0	0	0	0	54,000
5595	Construction	216,000	0	0	0	0	0	0	216,000
Total Uses		270,000	0	0	0	0	0	0	270,000

# Water & Wastewater Master Plan

# Capital Program Detail

**Program Scope**

Program provides for regular updates to the Master Plans. This project will ensure that the Water and Wastewater Master Plan is updated on a five (5) year cycle, which will provide updated project plans.

**Program Operating Budget Impact**

This project will have no impact to the operating budget.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Utility Pay Go		-318,000	0	0	-400,000	0	0	0	-718,000
<b>Total Funding Sources</b>		<b>-318,000</b>	<b>0</b>	<b>0</b>	<b>-400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-718,000</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
86007	Master Plan Update	318,000	0	0	400,000	0	0	0	718,000
<b>Total Water &amp; Wastewater Master Plan</b>		<b>318,000</b>	<b>0</b>	<b>0</b>	<b>400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>718,000</b>

# Master Plan Update

# Capital Project Detail

**Project Justification**

The Comprehensive Water and Wastewater Master Plan recommended updates on a 5 year schedule.

**Project Scope**

Project provides for the regular update of the current Water & Wastewater Master Plan to reflect changes in system growth.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-318,000	0	0	-400,000	0	0	0	-718,000
Total Funding Sources		-318,000	0	0	-400,000	0	0	0	-718,000
<b>Uses</b>									
5594	Design & Engineering	318,000	0	0	400,000	0	0	0	718,000
Total Uses		318,000	0	0	400,000	0	0	0	718,000



# Water Rehabilitation and Replacement

# Capital Program Detail

### Program Scope

Program provides for Water Rehabilitation and Replacement as an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Water Infrastructure. The construction projects identified are the Hwy 84 24-inch water main relocation and the Hwy 75 Booster Pump Station rehabilitation. In addition, an annual program is underway to replace existing galvanized water lines which are inadequate and provide various hydraulic, water quality and maintenance issues.

### Program Operating Budget Impact

The Water Rehabilitation and Replacement program is partially funding through issuance of Revenue Bonds in FY 2016 in the amount of \$2,239,360. The maximum annual debt service impact for this issuance will be \$156,435 beginning in FY 2017 and will retire in twenty two years.

### Program Summary

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Revenue Bonds - 2015	-2,239,360	0	0	0	0	0	0	-2,239,360
Utility Pay Go	-6,589,619	-1,600,000	-1,600,000	-1,700,000	-1,300,000	-1,900,000	-1,900,000	-16,589,619
<b>Total Funding Sources</b>	<b>-8,828,979</b>	<b>-1,600,000</b>	<b>-1,600,000</b>	<b>-1,700,000</b>	<b>-1,300,000</b>	<b>-1,900,000</b>	<b>-1,900,000</b>	<b>-18,828,979</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84000	Galvanized Water Line Replacement FY 13	502,156	0	0	0	0	0	0	502,156
84007	HWY84 24" Water Line Relocation	493,860	0	0	0	0	0	0	493,860
84015	Water R&R Program	118,700	500,000	500,000	600,000	600,000	1,200,000	1,200,000	4,718,700
84018	Galvanized Water Line Replacement	607,716	0	0	0	0	0	0	607,716
84019	WL Replacement Austin CH RD/Rocky RV	1,426,711	0	0	0	0	0	0	1,426,711
84020	Pilgrims Pride Line & Vault Replace	62,915	0	0	0	0	0	0	62,915
84023	Galvanized Water Line Replacement FY 15	531,000	0	0	0	0	0	0	531,000
84024	SCADA Master Plan - Water	800,000	500,000	500,000	500,000	0	0	0	2,300,000
84026	Galvanized Water Line Replacement FY 16	545,000	0	0	0	0	0	0	545,000
84027	Water R&R - Sikes Mills Road	1,598,960	0	0	0	0	0	0	1,598,960
84028	Water R&R - Doster Road	481,361	0	0	0	0	0	0	481,361
84029	Galvanized Water Line Replacement FY 17	580,000	0	0	0	0	0	0	580,000
84069	HWY 75 BPS Rehabilitation	1,080,600	0	0	0	0	0	0	1,080,600
84098	Galvanized Waterline Replacement FY18 - FY2033	0	600,000	600,000	600,000	700,000	700,000	700,000	3,900,000

# Water Rehabilitation and Replacement

# Capital Program Detail

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Total Water Rehabilitation and Replacement		8,828,979	1,600,000	1,600,000	1,700,000	1,300,000	1,900,000	1,900,000	18,828,979

# Galvanized Water Line Replacement FY 13

# Capital Project Detail

**Project Justification**

This is an annual project that will replace existing galvanized and small lines which are inadequate and provide various hydraulic, water quality and maintenance issues.

**Project Scope**

Project provides for the annual galvanized waterline replacement program.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-2,336	0	0	0	0	0	0	-2,336
4727	Revenue Bonds - 2015	-499,820	0	0	0	0	0	0	-499,820
Total Funding Sources		-502,156	0	0	0	0	0	0	-502,156
<b>Uses</b>									
5594	Design & Engineering	74,032	0	0	0	0	0	0	74,032
5595	Construction	428,124	0	0	0	0	0	0	428,124
Total Uses		502,156	0	0	0	0	0	0	502,156

# HWY84 24" Water Line Relocation

# Capital Project Detail

**Project Justification**

In 2008 this section of water main failed due to creek bank erosion along Highway 84 near Deal Road. This project will provide a permanent solution by replacing 400 LF of existing 24-inch main with restrained joint pipe, relocating and boring under the existing creek to eliminate future erosion issues and the installation of two 24-inch valves to minimize future disruption to existing customers.

**Project Scope**

Project provides for replacement and relocation of the existing 24-inch water main on Highway 84 and related improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-29,105	0	0	0	0	0	0	-29,105
4727	Revenue Bonds - 2015	-464,755	0	0	0	0	0	0	-464,755
Total Funding Sources		-493,860	0	0	0	0	0	0	-493,860
<b>Uses</b>									
5594	Design & Engineering	52,174	0	0	0	0	0	0	52,174
5595	Construction	441,686	0	0	0	0	0	0	441,686
Total Uses		493,860	0	0	0	0	0	0	493,860

# Water R&R Program

# Capital Project Detail

*Project Justification*

Water Rehabilitation and Replacement is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Water Infrastructure.

*Project Scope*

Project provides for the annual water rehabilitation and replacement program.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-118,700	-500,000	-500,000	-600,000	-600,000	-1,200,000	-1,200,000	-4,718,700
Total Funding Sources		-118,700	-500,000	-500,000	-600,000	-600,000	-1,200,000	-1,200,000	-4,718,700
<b>Uses</b>									
5594	Design & Engineering	31,200	100,000	100,000	100,000	100,000	200,000	200,000	831,200
5595	Construction	87,500	400,000	400,000	500,000	500,000	1,000,000	1,000,000	3,887,500
Total Uses		118,700	500,000	500,000	600,000	600,000	1,200,000	1,200,000	4,718,700

# Galvanized Water Line Replacement Capital Project Detail

**Project Justification**

This is an annual project that will replace existing galvanized and small lines which are inadequate and provide various hydraulic, water quality and maintenance issues.

**Project Scope**

Project provides for the annual galvanized waterline replacement program.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-14,053	0	0	0	0	0	0	-14,053
4720	Revenue Bonds - 2015	-593,663	0	0	0	0	0	0	-593,663
Total Funding Sources		-607,716	0	0	0	0	0	0	-607,716
<b>Uses</b>									
5594	Design & Engineering	79,573	0	0	0	0	0	0	79,573
5595	Construction	528,143	0	0	0	0	0	0	528,143
Total Uses		607,716	0	0	0	0	0	0	607,716

# WL Replacement Austin CH RD/Rocky Capital Project Detail RV

**Project Justification**

Water Rehabilitation and Replacement is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Water Infrastructure.

**Project Scope**

Project provides for a water line replacement for portions of Austin Chaney and Rocky River Road.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-1,132,141	0	0	0	0	0	0	-1,132,141
4720	Revenue Bonds - 2015	-294,570	0	0	0	0	0	0	-294,570
Total Funding Sources		-1,426,711	0	0	0	0	0	0	-1,426,711
<b>Uses</b>									
5594	Design & Engineering	308,998	0	0	0	0	0	0	308,998
5595	Construction	1,117,713	0	0	0	0	0	0	1,117,713
Total Uses		1,426,711	0	0	0	0	0	0	1,426,711

# Pilgrims Pride Line & Vault Replace

# Capital Project Detail

**Project Justification**

Water Rehabilitation and Replacement is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Water Infrastructure.

**Project Scope**

Project provides for Pilgrims Pride water line and vault replacement.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4720	Revenue Bonds - 2015	-62,915	0	0	0	0	0	0	-62,915	
Total Funding Sources		-62,915	0	0	0	0	0	0	-62,915	
<b>Uses</b>										
5594	Design & Engineering	33,100	0	0	0	0	0	0	33,100	
5595	Construction	29,815	0	0	0	0	0	0	29,815	
Total Uses		62,915	0	0	0	0	0	0	62,915	



# Galvanized Water Line Replacement FY 15

# Capital Project Detail

**Project Justification**

This is an annual project that will replace existing galvanized and small lines which are inadequate and provide various hydraulic, water quality and maintenance issues.

**Project Scope**

Project provides for the annual galvanized waterline replacement program.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-321,323	0	0	0	0	0	0	-321,323
4720	Revenue Bonds - 2015	-209,677	0	0	0	0	0	0	-209,677
Total Funding Sources		-531,000	0	0	0	0	0	0	-531,000
<b>Uses</b>									
5594	Design & Engineering	80,000	0	0	0	0	0	0	80,000
5595	Construction	451,000	0	0	0	0	0	0	451,000
Total Uses		531,000	0	0	0	0	0	0	531,000

# SCADA Master Plan - Water

# Capital Project Detail

**Project Justification**

As system growth continues so does the importance of operating the utility as efficiently as possible, and making use of staff resources and software tools to support operational strategies. The existing SCADA system is proprietary equipment and has operational limitations, therefore the renewal and replacement of the existing SCADA system is needed to upgrade our collection of data communication and provide for a more intelligent network.

**Project Scope**

This project will develop a master plan for the replacement of the existing Water SCADA System that will identify an implementation strategy for the next 5 years.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-800,000	-500,000	-500,000	-500,000	0	0	0	-2,300,000
Total Funding Sources		-800,000	-500,000	-500,000	-500,000	0	0	0	-2,300,000
<b>Uses</b>									
5594	Design & Engineering	300,000	0	0	0	0	0	0	300,000
5595	Construction	500,000	500,000	500,000	500,000	0	0	0	2,000,000
Total Uses		800,000	500,000	500,000	500,000	0	0	0	2,300,000

# Galvanized Water Line Replacement FY 16

# Capital Project Detail

**Project Justification**

This is an annual project that will replace existing galvanized and small lines which are inadequate and provide various hydraulic, water quality and maintenance issues.

**Project Scope**

Project provides for the annual galvanized waterline replacement program.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-545,000	0	0	0	0	0	0	-545,000
Total Funding Sources		-545,000	0	0	0	0	0	0	-545,000
<b>Uses</b>									
5594	Design & Engineering	82,000	0	0	0	0	0	0	82,000
5595	Construction	463,000	0	0	0	0	0	0	463,000
Total Uses		545,000	0	0	0	0	0	0	545,000

# Water R&R - Sikes Mills Road

# Capital Project Detail

**Project Justification**

Water Rehabilitation and Replacement is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Water Infrastructure.

**Project Scope**

Project provides for a water line replacement for portions of Sikes Mills Road.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-1,598,960	0	0	0	0	0	0	-1,598,960
Total Funding Sources		-1,598,960	0	0	0	0	0	0	-1,598,960
<b>Uses</b>									
5594	Design & Engineering	198,960	0	0	0	0	0	0	198,960
5595	Construction	1,400,000	0	0	0	0	0	0	1,400,000
Total Uses		1,598,960	0	0	0	0	0	0	1,598,960

# Water R&R - Doster Road

# Capital Project Detail

*Project Justification*

Water Rehabilitation and Replacement is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Water Infrastructure.

*Project Scope*

Project provides for a water line replacement for portions of Doster Road.

*Project Summary*

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	-481,361	0	0	0	0	0	0	-481,361	
Total Funding Sources		-481,361	0	0	0	0	0	0	-481,361	
<b>Uses</b>										
5592	Legal and Land Easements	7,025	0	0	0	0	0	0	7,025	
5594	Design & Engineering	77,673	0	0	0	0	0	0	77,673	
5595	Construction	396,663	0	0	0	0	0	0	396,663	
Total Uses		481,361	0	0	0	0	0	0	481,361	

# Galvanized Water Line Replacement FY 17

# Capital Project Detail

**Project Justification**

This is an annual project that will replace existing galvanized and small lines which are inadequate and provide various hydraulic, water quality and maintenance issues.

**Project Scope**

Project provides for the annual galvanized waterline replacement program.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-580,000	0	0	0	0	0	0	-580,000
Total Funding Sources		-580,000	0	0	0	0	0	0	-580,000
<b>Uses</b>									
5594	Design & Engineering	87,000	0	0	0	0	0	0	87,000
5595	Construction	493,000	0	0	0	0	0	0	493,000
Total Uses		580,000	0	0	0	0	0	0	580,000

# HWY 75 BPS Rehabilitation

# Capital Project Detail

**Project Justification**

This project will rehab the existing Hwy 75 Booster Pump Station and improve the water quality and pressure in the service area. Project included in the annually approved water rehabilitation and replacement program as identified in the 2011 Master Plan.

**Project Scope**

Project provides for upgrades to the existing Hwy 75 Booster Pumping Station and includes new flow monitoring, replacement of existing control valves, a new standby generator and switchgear.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-966,640	0	0	0	0	0	0	-966,640
4720	Revenue Bonds - 2015	-113,960	0	0	0	0	0	0	-113,960
Total Funding Sources		-1,080,600	0	0	0	0	0	0	-1,080,600
<b>Uses</b>									
5594	Design & Engineering	97,700	0	0	0	0	0	0	97,700
5595	Construction	982,900	0	0	0	0	0	0	982,900
Total Uses		1,080,600	0	0	0	0	0	0	1,080,600

# Galvanized Waterline Replacement FY18 - FY2033

## Capital Project Detail

**Project Justification**

This is an annual project that will replace existing galvanized and small lines which are inadequate and provide various hydraulic, water quality and maintenance issues.

**Project Scope**

Project provides for the annual galvanized waterline replacement program.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	0	-600,000	-600,000	-600,000	-700,000	-700,000	-700,000	-3,900,000
Total Funding Sources		0	-600,000	-600,000	-600,000	-700,000	-700,000	-700,000	-3,900,000
<b>Uses</b>									
5594	Design & Engineering	0	100,000	100,000	100,000	100,000	100,000	100,000	600,000
5595	Construction	0	500,000	500,000	500,000	600,000	600,000	600,000	3,300,000
Total Uses		0	600,000	600,000	600,000	700,000	700,000	700,000	3,900,000



# Water Tank Rehabilitation

# Capital Program Detail

**Program Scope**

Program provides Water Tank Rehabilitation as an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards asset management of existing water tanks. Projects may include, but not limited to, re-application of protective coatings, cleaning and structural inspections. The first project targeted for rehabilitation is the Marshville water tank.

**Program Operating Budget Impact**

The projects within this program will have little or no operating budget impact.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Utility Pay Go		-957,000	-400,000	0	0	-400,000	0	0	-1,757,000
Total Funding Sources		-957,000	-400,000	0	0	-400,000	0	0	-1,757,000

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
84080	Marshville Water Tank Rehabilitation	639,000	0	0	0	0	0	0	639,000
84087	Storage Tank Rehabilitation	318,000	0	0	0	0	0	0	318,000
84097	Storage Tank Rehabilitation FY18 - Forward	0	400,000	0	0	400,000	0	0	800,000
Total Water Tank Rehabilitation		957,000	400,000	0	0	400,000	0	0	1,757,000

# Marshville Water Tank Rehabilitation Capital Project Detail

**Project Justification**

Storage Tank Rehabilitation is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Water Tanks. Projects may include, but not limited to, re-application of protective coatings, cleaning and structural inspections. Existing Marshville Water Tank is the first project targeted for rehabilitation.

**Project Scope**

Project provides for storage tank rehabilitation in Marshville.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-639,000	0	0	0	0	0	0	-639,000
Total Funding Sources		-639,000	0	0	0	0	0	0	-639,000
<b>Uses</b>									
5594	Design & Engineering	89,000	0	0	0	0	0	0	89,000
5595	Construction	550,000	0	0	0	0	0	0	550,000
Total Uses		639,000	0	0	0	0	0	0	639,000

# Storage Tank Rehabilitation

# Capital Project Detail

**Project Justification**

Storage Tank Rehabilitation is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Water Tanks. Projects may include, but not limited to, re-application of protective coatings, cleaning and structural inspections.

**Project Scope**

Project provides for the rehabilitation and improvements to existing elevated storage tanks and other necessary improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	-318,000	0	0	0	0	0	0	-318,000
Total Funding Sources		-318,000	0	0	0	0	0	0	-318,000
<b>Uses</b>									
5594	Design & Engineering	64,000	0	0	0	0	0	0	64,000
5595	Construction	254,000	0	0	0	0	0	0	254,000
Total Uses		318,000	0	0	0	0	0	0	318,000

# Storage Tank Rehabilitation FY18 - Capital Project Detail Forward

**Project Justification**

Storage Tank Rehabilitation is an annual program identified as part of the Comprehensive Water and Wastewater Master Plan geared towards Asset Management of existing Water Tanks. Projects may include, but not limited to, re-application of protective coatings, cleaning and structural inspections.

**Project Scope**

Project provides for the rehabilitation and improvements to existing elevated storage tanks and other necessary improvements.

**Project Summary**

Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total	
<b>Funding Sources</b>										
4061	Utility Pay Go	0	-400,000	0	0	-400,000	0	0	-800,000	
Total Funding Sources		0	-400,000	0	0	-400,000	0	0	-800,000	
<b>Uses</b>										
5594	Design & Engineering	0	100,000	0	0	100,000	0	0	200,000	
5595	Construction	0	300,000	0	0	300,000	0	0	600,000	
Total Uses		0	400,000	0	0	400,000	0	0	800,000	

# Waste Water Treatment Plant Rehab Capital Program Detail and Replacement

**Program Scope**

Program provides Wastewater Plant Rehabilitation as an annual program identified through UCPW's partnership with Charlotte Water as the contract operator of UCPW's wastewater treatment facilities. The program is geared towards asset management of existing wastewater treatment facilities. Projects may include, but are not limited to, assessment or treatment process studies and the replacement of mechanical, electrical, and chemical systems equipment.

**Program Operating Budget Impact**

The projects within this program will have little or no operating budget impact.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
Utility Pay Go		0	-1,500,000	-1,600,000	-1,600,000	-1,700,000	-1,800,000	-1,800,000	-10,000,000
Total Funding Sources		0	-1,500,000	-1,600,000	-1,600,000	-1,700,000	-1,800,000	-1,800,000	-10,000,000

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
85055	WWTP R&R	0	1,500,000	1,600,000	1,600,000	1,700,000	1,800,000	1,800,000	10,000,000
Total Waste Water Treatment Plant Rehab and Replacement		0	1,500,000	1,600,000	1,600,000	1,700,000	1,800,000	1,800,000	10,000,000

# WWTP R&R

# Capital Project Detail

**Project Justification**

Wastewater Treatment Plant R&R is an annual program identified through UCPW's partnership with Charlotte Water as the contract operator of UCPW's wastewater treatment facilities geared towards asset management of existing wastewater treatment facilities. Projects may include, but are not limited to, assessment or treatment process studies and the replacement of mechanical, electrical, and chemical systems equipment.

**Project Scope**

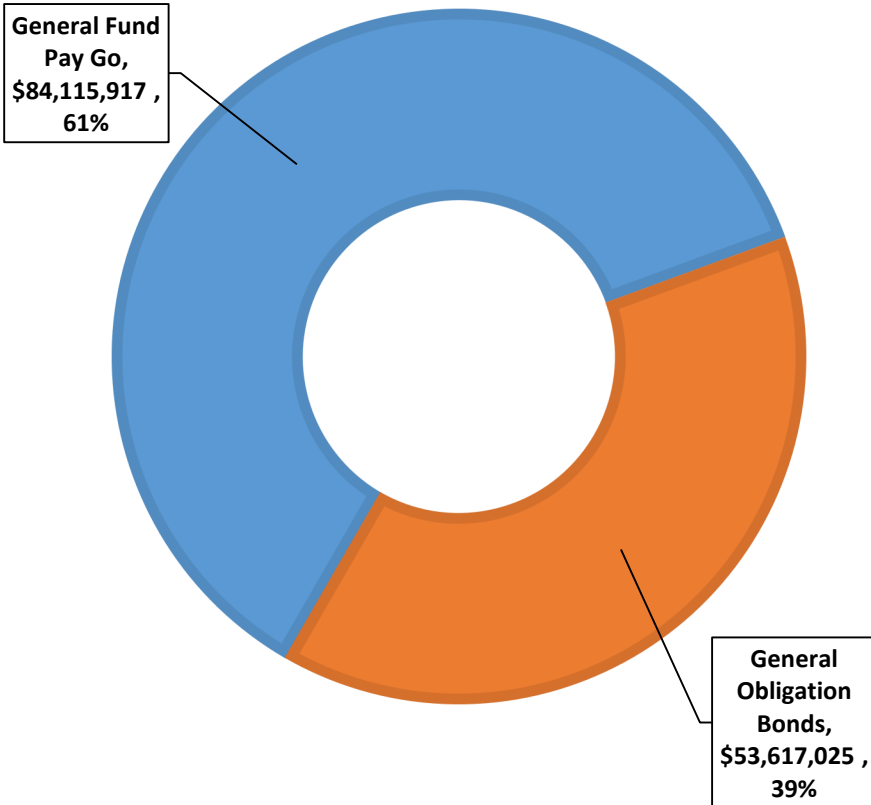
Project provides for the annual Wastewater Plant R&R

**Project Summary**

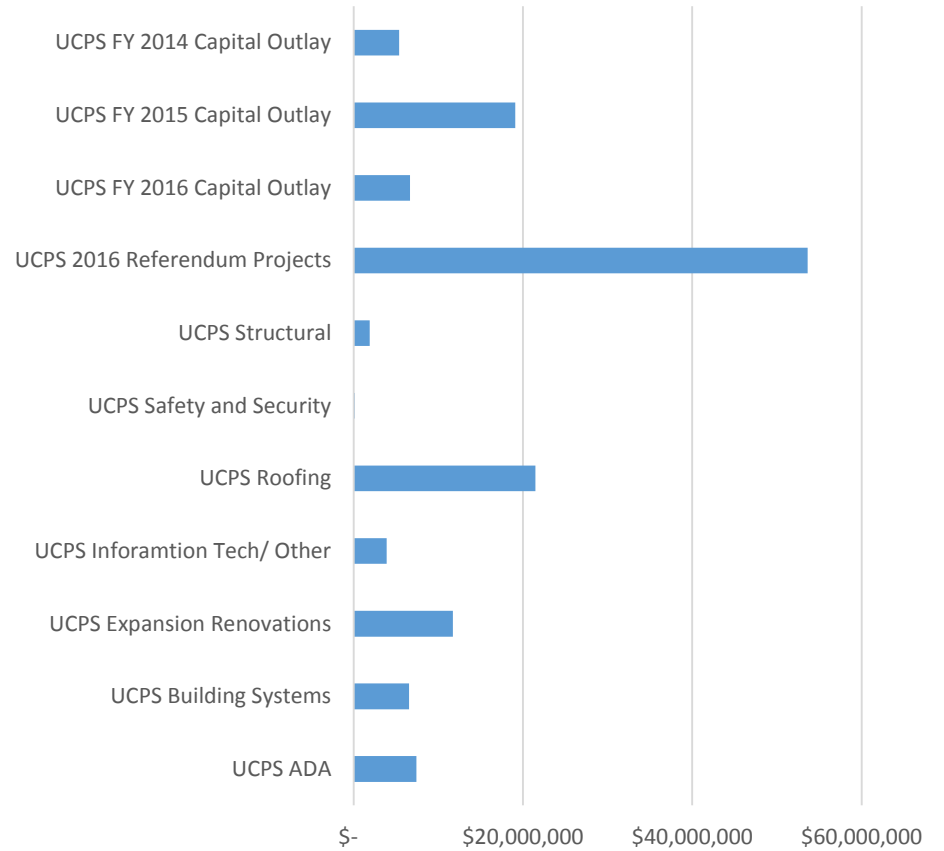
Object. No.	Phase	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
<b>Funding Sources</b>									
4061	Utility Pay Go	0	-1,500,000	-1,600,000	-1,600,000	-1,700,000	-1,800,000	-1,800,000	-10,000,000
Total Funding Sources		0	-1,500,000	-1,600,000	-1,600,000	-1,700,000	-1,800,000	-1,800,000	-10,000,000
<b>Uses</b>									
5594	Design & Engineering	0	200,000	200,000	200,000	300,000	300,000	300,000	1,500,000
5595	Construction	0	1,300,000	1,400,000	1,400,000	1,400,000	1,500,000	1,500,000	8,500,000
Total Uses		0	1,500,000	1,600,000	1,600,000	1,700,000	1,800,000	1,800,000	10,000,000

# Union County Public Schools Capital Program— Six year CIP Plan \$137,732,942

REVENUES BY SOURCE



Union County Public Schools Capital Programs



# UCPS Capital Program

# CIP Summary Report

Funding Sources	Appropriation To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-67,518,729	-16,597,188	0	0	0	0	0	-84,115,917
General Obligation Bonds	-6,233,617	-47,383,408	0	0	0	0	0	-53,617,025
<b>Total Funding Sources</b>	<b>-73,752,346</b>	<b>-63,980,596</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-137,732,942</b>

Program No.	Program	Program To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
83000	UCPS ADA	5,351,394	2,064,080	0	0	0	0	0	7,415,474
83001	UCPS Building Systems	3,196,632	3,359,000	0	0	0	0	0	6,555,632
83002	UCPS Expansion Renovations	2,109,872	9,593,149	0	0	0	0	0	11,703,021
83003	UCPS Information Tech/Other	2,329,540	1,580,959	0	0	0	0	0	3,910,499
83004	UCPS Roofing	21,447,405	0	0	0	0	0	0	21,447,405
83005	UCPS Safety and Security	98,500	0	0	0	0	0	0	98,500
83006	UCPS Structural	1,901,226	0	0	0	0	0	0	1,901,226
83007	UCPS 2016 Referendum Project	6,233,617	47,383,408	0	0	0	0	0	53,617,025
83008	UCPS FY 2016 Capital Outlay	6,656,522	0	0	0	0	0	0	6,656,522
83009	UCPS FY 2015 Capital Outlay	19,069,779	0	0	0	0	0	0	19,069,779
83010	UCPS FY 2014 Capital Outlay	5,357,859	0	0	0	0	0	0	5,357,859
<b>Total Uses</b>		<b>73,752,346</b>	<b>63,980,596</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>137,732,942</b>



# UCPS ADA

# Capital Program Detail

**Program Scope**

Program will address compliance with the Americans with Disabilities Act through improving access to Union County Public School facilities.

**Program Operating Budget Impact**

Funding needs are requested on an annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-5,351,394	-2,064,080	0	0	0	0	0	-7,415,474
<b>Total Funding Sources</b>	<b>-5,351,394</b>	<b>-2,064,080</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-7,415,474</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82008	BENTON HEIGHTS-DOOR HARDWARE	16,720	0	0	0	0	0	0	16,720
82009	BENTON HEIGHTS-UPGRADE RESTROOMS	491,906	0	0	0	0	0	0	491,906
82010	CATA-ADA ACCESSIBLE RESTROOMS	50,000	0	0	0	0	0	0	50,000
82011	EAST ELEM-UPGRADE RESTROOMS	291,200	0	0	0	0	0	0	291,200
82012	FOREST HILLS-ADA ACCESS CAFE/GH	38,500	0	0	0	0	0	0	38,500
82013	FOREST HILLS-ADA UPGRADE BALLFIELD	97,680	0	0	0	0	0	0	97,680
82014	HEMBY BRIDGE-RR FOR EC CR	12,672	0	0	0	0	0	0	12,672
82015	INDIAN TRAIL-ADA TOILET ROOMS	153,393	0	0	0	0	0	0	153,393
82016	MARSHVILLE-ADA UPGRADE RR	403,750	0	0	0	0	0	0	403,750
82017	NEW SALEM-ADA GROUP RESTROOMS	92,092	0	0	0	0	0	0	92,092
82018	PARKWOOD HIGH-ADA FIELDHOUSE	175,000	0	0	0	0	0	0	175,000
82019	PARKWOOD HIGH-ADA RESTROOM ISSUES	510,874	0	0	0	0	0	0	510,874
82020	PARKWOOD MID-ADA RESTROOM ISSUES	288,470	0	0	0	0	0	0	288,470
82021	PIEDMONT HIGH-ADA TOILET AC EVAL	361,998	0	0	0	0	0	0	361,998
82022	PIEDMONT MIDDLE-INTR ACCESS EVAL	41,530	0	0	0	0	0	0	41,530
82023	PIEDMONT MIDDLE-ADA TOILET AC EVAL	279,734	0	0	0	0	0	0	279,734
82024	PIEDMONT MIDDLE-ADA LOCKER ROOMS	322,264	0	0	0	0	0	0	322,264
82025	PROPSECT-ADA TOILET ROOMS	86,781	0	0	0	0	0	0	86,781
82026	PROPSECT-ADA ACCESS TO MCR	152,781	0	0	0	0	0	0	152,781
82027	SUN VALLEY MID-ADA RR SELF CONT CR	12,672	0	0	0	0	0	0	12,672
82028	UNION ELEM-ADA UPDATE RESTROOMS	187,824	0	0	0	0	0	0	187,824
82029	UNIONVILLE ELM-ADA EC CLASSROOMS	19,219	0	0	0	0	0	0	19,219

# UCPS ADA

# Capital Program Detail

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82030	UNIONVILLE ELEM-UPGRADE RESTROOMS	26,208	0	0	0	0	0	0	26,208
82031	VARIOUS LOCATION-OCR COMPLIANCE	218,480	0	0	0	0	0	0	218,480
82032	WALTER BICKETT-ADD STAFF TOILETS	25,344	0	0	0	0	0	0	25,344
82033	WALTER BICKETT-TOILET RM ACC EVAL	203,768	0	0	0	0	0	0	203,768
82034	WAXHAW-TOILET ROOMS	273,546	0	0	0	0	0	0	273,546
82035	WESLEY CHAP-RESTROOM ISSUES	168,704	0	0	0	0	0	0	168,704
82036	WESTERN UNION-TOILET ACCESS EVAL	145,000	0	0	0	0	0	0	145,000
82037	WESTERN UNION-ADA RESTROOMS	203,284	0	0	0	0	0	0	203,284
82300	FY 2018 UCPS ADA	0	2,064,080	0	0	0	0	0	2,064,080
<b>Total UCPS ADA</b>		<b>5,351,394</b>	<b>2,064,080</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,415,474</b>

# UCPS Building Systems

# Capital Program Detail

**Program Scope**

Program will address building systems needs for Union County Public Schools facilities. Building systems include items such as HVAC, Plumbing, Lighting, etc.

**Program Operating Budget Impact**

Funding needs are requested on an annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-3,196,632	-3,359,000	0	0	0	0	0	-6,555,632
<b>Total Funding Sources</b>	<b>-3,196,632</b>	<b>-3,359,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-6,555,632</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82041	MONROE HIGH-AC FOR KITCHEN	35,750	0	0	0	0	0	0	35,750
82042	MONROE HIGH-LIGHTS IN AUX GYM	45,000	0	0	0	0	0	0	45,000
82043	PARKWOOD HIGH-OUTSIDE AIR	275,000	0	0	0	0	0	0	275,000
82044	SUN VAL MID-HVAC/CHILLER REPLACEMEN	827,882	0	0	0	0	0	0	827,882
82046	UNIONVILLE ELEM-CHILLER REPLACEMENT	52,500	0	0	0	0	0	0	52,500
82047	UNIONVILLE ELM-OUTSIDE AIR TO CR	220,000	0	0	0	0	0	0	220,000
82048	UNIONVILLE-DDC BUILDING MGMT SYSTEM	220,000	0	0	0	0	0	0	220,000
82049	VARIOUS-BUILDING AUTOMATION SYS	275,000	0	0	0	0	0	0	275,000
82050	WEDDINGTON ELEM-DDC SYSTEM	192,500	0	0	0	0	0	0	192,500
82051	WEDDINGTON MID-DDC CONTROL	300,000	0	0	0	0	0	0	300,000
82052	WESLEY CHAP-OUTSIDE AIR TO ORG BLD	170,500	0	0	0	0	0	0	170,500
82053	WESTERN UNION-LIGHTING	74,000	0	0	0	0	0	0	74,000
82054	SUN VALLEY MID-AC FOR KITCHEN	35,200	0	0	0	0	0	0	35,200
82055	SUN VALLEY HIGH CHILLER REPLACEMENT	53,100	0	0	0	0	0	0	53,100
82056	PIEDMONT MIDDLE CHILLER REPLACEMENT	62,700	0	0	0	0	0	0	62,700
82075	PIEDMONT HIGH-LIGHTING	357,500	0	0	0	0	0	0	357,500
82301	FY 2018 UCPS BUILDING SYSTEMS	0	3,359,000	0	0	0	0	0	3,359,000
<b>Total UCPS Building Systems</b>		<b>3,196,632</b>	<b>3,359,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,555,632</b>

# UCPS Expansion Renovations

# Capital Program Detail

**Program Scope**

Program includes expansion and renovation projects as requested by Union County Public Schools.

**Program Operating Budget Impact**

Funding needs are requested on an annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-2,109,872	-9,593,149	0	0	0	0	0	-11,703,021
<b>Total Funding Sources</b>	<b>-2,109,872</b>	<b>-9,593,149</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-11,703,021</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82071	BENTON HEIGHTS-AUDITORIUM	1,600,000	0	0	0	0	0	0	1,600,000
82072	MONROE HIGH-AUDITORIUM	509,872	0	0	0	0	0	0	509,872
82302	FY 2018 UCPS EXPANSIONS AND RENOVATIONS	0	7,618,149	0	0	0	0	0	7,618,149
82307	FY 2018 MONROE MIDDLE STEM LABS	0	1,975,000	0	0	0	0	0	1,975,000
<b>Total UCPS Expansion Renovations</b>		<b>2,109,872</b>	<b>9,593,149</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,703,021</b>

# UCPS Information Tech/Other

# Capital Program Detail

**Program Scope**

Program includes ongoing information technology needs and all other miscellaneous capital outlay items. The miscellaneous capital outlay items include furniture, equipment and vehicle replacement.

**Program Operating Budget Impact**

Funding needs are requested on an annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-2,329,540	-1,580,959	0	0	0	0	0	-3,910,499
<b>Total Funding Sources</b>	<b>-2,329,540</b>	<b>-1,580,959</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-3,910,499</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82073	FACILITIES VEHICLE REPLACEMENTS	109,354	0	0	0	0	0	0	109,354
82074	FACILITIES-GPS SYSTEM UPDATE	140,646	0	0	0	0	0	0	140,646
82076	VARIOUS-FURNITURE/EQUIPMENT	300,000	0	0	0	0	0	0	300,000
82086	DATA CENTER	779,281	0	0	0	0	0	0	779,281
82087	EAST UNION-JUNIPER UPGRADE	50,000	0	0	0	0	0	0	50,000
82088	HEMBY BRIDGE-JUNIPER UPGRADE	40,661	0	0	0	0	0	0	40,661
82089	INDIAN TRAIL-JUNIPER UPGRADE	37,546	0	0	0	0	0	0	37,546
82090	MARSHVILLE-JUNIPER UPGRADE	44,100	0	0	0	0	0	0	44,100
82091	MONROE MID-JUNIPER UPGRADE	57,238	0	0	0	0	0	0	57,238
82092	PIEDMONT MIDDLE-JUNIPER UPGRADE	46,073	0	0	0	0	0	0	46,073
82093	SHILOH-JUNIPER UPGRADE	45,000	0	0	0	0	0	0	45,000
82094	SUN VALLEY MID-JUNIPER UPGRADE	46,500	0	0	0	0	0	0	46,500
82095	VARIOUS-NETWORK CARDS AND POWER SUP	140,550	0	0	0	0	0	0	140,550
82096	WEDDINGTON HIGH-JUNIPER UPGRADE	75,000	0	0	0	0	0	0	75,000
82097	WESLEY CHAPEL-JUNIPER UPGRADE	40,232	0	0	0	0	0	0	40,232
82222	UCPS TECHNOLOGY	377,359	0	0	0	0	0	0	377,359
82303	FY 2018 UCPS F&E	0	200,000	0	0	0	0	0	200,000
82306	FY 2018 UCPS TECHNOLOGY	0	1,380,959	0	0	0	0	0	1,380,959
<b>Total UCPS Information Tech/Other</b>		<b>2,329,540</b>	<b>1,580,959</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,910,499</b>

# UCPS Roofing

# Capital Program Detail

**Program Scope**

Program includes roofing repairs, roof audit or studies, and roof replacements at Union County Public School's facilities.

**Program Operating Budget Impact**

Funding needs are requested on an annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-21,447,405	0	0	0	0	0	0	-21,447,405
<b>Total Funding Sources</b>	<b>-21,447,405</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-21,447,405</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82133	VARIOUS ROOFING REPAIRS	3,000,000	0	0	0	0	0	0	3,000,000
82134	WAREHOUSE RE ROOFING	139,395	0	0	0	0	0	0	139,395
82144	WESTERN UNION ELEMENTARY ROOF	285,708	0	0	0	0	0	0	285,708
82145	UCPS- ROOF AUDITS	72,000	0	0	0	0	0	0	72,000
82149	BENTON HEIGHTS ROOF REPAIR	928,750	0	0	0	0	0	0	928,750
82150	EAST UNION MIDDLE ROOF REPAIR	326,970	0	0	0	0	0	0	326,970
82151	FOREST HILLLS HIGH ROOF REPAIR	451,326	0	0	0	0	0	0	451,326
82153	INDIAN TRAIL ELEMENTARY ROOF REPAIR	355,065	0	0	0	0	0	0	355,065
82154	MARSHVILLE ELEMENTARY ROOF REPAIR	393,565	0	0	0	0	0	0	393,565
82157	NEW SALEM ELEMENTARY ROOF REPAIR	181,600	0	0	0	0	0	0	181,600
82158	PIEDMONT MIDDLE ROOF REPAIR	34,500	0	0	0	0	0	0	34,500
82159	PIEDMONT HIGH ROOF REPAIR	144,260	0	0	0	0	0	0	144,260
82160	PARKWOOD HIGH ROOF REPAIR	551,503	0	0	0	0	0	0	551,503
82161	PARKWOOD MIDDLE ROOF REPAIR	1,264,350	0	0	0	0	0	0	1,264,350
82163	SUN VALLEY MIDDLE ROOF REPAIR	928,500	0	0	0	0	0	0	928,500
82164	SOUTH PROVIDENCE ROOF REPAIR	393,500	0	0	0	0	0	0	393,500
82165	TECHNICAL SERVICES ROOF REPAIR	153,870	0	0	0	0	0	0	153,870
82166	UNIONVILLE ELEMENTARY ROOF REPAIR	26,236	0	0	0	0	0	0	26,236
82167	WALTER BICKET EDUCATION CENTER ROOF	651,950	0	0	0	0	0	0	651,950
82168	WESLEY CHAPEL ELEMENTARY ROOF REPAI	4,000	0	0	0	0	0	0	4,000
82169	WEDDINGTON MIDDLE/ELEMENTARY ROOF	260,300	0	0	0	0	0	0	260,300
82170	WINGATE ELEMENTARY ROOF REPAIR	620,267	0	0	0	0	0	0	620,267

# UCPS Roofing

# Capital Program Detail

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82176	ANTIOCH ROOF REPAIR FY 16	476,809	0	0	0	0	0	0	476,809
82177	CATA ROOF REPAIR FY 16	257,123	0	0	0	0	0	0	257,123
82178	FAIRVIEW ROOF REPAIR FY 16	596,700	0	0	0	0	0	0	596,700
82179	FOREST HILLS ROOF REPAIR FY16	12,200	0	0	0	0	0	0	12,200
82180	KENSINGTON ROOF REPAIR FY16	114,236	0	0	0	0	0	0	114,236
82181	MARVIN ELEMENTARY ROOF REPAIR FY16	642,861	0	0	0	0	0	0	642,861
82182	NEW SALEM ROOF REPAIR FY 16	130,837	0	0	0	0	0	0	130,837
82183	NEW TOWN ROOF REPAIR FY 16	524,776	0	0	0	0	0	0	524,776
82184	PIEDMONT HIGH ROOF REPAIR FY16	270,200	0	0	0	0	0	0	270,200
82185	PORTER RIDGE ELEM ROOF REPAIR FY16	510,650	0	0	0	0	0	0	510,650
82186	PORTER RIDGE HIGH ROOF REPAIR FY16	1,334,509	0	0	0	0	0	0	1,334,509
82187	PROSPECT ROOF REPAIR FY16	682,339	0	0	0	0	0	0	682,339
82188	REA VIEW ROOF REPAIR FY 16	492,225	0	0	0	0	0	0	492,225
82189	ROCK REST ROOF REPAIR FY 16	556,860	0	0	0	0	0	0	556,860
82190	SANDY RIDGE ROOF REPAIR FY16	489,757	0	0	0	0	0	0	489,757
82191	UNIONVILLE ROOF REPAIR FY16	849,789	0	0	0	0	0	0	849,789
82192	WALTER BICKETT ED CENTER ROOF FY16	464,550	0	0	0	0	0	0	464,550
82193	WALTER BICKETT ELEM ROOF FY 16	500,430	0	0	0	0	0	0	500,430
82194	WEDDINGTON HIGH ROOF REPAIR FY16	687,100	0	0	0	0	0	0	687,100
82195	WESLEY CHAPEL ROOF REPAIR FY16	115,618	0	0	0	0	0	0	115,618
82196	EAST ELEMENTARY ROOF REPAIR FY16	1	0	0	0	0	0	0	1
82197	WINGATE ROOF REPAIR FY 16	236,107	0	0	0	0	0	0	236,107
82198	WOLFE ROOF REPAIR FY 16	334,113	0	0	0	0	0	0	334,113
Total UCPS Roofing		21,447,405	0	0	0	0	0	0	21,447,405

# UCPS Safety and Security

# Capital Program Detail

**Program Scope**

Program will provide for ongoing Union County Public School's facilities safety and security concerns.

**Program Operating Budget Impact**

Funding needs are requested on an annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-98,500	0	0	0	0	0	0	-98,500
<b>Total Funding Sources</b>	<b>-98,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-98,500</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82200	FOREST HILLS HIGH-EMG LIGHTING	16,500	0	0	0	0	0	0	16,500
82201	MARVIN ELEM-UPGRADE FIRE ALM PANEL	35,000	0	0	0	0	0	0	35,000
82202	PARKWOOD HIGH-STATEGIC FEN & HID	11,000	0	0	0	0	0	0	11,000
82203	PROSPECT-FIRE ALARM	17,500	0	0	0	0	0	0	17,500
82204	WESTERN UNION-FIRE ALARM	18,500	0	0	0	0	0	0	18,500
<b>Total UCPS Safety and Security</b>		<b>98,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>98,500</b>



# UCPS Structural

# Capital Program Detail

**Program Scope**

Program will provide for the ongoing improvements and other structural needs for Union County Public School's facilities.

**Program Operating Budget Impact**

Funding needs are requested on an annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-1,901,226	0	0	0	0	0	0	-1,901,226
<b>Total Funding Sources</b>	<b>-1,901,226</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1,901,226</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82207	BENTON HEIGHTS-SITE IMPROVEMENTS	489,720	0	0	0	0	0	0	489,720
82208	INDIAN TRIAIL-ELEC MDP REPLACE	51,230	0	0	0	0	0	0	51,230
82209	INDIAN TRAIL-SITE IMPROVEMENTS	280,709	0	0	0	0	0	0	280,709
82210	MONROE HIGH-WINDOWS/DOORS	415,000	0	0	0	0	0	0	415,000
82211	WAREHOUSE DEMO OF GYM	65,000	0	0	0	0	0	0	65,000
82212	WESLEY CHAPEL-CY STORM DRAIN	85,000	0	0	0	0	0	0	85,000
82213	WESTERN UNION-REPLACE FLOORING	514,567	0	0	0	0	0	0	514,567
<b>Total UCPS Structural</b>		<b>1,901,226</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,901,226</b>

# UCPS 2016 Referendum Project

# Capital Program Detail

**Program Scope**

Program provides appropriation for the 2016 Bond Referendum projects that were approved by voters during the November 2016 Election.

**Program Operating Budget Impact**

Funding needs are requested on annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Obligation Bonds	-6,233,617	-47,383,408	0	0	0	0	0	-53,617,025
<b>Total Funding Sources</b>	<b>-6,233,617</b>	<b>-47,383,408</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-53,617,025</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82001	MONROE HS BOND PROJECT	483,386	2,969,374	0	0	0	0	0	3,452,760
82002	PIEDMONT HS BOND PROJECT	300,774	1,847,610	0	0	0	0	0	2,148,384
82003	PORTER RIDGE HS BOND PRJ	209,467	1,286,729	0	0	0	0	0	1,496,196
82004	PORTER RIDGE MS BOND PRJ	878,152	5,394,362	0	0	0	0	0	6,272,514
82005	SUN VALLEY HS BOND PROJECT	2,558,297	21,806,437	0	0	0	0	0	24,364,734
82006	TRANSPORTATION FACILITY	1,260,000	10,740,000	0	0	0	0	0	12,000,000
82007	WESTERN UNION ES BOND PRJ	543,541	3,338,896	0	0	0	0	0	3,882,437
<b>Total UCPS 2016 Referendum Project</b>		<b>6,233,617</b>	<b>47,383,408</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53,617,025</b>

# UCPS FY 2016 Capital Outlay

# Capital Program Detail

**Program Scope**

Program provides funding for Union County Public School's capital improvement needs for Fiscal Year 2016.

**Program Operating Budget Impact**

Funding needs are requested on an annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go	-6,656,522	0	0	0	0	0	0	-6,656,522
<b>Total Funding Sources</b>	<b>-6,656,522</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-6,656,522</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82172	CAPITAL OUTLAY FY 2016	2,457,649	0	0	0	0	0	0	2,457,649
82173	BENTON HEIGHTS RENOVATIONS FY16	1,891,623	0	0	0	0	0	0	1,891,623
82174	IP SECURITY CAMERAS	1,307,250	0	0	0	0	0	0	1,307,250
82175	TECHNOLOGY AND TRANSPORTATION	1,000,000	0	0	0	0	0	0	1,000,000
<b>Total UCPS FY 2016 Capital Outlay</b>		<b>6,656,522</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,656,522</b>

# UCPS FY 2015 Capital Outlay

# Capital Program Detail

**Program Scope**

Program provides funding for Union County Public School's capital improvement needs for Fiscal Year 2015.

**Program Operating Budget Impact**

Funding needs are requested on an annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-19,069,779	0	0	0	0	0	0	-19,069,779
<b>Total Funding Sources</b>		<b>-19,069,779</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-19,069,779</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82171	FY 2015 UCPS FACILITY PROJECTS	19,069,779	0	0	0	0	0	0	19,069,779
<b>Total UCPS FY 2015 Capital Outlay</b>		<b>19,069,779</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19,069,779</b>

# UCPS FY 2014 Capital Outlay

# Capital Program Detail

**Program Scope**

Program provides funding for Union County Public School's capital improvement needs for Fiscal Year 2014.

**Program Operating Budget Impact**

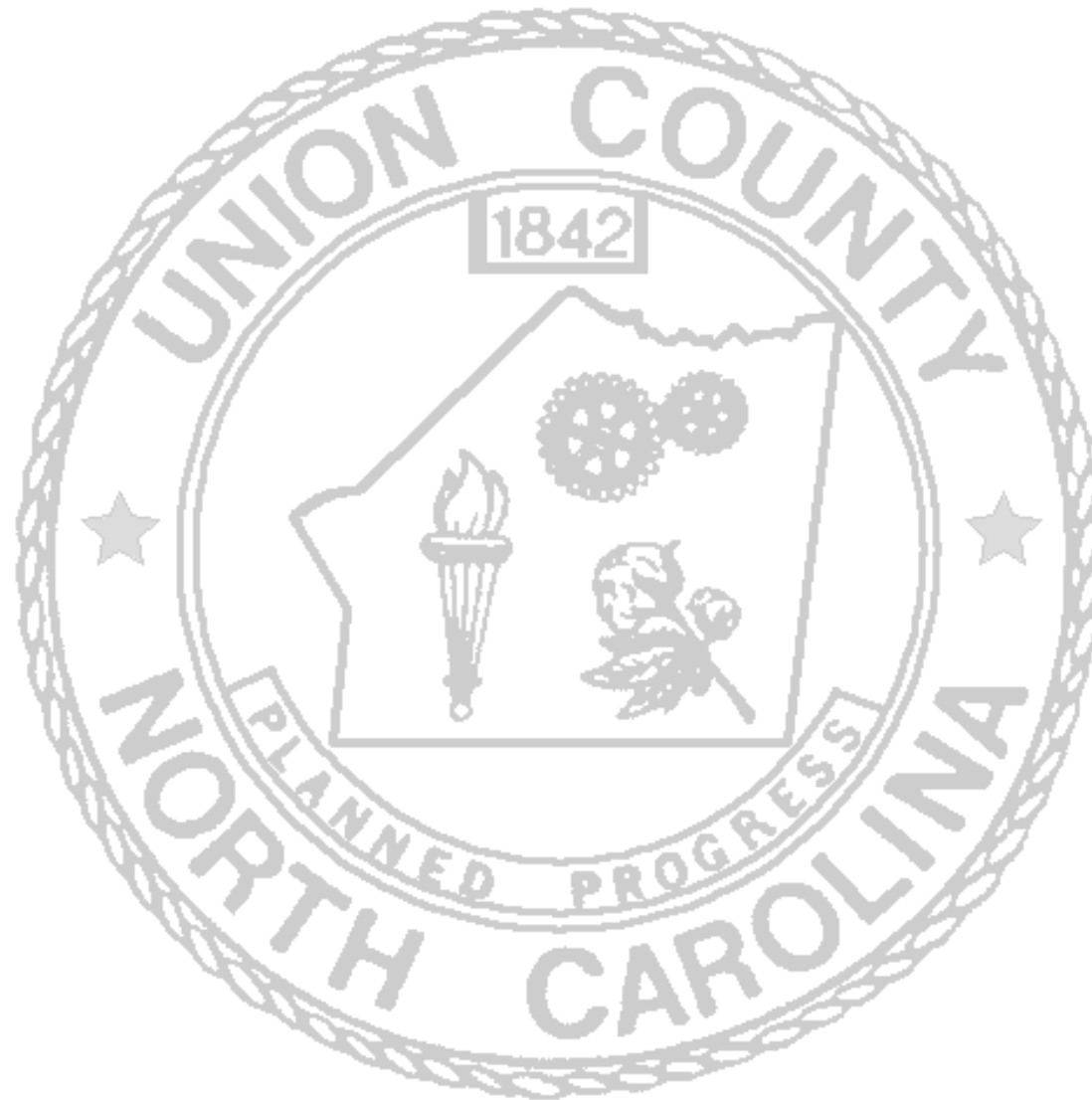
Funding needs are requested on an annual basis from Union County Public Schools in accordance with North Carolina General Statute 115-C-426.

**Program Summary**

Funding Sources		Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
General Fund Pay Go		-5,357,859	0	0	0	0	0	0	-5,357,859
<b>Total Funding Sources</b>		<b>-5,357,859</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-5,357,859</b>

Project No.	Project	Project To-Date	Proposed FY 2018	Planned FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Planned FY 2023	Total
82148	CAPITAL OUTLAY FY 2014 ADDITIONAL	5,357,859	0	0	0	0	0	0	5,357,859
<b>Total UCPS FY 2014 Capital Outlay</b>		<b>5,357,859</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,357,859</b>



## Debt Program

Union County borrows funds through the use of various debt instruments; typically general obligation bonds, installment financings (certificates of participation (COP's), limited obligation bonds (LOB's), and private placements), revenue bonds, and N.C. Clean Water Revolving Loans (NC CWRL). Principal and interest debt service payments are appropriated annually in the operating budget(s).

General obligation bonds are approved through voter referendum and collateralized by the full faith, credit, and taxing power of the County. Certifications regarding restrictions, covenants, budget data, and financial disclosure are reported annually for general obligation debt. Currently, there is \$104.32 million of authorized and unissued referendum approved general obligation debt.

Installment financings are typically collateralized or secured by the assets financed and not the taxing power of the County. However, installment financings require the County to follow customary covenants including providing insurance certificates, budget data, and annual financial disclosures.

Revenue bonds are secured by the pledge of net revenues. In the County's case, it is derived from the water and wastewater system revenues, and the County follows the requirements of the revenue bond debt indentures.

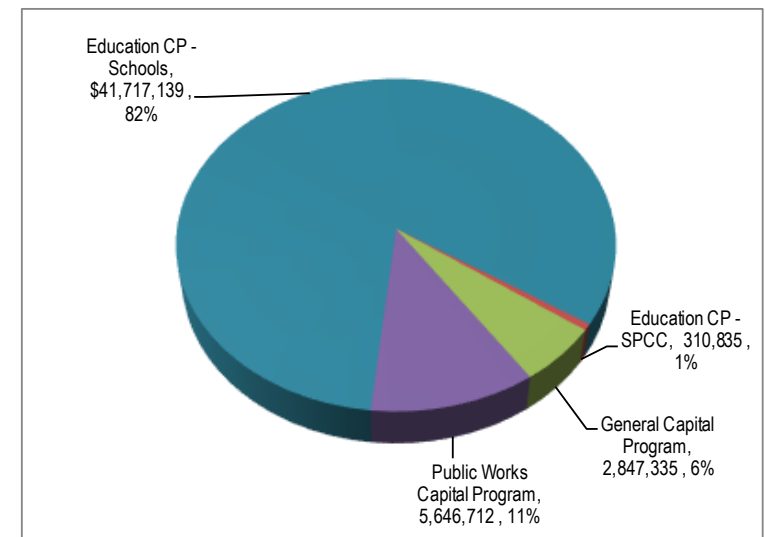
The County currently operates under indentures with U.S. Bank National Association as trustee. The indentures authorize and secure all outstanding revenue bonds of the County's water and wastewater system and contain several financial and operating covenants including rates, additional bonds, reserve funds, annual budgets, maintenance of the system, and insurance. The County is in compliance with all such covenants during the fiscal year ended June 30, 2016. The covenants are tested retrospectively annually during the audit process. It is anticipated the County, will continue to remain in compliance.

The County has one outstanding N.C. Clean Water Revolving Loan (NC CWRL) provided by the North Carolina Clean Water Revolving Loan and Grant Fund. The loan is payable over twenty years and is secured by the net revenues of the water and wastewater system. Additionally the loans contain financial and operating covenants.

The County was in compliance with all such covenants as of June 30, 2016. The covenants are tested retrospectively annually during the audit process. It is anticipated the County will continue to remain in compliance.

The County has been prudent in its use of debt funds through the years. The County's total proposed debt service per capita, in FY 2017, is estimated to be \$225. This is comprised of \$186 for Union County Public Schools capital program, \$1 for South Piedmont Community College (SPCC) education capital program, \$25 for public works capital program, and \$13 for the general capital program.

Capital Program	Debt Service FY 2018	Debt Service / Capita
Education CP - Schools	\$ 41,717,139	\$ 186
Education CP - SPCC	310,835	1
General Capital Program	2,847,335	13
Public Works Capital Program	5,646,712	25
<b>Total</b>	<b>\$ 50,522,021</b>	<b>\$ 225</b>



In accordance with the provisions of the State Constitution and The Local Government Bond Act, as amended, allowing for issuance of all presently authorized bonds, the County has the statutory capacity to incur additional net debt in an approximate amount of \$1,505,650,234. This legal debt margin is calculated following the June 1, 2017 debt payment, and includes the November 2016 referendum authorized and unissued debt. This debt analysis does not include operating leases or other County leases as they are typically secured by the purchased asset.

### Credit Ratings

The County's current credit ratings are as follows:

Debt Type	Moody's	Standard & Poor's	Fitch
GO Bonds	Aaa	AA+	AAA
Revenue Bonds	Aa1	AA+	AA

**Additionally, the County's Revenue Bond ratings were upgraded by Standard & Poor's in April 2017, from AA to AA+.**

### County Wide Debt

The following table illustrates the current debt service as well as the future debt service associated with new debt issuances included in the proposed FY 2018-2023 Capital Improvement Plan.

Based on the FY 2018-2023 Capital Improvement Plan new debt issuances, the County wide debt service reaches its highest point in FY 2023, due to the timing of various principal and interest payments and proposed new debt service for the education capital program (\$94.22 million), the general capital program (\$10.0 million), and the public works capital program (\$385.1 million by FY 2022).

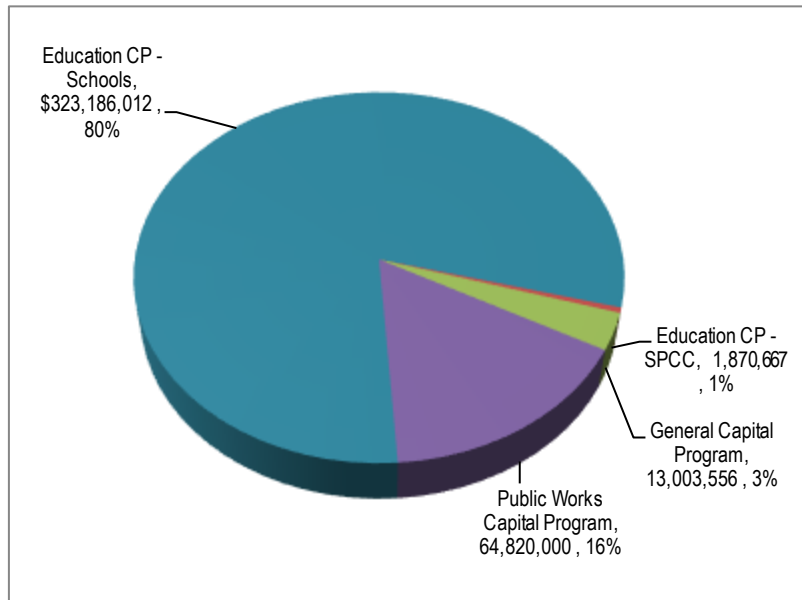
### County Wide Debt Amortization Schedule

Fiscal Year	Principal	Interest	Total
FY2018	\$ 36,179,705	\$ 14,031,481	\$ 50,211,186
FY2019	41,250,361	19,616,513	60,866,874
FY2020	44,570,231	23,945,331	68,515,562
FY2021	41,132,080	22,043,822	63,175,902
FY2022	41,213,562	24,518,402	65,731,964
FY2023	43,532,401	22,818,097	66,350,498
FY2024	40,917,762	25,550,589	66,468,351
FY2025	42,725,466	23,965,509	66,690,975
FY2026	42,366,000	22,353,182	64,719,182
FY2027	40,976,000	20,794,770	61,770,770
FY2028	40,926,000	19,172,769	60,098,769
FY2029	39,516,000	17,671,205	57,187,205
FY2030	36,891,000	16,227,233	53,118,233
FY2031	28,786,000	14,975,266	43,761,266
FY2032	25,946,000	13,864,254	39,810,254
FY2033	23,561,000	12,832,015	36,393,015
FY2034	22,806,000	11,814,137	34,620,137
FY2035	22,246,000	10,780,263	33,026,263
FY2036	22,996,000	9,762,238	32,758,238
FY2037	23,756,000	8,732,713	32,488,713
FY2038	24,571,000	7,669,188	32,240,188
FY2039	20,856,000	6,804,063	27,660,063
FY2040	16,895,000	5,809,613	22,704,613
FY2041	16,160,000	5,015,213	21,175,213
FY2042	16,940,000	4,236,638	21,176,638
FY2043	17,755,000	3,420,463	21,175,463
FY2044	18,610,000	2,565,000	21,175,000
FY2045	10,800,000	1,668,325	12,468,325
FY2046	11,320,000	1,142,000	12,462,000
FY2047	5,880,000	596,000	6,476,000
<b>Total</b>	<b>\$ 780,775,567</b>	<b>\$ 380,767,860</b>	<b>\$ 1,161,543,428</b>



The current outstanding debt as of June 30, 2017 will be \$402.9 million as illustrated by the table below. 80 percent is comprised of the education capital program debt, while 16 percent is public works capital program debt, 3 percent is general capital program debt, and less than 1 percent is for SPCC debt. The outstanding debt per capita is \$1,443 for the schools education capital program, \$8 for the SPCC education capital program, \$289 for the public works capital program and \$58 for the general capital program.

Capital Program	Outstanding at June 30, 2017	Outstanding Debt / Capita
Education CP - Schools	\$ 323,186,012	\$ 1,443
Education CP - SPCC	1,870,667	8
General Capital Program	13,003,556	58
Public Works Capital Program	64,820,000	289
<b>Total</b>	<b>\$ 402,880,235</b>	<b>\$ 1,798</b>



A portion of the local option sales tax, as prescribed by North Carolina State General Statutes, is used to support the education

capital program or the indebtedness incurred by the County for Union County Public School purposes as discussed in the revenue highlights of the budget document.

- Article 40 Local Option Sales Tax: The County is mandated to use 30% of the revenue received from Article 40 for Public School Capital Outlay purposes or to retire any indebtedness incurred by the County for Public School purposes.
- Article 42 Local Option Sales Tax: The County is mandated to use 60% of the revenue received from Article 42 for Public School Capital Outlay purposes (as defined in G.S. 115C-426(f)) or to retire any indebtedness incurred by the County for Public School purposes.

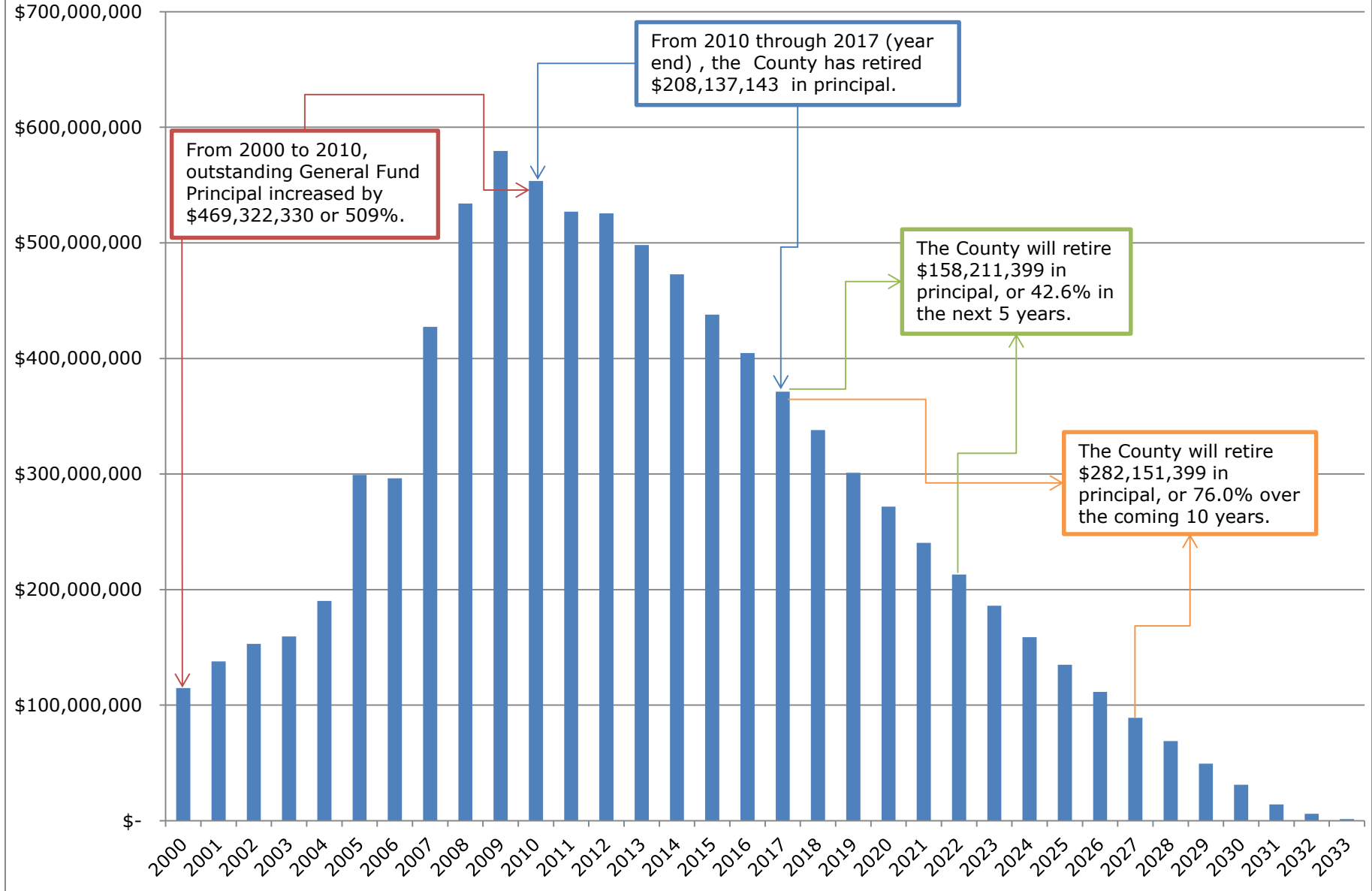
In 2016, the North Carolina General Assembly adopted a new Article 44 Local Option Sales Tax (G.S. 105-524), which expanded the sales tax base, creating an anticipated \$84.8 million that will be distributed to 79 counties according to allocation percentages (G.S. 105-524(c)). The County's share of the \$84.8 million, excluding amounts applicable to municipalities, is anticipated to be \$3,058,384. This distribution of additional sales tax revenue must be used for economic development, public education, and/or community colleges. In the FY 2017 Budget, this amount has been allocated to cover debt service requirements for the Union County Public Schools.

The graph on the following page indicates the *current* outstanding General Fund principal balances. These will change as new debt is added, however it illustrates the County's voracity for principal amortization. Due to this discipline, the County typically amortizes capital projects under 20 years, however the 2006 Certificates of Participation and 2007 General Obligation Bonds required a 25 year amortization, and will mature in 2032 and 2033 respectively.

While this graph portrays the outstanding principal, it is important to understand the debt load in the coming years and the impacts on future borrowing capacity.

# Outstanding General Fund Debt

(assumes current debt only)



Source: Union County Administrative Services, Finance, as of 6/30/2017

## Education Capital Program Debt

Over the past twenty years, \$600.8 million of general obligation bonds and certificates of participation have been issued by the County to fund UCPS and SPCC land, facilities construction, and facilities improvements as delineated in the following table.

Education Capital Program Debt Issuances		
Type and Purpose	Issued	Original Issue Amount
GO Bonds - UCPS	September 1999	30,050,000
GO Bonds - UCPS	March 2001	56,700,000
COPs - UCPS	June 2003	8,436,943
COP's - SPCC	June 2003	4,448,730
GO BAN's - UCPS	Multiple - 2004	48,265,000
GO Bonds - UCPS	June 2005	90,000,000
COPs - UCPS	November 2006	77,640,000
GO Bonds - UCPS	September 2007	220,730,000
GO Bonds - UCPS	March 2009	64,500,000
<b>Total</b>		<b>\$ 600,770,673</b>

The debt service for the outstanding portion of the \$600.8 million will be retired by March 1<sup>st</sup>, 2033.

In November 2016 a referendum was passed authorizing \$40.2 million for several South Piedmont Community College (SPCC) projects. The annual debt service impact is projected to begin in FY 2019 and would conclude within twenty years of issuance. The projected debt service for the additional \$40.2 million would equate to approximately 1.24 pennies of the projected FY 2018 ad valorem value.

In November 2016 a referendum was passed authorizing \$54.02 million for several Union County Public School (UCPS) projects. The annual debt service impact is projected to begin in FY 2019 and would conclude within twenty years of issuance. The projected FY 2019 debt service for the additional \$54.02 million would equate to approximately 1.57 pennies of the projected FY 2018 ad valorem value.

The projected existing and proposed new education capital program debt service is shown in the following table.

Education Debt Amortization Schedule			
Fiscal Year	Principal	Interest	Total
FY2018	\$ 30,539,125	\$ 11,178,014	\$ 41,717,139
FY2019	34,325,314	14,698,559	49,023,872
FY2020	33,678,858	13,283,415	46,962,273
FY2021	30,702,607	11,780,257	42,482,864
FY2022	30,478,847	10,633,428	41,112,275
FY2023	30,587,709	9,346,619	39,934,328
FY2024	28,132,467	8,120,142	36,252,609
FY2025	26,797,624	7,071,831	33,869,455
FY2026	26,836,159	6,114,075	32,950,234
FY2027	24,845,181	5,205,170	30,050,351
FY2028	24,159,203	4,268,548	28,427,751
FY2029	22,833,919	3,482,892	26,316,811
FY2030	21,586,000	2,718,924	24,304,924
FY2031	12,826,000	2,139,589	14,965,589
FY2032	9,311,000	1,730,730	11,041,730
FY2033	6,211,000	1,430,942	7,641,942
FY2034	4,711,000	1,177,750	5,888,750
FY2035	4,711,000	942,200	5,653,200
FY2036	4,711,000	706,650	5,417,650
FY2037	4,711,000	471,100	5,182,100
FY2038	4,711,000	235,550	4,946,550
FY2039	4,711,000	235,550	4,946,550
<b>Total</b>	<b>\$ 422,117,012</b>	<b>\$ 116,971,934</b>	<b>\$ 539,088,945</b>

This list excludes any capital requests received by the Board until they are added to the CIP.

### General Capital Program Debt

During the past fifteen years, \$34.2 million of general obligation bonds, certificates of participation, and installment financing have been issued by the County to fund General Capital Projects such as the Judicial Center, the Agricultural Center, Library projects, Law Enforcement facilities, and E911 Radio System/Equipment.

General Capital Program Debt Issuances		
Type and Purpose	Issued	Original Issue Amount
COP's - Judicial Center	June 2003	\$ 15,464,022
COP's - Ag. Center	June 2003	4,845,379
COP's - Library	June 2003	2,737,323
GO BAN's - Firearms Range	Multiple - 2004	525,000
GO BAN's - Jail Expansion	Multiple - 2004	467,500
GO BAN's - Animal Shelter	Multiple - 2004	742,500
Installment Financing - E911 Radio System	June 2009	9,390,000
<b>Total</b>		<b>\$ 34,171,724</b>

An additional \$10.1 million of referendum approved general obligation bonds are proposed for the following programs.

General Capital Program Proposed Debt Issuances	
Type and Purpose	Issue Amount
Library Expansion and Development	\$ 10,100,000
<b>Total</b>	<b>\$ 10,100,000</b>

In November 2016, \$10.1 million of General Obligation Bonds were passed by referendum for a Western Union Library Project. The annual debt service of the general obligation bonds would begin within a year of issuance and would retire within twenty years of issuance. The projected debt service for the \$10.1 million would equate to approximately .28 pennies of the projected FY 2018 ad valorem value.

The projected existing and proposed additional general capital program debt service is shown in the following table.

General Government Debt Amortization Schedule			
Fiscal Year	Principal	Interest	Total
FY2018	\$ 2,415,580	\$ 431,755	\$ 2,847,335
FY2019	3,620,047	853,428	4,473,475
FY2020	2,446,373	741,346	3,187,719
FY2021	1,684,473	652,160	2,336,633
FY2022	1,674,715	581,555	2,256,270
FY2023	1,574,692	513,104	2,087,796
FY2024	970,296	456,716	1,427,011
FY2025	1,647,842	393,403	2,041,245
FY2026	644,841	339,753	984,594
FY2027	635,819	311,315	947,134
FY2028	626,797	283,082	909,879
FY2029	617,081	255,055	872,136
FY2030	505,000	227,250	732,250
FY2031	505,000	202,000	707,000
FY2032	505,000	176,750	681,750
FY2033	505,000	151,500	656,500
FY2034	505,000	126,250	631,250
FY2035	505,000	101,000	606,000
FY2036	505,000	75,750	580,750
FY2037	505,000	50,500	555,500
FY2038	505,000	25,250	530,250
<b>Total</b>	<b>\$ 23,103,556</b>	<b>\$ 6,948,923</b>	<b>\$ 30,052,479</b>

All future general obligation debt issuance projections have been calculated on generally accepted repayment methods, with level principal structure, interest rates of 5%, and a 20 year amortization period.

### Public Works Capital Program Debt

During the past twenty years, \$95.8 million of revenue bonds, and N.C. Clean Water Revolving Loans (NC CWRL) have been utilized by the County to fund water and wastewater infrastructure projects. These are delineated in the following table.

Public Works Capital Program Debt Issuances		
Type	Issued	Original Issue Amount
NC CWRL	June 1998	4,673,933
Revenue Bonds	June 2003	33,130,000
NC CWRL	June 2008	15,000,000
Revenue Bonds	June 2009	20,000,000
Revenue Bonds	December 2015	22,955,000
<b>Total</b>		<b>\$ 95,758,933</b>

An additional \$358.1 million of water and waste water revenue bonds is proposed over five years to fund the water and wastewater system improvement and expansion projects. Proposed issuance timing and amount are shown below.

Public Works Capital Program Proposed Debt Issuances		
Type	Timing	Revenue Bond Amount
Revenue Bonds	FY 2018	\$ 61,660,000
Revenue Bonds	FY 2019	125,000,000
Revenue Bonds	FY 2020	84,720,000
Revenue Bonds	FY 2022	86,700,000
<b>Total</b>		<b>\$ 358,080,000</b>

The annual debt service impact of the four proposed additional revenue bond issuances totaling \$358.1 million is projected to begin in FY 2018, FY 2020, and FY 2022 respectively; and would conclude within twenty-five years for each issuance. The projected existing and proposed additional public works capital program debt service is shown in the following table.

Public Works Debt Amortization Schedule			
Fiscal Year	Principal	Interest	Total
FY2018	\$ 3,225,000	\$ 2,421,712	\$ 5,646,712
FY2019	3,305,000	4,064,527	7,369,527
FY2020	8,445,000	9,920,570	18,365,570
FY2021	8,745,000	9,611,405	18,356,405
FY2022	9,060,000	13,303,419	22,363,419
FY2023	11,370,000	12,958,375	24,328,375
FY2024	11,815,000	16,973,731	28,788,731
FY2025	14,280,000	16,500,275	30,780,275
FY2026	14,885,000	15,899,353	30,784,353
FY2027	15,495,000	15,278,285	30,773,285
FY2028	16,140,000	14,621,139	30,761,139
FY2029	16,065,000	13,933,258	29,998,258
FY2030	14,800,000	13,281,059	28,081,059
FY2031	15,455,000	12,633,678	28,088,678
FY2032	16,130,000	11,956,774	28,086,774
FY2033	16,845,000	11,249,573	28,094,573
FY2034	17,590,000	10,510,137	28,100,137
FY2035	17,030,000	9,737,063	26,767,063
FY2036	17,780,000	8,979,838	26,759,838
FY2037	18,540,000	8,211,113	26,751,113
FY2038	19,355,000	7,408,388	26,763,388
FY2039	16,145,000	6,568,513	22,713,513
FY2040	16,895,000	5,809,613	22,704,613
FY2041	16,160,000	5,015,213	21,175,213
FY2042	16,940,000	4,236,638	21,176,638
FY2043	17,755,000	3,420,463	21,175,463
FY2044	18,610,000	2,565,000	21,175,000
FY2045	10,800,000	1,668,325	12,468,325
<b>Total</b>	<b>\$ 422,740,000</b>	<b>\$ 271,071,429</b>	<b>\$ 693,811,429</b>

All future debt issuance projections have been calculated on generally accepted repayment methods, with interest rates of 5% and a 25 year amortization period.

## Debt Management and Debt Ratios

As a result of growth, there was pressure to expand a variety of needs within the County. As such, the County tries to provide a service that is appropriate, equitable and fiscally conscious. Some of the reasons Union County drew people and benefitted from growth were: the tax rate, schools, availability of homes, and nearby jobs.

In 2000 Union County ranked 49<sup>th</sup> in highest tax rate within the State, at \$0.7765 per \$100 of assessed value, today the County ranks 19<sup>th</sup>. Over that same period 59 (of 100) counties increased their tax rate, while the balance either decreased or stayed the same. Union County's rate increase was the 8<sup>th</sup> largest in the State.

The County has identified key debt ratios that are used in determining creditworthiness. The County is responsible for annual updates with the three rating agencies, and uses this information and that of other counties to weigh the County against other North Carolina counties.

More appropriately, Union County is compared against the counties whose population is greater than 100,000, to get a better idea of those that are similar in size and dealing with similar issues. The following is a comparison of the 26 North Carolina counties that fit that description, and is provided based on FY 2016 audits.

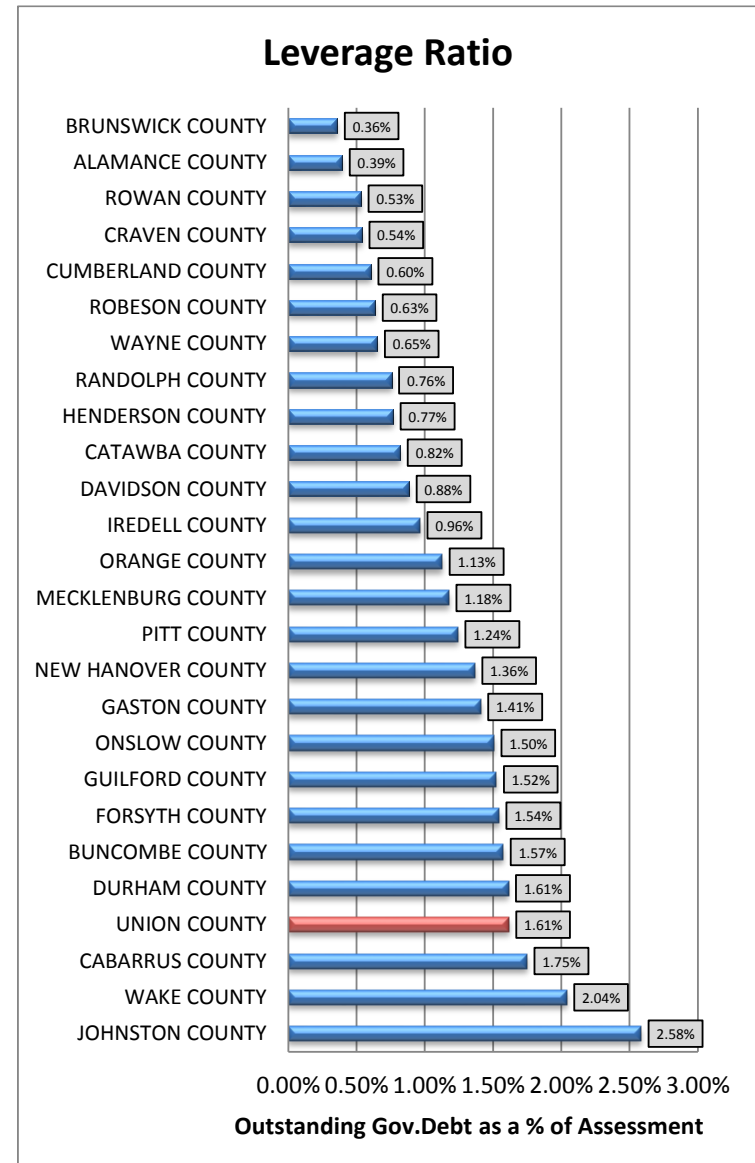
The following ratios are laid out in Section C, Readers Guide and Policies:

- Debt as a percentage of assessed value
- Debt Per Capita
- Debt Per Capita as a percentage of income
- Debt Service as a percentage of general fund expenditures
- General Fund Balances as a percentage of General Fund Operating Expenses

Furthermore, the tax rate has been graphed against the same group of counties with populations over 100,000.

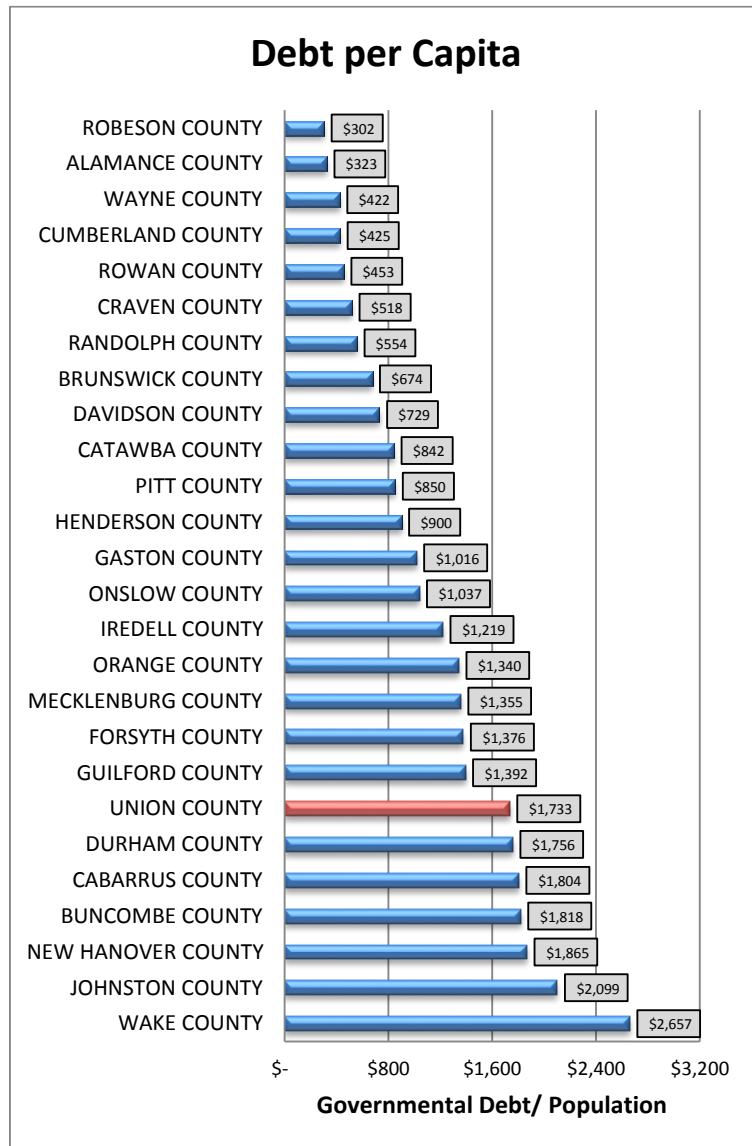
## Debt as a Percentage of Assessed Value

This is commonly referred to as leverage ratio in municipal governments and it measures the extent by which a government entity relies on tax supported debt. The calculation relies on all tax supported, long term debt and is divided by the assessed value.



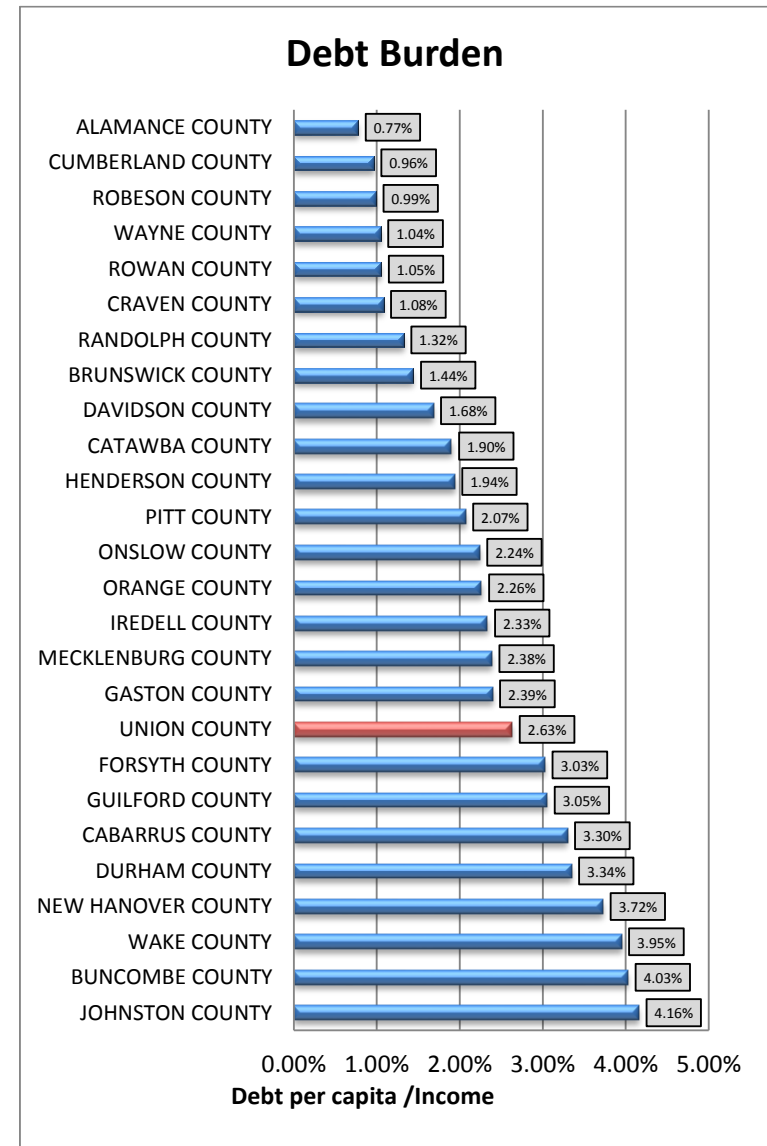
## Debt per Capita

This is a measure of County debt on a personal basis, and it represents an individual's share of the County wide governmental debt load. The calculation relies on all tax supported, long term debt and is divided by the annual population (provided by the State demographer).



## Debt per Capita as a percentage of income

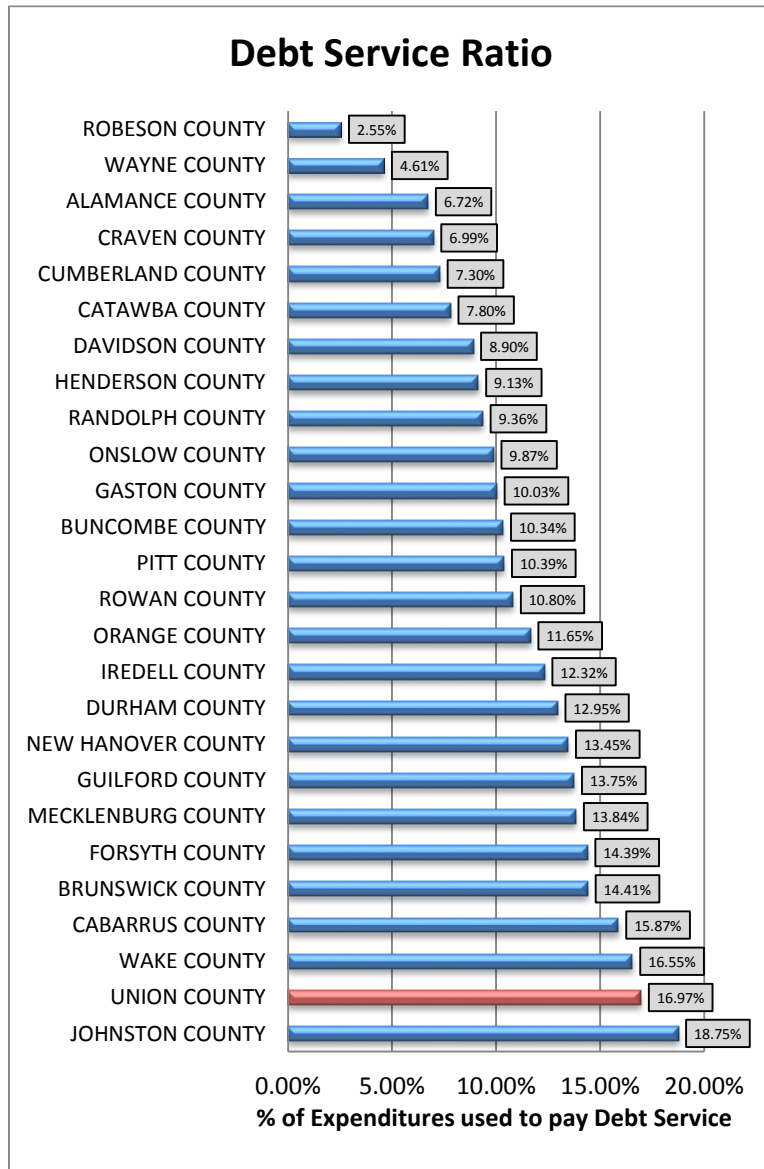
This is a measure of debt per capita as a percentage of income, and measures affordability. This measure is commonly known as debt burden. The calculation takes the debt per capita calculation (seen to the left) and is further divided by the County's Median Household Income (provided by the Bureau of Labor Statistics).





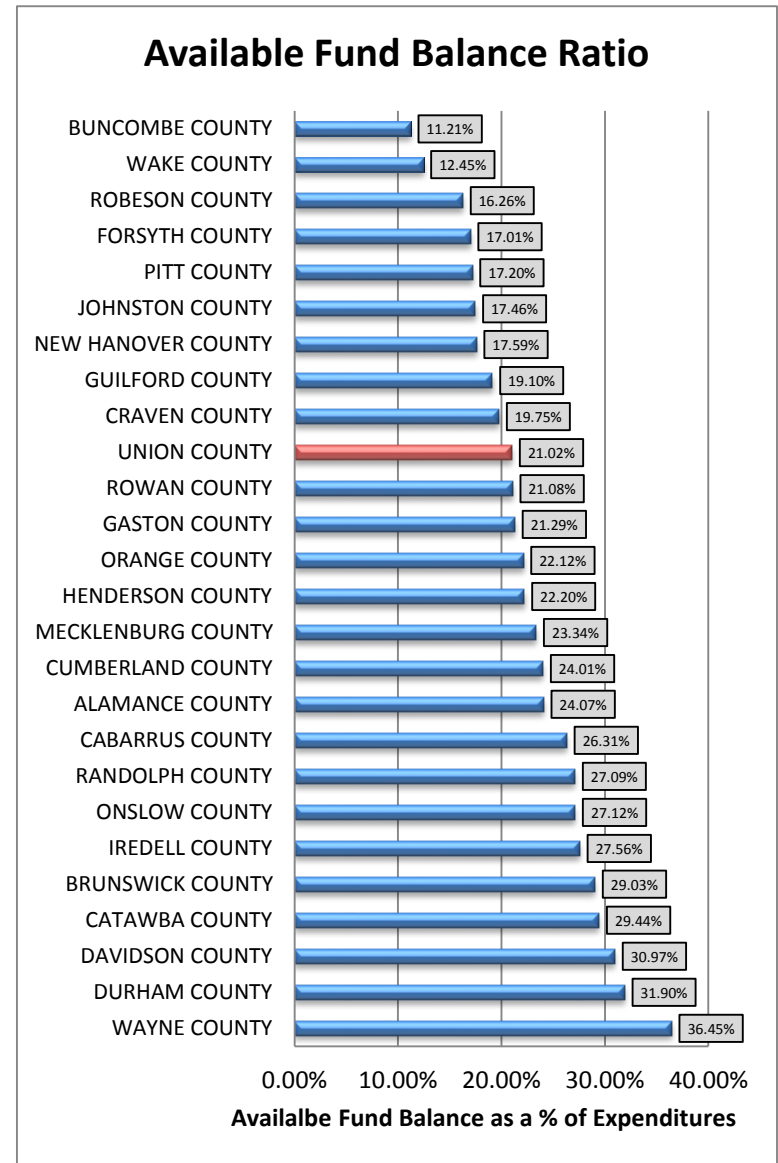
Debt Service Ratio

This is a measure of annual debt service, considering the total expenses of the governmental unit. The calculation provides feedback on flexibility of expenditures within the unit, whereby the higher the percentage, the less flexible the unit becomes.



Available Fund Balance Ratio

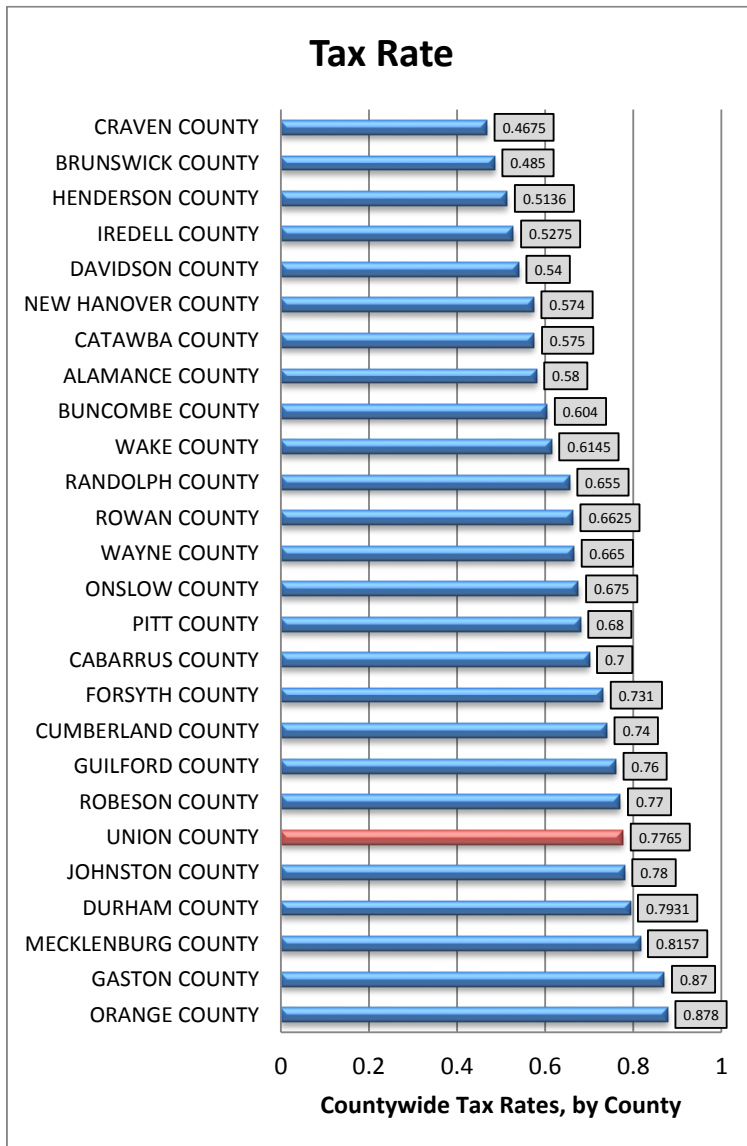
This is a measure of the solvency of a government unit. The calculation measures a County's ability to address long term obligations if revenues are not available. This is an important ratio that measures the time in which a unit could cover expenses. For Union County, it means the County has approximately 77 days of available funds, up from 75 days in FY 2015.





## Tax Rates

The tax rate is the posted rate by which the unit of government is going to tax assessed property in the current year. There is no calculation, and the information can be found within each entity's operating budget. Some counties have bifurcated their tax rates between purposes, as Union County has done. The following (combined) rates were for FY 2016.



In summary, the comparative ratios rely on good data available from not only the counties, but also the State of North Carolina to be able to measure fiscal health against other, similar sized units of government.

The County has been, and continues to be, active in searching for better solutions to the debt portfolio, having refunded over \$300 million in governmental (non-enterprise) debt since 2010. This is evident as Governmental funds debt service has dropped from \$52,367,596 in FY 2012 to \$46,103,360 in FY 2016.

The County continues to remain strong, yet challenged by being above average with tax rate, debt ratio and debt per capita. The County pays the second greatest amount of debt service as a percentage of expenditures in the State, at 16.97% in FY 2016 (last fiscal year ended). FY 2014 was however the high water mark, as the County has averaged over 21% over the last four fiscal years, well above the average in North Carolina, and considered high by the rating agencies. The County remains the seventh highest in debt per capita and only dropping below the highest, in FY 2013, after six years topping the list.

The debt burden will remain high, in contrast to the County remaining one of the top three highest Median Household Incomes in the State. The debt to assessed value remains the fourth highest in the State, and will likely only decrease as a result of annual debt payments.

The County's willingness to hold a greater level of fund balance has acted as an offset to the amount of debt, proving helpful to the debt ratings. The County is 17<sup>th</sup> lowest among 26 counties for the available fund balance ratio.

The County has strengthened the fund balance policy, increased strategic reserves, and lowered the annual debt service through refunding opportunities. As a result, the County was rewarded with upgrades to the General Obligation Bond ratings by Moody's Investor Services and Fitch Ratings in November 2015 to Aaa and AAA, respectively, the highest municipal credit rating available.

