CITY OF RALEIGH PROPOSED CAPITAL IMPROVEMENT PROGRAM FY2016-FY2020

Capital Improvement Program
FY2016 to FY2020
City of Raleigh, North Carolina

Recommended to the City Council by the City Manager ..... May 19, 2015

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Table of Contents

INTRODUCTION
Overview of the Capital Improvement Program 1
CIP Policies and Practices 3
Summary of the FY2016-FY2020 CIP 4
Operating Impacts from New Facilities 8
Horizon Issues 9

ELEMENT SECTIONS
General Public Improvements 11
Public Utilities 19
Stormwater 33
Transportation 41
Parks, Recreation and Cultural Resources 51
Housing 65
Convention and Performing Arts Complex 69
Technology 73

Overview of the Capital Improvement Program

The capital improvement program (CIP) is a five year plan, approved by City Council, that allocates limited financial resources to high priority needs. It is a primary mechanism for implementing the city's long-term vision and strategic plan.

When identifying new projects, staff look to the long-term priorities and direction set by City Council through strategic planning, as well as the city's comprehensive plan. In addition, long-term studies and citizen input also lead to additional requests. Staff submit formal requests through the annual budget process. A formal request includes a "business case" that articulates the project need, coordination with city plans, and potential operating costs. Business cases for new projects should be supported with relevant data and information. Staff analyze and discuss these requests, then prioritize the requests based on consistency with Council goals, documented need, and cost.

The CIP is organized into eight pieces called "elements" based on similar purpose and dedicated revenue sources:

- The **general public improvement element (GPI)** funds maintenance and construction of general government and public safety facilities and infrastructure. This element also includes selected economic development projects and other general needs.
- The **public utilities** element funds the ongoing maintenance and improvement of water and sewer infrastructure. These projects include main replacements, water treatment plant renovations, filter rehabilitation, and pump station maintenance.
- The **stormwater** element funds projects meant to manage and mitigate the effects of stormwater runoff. Project categories include general infrastructure, lake preservation, and drainage.
- The **transportation** element addresses major city streets, infrastructure maintenance, parking facility maintenance, long-term studies, and pedestrian-oriented projects. Both the 2011 and 2013 transportation bond referenda are implemented through this element.
- The **parks, recreation and cultural resources** element funds capital maintenance and renovations at the city's community centers, athletic facilities, greenways, and cultural sites. Projects can include structural and mechanical repairs and pavement repair and resurfacing. This element also funds land acquisition and long-term studies.
- The **housing** element provides capacity for increasing the stock of affordable housing throughout the city through neighborhood revitalization, first time home ownership programs and house rehabilitation projects.
- The **convention and performing arts complex** element funds maintenance, renovations, and improvements at three downtown facilities: Raleigh Convention Center, Performing Arts Center, and the downtown amphitheater. This element also includes the Walnut Creek Amphitheater in southeast Raleigh.
- The **technology** element funds the planning, design and implementation of new technological infrastructure. These projects include maintaining the city's enterprise resource management system and implementing a new land use planning system.

The city uses a variety of revenue sources to fund capital improvements. Capital revenues can be classified into two broad types: cash (or "paygo") and debt-financing. Cash sources include property and sales tax revenues transferred from the city's General Fund. Other cash sources include state-shared revenues, facility fees, program income, and interest earnings. For debt-financing, the city uses a range of debt mechanisms, including general obligation bonds. Some revenue sources, such as general fund transfers, can be applied to any city project. Other revenues such as facility fees and Powell Bill funds, may only be spent on eligible projects. Major funding sources for the CIP are described below:

- Debt Financing: The largest revenue source for the city's CIP, both in FY16 and across the five-year horizon, is bonds. In 2014, for example, Raleigh's citizens approved the use of general obligation bonds for parks and recreation projects. In the public utilities element, revenue bonds will fund many water and sewer infrastructure projects. The city also employs commercial loans and other debt mechanisms for selected projects.

- Transfers from Enterprise and Internal Service Funds: Enterprise funds, such as Public Utilities, Stormwater, and Parking, collect user fees as part of their operations, then invest a portion of that revenue into capital projects. The city uses these transfers only for corresponding enterprise purposes. For example, public utilities transfers to capital are only used for water and sewer projects. Such internal service funds as Vehicle Fleet Services also contribute to selected capital projects. Transfers from enterprise and internal service funds are the CIP's second largest revenue source.

- Transfers from the General Fund: The general fund transfers a portion of the city's property and sales tax revenues to capital funds each year. Compared to other sources, general fund transfers are a flexible revenue source without restrictions on their use. The city applies these funds to a wide range of projects, including general government and public safety facility maintenance, parks facility maintenance, street resurfacing, and technology projects.

- Facility Fees: The city assesses charges on new development to help pay for the capital facility burden created by new development. Each new residential or commercial project pays its proportionate share of the cost of new infrastructure facilities required to serve that development. These fees support debt service and cash-funded projects for parks and road widening. Facility fees are based on a standard formula and a pre-determined fee schedule.

- Interlocal Funds: In Spring 2012, the City of Raleigh and Wake County agreed to dedicate a portion of the county-wide hotel/motel tax and prepared food tax revenues to maintain the Raleigh Convention Center. The interlocal agreement between the two jurisdictions includes a long-term funding schedule to maintain the facility.

- User Fees and Program Income: In some capital elements, selected user fees and program income sources are dedicated to capital projects rather than operating budgets. This includes program income from affordable housing programs, which are invested in new housing programs. This revenue source also includes selected development fees and lease revenue at the Walnut Creek Amphitheater.

- Appropriated Fund Balance: As staff complete capital projects, the unspent budget accumulates into capital reserves, which are available to fund future projects. Capital reserves can also build up when the city collects additional revenues above the budget estimate. Staff annually estimate the reserve funds available for capital projects and may budget this additional revenue source.

- Interest Income: The city actively invests its cash balances in appropriate interest-earning mechanisms. Interest income is not a major source of revenue for the CIP, but supplements project budgets.

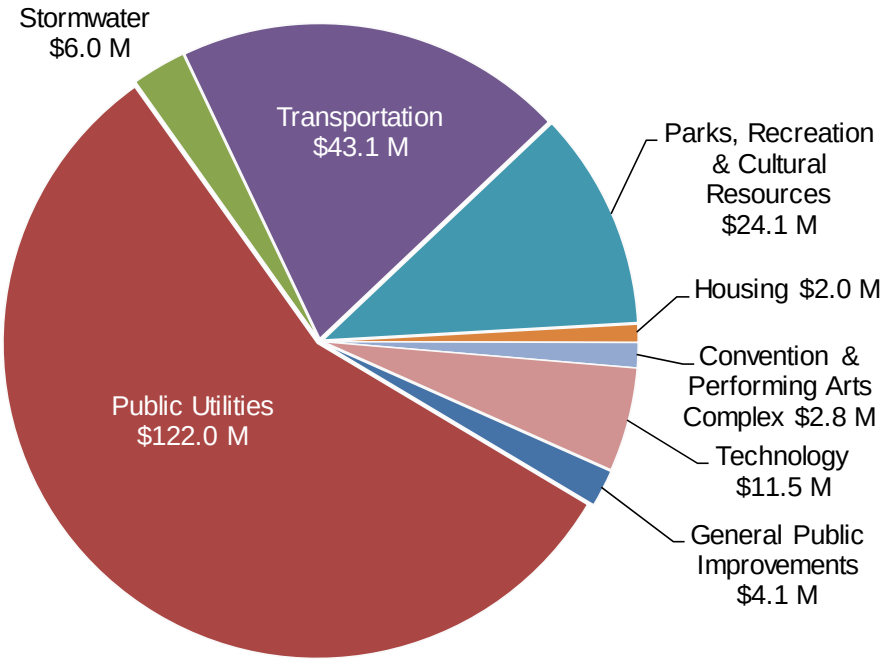
CIP Policies and Practices

The city adheres to several policies and practices to ensure long-term financial sustainability, promote effective planning, and ensure appropriate use of capital funds. Below is a summary of major items:

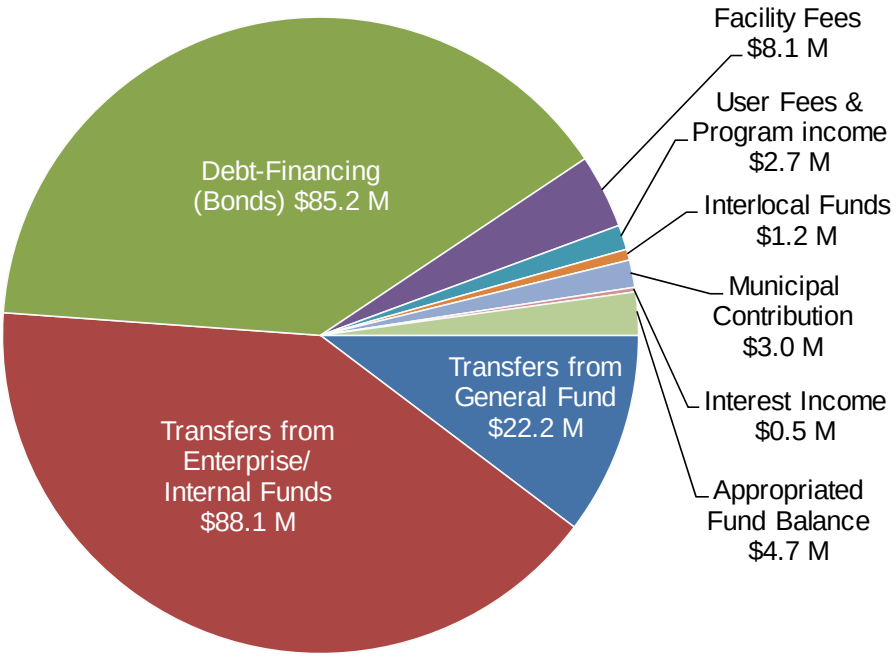
- Alignment with city-wide Strategic Plan: The Strategic Plan, adopted by City Council in April 2015, serves as the primary guide for capital investments. The plan articulates areas of strategic focus which will target the City's efforts and resources in ways intended to have the greatest impact in the six key focus areas over the life of the plan. Several of the plan's initiatives require staff to evaluate and implement capital investments in transportation, technology, economic development, and other areas.
- Defining capital projects: Generally, a capital project will be a fixed asset with a useful life greater than ten years and with a cost of at least $25,000. Capital projects include not only new assets, but projects that improve an asset or lengthen its useful life. Scheduled purchases of vehicles and equipment for routine operations are, generally, addressed through the annual operating budget. The operating budget also funds routine maintenance of facilities.
- The CIP as a policy document: Upon adoption by the City Council, the CIP becomes a statement of city policy regarding the timing, location, character, and funding of future capital projects. The CIP represents city administration's and City Council's best judgment at that time. Future needs and financial constraints may result in programmatic changes over the five year period. Policies and priorities established in the CIP guides subsequent decisions made by city administration and the various boards and commissions appointed by City Council.
- Complementing the city's comprehensive plan: All capital projects should complement the comprehensive plan. The comprehensive plan includes specific policies that establish it as the city's lead growth and development guide and connect it to the CIP. Policies also require staff to consult the comprehensive plan when establishing capital priorities, share long-term plans with other city staff, and identify long-term planning opportunities.
- General debt policies: City staff use a long-range debt model to track general debt obligations, as well as approved but unissued amounts. The model allows staff to forecast debt service requirements and perform "what if" scenarios. Historically, the city's general debt service should not exceed 15% of the general fund budget, and fund balance in the debt service fund should be at least 50% of annual debt expenses.
- Budget Transfers: City Council approves all increases and decreases to active project budgets. City staff may transfer up to $50,000 from one project to another within the same fund and category. Project transfers in excess of $50,000 require Council approval. All transfers are reviewed through an internal approval process.
- Identifying operating impacts: Requests for new projects must include an estimate of operating impacts. These costs include new staffing and operating costs essential to operate and maintain a new asset, such as a public facility or software system. Examples of operating costs include utilities, vehicles, annual licensing, and service contracts. Operating impacts do not include new services or programs that are not essential to the asset's operation.
- Long-range cost estimates: Beginning with the FY2015 budget process, staff will apply cost escalators to better estimate future construction costs. The city uses a default annual escalator of 3.5% per year. Staff apply the inflator to new construction and significant building rehabilitations. In some elements, such as public utilities and transportation, staff apply other escalators developed for those specific service areas.
- Closing Projects: Projects are closed when the approved scope of work is complete. Staff review project status periodically to identify projects that are finished and can be closed. If the budget for a completed project is not fully expended, generally, the budget is closed and the remaining balance accumulates in fund balance. The accumulated fund balance is available to pay for future projects.

Summary of the FY2016-FY2020 CIP

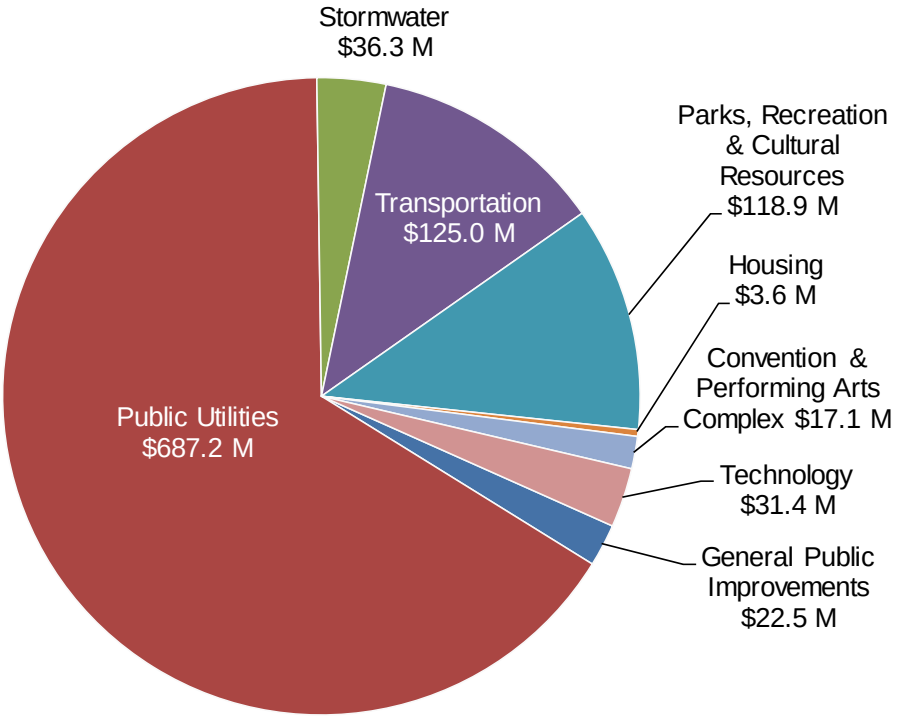
FY2016 Expenditures by Element (Year 1 of the 5-Year Plan)



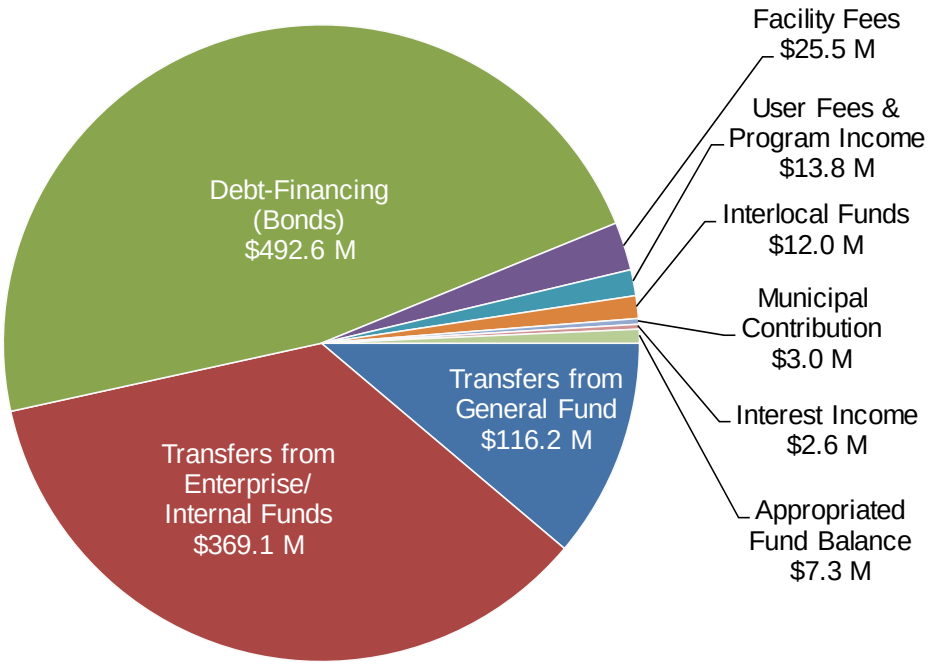
FY2016 Revenues by Source



Total Five Year Expenditures by Element



Total Five Year Revenues by Source



CIP Summary by Category

General Public Improvements	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
General Government Facility Maintenance	980,000	2,170,000	738,000	925,000	300,000	5,113,000
Public Safety Facility Maintenance	2,120,000	2,200,000	2,257,000	2,165,000	1,605,000	10,347,000
New Facilities	950,000	-	-	-	-	950,000
Economic Development	50,000	50,000	50,000	50,000	50,000	250,000
Reserve for Future Projects	-	180,000	1,555,000	1,460,000	2,645,000	5,840,000
Total	**$ 4,100,000**	**4,600,000**	**4,600,000**	**4,600,000**	**4,600,000**	**22,500,000**

Public Utilities	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Asset Management	17,255,000	28,207,000	34,362,000	25,212,000	37,442,000	142,478,000
Interceptors	50,252,000	11,301,000	67,599,000	129,824,000	24,400,000	283,376,000
NRWWTP Expansion	7,400,000	-	54,300,000	-	-	61,700,000
Wastewater Pump Stations	15,800,000	29,000,000	1,000,000	1,000,000	1,000,000	47,800,000
Reuse System	-	3,000,000	3,000,000	3,000,000	3,000,000	12,000,000
WWTP Maintenance	5,300,000	7,550,000	200,000	200,000	200,000	13,450,000
Water Main Expansions	5,417,000	4,341,000	4,386,000	685,000	4,978,000	19,807,000
Water Pump Stations	-	740,000	1,243,000	2,236,000	400,000	4,619,000
Little River Projects	500,000	3,000,000	3,000,000	3,000,000	3,000,000	12,500,000
Water Tank Upgrades	2,600,000	900,000	900,000	900,000	900,000	6,200,000
WTP Maintenance	5,900,000	11,250,000	1,950,000	3,000,000	10,750,000	32,850,000
Misc Water and Wastewater	4,350,000	5,415,000	2,250,000	3,800,000	2,300,000	18,115,000
Capital Equipment	5,700,000	4,700,000	5,700,000	4,700,000	4,000,000	24,800,000
Watershed Initiatives	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	7,500,000
Total	**$ 121,974,000**	**110,904,000**	**181,390,000**	**179,057,000**	**93,870,000**	**687,195,000**

Stormwater	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Lake Preservation	2,850,000	3,000,000	750,000	-	-	6,600,000
Water Quality Improvements	-	100,000	-	800,000	-	900,000
General Water Quality	550,000	650,000	650,000	550,000	550,000	2,950,000
Stream Restoration	150,000	825,000	600,000	700,000	1,450,000	3,725,000
General Drainage Infrastructure	870,000	950,000	1,050,000	1,050,000	1,650,000	5,570,000
Neighborhood Drainage System Improvements	700,000	1,775,000	4,000,000	3,925,000	3,065,000	13,465,000
Street Drainage System Improvements	880,000	225,000	675,000	175,000	1,105,000	3,060,000
Total	**$ 6,000,000**	**7,525,000**	**7,725,000**	**7,200,000**	**7,820,000**	**36,270,000**

Transportation	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Major Street Projects	24,250,000	17,500,000	3,500,000	3,000,000	2,500,000	50,750,000
Street Improvement Program	11,453,000	10,098,000	9,090,000	9,370,000	9,604,000	49,615,000
Bicycle and Pedestrian Improvements	3,636,000	1,540,000	1,165,000	1,205,000	1,260,000	8,806,000
Studies and Planning Projects	25,000	492,000	120,000	100,000	120,000	857,000
Transit	2,043,000	1,908,000	1,525,000	1,545,000	1,565,000	8,586,000
Parking	1,718,000	1,170,000	1,170,000	1,170,000	1,170,000	6,398,000
Total	**$ 43,125,000**	**32,708,000**	**16,570,000**	**16,390,000**	**16,219,000**	**125,012,000**

Parks, Recreation, and Cultural Resources	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Land Acquisition	275,000	100,000	125,000	100,000	125,000	725,000
Greenway System	300,000	300,000	300,000	300,000	300,000	1,500,000
Cultural Resources	335,000	175,000	335,000	300,000	800,000	1,945,000
Facility Improvements	2,095,000	2,415,000	2,680,000	2,710,000	2,350,000	12,250,000
Plans, Studies & Development	1,257,000	655,000	700,000	775,000	375,000	3,762,000
Site Improvements	1,663,000	1,405,000	1,255,000	1,210,000	1,445,000	6,978,000
2014 Bond Projects	18,150,000	17,375,000	29,525,000	8,500,000	18,225,000	91,775,000
Total	**$ 24,075,000**	**22,425,000**	**34,920,000**	**13,895,000**	**23,620,000**	**118,935,000**

Housing	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Multi-Purpose Intake Center	1,648,000	-	-	-	-	1,648,000
Transfer to Debt Service	400,000	400,000	400,000	400,000	400,000	2,000,000
Total	**$ 2,048,000**	**400,000**	**400,000**	**400,000**	**400,000**	**3,648,000**

Convention and Performing Arts Complex	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Raleigh Convention Center	1,152,000	2,709,000	2,709,000	2,709,000	2,709,000	11,988,000
Performing Arts Center	1,437,000	2,625,000	-	-	-	4,062,000
Walnut Creek Amphitheater	200,000	200,000	200,000	200,000	200,000	1,000,000
Total	**$ 2,789,000**	**5,534,000**	**2,909,000**	**2,909,000**	**2,909,000**	**17,050,000**

Technology	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
ERP Debt Transfer	3,134,187	3,081,387	3,027,864	-	-	9,243,438
Land Management System	830,500	-	-	-	-	830,500
Computer Aided Dispatch System	6,000,000	1,000,000	-	-	-	7,000,000
PRCR Management System	150,313	500,000	-	-	-	650,313
Budget and Planning System	1,346,000	-	-	-	-	1,346,000
Planning and Evaluation Studies	-	50,000	50,000	50,000	50,000	200,000
Small Projects Fund	-	75,000	75,000	75,000	75,000	300,000
Reserve for Future Projects	-	1,292,613	2,811,136	3,875,000	3,875,000	11,853,749
Total	**$ 11,461,000**	**5,999,000**	**5,964,000**	**4,000,000**	**4,000,000**	**31,424,000**
Grand Total	**$ 215,572,000**	**190,095,000**	**254,478,000**	**228,451,000**	**153,438,000**	**1,042,034,000**

Revenue Sources	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Transfers from General Fund	22,171,000	22,872,130	23,394,850	23,715,000	24,044,000	116,196,980
Transfers from Enterprise/Internal Funds	88,119,702	65,692,870	65,903,150	72,789,000	76,639,000	369,143,722
Debt-Financing (Bonds)	85,152,000	89,143,000	154,003,000	121,495,000	42,803,000	492,596,000
Facility Fees	8,050,000	5,550,000	4,450,000	3,950,000	3,450,000	25,450,000
User Fees and Program Income	2,725,000	2,750,000	2,775,000	2,775,000	2,775,000	13,800,000
Interlocal Funds	1,152,000	2,709,000	2,709,000	2,709,000	2,709,000	11,988,000
Municipal Contributions	3,000,000	-	-	-	-	3,000,000
Interest Income	518,000	518,000	518,000	518,000	518,000	2,590,000
Appropriated Fund Balance	4,684,298	860,000	725,000	500,000	500,000	7,269,298
Total	**$ 215,572,000**	**190,095,000**	**254,478,000**	**228,451,000**	**153,438,000**	**1,042,034,000**

Operating Impacts from Capital Investments

When the city opens a new facility, it generally takes on additional operating costs to run the facility. This can include new staffing, utilities, maintenance, and other recurring costs. New business systems can also add such recurring costs as annual licensing and maintenance contracts. During the budget process, staff review and analyze operating needs related to new facilities and business systems. Approved costs are added to the city's operating budget. There may also be one-time costs related to opening a new facility not covered in the project budget; these are funded with nonrecurring revenue sources in the city's General Fund.

The city's FY2016 General Fund budget will include roughly $3.2 million in additional operating costs, including 19 positions, to open new facilities. The table below lists the operating impacts related to individual capital projects. In future years, there will be additional operating costs operate such facilities as Raleigh Union Station and expanded parks facilities.

This table reflects only forecasted operating impacts in the General Fund for approved, funded projects.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
General Public Improvements					
Central Operations	643,843	441,862	441,862	441,862	441,862
Central Communications	1,244,156	1,244,156	1,244,156	1,244,156	1,244,156
Technology					
Cityworks	75,000	75,000	75,000	75,000	75,000
Budget and Planning System	104,000	54,000	54,000	54,000	54,000
Traffic Management Fiber System	141,396	141,396	141,396	141,396	141,396
Fiber Institutional Network	134,500	134,500	134,500	134,500	134,500
Computer Aided Dispatch (CAD)	-	80,100	66,238	66,238	66,238
Parks, Recreation and Cultural Resources					
Abbotts Creek (2007 bond)	840,490	647,490	647,490	647,490	647,490
Crabtree Creek West	-	65,000	65,000	65,000	65,000
Playgrounds Improvements	-	70,000	70,000	70,000	70,000
Historic Site Improvements	-	-	70,000	70,000	70,000
Lineberry Neighborhood Park	-	-	55,000	55,000	55,000
Eastgate Park	-	-	-	93,000	93,000
Kiwanis Park	-	-	-	93,000	93,000
Perry Creek Rd Park	-	-	-	25,000	25,000
Walnut Creek Athletic center	-	-	-	85,000	85,000
Walnut Creek Wetlands Center	-	-	-	-	125,000
Pullen Art Center	-	-	-	-	15,000
Brentwood Park	-	-	-	-	125,000
John Chavis Memorial Park	-	-	-	-	175,000
Transportation					
Union Station	-	1,040,000	480,000	480,000	480,000
Cumulative Total	**3,183,385**	**3,993,504**	**3,544,642**	**3,840,642**	**4,280,642**

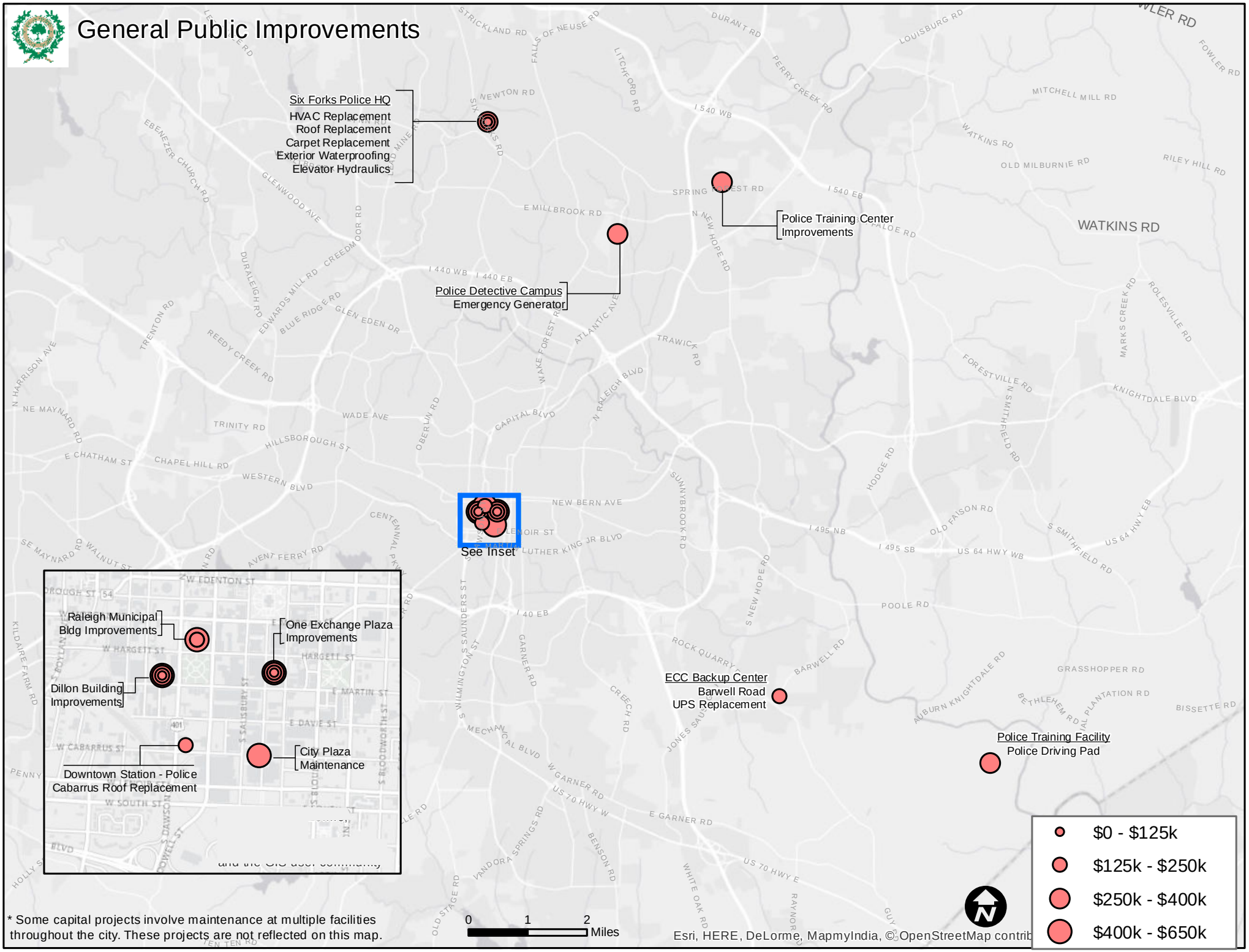
There are some future capital investments for which staff have not yet estimated operating impacts. During FY16, staff will continue analyzing operating needs for such projects as the new land management system, Moore Square, and future Dorothea Dix property development.

Horizon Issues

The Proposed CIP funds the city's priority needs. Staff reviewed and analyzed the business cases supporting these projects and considers them ready to move forward. In many situations, however, the city has identified a future need, but has not yet completed an analysis, considered options, or designed a specific facility. These needs include a variety of projects, such as new buildings, building rehabilitations, software systems, and other infrastructure needed in the future, often beyond the CIP's five-year timeframe. Below is a list of major needs staff will discuss and evaluate in the coming year and beyond:

- The city has reached an agreement with the State of North Carolina for the acquisition of the Dorothea Dix property. In addition to the $52 million acquisition cost, there will be significant costs for building demolition, environmental remediation, and operating needs. In the future, developing the property may involve a wide range of recreational and cultural services.
- During FY2015, City staff have explored new strategies and improvements to downtown city facilities. These strategies would locate city functions in fewer buildings, better serve customers, and coordinate the use of downtown assets with economic development goals. To advance this proposal, the CIP includes $800,000 in FY16 for additional consulting assistance.
- The city will continue assessing the costs and benefits of developing an institutional fiber network. This network could give the city greater data bandwidth, more consistent connectivity, and more control over long-term costs. In FY2016, the city will implement a small-scale option using existing project resources, connecting such critical service facilities as the Central Communications and Central Operations facilities, Lake Woodard Public Utilities Operations Center, and Raleigh Municipal Building. As the fiber market place changes in the Triangle region, staff will continue evaluating the potential benefits of expanding this network to other city facilities.
- To continue the city's transit improvements, staff are analyzing the need for future transit facilities. These may include transit centers along the New Bern Road and Capital Boulevard corridors, as well as southwest Raleigh. All new options and plans will be considered in the context of the Wake County Transit Strategy.
- With surging downtown development, demand for parking has increased. It is a city priority to maintain a sufficient parking supply that accommodates the needs of business, downtown residents, and downtown events. The CIP includes $200,000 in FY16 to study the city's current parking inventory, future space obligations, and recommend new deck locations and capacities.
- Staff has begun identifying projects that could be included in a future transportation bond referendum. These projects would include additional road widenings, streetscapes, traffic management, and other needs. As with the 2013 transportation bond, additional funding could be included to provide city matches for State-funded highway, bridge, and other infrastructure projects.
- To ensure our public safety staff are proficient and operate safely, the city's Fire and Police departments invest heavily in training. The police training facility, located on Spring Forest Road, is not large enough to accommodate the training needs of law enforcement officers. The fire training facility, located south of downtown, off Wilmington Street, is aging and does not include a driving pad. The CIP includes $150,000 in FY16 to fund consulting services to help identify needs, assess options, and develop a long-term plan to address public safety training facilities.

General Public Improvements



* Some capital projects involve maintenance at multiple facilities throughout the city. These projects are not reflected on this map.

General Public Improvements

Funded Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
General Government Facility Maintenance	980,000	2,170,000	738,000	925,000	300,000	5,113,000
Public Safety Facility Maintenance	2,120,000	2,200,000	2,257,000	2,165,000	1,605,000	10,347,000
New Facilities	950,000	-	-	-	-	950,000
Economic Development	50,000	50,000	50,000	50,000	50,000	250,000
Reserve for Future Projects	-	180,000	1,555,000	1,460,000	2,645,000	5,840,000
Total General Public Improvements	**$ 4,100,000**	**4,600,000**	**4,600,000**	**4,600,000**	**4,600,000**	**22,500,000**

Revenue Sources	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Transfers from General Fund	4,000,000	4,500,000	4,500,000	4,500,000	4,500,000	22,000,000
Interest Income	100,000	100,000	100,000	100,000	100,000	500,000
Total Revenue Sources	**$ 4,100,000**	**4,600,000**	**4,600,000**	**4,600,000**	**4,600,000**	**22,500,000**

Element Overview

The City of Raleigh's General Public Improvement element focuses on maintaining the city's general government and public safety facilities. This element also funds new facilities, selected economic development projects, and other projects funded with general tax revenues.

General government facility projects address capital maintenance at the Raleigh Municipal Building, One Exchange Plaza, and Dillon Building. Public safety facility maintenance projects focus on police, fire and emergency communications facilities and infrastructure. The scope of all these projects includes life safety improvements, mechanical system replacements, structural repairs, and office space renovations. Economic development projects assist small businesses and visitors to our growing downtown. This element also funds new facilities, such as new fire stations, and funds planning studies for future city needs.

Recent Accomplishments

- Completion of pump ejector project at Police Headquarters on Six Forks Rd.
- Completion of glass replacement on pedestrian bridge at Municipal Building.
- Completion of cooling tower replacement at One Exchange Plaza.
- Conducted a review for Fire Stations 2 and 5 of the site and building components in need of repair or renovations, developed the scope of work, and commenced design services.
- Construction of the Northeast Remote Operations Facility has been completed.

Work Plan Highlights

- Renovations of Fire Stations 2 and 5 will include asbestos and lead abatement, selective demolition, structural repairs, site enhancements, and building system and material replacement or repair.
- Design services for Fire Stations 10 and 15 will include the development of a scope of work and construction documents (plans, specifications, permits).
- Inclusion of emergency and backup generators in FY16 and FY17 for various locations is directly linked as a priority in the city's Energy Assurance Plan.
- Construction of the Central Communications Center is underway. The facility will host the city's emergency communications (911 dispatch), emergency operations center, traffic operations center, and technology infrastructure.

Operating Impacts

- Projected 5.2% decrease in kWh Consumption for One Exchange Plaza, 310 W. Martin Street, and 222 W. Hargett Street Buildings due to equipment change outs and upgrades.
- The FY16 operating cost for the opening of the Central Operations facility is $596,000, including nine positions for Facilities and Operations and Vehicle Fleet Services.
- The operating cost associated with the opening of the Central Communications Center in FY16 is $1,244,000 and includes utility costs and five operations and maintenance positions.

Horizon Items

- During FY2015 city staff began exploring new strategies and improvements to downtown city facilities. Staff will continue to evaluate options to consolidate city functions in fewer buildings, pursue economic development goals, and coordinate the use of downtown assets with City Council's strategic plans. The CIP includes $800,000 in FY16 for consulting assistance.
- Evaluate the condition of existing training facilities and the need for renovations or new facilities in the future.
- Evaluating emergency backup generators current inventory vs. needs in order to maintain and enhance energy assurance for all facilities.
- Continue to combine space configuration and security services opportunities for enhancement.

General Government Facility Maintenance

This category of projects funds major capital needs at the city's general government facilities in downtown—Raleigh Municipal Building (RMB), One Exchange Plaza (OEP), and the Dillon Building. City staff analyzes, audits, and assesses facilities on a periodic schedule. Then staff identifies necessary building repairs, replacement of mechanical, electrical, and plumbing (MEP) systems, and other projects that will improve life safety, prolong building lifespan, and make facilities more adaptable for staff.

General Government Facility Maintenance	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
One Exchange Plaza						
Tenant Aesthetic Improvements	-	-	163,000	-	-	163,000
Generator	-	-	200,000	-	-	200,000
Light System Controls	-	-	125,000	-	-	125,000
HVAC Air Distribution	-	-	-	650,000	-	650,000
Freight Elevator	80,000	220,000	-	-	-	300,000
Raleigh Municipal Building					-	
Restroom Lifecycle	-	475,000	-	-	-	475,000
Caulking and Packaging	-	250,000	-	-	-	250,000
Lighting Control System	-	175,000	-	-	-	175,000
Dillon Building					-	
Elevator Repair	300,000	-	-	-	-	300,000
Electrical Panel	-	-	50,000	-	-	50,000
Generator	-	500,000	-	-	-	500,000
Sprinkler Replacement	-	-	-	200,000	-	200,000
City Plaza Maintenance	300,000	-	200,000	-	-	500,000
Northeast Remote Operations Shelters	-	525,000	-	-	-	525,000
Downtown Facilities Interior Upgrades	-	-	-	-	300,000	300,000
Emergency Generators	300,000	-	-	-	-	300,000
Solar LED Batteries Replacement	-	25,000	-	75,000	-	100,000
Subtotal	**$ 980,000**	**2,170,000**	**738,000**	**925,000**	**300,000**	**5,113,000**

Highlighted Projects

RMB Restroom Lifecycle: $475,000

Scope of work includes removal of existing toilet partitions in bathrooms throughout the city and replacement with new partitions, inclusive of all fasteners, brackets and other hardware needed to guarantee institutional grade. In addition, this project includes removal and installation of new low flow fixtures throughout the building.

RMB Caulking and Packing: $250,000

Scope of works includes caulking and sealing the 222 West Hargett Street building's envelope to prevent air infiltration through cracks and holes in the walls, ceiling, and floor, also often referred to as air infiltration. Caulking and sealing is also one of the simplest energy-efficiency measures to install and it prevents water intrusion thus reducing mold issues and damage to the facility.

OEP HVAC Ducts and Air Distribution: $650,000

Scope of work includes mechanical system replacement and rerouting or replacement of the variable air controllers, and installation of building automation system controls. These electronic devices monitor and control the mechanical and lighting systems in a building. A well-maintained and correctly installed duct system is crucial to successful HVAC system operation and maintenance of a facility's ideal temperature. Parts are obsolete for these components.

Public Safety Facility Maintenance

This category of projects addresses maintenance and improvements in the city's public safety facilities including fire stations, police and emergency communication facilities. These projects keep the facilities safe for employees, extend the useful life of the assets, and improve their operating efficiency. All public safety departments work with the Facilities and Operations Division and Construction Management to identify and prioritize these projects.

Public Safety Facility Maintenance	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Police Headquarters						
Carpet Replacement	-	90,000	-	-	-	90,000
Roof Replacement	115,000	-	-	-	-	115,000
HVAC Replacement	-	25,000	225,000	-	-	250,000
Exterior Waterproofing	-	-	-	310,000	-	310,000
Elevator Hydraulics	-	-	-	250,000	-	250,000
Police Training Center Improvements	300,000	-	-	-	-	300,000
Police Driving Pad Resurfacing	400,000	-	-	-	-	400,000
Police Detective Campus Generator	-	335,000	-	-	-	335,000
Police Downtown Station Roof Replacement	-	-	250,000	-	-	250,000
Fire Stations					-	
Deferred Maintenance Program	1,000,000	1,300,000	1,300,000	1,300,000	1,300,000	6,200,000
Lead Paint & Asbestos	100,000	100,000	100,000	100,000	100,000	500,000
Workspace Improvements	205,000	205,000	205,000	205,000	205,000	1,025,000
Fire Stockroom HVAC	-	145,000	-	-	-	145,000
Barwell Rd-UPS Replacement	-	-	177,000	-	-	177,000
Subtotal	**$ 2,120,000**	**$ 2,200,000**	**$ 2,257,000**	**$ 2,165,000**	**$ 1,605,000**	**10,347,000**

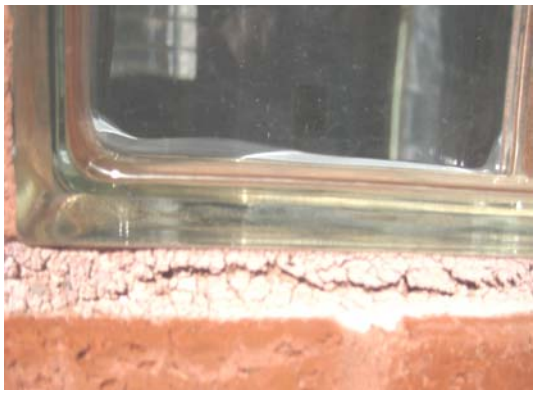
Highlighted Projects

Fire Station Lead Paint and Asbestos: $500,000

Scope of work includes aligning removal of asbestos containing material (ACM) and lead abatement present at fire station facilities with the proposed plan for fire station renovations and replacements over the next ten years.

Police Training Center Improvements: $300,000

Scope of work includes maintenance and improvements including: roof repairs to address insulation failure, rusting and replacing glass block with low E-safety glass; Replace boiler room door and casing and replace fire panels; Exhaust system and fixture upgrades to accommodate increased usage at restrooms; Replace all lighting fixtures to more efficient ones in restrooms and front foyer; Pressure wash facility, paint all exterior steel and ceilings, and address all deteriorating window glazing.



Police Cabarrus Station Roof: $250,000

Scope of work includes replacement of the roof and asbestos removal at Police evidence building located at 218 W. Cabarrus Street. The roof is in poor condition which could lead to roof leakages causing damage to interior infrastructure such as office areas and evidence portions of the building.

Police Six Forks HVAC Replacement: $250,000

Scope of work includes the replacement of three HVAC units that have high efficiency with combination gas heat and air conditioning. All three units will be 28 years old in 2018 and will have reached the end of their life expectancy.

Police Six Forks Elevator Hydraulics and Air Conditioning: $250,000

Rehabilitation of the existing hydraulic passenger elevators to include replacement of hydraulic pump unit system complete with electric motor, hydraulic pump, oil tank, control valve, and hydraulic line and oil. Installation of hoist way vent to conform to code requirements and provide air conditioning to maintain temperature and humidity in the elevator room.

Police Atlantic Avenue Generator: $335,000

Scope of work includes installation of an emergency back-up generator for critical police hub for all service areas. If this is cancelled or delayed the ability to assist during power outage situations and the ability to work during critical weather events will be impacted negatively.

Police Driving Pad Resurfacing: $400,000

The police driver's training pad was built in 1999 and is constructed of asphalt which has a life expectancy of approximately 15 years. The driver's training pad is experiencing significant wear in multiple locations including "alligator cracking" which is evidence that the asphalt has reached the end of its life expectancy. This project will repave the 360,000 square feet (8.26 acres) driving pad located on Battle Bridge Rd.

Other General Public Improvements Categories

New Facilities	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Public Safety Training Needs Planning	150,000	-	-	-	-	150,000
Downtown Facility Planning	800,000	-	-	-	-	800,000
Subtotal	**$ 950,000**	**-**	**-**	**-**	**-**	**950,000**

Economic Development	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Façade Improvements	50,000	50,000	50,000	50,000	50,000	250,000
Subtotal	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**250,000**

Highlighted Projects

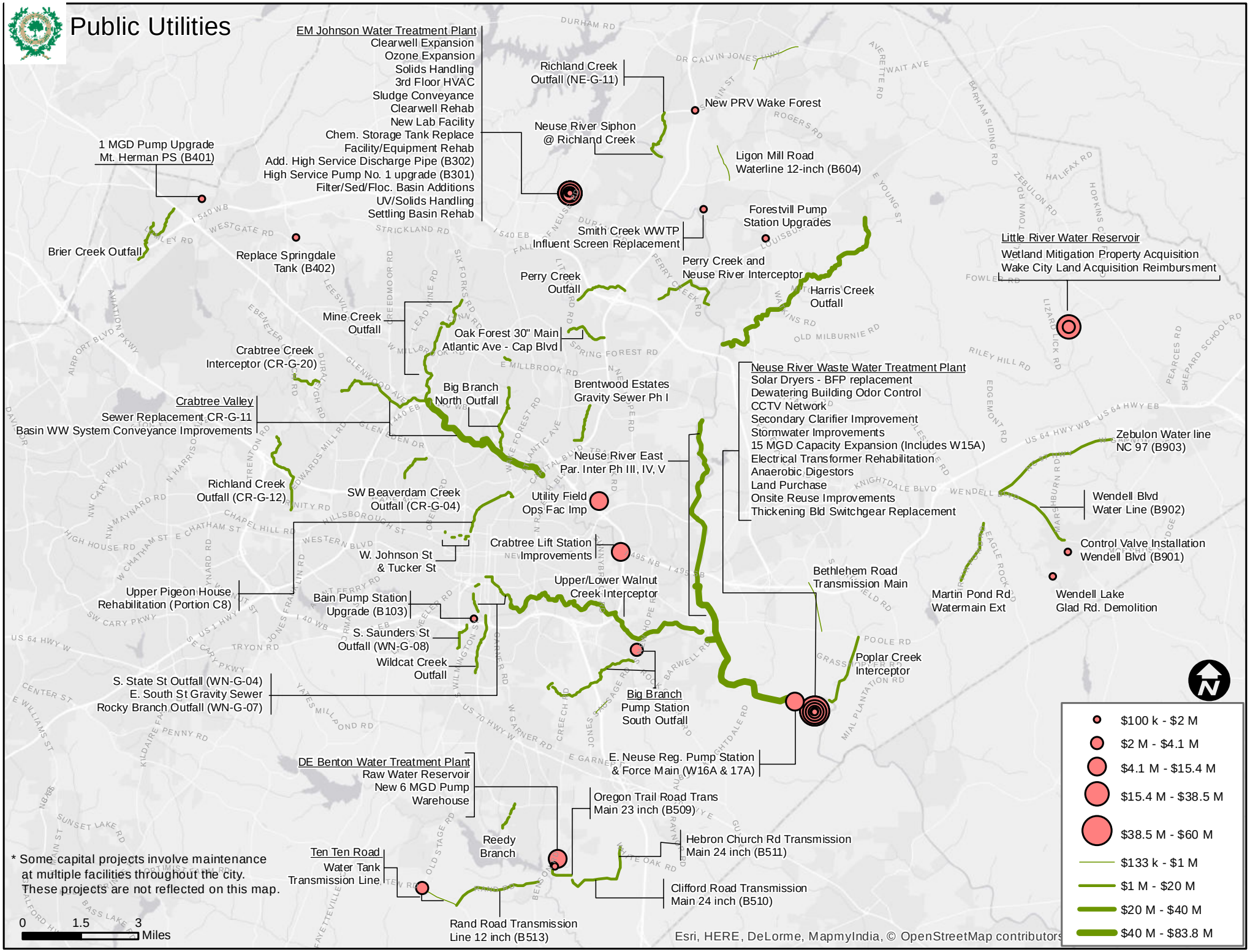
Downtown Facility Planning: $800,000

City staff are exploring new strategies and improvements to downtown city facilities. These strategies would consolidate city functions in fewer buildings, improve service to citizens and businesses, and coordinate the use of downtown assets with the city's economic development goals. To advance this proposal, the CIP includes $800,000 in FY16 for programming and consulting assistance.

Façade Grants Program: $250,000

This program helps small businesses rehabilitate older commercial properties with matching cash grants for exterior improvements. Improvements must comply with design standards specific to Pedestrian Business Overlay Districts (PBOD) streetscape plans and the Downtown Element of 2030 Comprehensive Plan. Standard grant awards are for $5,000. The city awards up to 10 grants per year.

Public Utilities



Public Utilities

Funded Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Asset Management	17,255,000	28,207,000	34,362,000	25,212,000	37,442,000	142,478,000	199,986,000	342,464,000
Interceptors	50,252,000	11,301,000	67,599,000	129,824,000	24,400,000	283,376,000	180,603,000	463,979,000
NRWWTP Expansion	7,400,000	-	54,300,000	-	-	61,700,000	26,200,000	87,900,000
Wastewater Pump Stations	15,800,000	29,000,000	1,000,000	1,000,000	1,000,000	47,800,000	5,000,000	52,800,000
Reuse System	-	3,000,000	3,000,000	3,000,000	3,000,000	12,000,000	15,000,000	27,000,000
WWTP Maintenance	5,300,000	7,550,000	200,000	200,000	200,000	13,450,000	1,000,000	14,450,000
Water Main Expansions	5,417,000	4,341,000	4,386,000	685,000	4,978,000	19,807,000	32,236,000	52,043,000
Water Pump Stations	-	740,000	1,243,000	2,236,000	400,000	4,619,000	6,200,000	10,819,000
EMJWTP Expansion	-	-	-	-	-	-	156,400,000	156,400,000
Little River Projects	500,000	3,000,000	3,000,000	3,000,000	3,000,000	12,500,000	30,900,000	43,400,000
Water Tank Upgrades	2,600,000	900,000	900,000	900,000	900,000	6,200,000	15,100,000	21,300,000
WTP Maintenance	5,900,000	11,250,000	1,950,000	3,000,000	10,750,000	32,850,000	11,750,000	44,600,000
Misc Water and Wastewater	4,350,000	5,415,000	2,250,000	3,800,000	2,300,000	18,115,000	7,700,000	25,815,000
Capital Equipment	5,700,000	4,700,000	5,700,000	4,700,000	4,000,000	24,800,000	20,000,000	44,800,000
Watershed Initiatives	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	7,500,000	11,250,000	18,750,000
Total Public Utilities Capital	**$ 121,974,000**	**110,904,000**	**181,390,000**	**179,057,000**	**93,870,000**	**687,195,000**	**719,325,000**	**1,406,520,000**

Revenue Sources	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Transfer-Public Utilities (water)	19,520,000	30,570,000	21,570,000	19,720,000	19,350,000	110,730,000	106,516,000	217,246,000
Watershed Projection Fees	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	7,500,000	11,250,000	18,750,000
Transfer-Public Utilities (wastewater)	58,735,000	24,797,000	33,842,000	44,842,000	48,442,000	210,658,000	164,420,000	375,078,000
Bond Proceeds (water)	9,667,000	6,981,000	6,829,000	6,921,000	17,378,000	47,776,000	239,336,000	287,112,000
Bond Proceeds (wastewater)	32,052,000	47,056,000	117,649,000	106,074,000	7,200,000	310,031,000	197,803,000	507,834,000
Appropriated Fund Balance	500,000	-	-	-	-	500,000	-	500,000
Total Revenues	**$ 121,974,000**	**110,904,000**	**181,390,000**	**179,057,000**	**93,870,000**	**687,195,000**	**719,325,000**	**1,406,520,000**

Element Overview

The city's public utilities system treats and distributes drinking water, collects and treats wastewater, distributes reuse water and protects watersheds in Raleigh, Garner, Rolesville, Wake Forest, Knightdale, Wendell and Zebulon. Public utilities capital projects are fully funded by revenues received from rates and fees for service, and from fees associated with new development. Funding for projects consists primarily of revenue bonds, paygo (cash-funded), and State Revolving Fund loans from the North Carolina Department of Environment and Natural Resources. The utility system plans to invest well over $1 billion in capital needs over the next 10 years, including $122 million in FY16.

This element includes projects for:

- Treatment and distribution of the city's drinking water supply
- Collection and treatment of wastewater
- Maintenance projects involving the rehabilitation or replacement of aging water distribution system, sewer collection system, and water and wastewater treatment infrastructure
- Construction and maintenance of elevated water storage tanks and pump stations
- Building projects for operations
- Developing future water supply
- Delivery of reuse water that has been processed by the wastewater treatment plant

Recent Accomplishments

The Public Utilities Department completed several important projects during FY15 including:

- Expansion of the Little Creek WWTP in Zebulon from 1.8 Million Gallons per Day (MGD) to 2.2 MGD
- Sanitary Sewer Capacity Study Update
- Marsh Creek Sanitary Sewer Improvements
- Knightdale Mango Creek Sanitary Sewer Improvements
- Water Distribution System Master Plan Update
- Reuse System Master Plan Update
- DEBWTP Backwash Waste Recycle Facility project
- Replaced over 40,000 linear feet of water main
- Replaced over 30,000 linear feet of sanitary sewer main

Work Plan Highlights

Notable projects that are a continuation of the FY15 capital plan include:

- Construction of the Crabtree Pipeline project (formerly Crabtree Basin Wastewater System Conveyance Improvement Project Phase II)
- Construction of the Wake Forest Richland and Smith Creek Interceptor Improvements
- Continue construction of the NRWWTP Expansion to 75 MGD Phase III and design and bidding of Phase IV

Notable projects added or modified as part of the FY16 Budget include:

- 18 new projects, totaling nearly $167M, in sewer interceptor upgrades to address recommendations made by the sewer capacity master plan.
- 48 inch water transmission main between Highway 70 and Hodge Road, costing approximately $27M, as recommended by the 2015 water master plan.
- Additional funds for a Raw Water Reservoir at DEBWTP and the Plate Settler Pilot at EMJTWP.
- The increased Watershed Protection Fee provides resources for additional outreach and watershed initiatives.

Horizon Items

- Major initiatives for the public utilities system over the next three to seven years revolve around infrastructure stability, regulatory compliance, completion of the merger capital improvements and planning for growth.
- Future infrastructure stability projects include the replacement of water and sanitary sewer mains and the rehabilitation of plants, pump stations, and elevated storage tanks.
- Compliance related projects comprise a large portion of the CIP and include such projects as the Crabtree Creek Wastewater System Conveyance Improvement, East Neuse Regional Pump Station and Interceptor System, Upper Pigeon House Sanitary Sewer Improvements and Lower Walnut Creek Wastewater System Improvements.
- The utility system is in the final stages of all capital projects related to the mergers with surrounding towns. Notable projects that remain to be completed include: Wake Forest Richland and Smith Creek Parallel Interceptors and Zebulon Beaverdam Creek Interceptor Improvements.

Abbreviations Used in the Public Utilities Project Descriptions

DEBWTP – Dempsey E. Benton Water Treatment Plant

LCWWTP – Little Creek Wastewater Treatment Plant

SCWWTP – Smith Creek Wastewater Treatment Plant

EMJWTP – E.M. Johnson Water Treatment Plant

NRWWTP – Neuse River Wastewater Treatment Plant

Asset Management

This category funds the City's recently developed Asset Management Plan (AMP), which is a sustainable and continuous infrastructure replacement prioritization plan. The AMP was completed in August 2013, and the recommendations for condition assessment as well as infrastructure replacement and rehabilitation have been incorporated in the CIP. The AMP developed a risk-based prioritization process to answer "how much" replacement rehabilitation is required to meet current and anticipated future rates of infrastructure replacement to mitigate risks of failure.

Asset Management	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Gravity Sewer Replacement	-	7,000,000	12,000,000	4,000,000	12,850,000	35,850,000	67,140,000	102,990,000
Water Main Replacement	1,800,000	3,100,000	3,700,000	4,000,000	6,100,000	18,700,000	31,266,000	49,966,000
Data Management Program	-	350,000	100,000	-	-	450,000	-	450,000
FCA and HPPR Assessment	-	-	-	-	-	-	9,000,000	9,000,000
Force Main Condition Assessment	430,000	182,000	182,000	182,000	-	976,000	-	976,000
Force Main FCA/HPPR Assessment	-	-	-	-	282,000	282,000	1,410,000	1,692,000
Force Main Replacement/Rehab	-	1,590,000	1,600,000	1,610,000	1,610,000	6,410,000	8,170,000	14,580,000
Gravity Sewer Condition Assessment	1,105,000	1,105,000	-	-	-	2,210,000	-	2,210,000
Gravity Sewer FCA/HPPR Assessment	-	-	-	-	2,100,000	2,100,000	10,500,000	12,600,000
Highest Priority Action Aerial Projects	-	1,360,000	1,360,000	-	-	2,720,000	-	2,720,000
Highest Priority Action Projects	920,000	920,000	920,000	920,000	-	3,680,000	-	3,680,000
Main Replacement	12,000,000	12,000,000	14,000,000	14,000,000	14,000,000	66,000,000	70,000,000	136,000,000
Pump Station/ARC Flash Assessment	-	100,000	-	-	-	100,000	-	100,000
Thoroughfare Mains	1,000,000	500,000	500,000	500,000	500,000	3,000,000	2,500,000	5,500,000
Subtotal	**$ 17,255,000**	**28,207,000**	**34,362,000**	**25,212,000**	**37,442,000**	**142,478,000**	**199,986,000**	**342,464,000**

Highlighted Projects

Main Replacement: $136,000,000 (10 year total)

A significant portion of the water distribution and sewer collection system in the City's service area is over 50 years old. Based on industry standards, 1-2% of the City's system should be replaced each year. A gradual increase in expenditures is expected to keep up with the needs of the Raleigh's service area.

Gravity Sewer Replacement: $102,990,000 (10 year total)

This project funds additional replacement of high priority, poor condition gravity sewer mains to meet the replacement targets projected in the asset management plan. That plan projected long term replacement needs for our system due to the expected service lives of the current stock of pipe comprising our sewer system. Based on that analysis, this project will fund increased replacement above and beyond the Main Replacement budget line of Gravity Sewer mains to keep pace with our expected rate of failure. This project is funded by the sanitary sewer infrastructure replacement fee.

Asset Management Water Main Replacement and Rehabilitation: $49,966,000 (10 year total)

This project funds additional replacement of high priority, poor condition water mains to meet the replacement targets projected in the asset management plan developed in 2013. That plan projected long-term replacement needs for our system due to the expected service lives of the current stock of pipe comprising our sewer system. Based on that analysis, this project will fund increased replacement above and beyond the Main Replacement budget line of water mains to keep pace with our expected rate of failure. This project is funded by the water infrastructure replacement fee.

Sewer Interceptor Upgrades

The 34 projects represented in the Sewer Interceptor Upgrade category are the result of the 2014 Sewer System Capacity Study. The projects outlined in the study address wet weather flow capacity within the sanitary sewer collection system. During wet weather events a small percentage of rainfall unintentionally enters into the sanitary sewer system. Wet weather flows can drastically decrease the functionality of the sanitary sewer system causing the system to surcharge and ultimately overflow. The U.S. Environmental Protection Administration and NCDENR have lowered the tolerances for these wet weather overflows for utilities across the nation, making it necessary to expand the capacity of the system.

Interceptors	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
30/42 Richland Creek Outfall	-	-	-	596,000	-	596,000	4,852,000	5,448,000
72-inch Interceptor Rehabilitation	1,000,000	1,500,000	-	15,000,000	-	17,500,000	-	17,500,000
Big Branch Interceptor Parallel	-	-	-	1,400,000	-	1,400,000	11,200,000	12,600,000
Big Branch South Parallel	-	-	-	-	-	-	15,142,000	15,142,000
Brentwood Estates Gravity Sewer	584,000	-	4,384,000	-	-	4,968,000	-	4,968,000
Brier Creek Outfall/Parellel	-	-	-	-	-	-	12,162,000	12,162,000
Crabtree Basin WWS Conveyance	7,500,000	-	-	-	-	7,500,000	-	7,500,000
Crabtree Creek Interceptor	-	-	-	-	-	-	4,692,000	4,692,000
Crabtree Valley Sewer Replacement	1,200,000	-	19,600,000	-	-	20,800,000	-	20,800,000
E. South St. Gravity Sewer	-	-	-	-	312,000	312,000	2,464,000	2,776,000
Harris Creek Interceptor Parallel	-	-	-	-	-	-	28,000,000	28,000,000
Lower Walnut Creek Parallel	26,000,000	-	22,000,000	-	-	48,000,000	-	48,000,000
Mine Creek Outfall East	-	-	-	512,000	-	512,000	3,926,000	4,438,000
Mine Creek Outfall Parallel	-	-	435,000	870,000	-	1,305,000	10,206,000	11,511,000
Neuse River East Parallel Phase III	-	3,500,000	5,000,000	75,300,000	-	83,800,000	-	83,800,000
Neuse River East Parallel Phase IV	-	1,500,000	3,000,000	-	15,700,000	20,200,000	24,000,000	44,200,000
Neuse River East Parallel Phase V	-	-	-	-	-	-	34,000,000	34,000,000
Neuse River Siphon at Richland Creek	-	-	350,000	-	2,762,000	3,112,000	-	3,112,000
Perry Creek Outfall	-	964,000	-	8,080,000	-	9,044,000	-	9,044,000
Perry Creek/Neuse River Parallel	-	421,000	842,000	10,200,000	-	11,463,000	-	11,463,000
Poplar Creek Interceptor	-	-	6,000,000	-	-	6,000,000	-	6,000,000
Reedy Branch	-	-	-	-	332,000	332,000	2,518,000	2,850,000
Richland Creek Outfall	-	-	-	-	-	-	11,269,000	11,269,000
Rocky Branch Outfall Parallel	-	-	-	462,000	-	462,000	4,168,000	4,630,000
S. Saunders St. Outfall	668,000	-	5,988,000	-	-	6,656,000	-	6,656,000
S. State St. Outfall Replacement	-	-	-	-	-	-	2,604,000	2,604,000
Southeast Beaver Dam	-	-	-	-	794,000	794,000	6,000,000	6,794,000
Southwest Beaver Creek Parallel	-	-	-	-	-	-	3,400,000	3,400,000
Turkey Creek Outfall	-	142,000	-	1,122,000	-	1,264,000	-	1,264,000
Upper Pigeon House Rehabilitation	7,600,000	1,500,000	-	-	4,500,000	13,600,000	-	13,600,000
W. Johnson & Tucker St. Repl.	-	312,000	-	2,904,000	-	3,216,000	-	3,216,000
Wildcat Branch Interceptor Parallel	-	1,462,000	-	13,378,000	-	14,840,000	-	14,840,000
Zebulon Beaver Dam (Merger)	5,700,000	-	-	-	-	5,700,000	-	5,700,000
Subtotal	**$ 50,252,000**	**11,301,000**	**67,599,000**	**129,824,000**	**24,400,000**	**283,376,000**	**180,603,000**	**463,979,000**

Highlighted Projects

Neuse River East Parallel Interceptor Phase III & IV: $128,000,000 (10 year total)

This project is the backbone to Raleigh's long range sanitary sewer collection system to address current and projected wet weather flow and growth. Improvements include approximately 28,000 linear feet of 96" & 84" diameter sanitary sewer from the proposed East Neuse Regional Pump Station to Anderson Point Park at the confluence of Crabtree Creek and the Neuse River.

Crabtree Valley Sewer Replacement: $20,800,000 (10 year total)

Replace 8,500 linear feet (LF) of 30” sanitary sewer main with a 54/60” sanitary sewer main from Glenwood Avenue to just downstream of Lindsay Drive along Crabtree Creek. The project will not only replace an existing pipeline that is in poor condition but will also address wet weather flow capacity restrictions.

Lower Walnut Creek: $48,000,000 (10 year total)

Replace 33,000 LF of 42” and 54” sanitary sewer main with a 66” and 72” sanitary sewer main from Barwell Rd. to just downstream of State St. along Walnut Creek. The project will not only replace an existing pipeline that is in poor condition, but will also address wet weather flow capacity restrictions.

Neuse River Wastewater Treatment Plant Expansion

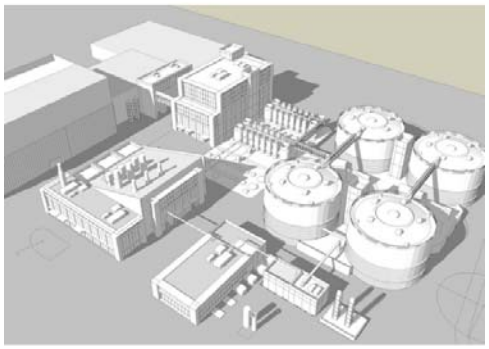
This category includes the construction of additional waste treatment facilities at the NRWWTP that will increase the hydraulic treatment capacity of the facility from 60 to 75 MGD. The project section also includes the construction of anaerobic digesters at the NRWWTP to provide a fuel source (methane gas) for generating electricity while simultaneously digesting sludge.

NRWWTP Expansion	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
15 MGD Capacity Expansion	7,000,000	-	-	-	-	7,000,000	-	7,000,000
Anaerobic Digesters	-	-	54,300,000	-	-	54,300,000	-	54,300,000
Solar Dryers	-	-	-	-	-	-	26,200,000	26,200,000
Plant Master Plan	400,000	-	-	-	-	400,000	-	400,000
Subtotal	**$ 7,400,000**	**-**	**54,300,000**	**-**	**-**	**61,700,000**	**26,200,000**	**87,900,000**

Highlighted Project

NRWWTP Anaerobic Digesters: $54,300,000 (10 year total)

Project includes construction of anaerobic digesters at the NRWWTP including: predewatering facilities, sludge screening, thermal hydrolysis and cogeneration of heat and power.



Wastewater Pump Stations

The CIP funding requested for wastewater pump stations includes the construction, rehabilitation, replacement or removal of sanitary sewer pump station facilities.

Wastewater Pump Stations	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Big Branch Pump Station	-	4,000,000	-	-	-	4,000,000	-	4,000,000
Crabtree Lift Station Improvements	8,000,000	-	-	-	-	8,000,000	-	8,000,000
East Neuse Regional Pump Station & Force Main	1,800,000	24,000,000	-	-	-	25,800,000	-	25,800,000
Removal/Rehab/Replacement	2,000,000	1,000,000	1,000,000	1,000,000	1,000,000	6,000,000	5,000,000	11,000,000
Walnut Creek Lift Station	4,000,000	-	-	-	-	4,000,000	-	4,000,000
Subtotal	**$ 15,800,000**	**29,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**47,800,000**	**5,000,000**	**52,800,000**

Highlighted Project

Crabtree Lift Station Improvements: $8,000,000

Project includes the replacement of existing screw lift pumps with pumps that can provide more capacity to the existing lift station. Project also includes the rehabilitation of existing concrete that is severely deteriorated. This capacity increase allowed for the removal of phase III of the Crabtree Basin Wastewater System Conveyance Improvements project.

Reuse System

The City is currently updating the 2007 Reuse Master Plan. Since adoption, the City has constructed more than 18 miles of reuse pipeline and one elevated 750,000 gallon storage tank. Now entering its second phase, the Reuse Master Plan Update focuses on constructing an efficient, effective reuse system. This category funds onsite and offsite reuse projects.

Reuse System	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Neuse River Off-site Reuse Expansion	-	2,000,000	2,000,000	2,000,000	2,000,000	8,000,000	10,000,000	18,000,000
NRWWTP Onsite Improvements	-	1,000,000	1,000,000	1,000,000	1,000,000	4,000,000	5,000,000	9,000,000
Subtotal	**$ -**	**3,000,000**	**3,000,000**	**3,000,000**	**3,000,000**	**12,000,000**	**15,000,000**	**27,000,000**

Neuse River Wastewater Treatment Plant Maintenance

Projects in this category fund the rehabilitation and replacement of major equipment and associated facilities at all three wastewater treatment plants. These projects improve the plants to continue reliable daily system operations.

WWTP Maintenance	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
CCTV network	-	2,000,000	-	-	-	2,000,000	-	2,000,000
Dewatering Building odor control	1,800,000	-	-	-	-	1,800,000	-	1,800,000
Electrical Transformer Rehabilitation	300,000	-	-	-	-	300,000	-	300,000
Lab Renovation	1,900,000	-	-	-	-	1,900,000	-	1,900,000
Land Purchase	200,000	200,000	200,000	200,000	200,000	1,000,000	1,000,000	2,000,000
Secondary Clarifier Improvements	400,000	3,600,000	-	-	-	4,000,000	-	4,000,000
Stormwater Improvements	-	1,000,000	-	-	-	1,000,000	-	1,000,000
Thickening Building Switchgear	300,000	-	-	-	-	300,000	-	300,000
Odor and Corrosion Master Plan	400,000	-	-	-	-	400,000	-	400,000
SCWWTP Influent Screen	-	750,000	-	-	-	750,000	-	750,000
Subtotal	**$ 5,300,000**	**7,550,000**	**200,000**	**200,000**	**200,000**	**13,450,000**	**1,000,000**	**14,450,000**

Highlighted Project

Secondary Clarifier Improvements: $4,000,000 (10 year total)

This project improves existing secondary clarifier systems with corrosion-resistant coatings, weir covers to eliminate intricate weir brush system, and other improvements.

Water Main Expansions

The projects represented in the Water Main Expansion category will add water distribution main capacity to serve various growth areas in the City and merger communities. The water main expansion projects range in pipe diameter is between 12 inches to 48 inches. The water mains will be installed primarily along major thoroughfares as recommended in the 2015 Water System Master plan. In addition to capacity, some of the projects in this category will address current operational problems such as tank imbalances in the 495' elevation pressure zone.

Water Main Expansions	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
48" TM between US70 & Hodge Rd.	-	-	-	-	-	-	26,778,000	26,778,000
Bethlehem Rd TM 16" (B802)	-	-	-	-	-	-	839,000	839,000
Bilyeu St. & Main Campus Dr.	-	100,000	1,000,000	-	-	1,100,000	-	1,100,000
Clifford Rd TM 24" (B510)	-	-	-	-	-	-	1,189,000	1,189,000
Durham Rd. (Tyler Run to Wingate)	-	-	-	25,000	249,000	274,000	-	274,000
EMJWTP Discharge Pipe (B302)	-	-	-	-	-	-	619,000	619,000
Franklin Street TM 12" (B602)	133,000	-	-	-	-	133,000	-	133,000
Hebron Church Road 24" (B511)	100,000	1,140,000	-	-	-	1,240,000	-	1,240,000
Jones Sausage Rd I-40 (B512)	-	-	-	-	-	-	850,000	850,000
Ligon Mill Rd TM 12" (B604)	430,000	-	-	-	-	430,000	-	430,000
Main Campus, Trailwood Connection	451,000	-	-	-	-	451,000	-	451,000
Martin Pond Rd 24"	-	350,000	3,286,000	-	-	3,636,000	-	3,636,000
NC98 Bypass TM 12" (B603)	493,000	-	-	-	-	493,000	-	493,000
Oak Forest 30" Water Main	2,910,000	-	-	-	-	2,910,000	-	2,910,000
Oregon Trail Rd Line 24" (B509)	150,000	1,352,000	-	-	-	1,502,000	-	1,502,000
Parallel 16", NC97 to Wendell PS	-	-	-	60,000	566,000	626,000	-	626,000
Rand Road Line 12" (B513)	-	-	-	-	-	-	1,029,000	1,029,000
Service Area Growth	-	100,000	100,000	100,000	100,000	400,000	500,000	900,000
Ten Ten road Line 12" (B514)	-	-	-	-	-	-	432,000	432,000
Wendell Blvd (Cypress to Fourth St)	600,000	-	-	-	-	600,000	-	600,000
Wendell Blvd TM (B902)	150,000	1,299,000	-	-	-	1,449,000	-	1,449,000
Zebulon TM on NC97 (B903)	-	-	-	500,000	4,063,000	4,563,000	-	4,563,000
Subtotal	**$ 5,417,000**	**4,341,000**	**4,386,000**	**685,000**	**4,978,000**	**19,807,000**	**32,236,000**	**52,043,000**

Highlighted Project

Oak Forest 30” Water Main: $2,910,000 (10 year total)

Project will install approximately 6,700 linear feet of 30-inch water main from Atlantic Avenue to Capital Boulevard for the purpose of meeting additional water flow demands and balancing water levels between the New Hope and Chamberlain tanks.

Water Pump Stations

This category includes funds rehabilitation and upgrades of existing water booster pumping stations. Existing equipment at booster pump stations has reached its service life. Rehabilitation and upgrade of existing pump stations extends the service life and increase pumping capacity for future demands.

Water Pump Stations	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Bain PS Upgrade (B103)	-	-	-	-	-	-	1,190,000	1,190,000
Benton WTP Pump Upgrade	-	-	-	-	-	-	1,180,000	1,180,000
DEBWTP - New 6 MGD pump	-	60,000	600,000	-	-	660,000	-	660,000
EMJWTP PS1 Upgrade (B301)	-	-	-	-	-	-	1,180,000	1,180,000
Forestville PS Upgrade	-	-	-	-	-	-	550,000	550,000
Mt. Herman PS 1MG Upgrade	-	280,000	-	-	-	280,000	-	280,000
New PRV in Wake Forest	-	-	-	-	-	-	100,000	100,000
Pullen Park Booster Pump -disch	-	-	243,000	1,836,000	-	2,079,000	-	2,079,000
Water Booster Station Rehab	-	400,000	400,000	400,000	400,000	1,600,000	2,000,000	3,600,000
Subtotal	**$ -**	**740,000**	**1,243,000**	**2,236,000**	**400,000**	**4,619,000**	**6,200,000**	**10,819,000**

EM Johnson Water Treatment Plant Expansion

Projects in this category include phases 1, 2 and 3 of the 120 MGD EM Johnson Water Treatment Plant (EMJWTP) expansion. The initial phase of the plant expansion will incorporate new high rate filters, an additional flocculation and sedimentation basin with plate settlers, improvements to the raw water transmission lines to the plant reservoirs, various chemical improvements, and the installation of miscellaneous electrical/instrumentation/controls. Phase 1 also provides reliability and redundancy to the existing clearwell storage needs and the installation of a 4th Ozone Generator and associated Destructor. Phase 2 of the E.M. Johnson Water Treatment Plant expansion involves the addition of flocculation and sedimentation basin improvements to the existing basins and the installation of new rapid mix basins, as well as installation of new raw water yard piping, chemical injection, site electrical and instrumentation/controls. Phase 3 includes the construction of a new ultraviolet radiation disinfection facility, and improved solids handling facilities. The need for these facilities will be highly dependent upon the location and quantity of the City's next water resource.

EMJWTP Expansion	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Clearwell Expansion	-	-	-	-	-	-	21,000,000	21,000,000
Filter/Sed/Floc Basin Additions	-	-	-	-	-	-	38,500,000	38,500,000
Flocculation Basin Improvements	-	-	-	-	-	-	36,400,000	36,400,000
Ozone Expansion	-	-	-	-	-	-	24,500,000	24,500,000
UV/Solids Handling	-	-	-	-	-	-	36,000,000	36,000,000
Subtotal	**$ -**	**-**	**-**	**-**	**-**	**-**	**156,400,000**	**156,400,000**

Little River Projects

Wake County, in partnership with the City of Raleigh and the utility merger municipalities, has worked for many years to acquire the land necessary for the construction of the Little River Reservoir in Eastern Wake County. The Little River water shed is the last available water shed in Wake County that is economically feasible to develop as a reservoir. The City of Raleigh Water Supply plan identifies the Little River Reservoir as the long range source of new drinking water for the Greater Raleigh Utility Service Area. This category funds the wetland mitigation cost and wetland restoration areas. This would consist of restoring wet conditions and planting trees for mitigation sites acquired through property or conservation easement purchases. Wetland mitigation will be required as part of the permitting process for the Little River Reservoir. A monitoring program is also funded that will be used to quantify the impact of mitigation associated with the reservoir construction. Finally, Wake County managed all land acquisition, and this category funds an annual repayment of $500,000 to Wake County until the land acquisition costs are repaid. Some funds in this category could be reallocated dependent upon the direction of the City's next water supply however the City is contractually obligated to repay the land acquisition to Wake County.

Little River Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Mitigation Monitoring	-	-	-	-	-	-	300,000	300,000
Wake County Reimbursent	500,000	500,000	500,000	500,000	500,000	2,500,000	2,500,000	5,000,000
Wetland Mitigation Construction	-	-	-	-	-	-	15,600,000	15,600,000
Wetland Mitigation Land Acquisition	-	2,500,000	2,500,000	2,500,000	2,500,000	10,000,000	12,500,000	22,500,000
Subtotal	**$ 500,000**	**3,000,000**	**3,000,000**	**3,000,000**	**3,000,000**	**12,500,000**	**30,900,000**	**43,400,000**

Water Tank Upgrades

This category funds the rehabilitation and maintenance of the elevated water tanks in the water distribution system which includes regularly scheduled washouts and regular maintenance due to the age of some of the tanks. These projects fund the construction of a new 1.0 MG elevated water storage tank in the vicinity of Ten Ten Road and Old Stage Road to support increasing water demand.

Water Tank Upgrades	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Elevated Water Tank Rehabilitation	900,000	900,000	900,000	900,000	900,000	4,500,000	4,500,000	9,000,000
New 495 2 MG Elevated Water Tank	-	-	-	-	-	-	7,600,000	7,600,000
Replace the Springdale Tank	1,700,000	-	-	-	-	1,700,000	-	1,700,000
Ten Ten Road Water Tank	-	-	-	-	-	-	3,000,000	3,000,000
Subtotal	**$ 2,600,000**	**900,000**	**900,000**	**900,000**	**900,000**	**6,200,000**	**15,100,000**	**21,300,000**

Water Treatment Plant Maintenance

This category funds the rehabilitation and replacement of major equipment and associated facilities at the EM Johnson Water and DE Benton Treatment Plants that have reached their service life are needed to improve operational efficiency.

WTP Maintenance	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
DEBWTP Warehouse	500,000	-	-	-	-	500,000	-	500,000
DEBWTP Raw Water Reservoir	-	-	-	1,000,000	10,000,000	11,000,000	-	11,000,000
Clearwell Expansion	-	2,000,000	1,000,000	-	-	3,000,000	-	3,000,000
3rd Floor HVAC	-	500,000	-	-	-	500,000	-	500,000
Chemical Storage Tank Replacement	-	-	-	250,000	-	250,000	-	250,000
Facility/Equipment Rehabilitation	750,000	750,000	750,000	750,000	750,000	3,750,000	3,750,000	7,500,000
Lagoon Liner	100,000	900,000	-	-	-	1,000,000	-	1,000,000
New Laboratory Facility	-	4,100,000	-	-	-	4,100,000	-	4,100,000
Plate Settler Pilot	4,250,000	-	-	-	-	4,250,000	-	4,250,000
Settling Basin Rehabilitation	-	-	200,000	1,000,000	-	1,200,000	-	1,200,000
Sludge Conveyance	300,000	3,000,000	-	-	-	3,300,000	-	3,300,000
Solids Handling Improvements	-	-	-	-	-	-	8,000,000	8,000,000
Subtotal	**$ 5,900,000**	**11,250,000**	**1,950,000**	**3,000,000**	**10,750,000**	**32,850,000**	**11,750,000**	**44,600,000**

Miscellaneous Water and Wastewater Projects

This category includes other infrastructure, technology, and planning projects that support the public utility system generally.

Miscellaneous Water and Wastewater	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Access to Sanitary Sewer Mains	200,000	200,000	200,000	200,000	200,000	1,000,000	1,000,000	2,000,000
CCB Upgrade	-	3,000,000	-	-	-	3,000,000	-	3,000,000
Sanitary Sewer Siphon Rehabilitation	-	1,000,000	1,000,000	1,000,000	1,000,000	4,000,000	-	4,000,000
Service Area Growth	-	200,000	200,000	200,000	200,000	800,000	1,000,000	1,800,000
Sewer System Capacity	-	250,000	250,000	1,200,000	300,000	2,000,000	2,700,000	4,700,000
Utility Field Ops Facilities	3,300,000	500,000	500,000	500,000	500,000	5,300,000	2,500,000	7,800,000
VA Security Improvements	750,000	-	-	-	-	750,000	-	750,000
Water Quality Study	100,000	100,000	100,000	700,000	100,000	1,100,000	500,000	1,600,000
Wendell Lake Glad Rd. Demolition	-	165,000	-	-	-	165,000	-	165,000
Subtotal	**$ 4,350,000**	**5,415,000**	**2,250,000**	**3,800,000**	**2,300,000**	**18,115,000**	**7,700,000**	**25,815,000**

Capital Equipment

This category includes the hydrant and nozzle replacement plan (10 and five year respectively) to update Raleigh to national thread hydrant standards and nozzles on all non-lead barrel hydrants. The project cost represents materials only; the City staff will perform the installation. This initiative will benefit the Fire Department by reducing response time and minimizing operational costs. The Capital Equipment Rehabilitation and Replacement project funds meter replacement.

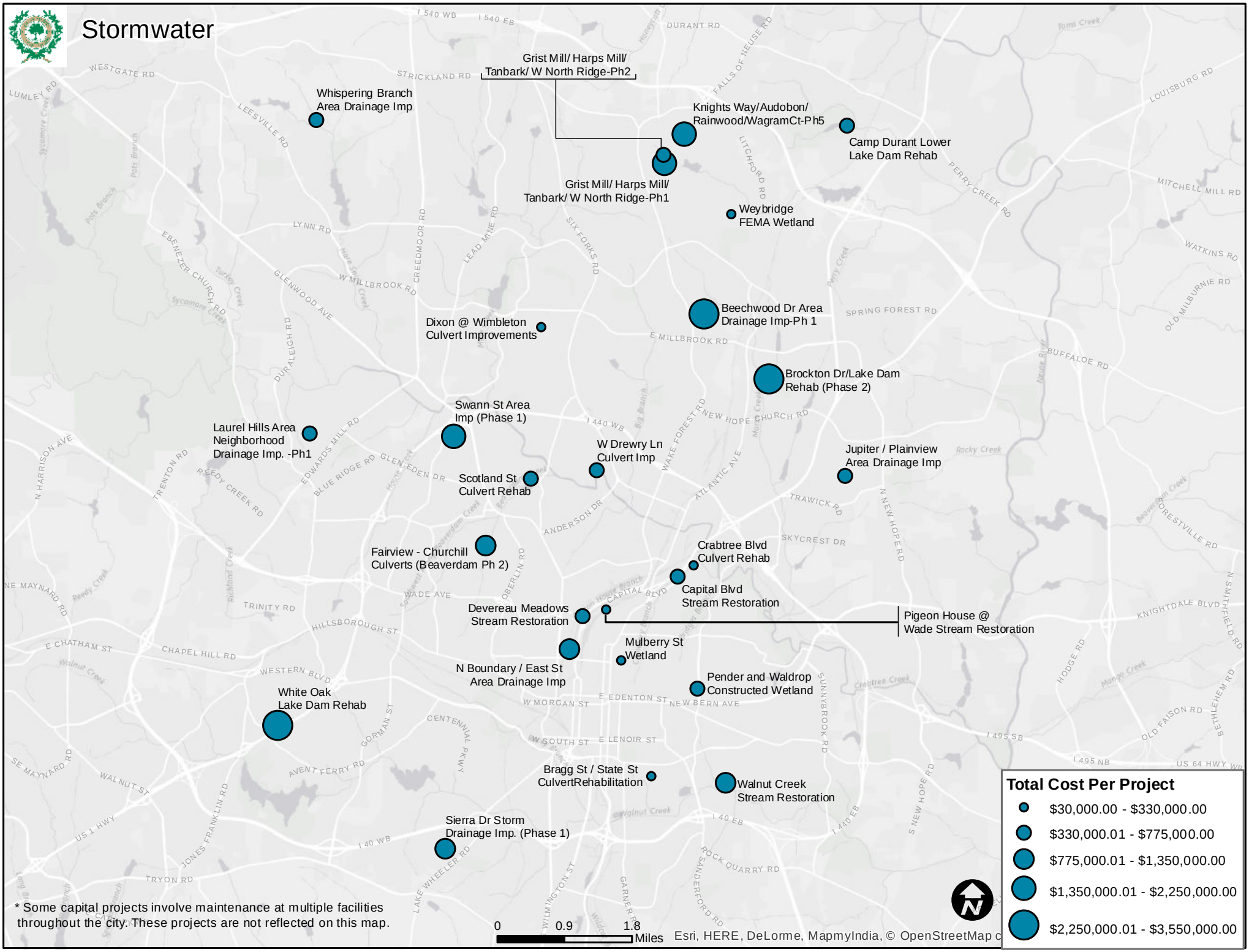
Capital Equipment		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Capital Equipment Rehabilitation/Replacement		4,000,000	3,000,000	4,000,000	3,000,000	3,000,000	17,000,000	15,000,000	32,000,000
Fire Hydrant Nozzle Replacement		700,000	700,000	700,000	700,000	-	2,800,000	-	2,800,000
Fire Hydrant Replacement		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	5,000,000	10,000,000
Subtotal	**$**	**5,700,000**	**4,700,000**	**5,700,000**	**4,700,000**	**4,000,000**	**24,800,000**	**20,000,000**	**44,800,000**

Watershed Initiatives

The City's Watershed Protection ordinance took effect November 1st, 2011. The watershed initiatives are solely funded with the watershed protection fees. Funds support watershed conservation and protection activities, such as funding the Conservation Trust of North Carolina to expand the land protection in the Falls Lake and Upper Neuse River watershed.

Watershed Initiatives		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total	FY 2021 to FY 2025	10 Year Total
Watershed Initiatives		1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	7,500,000	11,250,000	18,750,000
Subtotal	**$**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**7,500,000**	**11,250,000**	**18,750,000**

Stormwater



* Some capital projects involve maintenance at multiple facilities throughout the city. These projects are not reflected on this map.

Stormwater Management Program

Funded Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Lake Preservation	2,850,000	3,000,000	750,000	-	-	6,600,000
Water Quality Improvements	-	100,000	-	800,000	-	900,000
General Water Quality	550,000	650,000	650,000	550,000	550,000	2,950,000
Stream Restoration	150,000	825,000	600,000	700,000	1,450,000	3,725,000
General Drainage Infrastructure	870,000	950,000	1,050,000	1,050,000	1,650,000	5,570,000
Neighborhood Drainage System Improvements	700,000	1,775,000	4,000,000	3,925,000	3,065,000	13,465,000
Street Drainage System Improvements	880,000	225,000	675,000	175,000	1,105,000	3,060,000
Total	**$ 6,000,000**	**7,525,000**	**7,725,000**	**7,200,000**	**7,820,000**	**36,270,000**

Revenue Sources	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Transfers from Stormwater Operations	5,757,000	7,057,000	7,257,000	6,957,000	7,577,000	34,605,000
Drainage Petition Fees	75,000	75,000	75,000	75,000	75,000	375,000
Interest On Investments	168,000	168,000	168,000	168,000	168,000	840,000
Appropriated Fund Balance	-	225,000	225,000	-	-	450,000
Total Revenues	**$ 6,000,000**	**7,525,000**	**7,725,000**	**7,200,000**	**7,820,000**	**36,270,000**

Element Overview

The Stormwater Management Program protects and improves quality of life in Raleigh through progressive stormwater and surface water resource management. Projects fall into one of several categories, including lake preservation, water quality improvement, stream restoration, neighborhood drainage improvements, flood mitigation, and street drainage system improvements. The Stormwater Capital Improvement Program for FY16 through FY20 totals $36,270,000.

Recent Accomplishments

- Completed phases II and III of major neighborhood-wide drainage system improvements at Harps Mill Road, Haymarket Lane and Favorwood Court to reduce flooding hazards.
- Completed the first phase of major drainage system improvements along Swift Drive and Pineview Drive to reduce flooding hazards.
- Completed water quality improvements in the Bertie Creek watershed including preservation of the Upper Longview Lake and associated wetland.
- Completed the relocation and demolition of the Grove Park Apartment Complex to return the floodplain to its natural function and enhance the greenway system.
- Purchased the flood-plagued Milner Inn property at 1817 Capital Boulevard, one of four sites on Capital Boulevard damaged in August by flooding.

Work Plan Highlights

- Continue funding of $2.85 million for the construction of the high priority Brockton Drive Dam Lake Rehabilitation (Phase 2). This project addresses public safety and dam safety concerns,

reduces the frequency and severity of flooding in adjacent structures, protects and improves water quality, and complies with the City's Lake Preservation Policy.

- Continue funding of $550,000 for water quality retrofit projects and the water quality cost share program.
- Continue funding totaling $750,000 for the drainage petitions program.
- Continue implementing neighborhood-wide drainage system improvement projects.

Operating Impacts

- Implementing high priority stormwater projects will require continued maintenance of permanent stormwater easement areas by City or contracted maintenance forces. As the stormwater program expands, staff will continue analyzing these costs and their overall impact on the stormwater operating budget.

Horizon Items

- Staff will analyze and develop new policy options that will respond to the need for prioritized drainage and stream system improvements on private property that convey public runoff.
- Staff anticipates continued growth of water quality regulatory requirements necessitating retrofit projects to improve water quality.

Lake Preservation

Lake preservation projects focus on improvements to existing lake facilities in strategic locations within local watersheds. These projects provide significant public stormwater management benefits including flood control and water quality protection.

Lake Preservation	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Brockton Dr Dam Lake Rehab (Phase 2)	2,850,000	-	-	-	-	2,850,000
White Oak Lake Dam Rehab	-	3,000,000	-	-	-	3,000,000
Camp Durant Lower Lake Dam Rehab	-	-	750,000	-	-	750,000
Subtotal	**$ 2,850,000**	**3,000,000**	**750,000**	**-**	**-**	**6,600,000**

Highlighted Projects

Brockton Drive Dam Lake Rehabilitation (Phase II): $2,850,000

Brockton Drive Dam Lake is classified as an intermediate-hazard dam by the North Carolina Dam Safety Division. The total drainage area to the lake is 1.07 square miles (685 Acres). The upper lake collects debris and, in intense storms, floods adjacent occupied structures. The lower lake dam spillway is undersized and there is severe erosion at the outlet and along the embankment. Phase I and Phase II of this project will provide dam improvements at both the upper and lower lake spillways. The upper lake spillway rehabilitation is being constructed as Phase I and the lower lake spillway rehabilitation as Phase II. Construction for Phase I is expected to begin Spring 2015 and construction for Phase II is expected to begin Fall 2015. The entire project will address public and dam safety concerns, reduce the frequency and severity of flooding in adjacent structures, protect and improve water quality, and remain consistent with the City's Lake Preservation Policy.

Upper Brockton Dr. Dam

Lower Brockton Dr. Dam

Water Quality Improvement, General Water Quality and Stream Restoration

These categories are designed to protect and improve surface water quality within priority receiving streams in Raleigh. Project types include cost-share with private property owners for water quality initiatives that protect and improve runoff quality, drainage and stream system retrofit projects, and water quality improvement projects within watersheds subject to Total Maximum Daily Load (TMDL) regulations.

Water Quality Improvements	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Pender and Waldrop Constructed Wetland	-	100,000	-	400,000	-	500,000
Weybridge FEMA Wetland	-	-	-	150,000	-	150,000
Mulberry St Wetland	-	-	-	250,000	-	250,000
Subtotal	**$ -**	**100,000**	**-**	**800,000**	**-**	**900,000**
						-
General Water Quality	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Water Quality Cost Share	250,000	250,000	250,000	250,000	250,000	1,250,000
Water Quality Retrofit Projects	100,000	200,000	200,000	100,000	100,000	700,000
TMDL Streams Water Quality Projects	200,000	200,000	200,000	200,000	200,000	1,000,000
Subtotal	**$ 550,000**	**650,000**	**650,000**	**550,000**	**550,000**	**2,950,000**
Stream Restoration	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Devereau Meadows Stream Restoration	150,000	500,000	-	350,000	-	1,000,000
Capital Blvd Stream Restoration	-	325,000	450,000	-	-	775,000
Pigeon House at Wade Stream Restoration	-	-	150,000	-	450,000	600,000
Walnut Creek Watershed Stream Restoration	-	-	-	350,000	1,000,000	1,350,000
Subtotal	**$ 150,000**	**825,000**	**600,000**	**700,000**	**1,450,000**	**3,725,000**

Highlighted Projects

Water Quality Cost Share: $1,250,000

This program assists Raleigh property owners with financial assistance to install devices that improve and treat stormwater runoff from their properties. Examples of projects are bioretention beds, rainwater harvesting systems, stream and buffer restoration, green roofs, infiltration devices, and pervious pavers. Funded projects may not contribute to complying with City or State stormwater management ordinances or regulations. Priority is given to projects that drain to streams designated by the U.S. Environmental Protection Administration (USEPA) as total maximum daily load (TMDL) impaired, that have high benefit-to-cost relationships based on pollutant removal, and that are in areas designated as Priority Water Quality Target Areas as defined by the Stormwater Quality Cost Share Policy.

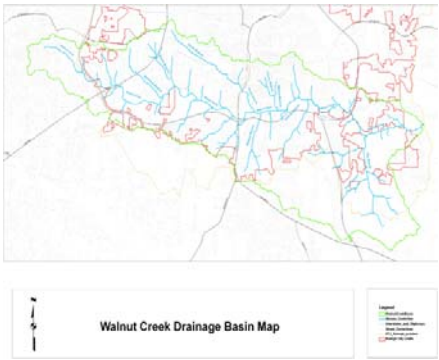
Water Quality Retrofit Projects: $700,000

These projects install devices that protect and improve the quality of stormwater runoff that flows into Raleigh's streams and lakes. Most of these devices reduce runoff pollutants and volume. Retrofits include bioretention cells, constructed wetlands, pavers, stormwater detention ponds, vegetated stream buffers, and pervious pavers and pavements. Priority is given to areas that drain to streams designated by EPA as impaired for intended uses and subject to corrective measures under Total Maximum Daily Load (TMDL) requirements. Pictured is the constructed wetland at Fred Fletcher Park.

TMDL Streams Water Quality Projects: $1,000,000

This project funds the installation of devices that protect and improve the quality of stormwater runoff that flows into streams that USEPA has designated as impaired and for which the City is required to reduce stormwater-source pollutant "loading" of the stream to a target level (total maximum daily load, or TMDL). Included are bioretention cells, constructed wetlands, pavers, stormwater detention ponds, vegetated stream buffers, and pervious pavers and pavements.

Walnut Creek Watershed-Stream Restoration (Priority Projects): $1,350,000



The Walnut Creek Watershed Stormwater Master Planning Study was completed in 2014. The primary goal of the study was to address existing flooding and erosion problems; further develop the available floodplain mapping within the watershed; update information for previously recommended water quality Best Management Practices; and to provide stormwater master planning for key locations currently experiencing flooding. The study recommends approximately 118 potential stormwater retrofit projects to address street and structural flooding and improve streams and water quality.

Devereau Meadows Stream Restoration: $1,000,000

This project envisions restoring part of Pigeon House Branch, a highly urbanized and impacted stream that is choked with non-native invasive vegetation and littered with trash and rubble from years of neglect. After restoration, the stream will have a new, more natural channel form and will allow flood flows to spread over a restored floodplain that will be developed as a new passive park and greenway trail. Part of the stream will be "daylighted", opening up sections that long have flowed through buried pipes. This project will benefit surface water quality, stream health, local aesthetics, and recreation and will contribute to the City's compliance with Federal and State stormwater regulations.

General Drainage Infrastructure

This category of projects includes the storm drainage petitions program, emergency drainage repairs, and flood mitigation. Storm drainage petition projects are on private property and help reduce flooding to homes and businesses, repair eroded streams, and replace failing drainage infrastructure.

General Drainage Infrastructure	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Stormwater System Repairs	120,000	100,000	100,000	100,000	500,000	920,000
Drainage Petition Projects	750,000	750,000	750,000	750,000	750,000	3,750,000
Watershed Master Planning	-	100,000	100,000	100,000	200,000	500,000
Flood Mitigation Projects	-	-	100,000	100,000	200,000	400,000
Subtotal	**$ 870,000**	**950,000**	**1,050,000**	**1,050,000**	**1,650,000**	**5,570,000**

Highlighted Projects

Stormwater System Repairs: $920,000

These projects focus on unplanned, emergency maintenance repairs of existing stormwater infrastructure. This includes culvert repairs such as Blenheim Drive (pictured), where a large tree situated above the culvert fell, causing five sections of 54" pipe to be separated. Severe erosion has occurred along the fill slope above the culvert which is threatening the sidewalk and roadway. The steep eroding slope is a safety hazard for the citizens in the area. The proposed solution is to replace the structure from the catch basin at the roadway to the outfall and stabilize the slope.

Drainage Petitions Program: $3,750,000

This includes cost-shared projects such as on Westridge Drive (pictured), where several properties are experiencing severe erosion issues in the form of sinkholes and streambank erosion. The sinkholes are occurring along a 42-inch reinforced concrete stormwater pipe which is interspersed with corrugated metal pipe segments. The pipe is deteriorating due to joint separation and corrosion. Severe erosion is occurring around the outlet of the pipe as well as along the streambanks. To address these issues, the deteriorated section of pipe will be replaced and the outlet and stream banks will be stabilized. The construction of this project is scheduled to begin February 2015.

Flood Mitigation Program: $400,000

This project provides matching funds for Federal Emergency Management Agency's (FEMA) grant program to acquire repetitive flood loss properties. City staff maintains a priority of list of properties that experience multiple losses during large flooding events for the purpose of applying for grants to acquire these properties. The Grove Park Apartment purchase and demolition is an example and is funded by 75% federal share and 25% city share.

Grove Park - before

Grove Park - after

Neighborhood Drainage and Street Drainage System Improvements

This category of projects includes major storm drainage system improvements to prevent flooding of private property and reduce flooding to public roads and building, while protecting water quality. These projects are normally associated with drainage systems serving and affecting City streets.

Neighborhood Drainage System Improvements	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Beechwood Dr Area (Phase 1)	400,000	-	-	1,575,000	1,575,000	3,550,000
Swann St Area (Phase 1)	300,000	-	-	1,850,000	-	2,150,000
Grist Mill/ Harps Mill/Tanbark (Phase 1)	-	1,000,000	1,000,000	-	-	2,000,000
Sierra Drive Storm (Phase 1)	-	250,000	750,000	-	-	1,000,000
Laurel Hills Area Neighborhood (Phase 1)	-	525,000	-	-	-	525,000
Knights Way/Audubon/Rainwood (Phase 5)	-	-	2,250,000	-	-	2,250,000
Fairview-Churchill Culverts (Phase 2)	-	-	-	500,000	540,000	1,040,000
Grist Mill/ Harps Mill/Tanbark (Phase 2)	-	-	-	-	700,000	700,000
Walnut Creek Watershed (Phase 1)	-	-	-	-	250,000	250,000
Subtotal	**$ 700,000**	**1,775,000**	**4,000,000**	**3,925,000**	**3,065,000**	**13,465,000**
						-
Street Drainage System Improvements	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Dixon at Wimbleton Culvert	330,000	-	-	-	-	330,000
Crabtree Blvd Culvert Rehab	275,000	-	-	-	-	275,000
N. Boundary/East St Area	275,000	-	-	-	-	275,000
Jupiter/Plainview Area	-	75,000	-	-	450,000	525,000
Whispering Branch Area	-	75,000	-	-	450,000	525,000
Scotland St Culvert Rehab	-	75,000	-	175,000	175,000	425,000
W. Drewry Lane Culvert	-	-	675,000	-	-	675,000
Bragg St / State Ct Culvert Rehab	-	-	-	-	30,000	30,000
Subtotal	**$ 880,000**	**225,000**	**675,000**	**175,000**	**1,105,000**	**3,060,000**

Highlighted Projects

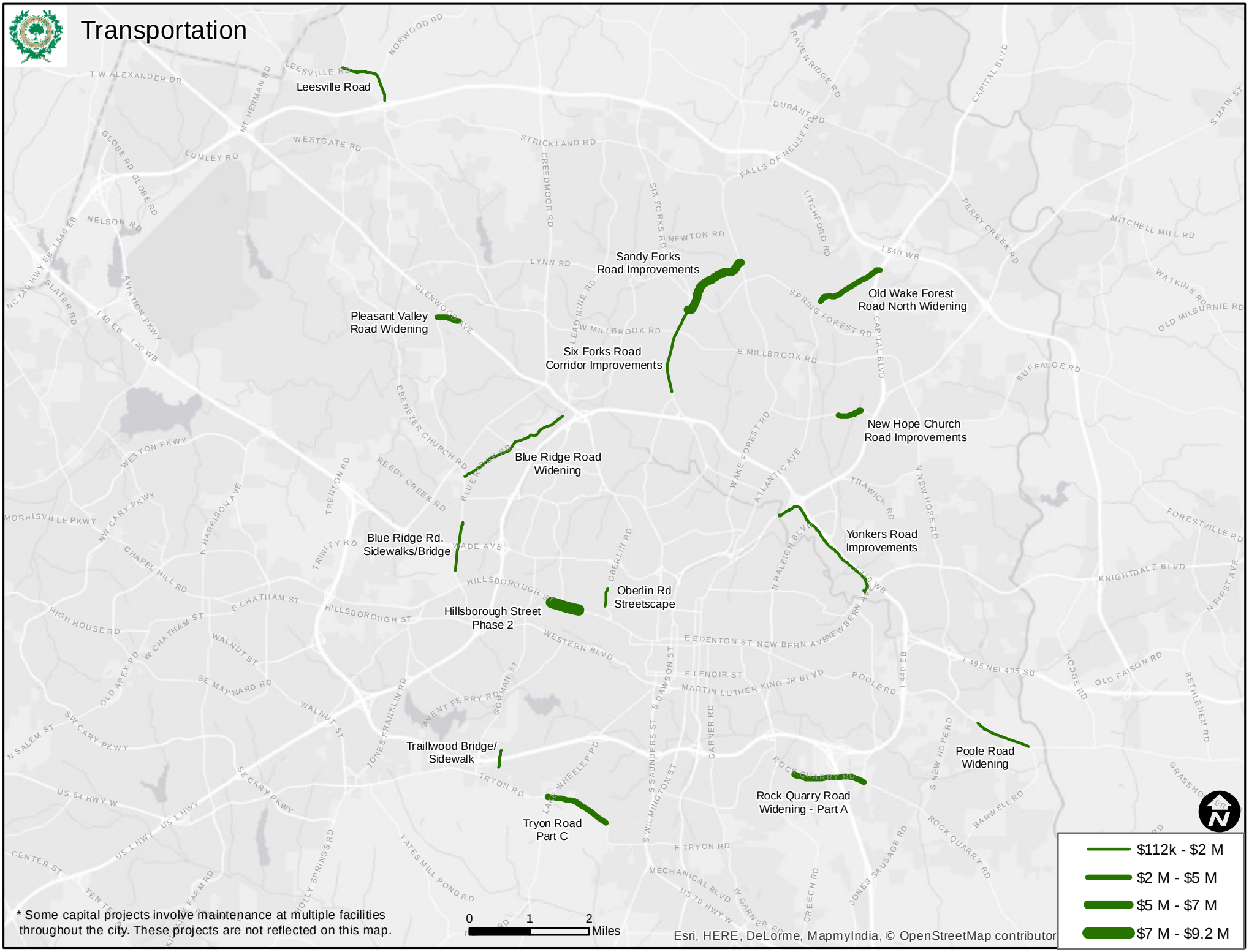
Swann Street Area Improvement (Phase I): $2,150,000

This neighborhood experiences significant street and private property flooding conditions. Significant water volume has overflowed the creekbank and the street. The drains across from homes are undersized, and, as a result, the street and adjacent properties flood. The goal of the project is to upgrade the undersized storm drainage system and reduce street flooding.

Crabtree Boulevard Culvert Rehabilitation: $275,000

The need for the Crabtree Boulevard Culvert Rehabilitation Project was identified during routine inspection of the culvert. This project will address scour, poor drainage of the roadway, erosion along the banks, and exposed steel reinforcement. The rehabilitation will prolong the integrity of the structure and improve public safety.

Transportation



* Some capital projects involve maintenance at multiple facilities throughout the city. These projects are not reflected on this map.

Transportation

Funded Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Major Street Projects	24,250,000	17,500,000	3,500,000	3,000,000	2,500,000	50,750,000
Street Improvement Program	11,453,000	10,098,000	9,090,000	9,370,000	9,604,000	49,615,000
Bicycle and Pedestrian Improvements	3,636,000	1,540,000	1,165,000	1,205,000	1,260,000	8,806,000
Studies and Planning Projects	25,000	492,000	120,000	100,000	120,000	857,000
Transit	2,043,000	1,908,000	1,525,000	1,545,000	1,565,000	8,586,000
Parking	1,718,000	1,170,000	1,170,000	1,170,000	1,170,000	6,398,000
Total Transportation	**$ 43,125,000**	**32,708,000**	**16,570,000**	**16,390,000**	**16,219,000**	**125,012,000**

Revenue Sources	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
2013 Bond Proceeds	22,346,000	15,106,000	-	-	-	37,452,000
2011 Bond Proceeds	1,500,000	-	-	-	-	1,500,000
Transfers from General Fund	10,496,000	10,572,000	10,650,000	10,970,000	11,299,000	53,987,000
Streets Facility Fees	4,000,000	3,500,000	3,500,000	3,000,000	2,500,000	16,500,000
Streets Facility Fees-Fund Balance	2,000,000	1,000,000	-	-	-	3,000,000
Assessments and Fees	800,000	825,000	850,000	850,000	850,000	4,175,000
Transfers from Parking Operating Fund	1,718,000	1,170,000	1,170,000	1,170,000	1,170,000	6,398,000
Interest Income	200,000	200,000	200,000	200,000	200,000	1,000,000
Appropriated Fund Balance	65,000	335,000	200,000	200,000	200,000	1,000,000
Total Revenues	**$ 43,125,000**	**32,708,000**	**16,570,000**	**16,390,000**	**16,219,000**	**125,012,000**

Element Overview

The transportation capital program includes major street construction, street improvements, pedestrian and bicycle projects, downtown parking improvements, and transit projects. Total proposed funding for the five-year program is $125 million with $43.1 million planned for FY2016. The CIP programs the final $1.5 million from the 2011 transportation bond and the remaining $37.5 million budget from the 2013 transportation bond. All capital projects are consistent with the adopted goals of the 2030 Comprehensive Plan and incorporate "Complete Streets" principles, integrating bicycle, pedestrian and transit system elements into each project.

The CIP includes matching city funds for several projects awarded to the City through the Capital Area Metropolitan Planning Organization's (CAMPO) Locally Administered Project Program (LAPP). The program distributes federal transportation funding directly allocated to local governments through a competitive process annually. Raleigh was able to successfully receive $9.4 million for five projects by leveraging project funds budgeted in FY15 and $261,000 for new projects in FY16.

The CIP also invests $8.6 million in the city's transit system, including facility maintenance and equipment replacement. The bicycle and pedestrian program includes $8.8 million for sidewalk construction, maintenance, repair, streetlight installations, and bicycle facility improvements. Lastly, the CIP includes $6.4 million for maintenance and improvements at downtown parking decks including funding in FY16 for upgraded parking equipment to accommodate a new fee structure for night and weekend parking.

Recent Accomplishments

The City has completed several major transportation projects including:

- Creedmoor Road sidewalk improvements from Glenwood Avenue to Strickland Road;
- Marvino Lane extension and realignment from existing Marvino Lane to Glenwood Avenue;

- Oak Forest Drive Extension from Fox Road to Triangle Oaks Drive;
- Bicycle pavement markings for 27 miles of new facilities across the City;
- Sanderford Road widening from Griffin Circle to Elk Park Drive; and
- Pedestrian signal and intersection improvements in Downtown Raleigh.

Work Plan Highlights

- The proposed CIP significantly increases the amount of cash funding for street resurfacing. A 1¢ property tax increase approved in FY2015 generates roughly $5.2 million to be transferred to the CIP for additional resurfacing contracts. This brings the total resurfacing budget in FY2016 to $7.2 million and the five year total to $38.4 million. The new funding translates to the city being able to resurface approximately 3% of its streets annually, compared to 1% in previous years.
- The CIP continues an accelerated delivery schedule for the city's sidewalk program projects. Funds from both 2011 and 2013 Transportation Bonds have been allocated for a second year in the CIP to address sidewalk maintenance and repairs.
- The second phase of streetscape improvements for Oberlin Road from Bedford Avenue to Groveland Avenue are to begin in FY2015. This phase consists of utility improvements and streetscape improvements north of Clark Avenue. The improvements will be coordinated with sidewalk and spot safety improvements approved as Phase I by City Council in late 2014.
- Continued implementation of projects from the 2013 Transportation Bond including; Buck Jones, Mitchell Mill, Sandy Forks.
- The New Bern Avenue Improvements project will install curb and gutter, sidewalks, bicycle lanes, streetlights, and drainage infrastructure on both sides of New Bern Avenue from Tarboro Road to Sunnybrook Road.
- Increased facility fee revenue generated by increased development activity will be used to supplement bond funding for major street projects.

Operating Impacts

- Staff continues to estimate the operating requirements and costs for Union Station. The facility will likely require additional positions and funds to maintain and operate efficiently. These costs will be added to a future operating budget.

Horizon Items

- Despite new revenues dedicated in FY15, additional funding may be needed for street resurfacing. Staff estimates that roughly $12 million per year is needed to meet the city's resurfacing and road quality goals. These goals include resurfacing all city roads every 20 years, which requires the city to maintain a pace of roughly 5% of road miles resurfaced per year. The proposed budget maintains $7.2 million in funding.
- The city will need to continue to identify funding for local matches on upcoming North Carolina Department of Transportation projects including I-440 Beltline widening, several bridge replacements, Martin Luther King Boulevard bike facilities, and the Western/Avent Ferry pedestrian underpass.
- The CIP funds the construction of four Major Streets projects. Construction or right-of-way acquisition for the remaining projects, as well as for programs such as neighborhood traffic management, capital streetscapes, sidewalk petitions, and sidewalk repairs, will depend on the identification of substantial funding through future transportation bonds or other sources.
- A future deck study will evaluate current deck capacity and future development growth and make recommendations for future deck needs.
- To continue the city's transit improvements, staff are analyzing the need for future transit facilities. All new options and plans will be considered in the context of the Wake County Transit Strategy.

Major Street Projects

The Major Street Projects category funds road widening and other significant improvements in the city's street network. The primary source of funds for these large-scale projects is bond funding. Raleigh citizens approved bonds in 2011 and 2013 to fund these projects.

Major Street Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Hillsborough Streetscape - Phase 2	9,200,000	-	-	-	-	9,200,000
Sandy Forks Road Improvements	7,000,000	-	-	-	-	7,000,000
New Hope Road Improvements	2,000,000	1,650,000	-	-	-	3,650,000
Pleasant Valley Widening	1,150,000	2,316,000	-	-	-	3,466,000
Yonkers Rd Improvements	1,000,000	1,000,000	-	-	-	2,000,000
Old Wake Forest Road North Widening	1,200,000	3,600,000	-	-	-	4,800,000
Rock Quarry Road Widening - Part A	1,500,000	1,500,000	-	-	-	3,000,000
Tryon Road Part C	1,200,000	3,325,000	-	-	-	4,525,000
Blue Ridge Road Widening	-	1,249,000	-	-	-	1,249,000
Poole Road Widening	-	1,022,000	-	-		1,022,000
Six Forks Corridor Improvements	-	1,838,000	-	-	-	1,838,000
Reserve for Future Projects	-	-	3,500,000	3,000,000	2,500,000	9,000,000
Subtotal	**$ 24,250,000**	**17,500,000**	**3,500,000**	**3,000,000**	**2,500,000**	**50,750,000**

Highlighted Projects

Hillsborough Street Improvements Phase II: $9,200,000 (Project total is $10,200,000)

The FY16 budget funds construction of streetscape improvements along Hillsborough Street from Gardner Street to Rosemary and Shepherd Streets. The project will convert the multi-lane undivided roadway section to a 2-lane divided roadway with a raised median. The improved street will feature a three-lane curb and gutter section with roundabouts, bike lanes, parallel parking, wide sidewalks, landscaping, street trees, street lights, and underground consolidation of utilities.

Sandy Forks Road Improvements: $7,000,000 (Project total is $9,000,000)

This project will widen and rehabilitate Sandy Forks Road between Six Forks and Falls of Neuse Roads. The improved street will feature a three-lane curb and gutter section with bike lanes, sidewalks, landscaping, street trees, and street lights. This project also includes a pilot effort to deploy low-impact stormwater mitigation strategies within and adjacent to the street. The FY16 budget funds the project's construction.

New Hope Church Road Improvements: $3,650,000 (Project total is $3,800,000)

This project will widen New Hope Church Road from Green Road to Deana Lane. The improved street will feature a three-lane curb and gutter section with bike lanes, sidewalks, landscaping, street trees, and streetlights. The project will require extension of a culvert just west of Deana Lane and provide a significant pedestrian connection from the neighborhood to nearby retail uses. Design began in 2015 and the budget funds the right-of-way acquisition mitigation and construction.

Pleasant Valley Road Widening: $3,466,000 (Project total is $3,816,000)

This project will widen and rehabilitate Pleasant Valley Road between Duraleigh Road and Glenwood Avenue. The improved street will feature a three-lane curb and gutter section with bike lanes, sidewalks, landscaping, street trees, and streetlights. Project design began in 2015 and the budget funds the right-of-way acquisition, mitigation, and construction.

Yonkers Road Improvements: $2,000,000 (Project total is $2,500,000)

This project will repair and improve Yonkers Road from Capital Boulevard to New Bern Avenue to include a two-lane curb and gutter section with bike lanes and street lights and will include sidewalk along the south side of the street. Traffic in this heavily industrial area has damaged the street and shoulders, requiring extensive reconstruction. Current funding supports design and right-of-way efforts for the project, with construction funding required in later years.

Old Wake Forest Road North Widening: $4,800,000

This project will widen Old Wake Forest Road to a four-lane median-divided section with curb and gutter, sidewalks, bicycle lanes, and streetlights from Litchford Road to Capital Boulevard (US 1). This project was partially funded for design and right-of-way as part of the 2013 Transportation Bond referendum and will require additional funding in FY18 to complete construction.

Rock Quarry Road Widening Part A: $3,000,000

This project will widen Rock Quarry Road from Olde Birch Road to Sunnybrook Road. The project will widen the segment to four lanes with a median, curb and gutter, sidewalks, bicycle lanes, and streetlights. This project will require the widening of the existing I-40 overpass and will eliminate a bottleneck within the Rock Quarry Road corridor. Current funding supports design and right-of-way efforts for the project, with construction funding required in later years.

Tryon Road Part C: $4,525,000

This project will widen Tryon Road between Lake Wheeler Road and Par Drive. The improved street will feature a four-lane curb and gutter section with a raised median, bike lanes, sidewalks, landscaping, street trees, and streetlights. This project will complete the entire corridor from US 1/64 in Cary to Garner Road. This project is funded for design and right-of-way as part of the 2013 Transportation Bond referendum and will require additional construction funding in later years.

Street Improvement Program

This category addresses ongoing maintenance and other improvements to city streets. The city's street network is maintained through ongoing street resurfacing, paving petitions, intersection improvements, and neighborhood traffic management projects. This category also includes streetscape improvements and matching funds for NCDOT projects affecting city streets.

Street Improvement Program	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Street Resurfacing	7,200,000	7,563,000	7,640,000	7,870,000	8,105,000	38,378,000
Street Improvements & Paving Petitions	300,000	410,000	500,000	500,000	500,000	2,210,000
Intersection Improvements	600,000	600,000	600,000	600,000	600,000	3,000,000
Traffic Signal Installations	200,000	200,000	200,000	200,000	200,000	1,000,000
Bridge Repair & Maintenance	150,000	150,000	150,000	200,000	199,000	849,000
Neighborhood Traffic Management - Major	500,000	500,000	-	-	-	1,000,000
Neighborhood Traffic Management - Minor	175,000	175,000	-	-	-	350,000
Streetscape Program	600,000	500,000	-	-	-	1,100,000
Oberlin Road Streetscape	1,728,000	-	-	-	-	1,728,000
Subtotal	**$ 11,453,000**	**10,098,000**	**9,090,000**	**9,370,000**	**9,604,000**	**49,615,000**

Highlighted Projects

Street Resurfacing: $38,378,000

This project funds ongoing resurfacing and repair of the city's 2,500 lane miles. The city's goal is to maintain high quality roads that provide citizens smooth vehicle rides and have minimal cracking. Capital funds will pay for contracted crews to resurface and repair streets throughout the city. To prioritize streets, staff uses a scoring system that evaluates the asphalt's structural integrity, cracking, and ride quality.

Neighborhood Traffic Management Program: $1,350,000

The City of Raleigh promotes safe and efficient public streets that contribute to a positive quality of life for residents. The city is also committed to mitigating impacts that may detract or adversely affect the places where we live. Positive street design and good traffic management within our neighborhoods are important elements of this goal. The program includes the Neighborhood Streetscape (major) and Traffic Calming (minor) programs.

Capital Streetscape Program: $1,100,000

Streetscape Improvement Projects entail a variety of improvements to the street, sidewalks, and the public rights-of-way. These types of projects may include a variety of improvements such as landscaping, bicycle parking & bicycle lanes, sidewalks, street furniture & lighting, and consolidation of overhead utilities. They may also update aging infrastructure, improve the pedestrian/ bicycle environment, resolve traffic conflicts, and support economic development.

Oberlin Road Streetscape Phase II: $1,728,000

This project focuses on pedestrian improvements installing improved sidewalks with street trees, lighting, and furniture on Oberlin Road. Recommendations included select high-priority sidewalks on side streets, improved pedestrian crossings, and utility consolidation in support of the streetscape. Changes to the allocation of street space and a road diet are not under consideration as a part of this project. The budget funds Phase II of the project; Phase I was funded in FY15 to finalize design and begin sidewalk improvements.

Bicycle and Pedestrian Programs

These categories fund the maintenance and expansion of the city's pedestrian and bicycle networks. Annual programs include sidewalk construction and repairs, installation of curb ramps and pedestrian signals at intersections, bicycle facilities markings, and street light installations. In addition, this category programs matching funds for projects awarded to the city through the Capital Area MPO's LAPP process.

Bicycle and Pedestrian Improvements	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Sidewalk Improvements	2,425,000	-	-	-	-	2,425,000
Sidewalk Repairs	300,000	375,000	450,000	460,000	485,000	2,070,000
Thoroughfare Streetlight Installation	400,000	400,000	400,000	400,000	400,000	2,000,000
Pedestrian Intersection Safety Improvements	-	100,000	100,000	100,000	100,000	400,000
ADA Curb Ramps	-	100,000	125,000	125,000	125,000	475,000
Leesville Rd. Safe Routes to School Improve	112,000	-	-	-	-	112,000
Trailwood Bridge Sidewalk	149,000	-	-	-	-	149,000
Blue Ridge Rd Bridge Pedestrian/Bike Impro	250,000	500,000	-	-	-	750,000
Bicycle Lane Marking and Signage	-	50,000	75,000	100,000	125,000	350,000
Bicycle Facilities/Parking and Stations	-	15,000	15,000	20,000	25,000	75,000
Subtotal	**$ 3,636,000**	**1,540,000**	**1,165,000**	**1,205,000**	**1,260,000**	**8,806,000**

Highlighted Projects

Leesville Road Safe Routes to Schools Improvements: $112,000

The project will construct new sidewalks along local streets near and on the school property, as well as ADA ramps, curb extensions, crosswalks, pedestrian signals and medians at select locations. The project will also allow for the addition of bike lanes and sharrows on street segments near the school.
The funding is a local match to CAMPO LAPP funding for the construction of the project.

Blue Ridge Road Sidewalks/Bridge: $750,000

The project will fund the preliminary designs to fill sidewalk gaps along Blue Ridge Road between Reedy Creek Road and Trinity Road. The project will include the development of concepts to widen the existing bridge over Wade Avenue to improve pedestrian and bicycle connectivity along the corridor between the NCSU Biomedical Campus, State Fairgrounds, Arena complex, the NC Museum of Art, and Reedy Creek Greenway.

Trailwood Drive Bridge Sidewalk: $149,000

The project will construct sidewalks on both sides of Trailwood Drive to fill gaps in pedestrian infrastructure across I-40 between Thistledown Drive/Main Campus Drive and Canine Tech Way/Lineberry Drive.
The funding is a local match to CAMPO LAPP funding for the construction of the project.

Other Transportation Categories

Transit	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Bus and Van Replacements	720,000	225,000	225,000	225,000	225,000	1,620,000
Equipment and Facility Maintenance	200,000	200,000	200,000	200,000	200,000	1,000,000
Corridor Improvements (Shelters/Benches)	183,000	200,000	200,000	200,000	200,000	983,000
Preventive Maintenance	940,000	900,000	900,000	920,000	940,000	4,600,000
Wilmington Street ADA Facility	-	155,000	-	-	-	155,000
Poole Rd. Park & Ride Facility	-	228,000	-	-	-	228,000
Subtotal	**2,043,000**	**1,908,000**	**1,525,000**	**1,545,000**	**1,565,000**	**8,586,000**

Studies and Planning Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Advanced Planning Feasibility Studies	-	50,000	50,000	50,000	50,000	200,000
Capital Blvd North Corridor Study	-	400,000	-	-	-	400,000
Wetland Mitigation & Delineation	-	42,000	50,000	50,000	50,000	192,000
Bike/Pedestrian Count Program	25,000	-	20,000	-	20,000	65,000
Subtotal	**$ 25,000**	**492,000**	**120,000**	**100,000**	**120,000**	**857,000**

Parking	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Parking Deck Improvements	570,000	675,000	575,000	145,000	435,000	2,400,000
Parking Deck Assessment & Repairs	60,000	60,000	80,000	80,000	110,000	390,000
Parking Deck LED Lighting	180,000	270,000	350,000	780,000	460,000	2,040,000
Parking Study	200,000	-	-	-	-	200,000
Parking Deck Security	160,000	165,000	165,000	165,000	165,000	820,000
Night/Weekend Parking Equipment	548,000	-	-	-	-	548,000
Subtotal	**$ 1,718,000**	**1,170,000**	**1,170,000**	**1,170,000**	**1,170,000**	**5,850,000**

Highlighted Projects

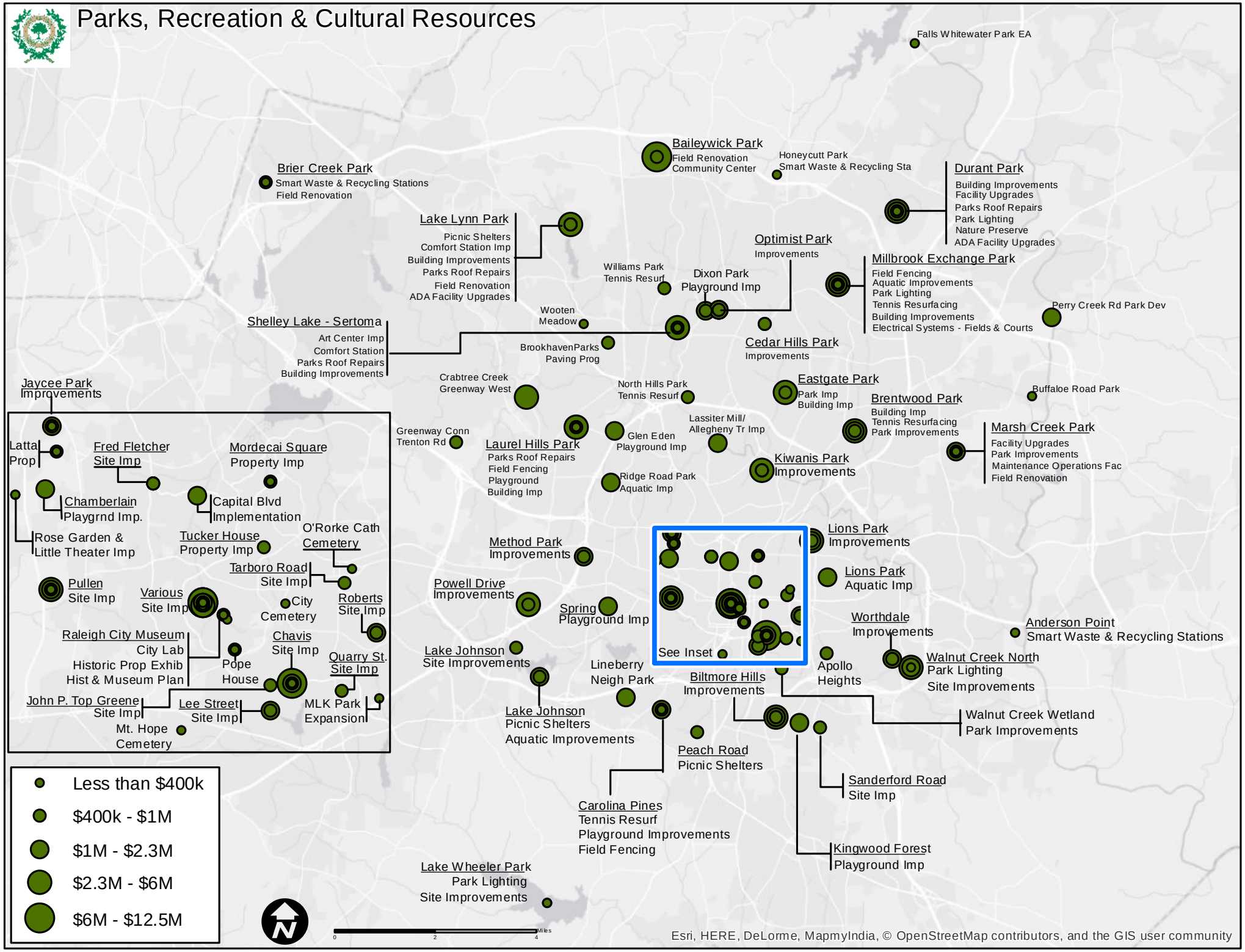
Future Parking Deck Study: $200,000

A comprehensive study will review the current levels of available parking spaces in city decks and the impact that current and future developments will have on supply. The study will recommend the appropriate locations and size of any proposed decks and will focus on the combined impacts of the new development, increased nighttime activities, the existing agreements, and the environmental impacts.

Raleigh Union Station: No additional appropriation in the CIP (Project total of $79,800,000)

In partnership with NCDOT, the city will construct a new passenger rail station in downtown Raleigh. The new station will replace the existing Amtrak Station on Cabarrus Street, which does not have capacity to meet current and growing service demand. The 41,000 square foot station will host Amtrak operations, restaurants, retail stores, and civic and performance events. The total project budget is $79.8 million, including city, State, federal, and other sources. The city's contribution will not exceed $19 million. Construction begins in mid-2015 and the facility will open in late 2017.

Parks, Recreation & Cultural Resources



Parks, Recreation and Cultural Resources

Parks, Recreation and Cultural Resources Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Land Acquisition	275,000	100,000	125,000	100,000	125,000	725,000
Greenway System	300,000	300,000	300,000	300,000	300,000	1,500,000
Cultural Resources	335,000	175,000	335,000	300,000	800,000	1,945,000
Facility Improvements	2,095,000	2,415,000	2,680,000	2,710,000	2,350,000	12,250,000
Plans, Studies & Development	1,257,000	655,000	700,000	775,000	375,000	3,762,000
Site Improvements	1,663,000	1,405,000	1,255,000	1,210,000	1,445,000	6,978,000
2014 Bond Projects	18,150,000	17,375,000	29,525,000	8,500,000	18,225,000	91,775,000
Total Parks, Recreation and Cultural Resources Capital	**$ 24,075,000**	**22,425,000**	**34,920,000**	**13,895,000**	**23,620,000**	**118,935,000**

Revenue Sources	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
2014 Bond Proceeds	18,150,000	17,375,000	29,525,000	8,500,000	18,225,000	91,775,000
Transfers from General Fund	3,675,000	3,800,000	4,245,000	4,245,000	4,245,000	20,210,000
Tree Conservation Area Fee	50,000	50,000	50,000	50,000	50,000	250,000
Parks Facility Fees	1,250,000	1,050,000	950,000	950,000	950,000	5,150,000
Parks Facility Fees-Fund Balance	800,000	-	-	-	-	800,000
Transfers from Revolving Fund	100,000	100,000	100,000	100,000	100,000	500,000
Interest Income	50,000	50,000	50,000	50,000	50,000	250,000
Total Revenue Sources	**$ 24,075,000**	**22,425,000**	**34,920,000**	**13,895,000**	**23,620,000**	**118,935,000**

Element Overview

The “Parks, Recreation and Greenway” portion of the *City of Raleigh’s Comprehensive Plan*, as well as the *Parks, Recreation and Cultural Resources System Plan* are primary guiding documents for park maintenance and development. Existing feasibility studies, reports and strategic plans also guide staff on the timing and location of capital investments required to sustain a maturing parks, recreation and cultural resources system. This element of the CIP consists of seven project categories: cultural resources; facility improvements; greenway; land acquisition; plans, studies and development; site improvements; and 2014 bond projects. Major funding sources for the program include bond proceeds, general fund transfers, and facility fees.

Recent Accomplishments

- The Department opened three new facilities: Halifax Center, Mordecai Historic Park Visitor Center and AWL Education Center at Annie Louise Wilkerson, MD Nature Preserve Park.
- The PRCR System Plan was completed and adopted by City Council. The process used various forms of public participation to incorporate as much input as possible and was used to prioritize projects in the 2014 Bond Referendum.
- Roberts Park playground renovation was completed with a generous contribution from the Realtor Foundation of the Triangle. This is the second time the organization has partnered with the City to assist with playground renovations.
- City Council adopted the revised master plan for John Chavis Memorial Park and the park master plan for Sierra/Lineberry Drive Park.

- A 10-foot paved multipurpose trail connecting neighborhoods south of Leesville Park to Country Trail was completed to provide bicycle and pedestrian access to the schools, library and park.
- Construction was completed on the Crabtree Creek Trail east extension, which connects with the existing trail at Milburnie Road, extending along Crabtree Creek, and ultimately joining the Neuse River Trail at Anderson Point Park. The completed Crabtree Creek Trail extends across the city, connecting north Raleigh, Shelley Lake, Sertoma Park, Lassiter Mill, Kiwanis Park, and Anderson Point Park.
- Construction was completed on the Honeycutt Trail, which connects the existing Mine Creek Greenway Corridor to the South Shore Trail on Falls Lake.
- The final section of the Neuse River Trail at Horseshoe Bend was completed. The Neuse River Trail now continuously extends over 26 miles from Falls Lake to the county line.
- New comfort stations at Kentwood Park and Pullen Park were constructed to replace existing restroom buildings.
- Facility improvements and upgrades were completed at Pullen Park Community Center, Aquatics Center, and Arts Center.

Work Plan Highlights

- Staff will continue to implement Americans with Disabilities Act (ADA) upgrades as documented in the 2012 ADA Assessment Study. To maximize efficiency and minimize interruption to user activities, ADA upgrades will be paired with planned building improvements and community facility upgrades when possible.
- The tree planting project utilizes Tree Conservation Area fee-in-lieu revenue. Project funds will be spent either for acquisition of lands where trees will be preserved or for tree planting.
- While a park advocacy group continues their fundraising efforts, staff is moving forward with the review and analysis of the proposed Falls of Neuse Whitewater Park. An environmental assessment has been added to the work plan for FY2016 to prepare the required National Environmental Policy Act (NEPA) document.
- The FY16-FY20 CIP will implement projects funded by the 2014 Bond Referendum. The bond package includes many facility maintenance projects, such as park lighting, aquatic improvements, and ADA facility upgrades. The bond package also funds such new facilities as the Lineberry Neighborhood Park, Crabtree Greenway West connection to Umstead Park, and Baileywick Park Community Center.
- With increased development activity in the city, staff anticipates additional facility fee revenues. The additional revenues are programmed in the five-year plan and will supplement other paygo and bond revenues.

Operating Impacts

- The 5-year capital plan focuses on repair, replacement and upgrade of existing parks facilities. These projects have negligible operating impacts.
- The operating impacts of implementing the 2014 bond package will total $1.4M once all projects are complete. This includes roughly 15 new positions to staff new and renovated facilities.

Horizon Items

- As Raleigh's expansive park system continues to mature, staff will evaluate the need for additional funding for additional capital maintenance and facility upkeep.
- Staff will continue to analyze and evaluate new opportunities for new facilities. All new requests will be prioritized against existing plans and other needs.

Land Acquisition

City staff identify and purchase land for future parks and greenways as directed by the Comprehensive Plan and the parks system plan. The primary method of acquiring land is accomplished through a targeted acquisition process. The 2004 Parks Plan identifies Level of Service (LOS) goals and recommended Park Service Areas. Areas in need of parks are identified by combining these measures with geographic information system (GIS) data on the size and locations of existing parks. Properties in these areas are then analyzed to determine their suitability as park sites. City Council approves all park land acquisitions. Greenway land is usually conveyed to the City through greenway easements and fee simple transactions. The City's acquisition of greenways is guided by the Capital Area Greenway System corridors. The widths of the greenway corridors vary based on the stream hierarchy and the 100 year floodplain. The City requires dedication of land for greenways from residential developments that fall along these corridors or other planned greenway connectors. Developers of non-residential properties may also be required to reserve a portion of their property for greenways. Additionally, planned greenway trail projects may require greenway land to be acquired.

Land Acquisition	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Park Site Acquisition	25,000	-	25,000	-	25,000	75,000
Greenway Acquisition	250,000	100,000	100,000	100,000	100,000	650,000
Subtotal	**$ 275,000**	**100,000**	**125,000**	**100,000**	**125,000**	**725,000**

Projects

Greenway Acquisition: $650,000

This is an ongoing program to acquire property for the greenway system, including missing greenway segments and reimbursements for dedicated greenway easements that become available during development site plan approval procedures.

Greenway

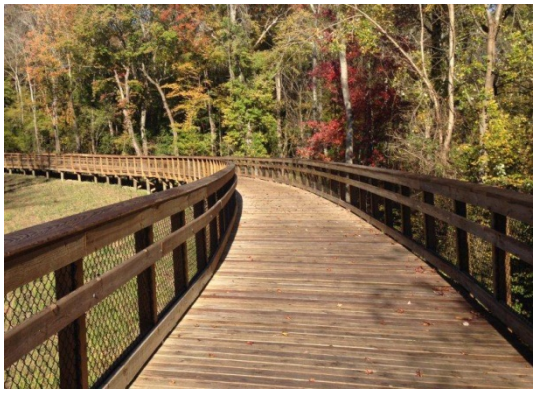
The Capital Area Greenway System is a network of public open spaces and recreational trails, which provides for such activities as walking, jogging, hiking, bird watching, nature study, fishing, picnicking and outdoor fun. In addition to recreation, users appreciate ecological features in their natural state along the greenway. Trails connect many of Raleigh's parks and neighborhoods. The goal is to establish a completed network of interconnected trails throughout the city. The greenway category includes greenway development, trail repaving, structures repair and any major greenway-related projects. The Capital Area Greenway master plan has been adopted by City Council and sustained funding is necessary to work towards completion, repair and maintenance of the existing facilities and enhancement of older facilities. The greenway system consists of over 4,000 acres of land and over 100 miles of trails throughout the city with an estimated current value of $150,000,000.

Greenway System	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Greenway Trail Resurfacing	100,000	100,000	100,000	100,000	100,000	500,000
Greenway Boardwalk Repair	100,000	100,000	100,000	100,000	100,000	500,000
Structure Repair & Replacement	100,000	100,000	100,000	100,000	100,000	500,000
Subtotal	**$ 300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**1,500,000**

Highlighted Projects

Greenway Bridge and Boardwalk: $500,000

This project funds repairs to, and replacement of, infrastructure that go beyond the capability of the operating budget. Structures play a critical role in preserving connectivity of the trail system and to parks and adjacent neighborhoods. The structures proposed to be repaired or replaced over the next five years included Shelley Lake (Structure 18), Sawmill (Structures 3, 5), Beaver Dam (Structures 56, 121), Gardner St (Structures 51, 52), Lake Park Segment to Shelley Lake (Structures 22, 24), Brentwood (Structure 103), Allegheny Steps (Structure 69)



Greenway Trail Resurfacing: $500,000

This project funds resurfacing and repair of aging trail surfaces to maintain a safe, smooth travel surface. Life expectancy of trail surfaces is approximately 10 to 15 years. The City has over 100 miles of greenway trails with older trails being nearly 30 years old. Trail sections that have met or exceeded their life cycle are identified and prioritized by staff assessment. Asphalt trails proposed to be repaired or replaced over the next five years include North Hills, Shelley Lake, and Bent Creek.

Cultural Resources

The City manages and cares for many of the cultural assets. This include the historic carousels at Pullen and John Chavis Memorial parks; Mordecai Historic Park; Pope House Museum; City of Raleigh Museum; Latta House and University site; Borden Building and Tucker House; and the City, Mt. Hope and O'Rorke-Catholic historic cemeteries. This city also maintains a municipal art collection. All of these assets require dedicated, consistent and specialized upkeep specific to their unique historic or artistic context. Concurrent with the conservation mission for cultural resources, staff strive to extend the historic significance of these assets to citizens through the development and fabrication of exhibits. The cultural resources category funds maintenance and improvement projects at the city's historically and culturally significant properties. These properties include historic cemeteries, historic parks and homes, museums, public art, and carousels. Major maintenance work includes replacing fences, restoring carousel animals, repairing cemetery headstones, and major facility and property maintenance. This program also funds new exhibits at Mordecai Historic Park, Raleigh City Museum, and other historic properties.

Cultural Resources	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Carousel Animal Restoration	25,000	25,000	25,000	25,000	25,000	125,000
Historic Cemetery Restoration	25,000	100,000	25,000	25,000	25,000	200,000
Historic Property Improvements	125,000	25,000	25,000	25,000	525,000	725,000
Historic Property Exhibits	35,000	25,000	35,000	25,000	25,000	145,000
Public Art Conservation	25,000	-	25,000	-	25,000	75,000
City Lab Exhibit Match	100,000	-	200,000	200,000	-	500,000
Art Center Improvements	-	-	-	-	25,000	25,000
Raleigh History & Museum Plan	-	-	-	-	150,000	150,000
Subtotal	**$ 335,000**	**175,000**	**335,000**	**300,000**	**800,000**	**1,945,000**

Highlighted Projects

Historic Property Improvements: $725,000

The city maintains a number of properties and structures of historic significance. This program supports capital improvements at historic and cultural resources properties to keep them in condition for public access and historic preservation. The project funds the continuation of phased maintenance for the Mordecai Historic Park buildings, as well as lead paint abatement at other historic properties such as Raleigh Little Theatre, Theatre in the Park, and Pope House.

Historic Cemetery Restoration: $200,000

This project funds repairs to, and replacement of, infrastructure at the three City Cemeteries (headstones, markers, plot fencing, perimeter fencing, mausoleums, iron gates) and provision of park furnishings and other amenities (benches, trash cans, signage). The project will also include consulting services for re-grading and fence replacement at O'Rorke Cemetery, a landscape plan at all three cemeteries, and preparation of a maintenance manual. Cemetery improvements include repairs that currently pose a safety threat to the visiting public and maintenance staff.

City Lab Core Exhibit – $500,000

This project funds the proposed “City Lab: Your Space in this Place” core exhibit that explores present Raleigh and highlights various historic aspects of daily life in Raleigh and explores these issues from today’s perspective and prompts visitors to consider these issues as the city develops. The transition from private to public management of the museum included a plan to produce a "core" exhibit. The project is budgeted at $1 million and will consist of a 50/50 public-private match with half of the money coming from the city and half coming from the private COR Friends organization.

Facility Improvements

The facility improvements category includes projects that maintain, upgrade or replace infrastructure and facilities. Continued investments in infrastructure and facilities are critical to support and enhance neighborhoods, stimulate the economy and improve services. Many of these improvements focus on, but are not limited to, such areas as regulatory compliance, building automation, and equipment modernization.

Facility Improvements	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Park Lighting	300,000	600,000	525,000	525,000	350,000	2,300,000
Parks Building Maintenance	500,000	500,000	920,000	520,000	600,000	3,040,000
Parks Irrigation Projects	25,000	50,000	50,000	125,000	-	250,000
Parks Roof Repairs	50,000	180,000	180,000	180,000	180,000	770,000
Theater In The Park	100,000	50,000	100,000	25,000	-	275,000
Community Facility Upgrades	560,000	305,000	100,000	500,000	525,000	1,990,000
Backflow Prevention Upgrade	25,000	30,000	30,000	35,000	-	120,000
Aquatic Improvements	200,000	300,000	300,000	300,000	345,000	1,445,000
Lead Paint Abatement	50,000	50,000	125,000	50,000	-	275,000
P&R Electrical-Fields/Courts	135,000	175,000	125,000	175,000	175,000	785,000
Fall Protection	150,000	150,000	150,000	150,000	150,000	750,000
Raleigh Little Theatre Improve	-	25,000	50,000	100,000	-	175,000
Reused Water Line Extension	-	-	25,000	25,000	25,000	75,000
Subtotal	**$ 2,095,000**	**2,415,000**	**2,680,000**	**2,710,000**	**2,350,000**	**12,250,000**

Highlighted Projects

Building Improvements: $3,040,000

This project funds interior lighting upgrades, boilers, gas packs, water fountain and HVAC replacement. System efficiencies are analyzed and the operational impacts are assessed and compared to new equipment technology and efficiency standards. As facility systems age, it becomes advantageous and necessary to replace and upgrade systems to ensure proper operation and continued services. Code compliance and governmental regulations also drive interior lighting upgrades and system replacements particularly concerning proper air flow through buildings.

Community Facility Upgrades: $1,990,000

This project funds interior/exterior painting, gym floor repairs, partitions, countertops, lighting improvements, and other needs of the city's aging community centers. Programming requirements and the American Disabilities Act direct specific replacements and upgrades to ensure park facilities are safe, code compliant and suitable for programmed activities.

Park Lighting: $6,300,000 (including $4 million form 2014 bond and $2.3 million in paygo funds)

This project funds upgrade and replacement of the lighting system at ball fields, tennis courts, and parking lots. A recent assessment revealed that many of the existing sports and tennis lighting systems are in poor condition and in need of replacement. This project emphasizes security lighting as well as energy conservation. As lighting systems age it becomes advantageous and necessary to replace and upgrade systems to ensure proper operation and continued services as well as use technology advances to reduce energy consumption while maintaining an appropriate lighting level.

Aquatic Improvements: $9,445,000 (including $8 million from 2014 bond and roughly $1.4 million in paygo funds)

This project funds upgrade and replacement of aquatic facility components, including but not limited to water treatment systems (filters and chemical feed systems), replacement of pool blankets, aquatic controls, lighting, diving boards, stanchions, starting blocks, locker replacements, decks and other supporting structures. The bond funding for this project will include an analysis of existing pools shells and address deferred maintenance.

Plans, Studies and Development

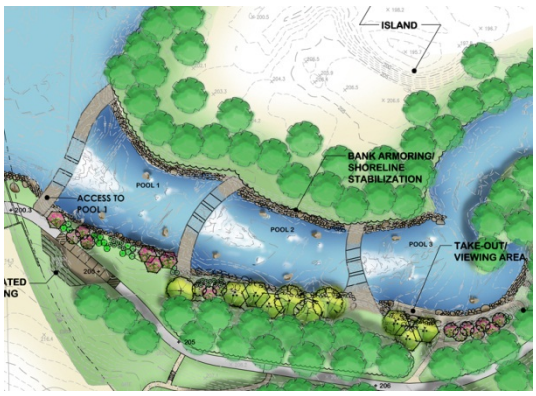
The Parks, Recreation and Cultural Resources System Plan guides all subsequent park acquisition, development and improvements. Development of a particular site is based on an individual park master plan study. Specific strategic studies are also called for by the System Plan and the Comprehensive Plan. This category funds studies of new and replacement park amenities as well as initial implementation of specific projects based on recently adopted Master Plans that are critical to maintain public participation momentum and meet citizen expectations. Continued strategic development of phases in individual parks is included as well. Implementation of the System Plan will include specific recommendations for park land acquisition, strategic studies, and an update to the Plan in five years. Master Plans for undeveloped park land incorporate recommendations from the System Plan and public input. Additional master plan processes or sub-system studies are estimated at one per year, with site selection to be determined by potential partnerships and recommended major development by future park bonds.

Plans, Studies & Development	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Wooten Meadow	117,000	100,000	100,000	-	-	317,000
Picnic Shelters	25,000	155,000	150,000	150,000	25,000	505,000
MLK, Jr Park Expansion	200,000	-	-	-	-	200,000
Chavis Park Improvements	250,000	-	-	-	-	250,000
Canine Park	100,000	-	-	-	-	100,000
Pullen Park North Imprv	325,000	-	-	-	-	325,000
Master Plans & Studies	125,000	125,000	125,000	125,000	150,000	650,000
Falls Whitewater Park Environmental Assessment	115,000	-	-	-	-	115,000
Comfort Station Improvements	-	175,000	175,000	400,000	200,000	950,000
PRCR System Plan	-	-	150,000	100,000	-	250,000
Latta House	-	100,000	-	-	-	100,000
Subtotal	**$ 1,257,000**	**655,000**	**700,000**	**775,000**	**375,000**	**3,762,000**

Highlighted Projects

Falls Whitewater Park Environmental Assessment: $125,000

Environmental assessment for the proposed Falls of Neuse Whitewater Park includes completion and approval of a National Environmental Policy Act (NEPA) document. The project will be processed as an environmental assessment with ultimate approval and adoption by the United States Army Corps of Engineers upon consultation by other Federal, state, and local agencies as appropriate. The EA/FONSI will be prepared in accordance with the National Environmental Policy Act.



Dr. Martin Luther King, Jr. Memorial Gardens: $200,000

The Dr. Martin Luther King, Jr. Memorial Gardens Master Plan was revised and adopted in 2013; implementation coincides with expanded acreage. Expansion of the existing memorial gardens has been in collaboration with Community Advocates for Parks in Southeast Raleigh (CAPSR) and the Martin Luther King Committee. Phase 1 will be implementation of the adopted master plan including an outdoor covered space, restroom facility and additional parking.

Site Improvements

The site improvements category funds site-related maintenance and improvement projects at the City's numerous parks properties. Exterior components needing maintenance and improvements include parking lots, roads, trails, playgrounds, fields, fences, sport courts, trees, landscapes, site furnishings and signage. Over time these components reach the end of their life-cycles and require substantial renovation to remain safe, functional and attractive. There is an ongoing need to repair and replace park facilities and infrastructure as they degrade over time, become outdated, or become unsafe. This category also addresses critical and legally mandated changes (Americans with Disabilities Act, building code, etc.). Standardization of park furnishings and signage present an identifiable character to our park facilities.

Site Improvements	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Site Security	200,000	75,000	75,000	75,000	105,000	530,000
Field Fencing	75,000	75,000	75,000	75,000	75,000	375,000
Park Site Improvements	100,000	100,000	125,000	100,000	125,000	550,000
Parks Paving Program	150,000	150,000	175,000	200,000	135,000	810,000
Tennis Resurfacing	100,000	130,000	100,000	100,000	100,000	530,000
Playground Improvements	145,000	145,000	125,000	100,000	100,000	615,000
Walnut Creek Softball Complex	50,000	50,000	50,000	-	-	150,000
ADA Facility Upgrades	150,000	100,000	100,000	100,000	-	450,000
Signage-Parks & Greenways	100,000	75,000	75,000	75,000	75,000	400,000
Volunteerism & Partnerships	30,000	30,000	30,000	30,000	30,000	150,000
Fayetteville St Renovation	40,000	50,000	50,000	50,000	30,000	220,000
Safety Compliance	25,000	50,000	25,000	50,000	25,000	175,000
Maintenance Operations Facility	50,000	50,000	25,000	-	25,000	150,000
Field Renovations	100,000	100,000	100,000	100,000	100,000	500,000
Highway Landscape	25,000	25,000	25,000	25,000	25,000	125,000
Rose Garden	30,000	50,000	50,000	-	-	130,000
Tree Planting	50,000	50,000	50,000	50,000	50,000	250,000
Smart Waste & Recycling Stations	68,000	-	-	-	-	68,000
Buffaloe Rd Park	175,000	-	-	-	-	565,000
Marsh Creek Park	-	100,000	-	-	-	100,000
Lake Wheeler Boat House	-	-	-	50,000	-	50,000
Lake Wheeler Replacement Deck	-	-	-	30,000	-	30,000
Durant Nature Improvements	-	-	-	-	145,000	145,000
Millbrook Tennis Center	-	-	-	-	300,000	300,000
Subtotal	**$ 1,663,000**	**1,405,000**	**1,255,000**	**1,210,000**	**1,445,000**	**7,368,000**

Highlighted Projects

ADA Facility Upgrade: $2,450,000 (including $2 million from 2014 bond and $450,000 in paygo sources)

Current codes, standards and expectations have changed with regards to the extent of accessibility to park and recreation services. The ADA Study, completed in 2012, identified over $5.7 million in repairs and upgrades needed at facilities and sites throughout the parks system. Funds will be used to implement changes in buildings and access routes to bring them into compliance.

Field Renovations: $500,000

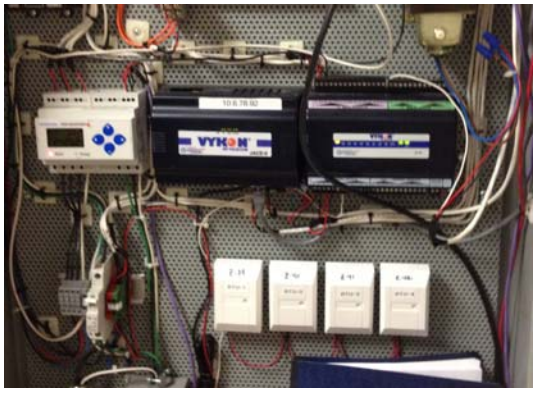
This project funds an ongoing program to renovate existing open space areas at park facilities to accommodate athletic programming and space rentals by outside agencies. Renovation consists of grading and site preparation, irrigation system installation and installation of sod or sprigs to establish a quality playing surface. This project funds the addition of concrete pads and walks for dugouts, scoreboards, bleachers, and permanent foul poles where necessary.

Parks Paving Program: $810,000

This project funds an ongoing program to repair and replace existing paved areas, as well as creating new paved surfaces. Types of surfaces include walking trails in parks, interior roadways and parking lots, basketball court surfaces, and sidewalks. The identified locations are sites that have met or exceeded their life cycle. Damage and wear comes not only from heavy usage, but from adjacent environmental impacts (i.e. tree root intrusion), and other factors. Projects are prioritized following an annual visual assessment performed by staff.

Site Security: $530,000

This project funds an ongoing program to address security issues throughout the park system, including installation of control access gates to limit vehicular access to facilities after hours and security cameras to increase security for parks and facilities.



Playground Improvements: $615,000

This project funds playground repairs and replacement of existing playground components to improve safety and play value. Removal of old wooden structures, correction of entrapments, surfacing materials, and borders allows the playgrounds to meet guidelines from the Consumer Product Safety Council and other entities. There are 69 playground sites across the City that require routine inspection, repair and maintenance. Six additional playgrounds have been added to the system in recent years. Funding is necessary to maintain safety and minimize liability issues.

2014 Parks, Recreation and Cultural Resources Bond

In May 2014 the Raleigh City Council voted unanimously to approve a new Parks, Recreation and Cultural Resources System Plan. The projects in the 2014 Raleigh Parks Bond referendum reflect highest priority needs identified in the System Plan including investing in the existing system facilities. Additional projects include new facilities and opportunities that address future growth of the city and expanding needs and desires of residents. A 1.72-cent increase in Raleigh's property tax rate will be needed to support the debt service and operating impacts of this bond package. Projects will be implemented in phases over the next 5-7 years. The first phase of projects will begin fall 2015, including Laurel Hills Park playground development, John Chavis Memorial Park design, Crabtree Creek West greenway trail development and Sierra/Lineberry Drive Park development.

2014 Bond Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Park Lighting	500,000	1,500,000	1,000,000	1,000,000	-	4,000,000
Park Site Acquisition	2,000,000	5,000,000	-	2,000,000	1,000,000	10,000,000
Parks Building Maintenance	500,000	675,000	600,000	125,000	125,000	2,025,000
Walnut Creek Softball Complex	500,000	4,500,000	-	-	-	5,000,000
Shelley Lake Comfort Station	100,000	400,000	-	-	-	500,000
Aquatic Improvements	1,000,000	-	5,000,000	-	2,000,000	8,000,000
ADA Facility Upgrades	500,000	500,000	500,000	500,000	-	2,000,000
Neighborhood Connections	250,000	250,000	-	250,000	250,000	1,000,000
Playground Improvements	350,000	375,000	300,000	275,000	200,000	1,500,000
John Chavis Park Improvements	750,000	-	11,750,000	-	-	12,500,000
Crabtree Creek Greenway West	4,400,000	-	-	-	-	4,400,000
Historic Cemetery Restoration	500,000	-	-	-	-	500,000
Lineberry Neighborhood Park	1,250,000	-	-	-	-	1,250,000
Historic Property Improvements	-	1,000,000	-	-	-	1,000,000
Brentwood Park Improvements	-	150,000	-	200,000	1,650,000	2,000,000
Apollo Heights Park Improvements	-	100,000	500,000	-	-	600,000
Kiwanis Park Improvements	-	100,000	600,000	-	-	700,000
Eastgate Park Improvements	-	100,000	500,000	-	-	600,000
Walnut Creek Wetland Park	-	150,000	-	850,000	-	1,000,000
Laurel Hills Playground	1,000,000	-	-	-	-	1,000,000
Pullen Art Center	-	575,000	5,425,000	-	-	6,000,000
Greenway Improvements	2,200,000	2,000,000	200,000	1,400,000	1,400,000	7,200,000
Greenway Connection Trenton Road	-	-	-	200,000	800,000	1,000,000
Lassiter Mill / Allegheny Trail	-	-	300,000	1,700,000	-	2,000,000
Baileywick Park Community Center	-	-	1,200,000	-	10,800,000	12,000,000
Capital Blvd Implementation	2,000,000	-	-	-	-	2,000,000
Perry Creek Rd Park Development	350,000	-	1,650,000	-	-	2,000,000
Subtotal	**$ 18,150,000**	**17,375,000**	**29,525,000**	**8,500,000**	**18,225,000**	**91,775,000**

Highlighted Projects

Laurel Hills Playground: $1,000,000

The new Sassafras Playground will be located at Laurel Hills Park, replacing the existing All Children's Playground built in 1990. In early 2010, a group of citizen volunteers came together and started a conversation about reconstructing the original playground, not only making it compliant to current codes, but also providing a safe place for children of all abilities to interact and families of multiple generations to socialize together. The key planning concepts for the new playground include parallel play (children of all capabilities playing side by side), nature play (introducing natural elements) and accessibility at all levels of the play areas.

Crabtree Creek West Greenway: $4,400,000

The Crabtree Creek West Greenway is a proposed trail connection that extends from the current Crabtree Creek Trail terminus at Lindsay Drive (east of Duraleigh Road) to the eastern boundary of Umstead State Park on Ebenezer Church Road. This connection is the last remaining section of the Crabtree Creek Trail and will be approximately two miles in length. This segment is a critical link in a regional greenway system, completing a network of trails spanning Wake County. The American Tobacco Trail in western Wake County will be connected by this critical link to the Neuse River Trail serving communities in the east-central portion of Wake County.

Lineberry Neighborhood Park: $1,250,000

The master plan reinforces the community's vision for the park by providing areas for outdoor recreation and community building, that are accessible for all ages and abilities in a safe, fun, and comfortable setting. The park is designed to be multifunctional and foster a healthy ecosystem through tree conservation, stormwater management, sustainable design practices and respect for the natural environment. Park elements may include a covered canopy area with restrooms, hard surface multipurpose court, playground area, multipurpose lawn, flexible use educational garden, circulation and access paths, environmental stewardship, basic park amenities, sidewalks, and traffic calming improvements.

John Chavis Memorial Park Improvements: $12,500,000

Through an 18-month Community Conversation Project, the Public Leadership Group worked towards a community understanding and respect for both the history and the future of the park, establishing consensus on shared interests, desired amenities, and needed improvements for the park. The work resulted in a Revised Master Plan for John Chavis Memorial Park, adopted by the Raleigh City Council in 2014. This project will fund schematic design and first phase of park redevelopment.

Pullen Arts Center: $6,000,000

This project funds improvements at the Pullen Arts Center and surrounding north portion of Pullen Park. The current structure at 105 Pullen Road was built in the 1960's and houses a variety of programs including: pottery, painting, jewelry, printmaking, glass, arts-based summer camps for children with support spaces for administration, meetings, gallery and operation. Improvements are needed to accommodate the growth and popularity of arts education at Pullen Arts Center with new technology and equipment.

Walnut Creek Athletic Complex Improvements: $5,000,000

This project funds overall site and facility improvements at Walnut Creek Athletic Complex. Improvements may include new fencing, drainage improvements, lighting upgrades, utility infrastructure, additional site amenities, walks and tower renovations. The Complex has hosted notable North Carolina High School Athletic Association and NC ASA Girls Fastpitch events. It is currently host for Shaw University Women's softball program.

Park Acquisition: $10,000,000

This is an ongoing program to acquire park land in areas that are deficient in parks and open space as identified and prioritized in the Comprehensive Plan and the departmental system plan. The $10 million in bond funds is supplemented with an additional $75,000 programmed from paygo sources.

Baileywick Park Community Center: $12,000,000

Bond funds will be used to design and construct a new community center at Baileywick Park. The current park is located south of I-540, just east of Creedmoor Rd. Today, the park consists of two shelters, three fields, a playground and a paved walking trail that begins at the Baileywick Road entrance to the park and loops behind the playground to the parking lot.

Housing

Funded Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Multi-Purpose Intake Center	1,648,000	-	-	-	-	1,648,000
Transfer to Debt Service	400,000	400,000	400,000	400,000	400,000	2,000,000
Total	**$ 2,048,000**	**400,000**	**400,000**	**400,000**	**400,000**	**3,648,000**

Revenue Sources	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Appropriated Fund Balance	1,948,000	300,000	300,000	300,000	300,000	3,148,000
Program Income	100,000	100,000	100,000	100,000	100,000	500,000
Total Revenues	**$ 2,048,000**	**400,000**	**400,000**	**400,000**	**400,000**	**3,648,000**

Element Overview

City staff are developing a new Affordable Housing Implementation Plan. Once adopted, the plan will launch significantly revised housing programs to help the City better achieve its housing goals. Because staff are reconsidering how to best use financial resources, the proposed CIP includes only one specific project, a city contribution to a proposed multi-purpose intake center for homeless support services. When the new plan is adopted, the 5-year CIP will be amended to reflect the new housing programs.

Historically, the main funding source for the housing program has been general obligation housing bonds. These funds help reduce the rents in assisted rental developments, finance the rehabilitation of housing for citizens of low to moderate incomes, provide down-payment assistance for homebuyers, and support neighborhood revitalization and homelessness activities.

Specifically, housing bond funds are used in the following ways:

- Investments to assist developers with acquisition, new construction, or rehabilitation of affordable rental housing.
- Loans to assist existing owner-occupants with the repair, rehabilitation or reconstruction of their homes.
- Second mortgage loans to assist homebuyers with down payment and/or closing costs.
- To support neighborhood revitalization in the city. This involves property acquisition, relocation, and demolition of blighted properties to create new sites for affordable housing.

Recent Accomplishments

- Provided second mortgage loans to 55 first-time homebuyers for down payment and closing cost assistance.
- Provided deferred, forgivable loans to 27 homeowners to make home repairs that, if left unattended, could pose a threat to occupants' health or safety.
- Partnered with Wake County and nonprofit community to begin selecting an operator of the proposed multi-purpose intake center to serve homeless persons.

Work Plan Highlights

- Building on prior funding for Washington Terrace, City staff is assisting in the planning of new development on that site. Additional city housing bond funds may be needed for future site improvements.
- Staff has retained the services of consultants to complete the planning for the East College Park Redevelopment Area, which is south of the Washington Terrace site. A multi-million-dollar construction project for new water, sewer, and storm water services for East College Park will begin early in the FY16.

Operating Impacts

- At this time, staff do not anticipate that any city-funded affordable housing programs will require ongoing operational support.

Horizon Items

Over the next several years, the Housing & Neighborhoods Department will implement the new programs and strategies outlined in its Affordable Housing Implementation Plan in order to meet the following outcomes:

- Increase supply of affordable housing for owners and renters
- Put City-owned property to productive use
- Remove or reduce land cost from affordable developments when necessary
- Preserve existing affordable rental units
- Support tax credit developments where appropriate
- Strengthen neighborhoods and reduce blight
- Enhance and strengthen the homeless shelter to housing continuum

As loans are repaid from housing bond investments, the City uses this program income to help lower-wage residents maintain safe and decent living environments. Such investments also support the local job market in the design, real estate, lending, construction, and non-profit sectors.

Highlights of Recently Completed Housing Projects

Poyner Spring:

The City provided a loan of $700,000 to local developer Evergreen Construction to produce a 42 unit development oriented toward senior citizens. The City's funds were leveraged with a combination of private and other public debt to finance the project's total cost of $5.2M. The development is located off Fox Road near the Triangle Town Center in Northeast Raleigh. Poyner Spring offers 21 one bedroom units and 21 two bedroom units. All of the units must be rented to eligible tenants with incomes less than 60% of the Area Median Income (AMI) with 12 units targeting 30% of AMI and 6 targeting 50% of AMI.

Martin & Haywood Street Infill Development:

Six lots at the intersection of Martin Street and Haywood Street were sold to RD Construction and Habitat for Humanity of Wake County to create affordable homeownership opportunities for first time homebuyers earning less than 80% of the area median income. Five homes have received a total of $100,000 in bond-funded City second mortgage funds, which assisted homeowners in qualifying for primary mortgages from participating lenders. The lots are located within a National Historic District. The City used federal Community Development Block Grant (CDBG) funds to acquire land, relocate tenants, and demolish dilapidated buildings previously located at Martin Street and Haywood Street. Additionally, the City used CDBG funds to complete infrastructure improvements including storm drainage, water and sewer taps, as well as sidewalk were installed.

Before

After

760 Bunche Rehab:

The City provided a loan of $78,500 for a substantial rehabilitate to the home located at 760 Bunche Dr. The rehabilitation included updating the mechanical, electrical and plumbing systems up to current code. A new roof was installed, additional foundation supports were added, and the bathroom was redesigned to be handicap accessible.

Before

After

Convention and Performing Arts Complex

Funded Projects		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Raleigh Convention Center		1,152,000	2,709,000	2,709,000	2,709,000	2,709,000	11,988,000
Performing Arts Center		1,437,000	2,625,000	-	-	-	4,062,000
Walnut Creek Amphitheater		200,000	200,000	200,000	200,000	200,000	1,000,000
Total Convention and Performing Arts Complex Capital	**$**	**2,789,000**	**5,534,000**	**2,909,000**	**2,909,000**	**2,909,000**	**17,050,000**

Revenue Sources		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Interlocal Funding		1,152,000	2,709,000	2,709,000	2,709,000	2,709,000	11,988,000
Future Bond Proceeds		1,437,000	2,625,000	-	-	-	4,062,000
Amphitheatre Rent		200,000	200,000	200,000	200,000	200,000	1,000,000
Total Revenue Sources	**$**	**2,789,000**	**5,534,000**	**2,909,000**	**2,909,000**	**2,909,000**	**17,050,000**

Element Overview

The five-year capital improvement plan includes $17 million, including $2.8 million in FY 2016, to maintain the four city facilities: the Raleigh Convention Center (RCC), Performing Arts Center (PAC), Walnut Creek Amphitheater, and the downtown amphitheater. These improvements are funded through interlocal partnerships, lease revenues, transfers from enterprise funds, and debt financing.

The 500,000 square foot Convention Center opened in 2008 and hosts approximately 400,000 attendees annually. The Center has extensive meeting space, exhibit halls, and catering service. It is nationally recognized as a premier facility for conferences and events. The center's design and location makes it a key component to the city's downtown economy. In Spring 2012, the City of Raleigh and Wake County negotiated the use of local hotel and restaurant sales tax revenues for RCC capital needs. This agreement establishes a long-term funding source to maintain this important facility.

The Performing Arts Center, located downtown, provides rehearsal and performance facilities for the North Carolina Symphony, North Carolina Theatre, Carolina Ballet, Pinecone, North Carolina Opera, and other groups. The Raleigh Memorial Auditorium was originally constructed in 1932 and most recently renovated in 1990. Additional performance spaces were opened in 2001.

The downtown amphitheater opened in 2010. This 5,990 person capacity venue hosts concerts, festivals, and other events. The amphitheater was recognized as "2011 Concert Industry Award for Best New Major Concert Venue" by *Pollstar* a leading worldwide trade magazine.

The Walnut Creek amphitheater, located on Rock Quarry Road, holds over 20,000 attendees. Live Nation leases and operates the facility.

Recent Accomplishments

- Completed installation phase for the heating, ventilation and air conditioning system (HVAC) replacement in the PAC. The entire design and construction budget for the project is $6.7 million.
- As a part of the HVAC project, new cooling towers have been installed at a cost of $819,000.

- Continuation of lighting replacement program with LED bulbs as well as upgrading to new LED fixtures and sensors.
- VIP restrooms and new office space at Walnut Creek will be completed in May 2015.

Work Plan Highlights

- The city is in the process of installing new direct digital controls in both Fletcher Theatre and Meymandi Concert Hall at the PAC.
- PAC interior finish improvements will include replacement of carpet, bathrooms, wall treatments, drapery, ceiling tiles, painting, new lobby furniture, lighting upgrades, and digital signage. The interior upgrades will be coordinated with the HVAC project and are expected to be completed in the fall of 2015.
- Staff are designing the electrical upgrades on systems in the Raleigh Memorial Auditorium. Some of the components date back to 1950's.
- Staff are replacing carpet in the Convention Center, which is expected to be completed by August 2015.
- In design phase for the interior upgrades of the PAC expected to include new lobby furniture, carpet, wall treatments, drapery, ceiling tiles, paint, lighting, and digital signage.
- In design phase to update the original dishwasher in the RCC to a more energy efficient one that saves on both water and electrical.
- Staff is preparing to install new digital and static signage throughout the center with a completion date of May 2015.
- Grading work of the parking lots at Walnut Creek Amphitheater is expected to begin October 2015.

Operating Impacts

- HVAC replacement at the PAC should produce significant savings in energy cost as well as a reduction in the cost of maintenance as some of the equipment being replaced dates from the 1950s.
- LED lighting replacement in the RCC Exhibit Halls is estimated to have an energy savings of more than 75%.

Horizon Items

- In the future the city will consider long term opportunities to expand RCC across McDowell Street into the downtown amphitheater space.

Convention and Performing Arts Complex Projects

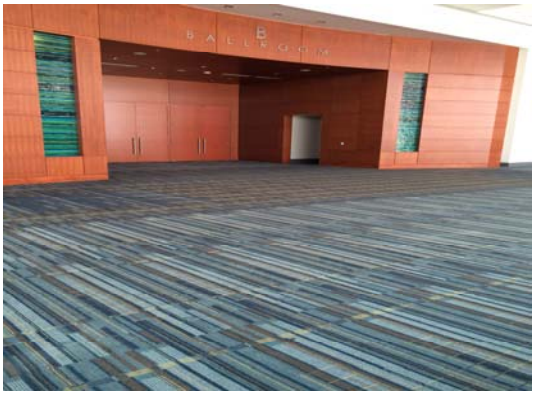
These projects include safety and security enhancements, exterior site improvements, building system repair and maintenance, technology upgrades, interior finishes and general facility maintenance. Specific examples include carpet replacement, roof repairs, painting and pavement work.

Convention and Performing Arts Complex	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Raleigh Convention Center						
Life Safety and Security	-	-	-	-	325,000	325,000
Site Improvements	-	-	30,000	-	-	30,000
Building Systems	357,000	163,000	325,000	1,078,000	-	1,923,000
Technology	503,000	189,000	-	87,000	-	779,000
Interior Finishes	-	2,357,000	2,354,000	1,544,000	2,384,000	8,639,000
Building Envelope	292,000	-	-	-	-	292,000
Performing Arts Center						
Building Envelope	407,000	-	-	-	-	407,000
Building Systems	280,000	896,000	-	-	-	1,176,000
Interior Finishes	750,000	1,214,000	-	-	-	1,964,000
Site Improvements	-	515,000	-	-	-	515,000
Walnut Creek Amphitheater						
Restroom Renovations	-	50,000	-	-	-	50,000
HVAC Updates	-	-	70,000	-	-	70,000
Electrical Upgrade	-	-	30,000	-	-	30,000
Asphault Repaving	-	-	-	-	100,000	100,000
Painting Updates	-	-	-	70,000	-	70,000
Water Heaters	-	-	-	30,000	-	30,000
Grading Work	200,000	150,000	100,000	100,000	100,000	650,000
Total	**$ 2,789,000**	**5,534,000**	**2,909,000**	**2,909,000**	**2,909,000**	**17,050,000**

Highlighted Projects

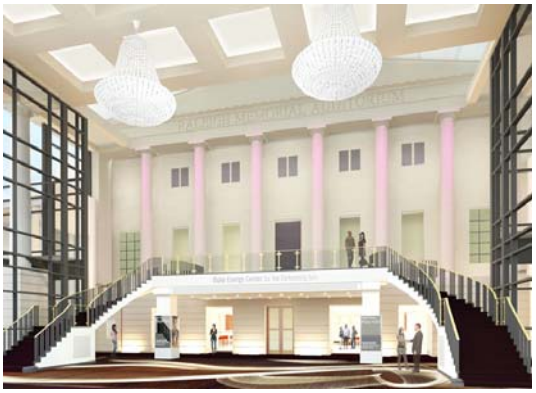
RCC Interior Finishes: $8,639,000

The Convention Center is in the process of carpet replacement and is expected to be completed by August 2015. This is the first time that the carpet has been replaced since the building opened in 2008.



PAC Interior Finishes: $1,964,000

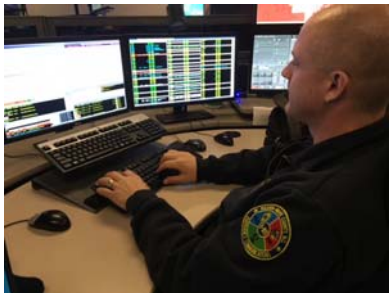
PAC interior finish improvements will include replacement of carpet, bathrooms, wall treatments, drapery, ceiling tiles, painting, new lobby furniture, lighting upgrades, and digital signage. The interior upgrades will be coordinated with the HVAC project and are expected to be completed in the fall of 2015.



Walnut Creek Grading Work: $650,000

Grading work of the parking lots at Walnut Creek is expected to begin October 2015 to help eliminate rain water runoff from the surrounding parking areas.

Technology



Technology Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
ERP Debt Transfer	3,134,187	3,081,387	3,027,864	-	-	9,243,438
Land Management System	830,500	-	-	-	-	830,500
Computer Aided Dispatch System	6,000,000	1,000,000	-	-	-	7,000,000
PRCR Management System	150,313	500,000	-	-	-	650,313
Budget and Planning System	1,346,000	-	-	-	-	1,346,000
Planning and Evaluation Studies	-	50,000	50,000	50,000	50,000	200,000
Small Projects Fund	-	75,000	75,000	75,000	75,000	300,000
Reserve for Future Projects	-	1,292,613	2,811,136	3,875,000	3,875,000	11,853,749
Total	**$ 11,461,000**	**5,999,000**	**5,964,000**	**4,000,000**	**4,000,000**	**31,424,000**

Revenue Sources	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
Transfers in for ERP Debt:						
Transfer from General Fund	1,101,066	1,082,517	1,063,714	-	-	3,247,296
Transfer from Public Utilities	1,556,249	1,530,032	1,503,455	-	-	4,589,736
Transfer from Vehicle Fleet Services	41,230	40,535	39,831	-	-	121,597
Transfer from Solid Waste	168,590	165,750	162,871	-	-	497,211
Transfer from Transit	8,980	8,829	8,675	-	-	26,483
Transfer from Parking Operations	14,131	13,893	13,652	-	-	41,676
Transfer from Stormwater Utilitiy	143,202	140,789	138,344	-	-	422,334
Transfer from RCC Operating	77,331	76,029	74,708	-	-	228,068
Transfer from Community Development	23,408	23,014	22,614	-	-	69,036
Subtotal	**$ 3,134,187**	**3,081,387**	**3,027,864**	**-**	**-**	**9,243,438**
Transfers in for Selected Projects:						
Transfer from General Fund	2,898,934	2,917,613	2,936,136	4,000,000	4,000,000	16,752,684
Transfer from Public Utilities	152,143	-	-	-	-	152,143
Transfer from Vehicle Fleet Services	9,523	-	-	-	-	9,523
Transfer from Solid Waste	41,852	-	-	-	-	41,852
Transfer from Transit	1,287	-	-	-	-	1,287
Transfer from Parking Operations	5,588	-	-	-	-	5,588
Transfer from Stormwater Utilitiy	22,830	-	-	-	-	22,830
Transfer from RCC Operating	15,417	-	-	-	-	15,417
Transfer from Community Development	7,941	-	-	-	-	7,941
Subtotal	**$ 3,155,515**	**2,917,613**	**2,936,136**	**4,000,000**	**4,000,000**	**17,009,264**
Computer Aided Disptach System Project Revenues:						
Appropriated Fund Balance	2,171,298	-	-	-	-	2,171,298
Wake County Contribution	3,000,000	-	-	-	-	3,000,000
Subtotal	**$ 5,171,298**	-	-	-	-	5,171,298
Total Revenues	**$ 11,461,000**	**5,999,000**	**5,964,000**	**4,000,000**	**4,000,000**	**31,424,000**

Program Overview

The Information Technology Fund provides funding for the city's major technological infrastructure and major business system projects. The proposed five-year CIP maintains existing systems and invests in new systems to improve city operations. The CIP also funds debt service on the city's financial system. Initiatives currently underway include an upgrade to the Peoplesoft Enterprise Resource Planning (ERP) system, the implementation of a fiber network, the assessment phase of the land management system; and the final implementation of Cityworks as the organization's primary work order management system. These technology efforts and systems positively affect operations and enhance city services.

Before the next budget cycle begins, city staff will review our processes used for technology investments and assess new ways to identify future technology needs.

Recent Accomplishments

- In June 2014 , the city Implemented NEOGOV Insight hosted software. The product has automated the candidate recruiting process which replaced the manual paper application process and provides the City of Raleigh with a larger candidate selection pool. By the end of 2014, City of Raleigh departments posted more than 250 positions and 25,843 applications using this new software.
- Columbia Telecommunications Corporation, Inc. (CTC) completed their master plan for a citywide institutional fiber network. IT staff completed the business case and analysis in support of this project.
- Executed Assessment Phase contract and began detailing a new system to track and manage a highly collaborative multi-departmental land management solution. The system will provide a seamless integration of all land development activities, regardless of their business origination, in a hierarchical, systematic and rational basis, with GIS-based identification linking all activities.

Work Plan Highlights

- Members of the Peoplesoft Center of Excellence are fully engaged in the Peoplesoft 9.2 upgrade project. The team, including participants throughout the city, have completed the fit-gap, configuration, system testing and user acceptance testing phases and are on schedule to go live before the end of calendar year 2015.
- Cityworks and SeeClickFix integration will allow a number of reportable issues to flow directly into Cityworks as service requests.
- The city will use existing appropriation to provide institutional fiber to facilities. The services provide one gigabyte fiber service to a handful of critical facilities, including the Raleigh Municipal Building, Central Communications Center, Central Operations Facility, and the Public Utilities Lake Woodard facility.
- The assessment phase for Land Management will be complete by fall 2015 with deployment expected by summer 2017.
- The City of Raleigh will implement a Citrix Mobile Device Management (MDM) solution utilizing Varrow as the selected vendor. Mobile Device Management software supports mobile devices that serve our business requirements. MDM functionality includes over-the-air distribution of applications, data and configuration settings for all types of mobile devices, including mobile phones, smartphones, tablet computers, ruggedized mobile computers, mobile printers, etc.

Operating Impacts

The following Technology Capital Projects have an operating impact for FY 2016 operations:

- Institutional Fiber Network - Annual operating budget includes $134,500 for maintenance, support and Direct Internet Access for the fiber network project.

- Cityworks System – The operating budget includes $72,000 for the funding of a full-time permanent Application Integration Developer position to manage the technical integration details for this program and system.
- New Budgeting and Planning System – Funding of $104,074 included in FY 2016 for software maintenance, hardware lease, and user training.

Horizon Items

Staff will revisit the governance process we use for technology investments and look for new ways to identify future technology needs, evaluate and prioritize projects, and reach consensus on budget priorities. These process changes will enable the city to use the resources currently programmed in the 5-year technology CIP. Some programmatic areas that will likely need funding in the next five years include:

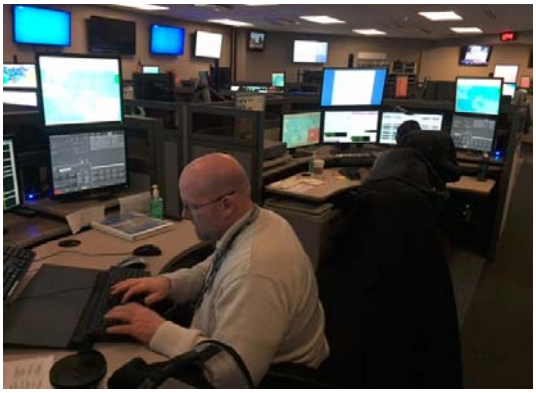
- Customer Relationship Management: One organizational excellence initiative in our adopted Strategic Plan is to implement a customer relationship management system to better serve citizens and businesses.
- Technology Infrastructure and Hardware: To ensure stability for the city's various systems, we will need to maintain and improve the physical infrastructure and hardware. This includes replacing aging servers and improving connectivity in city buildings.
- Enterprise Resource Planning Enhancements: The PeopleSoft Center of Excellence is developing a roadmap of potential enhancements to pursue, once the upgrade is completed in September 2015. Staff will evaluate and prioritize enhancements to treasury functions, projects and grants management, enterprise learning, employee performance management, and other areas.
- Enterprise Content Management: The city will continue evaluating investments in content management software. It will be necessary to identify the records management roles and responsibilities among city departments. Staff will consider the project scope and scale to determine whether a partial implementation at first phase is preferable.
- Upgrading Existing Systems: In the coming years, the city's existing systems will need periodic upgrades and improvements. These include Cityworks, land management, law enforcement records, and others.

Technology Capital

The Capital Improvement Program is an annual process that provides a five-year view of funding for major City projects. The technology capital portfolio of funded projects has fulfilled the city's technology governance process and reflects the priorities of the organization.

Highlighted Projects

Computer Aided Dispatch System Replacement: $7,000,000



A replacement Computer Aided Dispatch (CAD) system will be utilized by the Raleigh-Wake Emergency Communications Center to enter 9-1-1 calls for service, track the dispatch of 9-1-1 calls, and maintain a log of emergency vehicle locations and assignments. In addition, it provides hazard information to first responders and serves as a gateway to a variety of other services essential for first responder safety. This project will replace the existing CAD system, which has reached end of life, and adds new capabilities available with technology advances. The city is partnering with Wake County on this project and sharing in the costs of the project equally. Staff will submit a funding request to the State 911 Board in FY17 for reimbursement of eligible project expenses.

Budget and Planning System Replacement: $1,346,000

The PeopleSoft Hyperion budgeting tool will replace PeopleSoft EPM which will no longer be supported by Oracle. The new system will be used to develop yearly operating, capital, position and grants budgets. This system will be tightly integrated to existing PeopleSoft Financials and Human Resources modules ensuring the most efficient transfer and management of budget and performance data. This system will deliver new functionality to better support the direction of the City Manager's office including decision packages, integrated forecasts and modeling, and system flexibility required by a dynamic organization.

Parks Recreation and Cultural Resources Management Sytem: $650,000

The goal of the project is to formulate requirements, select and implement a management system to replace Active Network's Class software. Class is used to manage programs and services provided to citizens, as well as the usage of facilities. This system processed transactions that accounted for approximately $10,000,000 in revenue during FY14 and over 90,000 program registrations. In 2017, Class will reach its end of life when maintenance and support will cease. The department must migrate to another product that will fulfill its existing needs and allow for continued enhancements in functionality. Functionality required of the new system will include the management of registrations, facility reservations, memberships, e-commerce and point-of-sale transactions.