



City of Raleigh

Adopted Capital Improvement Program 2013-2014



City of Raleigh

Capital Improvement Program

Fiscal Years 2014 through 2018

The City Council

Nancy McFarlane, Mayor

Eugene Weeks, Mayor Pro Tem

Mary-Ann Baldwin

Thomas G. Crowder

Bonner Gaylord

John Odom

Randall Stagner

Russ Stephenson

Executive Staff

J. Russell Allen City Manager
Perry E. James, III. Chief Financial Officer
Joyce Munro Budget and Management Services Director
Ben Canada Capital Improvement Program Manager
Kirsten Larson Operating Budget Manager
Stephen Bentley Parks and Recreation Strategic Planning Superintendent
David P. Erwin Assistant Controller for Strategic Initiatives

The following individuals, whose assistance and contributions to the annual capital improvement program development process are immeasurable, are hereby acknowledged:

Tyrone S. WilliamsonBusiness Analyst, Finance Department
Allyson Wharton.....Treasury Manager, Finance Department
Fred Blackwood Debt Manager, Finance Department
George LaneAccountant Auditor II, Finance Department

Table of Contents

Overview of the Capital Improvement Program	1
Tables: FY2014-FY2018 Capital Improvement Program Budget Summary.....	10
Tables: Summary of Five-Year Capital Improvement Plan	13
General Public Improvements	15
Public Utilities	27
Stormwater	43
Transportation	53
Parks and Recreation.....	65
Housing	79
Convention and Performing Arts Complex	85
Technology	91



City Of Raleigh
North Carolina

June 18, 2013

Mayor Nancy McFarlane
Mayor Pro Tem Eugene Weeks
Councilor Mary-Ann Baldwin
Councilor Thomas G. Crowder
Councilor Bonner Gaylord
Councilor John Odom
Councilor Randall Stagner
Councilor Russ Stephenson

Dear Mayor and Councilors:

Presented in this document is the adopted *Capital Improvement Program (CIP)* for the City of Raleigh, spanning FY 2014 to FY 2018.

In the FY 2014 budget proposal, I included a single, consolidated budget message. The budget message weaves together the themes upon which the operating *and* capital budgets are based. The memorandum is included with the proposed FY 2014 operating budget document.

This CIP continues the City of Raleigh's commitment to being one of the most desirable places to live, work and play in the United States. Our CIP also implements recommendations from the 2030 Comprehensive Plan. The City administration is prepared to implement the projects authorized by Council's adoption of this Capital Improvement Program. As the City moves forward in FY 2014, you will receive periodic updates on the progress of our capital improvement initiatives.

Respectfully submitted,

J. Russell Allen
City Manager

Overview of the Capital Improvement Program

The city's capital improvement program analyzes major facility and equipment needs, establishes priorities, estimates fiscal resources, and schedules the development of funded projects. For the purpose of the five-year *Capital Improvement Program* (CIP), capital expenditures are generally defined as fixed assets with a useful life greater than ten years and with a cost of at least \$25,000. Regular purchases of vehicles and equipment for routine operations are, generally, financed through an internal service fund and the annual operating budget. Routine maintenance of facilities is funded through the annual operating budget.

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 Council's best judgment at that time, and future needs and financial constraints may result in programmatic changes over the five year period. The policy established in the CIP provides important guidance for city administration, the various boards and commissions appointed by City Council that assist with municipal governance, and all citizens of the City of Raleigh.

Capital improvement programming is one element in the city's long-term planning process. It is a bridge between the city's Comprehensive Plan, city-wide initiatives such as the Climate Energy Action Plan, and departmental plans. The CIP supports city operations by planning the maintenance and expansion of facilities and other assets needed to serve citizens.

Capital Improvement Program

“Guiding Principles”

The City of Raleigh is identified consistently as one of the top rated locations to live and work in the United States. It is home to many progressive companies and highly-regarded universities. One of the driving forces behind the region’s success is the City of Raleigh’s commitment to collaborative planning and investment into capital infrastructure and other assets.

Several factors both known and unforeseen influence the city’s CIP. This section outlines the “Guiding Principles” used by the city in the planning, development and implementation of the annual capital improvement program.

1. The city will comply with applicable Federal and State mandates.
2. Projects shall reflect both the City Council Mission Statement and the City Manager’s Strategic Themes

City Council Mission Statement:

- *We are a 21st Century City of innovation focusing on environmental, cultural and economic sustainability.*
- *We conserve and protect our environmental resources through best practices and cutting edge conservation and stewardship, land use, infrastructure and building technologies.*
- *We welcome growth and diversity through policies and programs that will protect, preserve and enhance Raleigh existing neighborhoods, natural amenities, rich history and cultural and human resources for future generations.*
- *We lead to develop an improved neighborhood quality of life and standard for all our citizens.*
- *We work with our universities, colleges, citizens and regional partners to promote emerging technologies, create new job opportunities and cultivate local businesses and entrepreneurs.*
- *We recruit and train a 21st century staff with the knowledge and skill sets to carry out this mission, through transparent civic engagement and providing the very best customer service to our current citizens in the most efficient and cost effective manner.*

City Manager’s Strategic Themes:

- *Customer Service: Investing and integrating new systems, technology, training and organization development programs to help us become the single best local government for direct service anywhere in the country.*
- *Neighborhood Quality: Developing citizen participation and responsive programs and services to enhance the quality of life for our neighborhoods.*
- *Capital Projects: Developing our infrastructure (buildings, parks, transportation and utilities) by performing well on Capital Projects. This enable us to both keep up with growth and be a place where people want to live.*
- *Environmental Initiatives: Seek sustainable advances that will assist us in creating a positive environmental impact in the projects we take on and in the way we work.*
- *Growth: Developing and implementing strategies (for downtown, new and redeveloping neighborhoods, etc) to manage growth by focusing on our Comprehensive Plan to ensure that Raleigh continues to be a location where people want to live and work.*

3. The City will utilize the Comprehensive Plan as well as other City Council adopted plans and studies as guides for the development and implementation of the capital improvement program.
4. The City will collaborate and develop partnerships within our organization as well as with other governmental agencies, private businesses and nonprofits to leverage public resources in order to implement the most cost effective and highest quality capital projects
5. The City will plan and implement projects that promote sustainability.
6. The City will encourage economic development projects that are both culturally and geographically equitable
7. The City will plan, evaluate and implement capital projects based on the following basic principles:
 - Maintenance of our existing capital assets (Priority One)
 - Replacement and/or expansion of existing capital assets (Priority Two)
 - Creation of a new capital asset (Priority Three)
8. The City will promote sound fiscal planning across a spectrum of capital disciplines by using various funding resources including paygo funding (cash), grant funding, partnerships for joint funding and debt funding in a manner that leverages resources to minimize cost for customers and citizens, but appropriately allows the city to meet its infrastructure needs in a timely manner.

Capital Improvement Core Team

The development of the city's CIP is a dynamic, evolving process that involves staff from several city departments. An interdepartmental team, the Capital Improvement Core Team (CIPCT), sets the foundation for the plan's development.

The purpose of the Capital Improvement Core Team (CIPCT) is to foster an organizational environment that promotes collaborative capital planning, budgeting and implementation through active and open communication, leveraging of resources and cooperative leadership.

The Office of Management and Budget (OMB) provides the overall leadership and coordination of the CIPCT. The CIPCT meets during the budget process to discuss various aspects of the capital improvement program ranging from project status, coordination, and budget planning and development. A primary responsibility of the CIPCT is to review, discuss and prioritize the city's General Public Improvement (GPI) projects. The GPI program consists of projects related to public safety, economic development, sustainability and maintenance of general government facilities. The CIPCT uses a weighted set of criteria to score GPI projects that are submitted for funding. The criteria used for the FY 2014 CIP General Public Improvements (only) include:

General Public Improvement Program Scoring Criteria

1. Criteria 1 - Impact on Operating Costs / Return on Investment
 - a. High: A business case evaluation and/or benefit cost analysis has been completed and clearly demonstrated for this project. There is significant reduction in operating costs (25% or >) and/or a reasonable payback period (1 to 12 years)
 - b. Medium: The project will reduce operating costs but no business case evaluation or benefit cost analysis has been completed or provided as a part of the project.
 - c. Low: No reduction in existing or future operating / maintenance costs but improves city services
2. Criteria 2 - Demonstrated Need and Service Impacts
 - a. High: Clearly demonstrates an immediate need and addresses an existing service deficiency (Service/need is addressed within 1 year)
 - b. Medium: Somewhat demonstrates an immediate need and proposed service deficiency (Approx. 2 to 4 yrs)
 - c. Low: Does not demonstrate an immediate need or existing service deficiency (5 or more years)
3. Criteria 3 - Legal Mandate / Health & Safety Issue / Signed Agreement
 - a. High: Is a legal mandate (Federal, State or Local) or contractual obligation through signed agreement(s)
 - b. Medium: Is a health risk or safety factor, but not a legal mandate
 - c. Low: Is not a legal mandate
4. Criteria 4 - 2030 Comprehensive Plan
 - a. High: Provides critical infrastructure or service for planned development in designated centers, corridors, and Areas for Economic Development
 - b. Medium: Demonstrates a long term (20+ year) outcome that advances the Comprehensive Plan themes
 - c. Medium/Low: Directly implements specific policy(ies) of the Comprehensive Plan, with measurable objectives

- d. Low: Aligns with Comprehensive Plan policies and themes
- 5. Criteria 5 - Adopted Plans, Studies, and Reports
 - a. High: Project is part of a City Council adopted study, report or goals and is consistent with or part of another adopted project that is under implementation
 - b. Low: Project is not part of an adopted City Council study or report and is stand alone
- 6. Criteria 5 - Grants and Partnerships
 - a. More than 25% of project costs covered
 - b. Up to 25% of project costs covered
 - c. No grant
- 7. Criteria 6 - Number of years project has been requested

After the CIPCT scores the general public improvement projects, the team reviews the results and discusses each project. Available revenues are then applied to the highest priority projects. The CIPCT's final product is a specific recommendation to the City Manager.

At present, the criteria listed above are only applied to the general public improvement projects. CIP projects funded with restricted-use revenues (e.g., Transportation, Public Utilities, Stormwater) are selected based on their adopted master plans, Council priorities, citizen requests, regulatory mandates and other criteria.

The Comprehensive Plan's Relationship to the Capital Improvement Program

The 2030 Comprehensive Plan, adopted by City Council in October 2009, is the City's primary long-range policy document, providing a singular vision along with unifying strategies for Raleigh to grow as a modern, 21st Century city. A principal application of the Plan is the coordination of private and public investments as they relate to the City's physical growth. The Comprehensive Plan most directly influences private investment through the development policies and code and public investment through strategies within the Capital Improvement Program (CIP).

By City Charter, the City of Raleigh Comprehensive Plan is to correlate the activities and projects of all of the agencies of the City, treating the problems of the community and of the municipal government as a closely knit whole. This is to be achieved through the adopted policies and maps of the Plan which give clarity for internal and external stakeholders regarding development and investment expectations.

All capital projects should be consistent with the Comprehensive Plan. While life safety issues remain critical, capital projects which better implement the Plan should be prioritized in the CIP. As further articulated below, City Council-adopted policy asserts the preeminence of the Comprehensive Plan and the need for a process to consult the plan so to establish priorities within the CIP.

The following four policies, taken from the Plan's Implementation Element, most directly impact the CIP:

- i. Policy IM 2.1—CIP Priorities: The Comprehensive Plan shall be consulted when establishing priorities within the City's Capital Improvement Program;
- ii. Policy IM 2.2—Preeminence of the Comprehensive Plan: The Comprehensive Plan shall be the city's lead and overall policy guide for the growth and development of Raleigh. All other city plans related to the City's growth and development and related infrastructure plans must be revised to be in conformance with the Comprehensive Plan;
- iii. Policy IM 2.3—Consistency of Other Plans: All City departments shall submit annually to the City Manager and Planning Director a list of plans and studies to be undertaken in the upcoming year, to determine joint planning opportunities and consistency with the Comprehensive Plan;
- iv. Policy IM 2.4—Return on Investment: Major capital projects not tied to immediate life safety or capacity deficiencies should be subjected to a return on investment analysis as part of the prioritization process. The return on capital projects should be based on the ability of the project to catalyze private investment, make efficient use of existing infrastructure, and generate new net revenues.

Raleigh's Vision Statement for 2030 (Adopted by City Council)

Raleigh will be a city that values and fosters development that provides economic prosperity, housing opportunity, and equity for all Raleigh residents. Raleigh will embody environmental conservation, energy efficiency, and sustainable development. Raleigh will be a great place to live with distinctive and attractive neighborhoods, plentiful parks and green spaces, quality schools and educational opportunities, and a vibrant downtown.

Vision Themes of the 2030 Comprehensive Plan

Six key themes reinforce Raleigh's Vision Statement for 2030 implemented by way of adopted policies that are grouped into 15 Comprehensive Plan Elements such as Land Use, Transportation, Community Facilities and Services, and Economic Development:

- 1) Economic Prosperity and Equity
- 2) Expanding Housing Choices
- 3) Managing Our Growth
- 4) Coordinating Land Use and Transportation
- 5) Greenprint Raleigh—Sustainable Development
- 6) Growing Successful Neighborhoods and Communities

Assistance with the Comprehensive Plan's Vision Themes, Plan Elements, Plan Policies, Action Items, and illustrative maps can be obtained through the Raleigh Department of Planning and Development.

Capital Improvement Program Elements

The Capital Improvement Program spans five fiscal years, from FY 2014 through FY 2018. This document displays project costs, descriptions and funding plans in eight program areas:

The **General Public Improvement** element includes funding for maintenance and construction of public safety facilities general maintenance of city-owned buildings and infrastructure, economic development projects and other general needs.

The **Public Utilities** element includes water projects for main replacements, water treatment plant maintenance, sewer projects include facility improvements, filter rehab and pump stations.

The **Stormwater** element continues the city's efforts to proactively manage and mitigate the effects of stormwater runoff, alleviate flooding, improve the drainage capacity of watercourses and containment structures within the Neuse River drainage basin.

The **Transportation** element addresses major streets development and improvement, bicycle, pedestrian planning, transit and parking facility's needs.

The **Parks and Recreation** element contains community facility maintenance, lighting, greenway improvements, fencing, paving, future planning and design projects.

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 contains projects addressing the facility maintenance, renovation, and improvement needs for the Raleigh Convention Center, Performing Arts Center, Walnut Creek Amphitheater and downtown amphitheater.

The **Technology** element includes the planning, design and implementation of the city's technological infrastructure relating to financial management, human resource management, land use planning, work order management, and other major systems.

Capital Improvement Program Revenue Sources

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 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 FY 2014 and across the five-year horizon, is bonds. In November 2011, Raleigh’s citizens approved the use of general obligation bonds for housing and transportation projects. Revenue bonds will fund many public utility improvements. 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 improvements. The transfers for capital are only used for the enterprise purposes (e.g., 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. This source supports general public improvements, including facility maintenance, economic development, and public safety facilities. The general fund transfers also support technology projects and maintenance at parks facilities.

Powell Bill Revenue: The portion of the state gasoline tax returned to the city is known as Powell Bill revenue. This funding source is restricted to use for the city’s transportation system including streets, sidewalks, and bicycle infrastructure. The city has traditionally allocated a portion of the revenues to street maintenance operations and a portion to capital improvements.

Facility Fees: The City assesses charges on new development to help pay for the capital facility burden created by new development. These fees support debt service and cash-funded projects for city parks and transportation improvements. Unlike other types of developer fees, facility fees are based on a standard formula and a pre-determined fee schedule. Facility fees require that each new residential or commercial project pay its proportionate share of the cost of new infrastructure facilities required to serve that development.

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 includes a specific, 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 Community Development services, which are invested in new affordable housing programs. This also includes selected development fees, and lease revenue at the Walnut Creek Amphitheater.

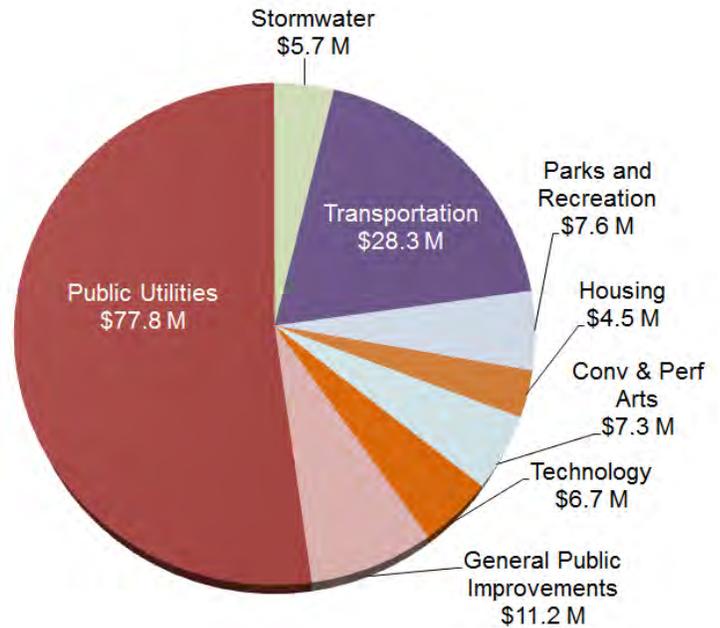
Reserve from Prior Years: Capital reserves are an accumulation of budget savings after projects have been completed, or additional revenues collected above the budget estimate. During the capital planning process, staff estimate the amount of reserve available in the future and schedule the use of reserves in the five-year plan.

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.

FY 2014 CIP Budget Summary (Year 1 of the 5-Year Plan)

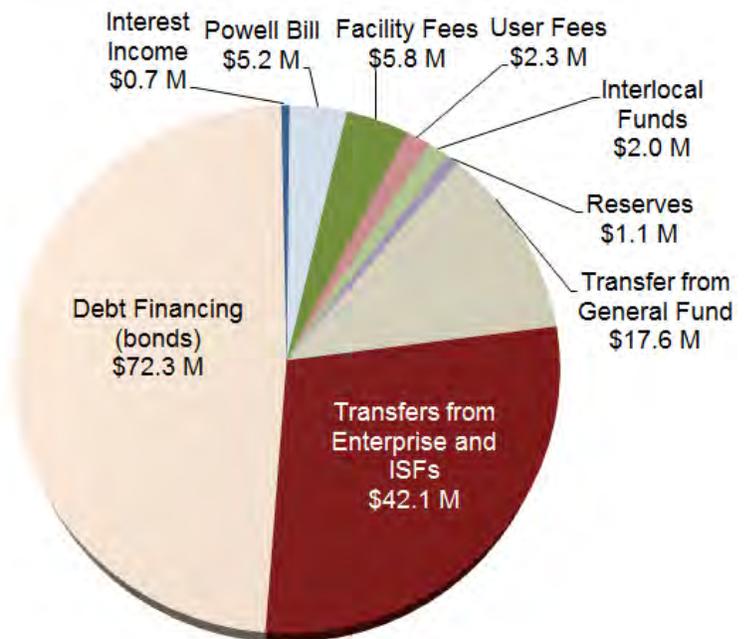
Expenditure Summary

Capital Element	FY 2014
General Public Improvements	11,229,000
Public Utilities	77,792,000
Stormwater	5,700,000
Transportation	28,277,000
Parks and Recreation	7,587,520
Housing	4,500,000
Convention & Performing Arts	7,314,434
Technology	6,695,787
Total Expenditures	149,095,741



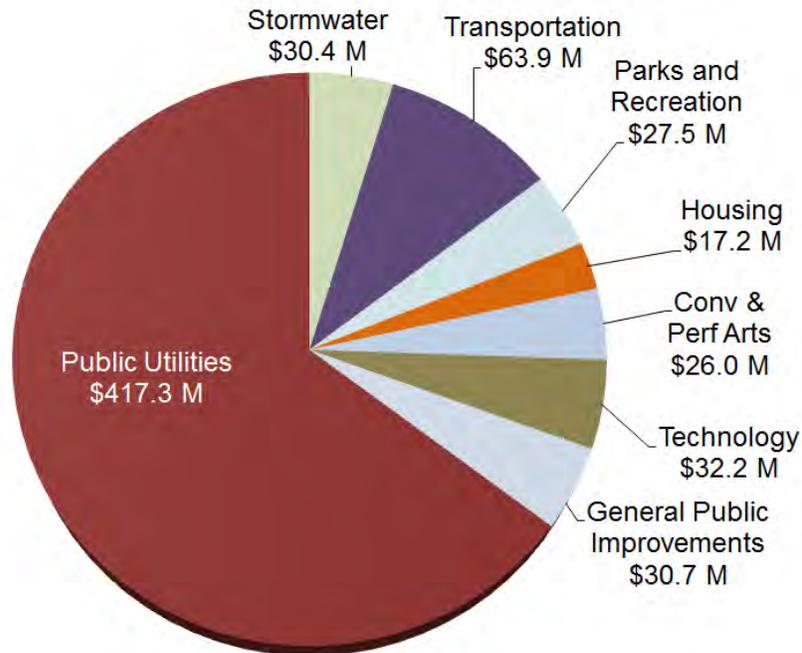
Revenue Summary

Revenue Sources	FY 2014
Transfers from General Fund (programmed transfers)	9,751,928
Transfers from General Fund (one-time revenues)	7,877,000
Transfers from Enterprise and Internal Service Funds	42,133,379
Debt-Financing (bonds)	72,287,000
Interest Income	735,000
Powell Bill Revenue	5,190,000
Facility Fees (Streets and Parks)	5,750,000
User Fees and Program Income	2,266,000
Interlocal Funds (Hotel/Rest tax)	1,980,434
Reserve from Prior Years	1,125,000
Total Revenues	149,095,741



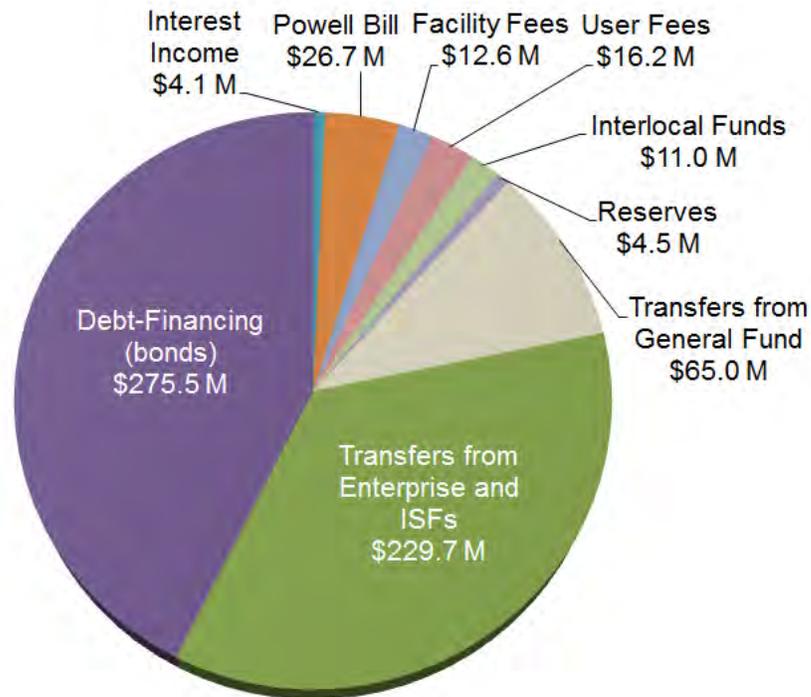
Five-Year CIP Expenditure Summary

Capital Element	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
General Public Improvements	11,229,000	6,182,000	4,100,000	4,600,000	4,600,000	30,711,000
Public Utilities	77,792,000	68,265,560	79,916,855	89,595,945	101,752,893	417,323,253
Stormwater	5,700,000	5,947,000	6,098,000	6,254,000	6,415,000	30,414,000
Transportation	28,277,000	9,952,000	9,441,000	8,421,500	7,765,000	63,856,500
Parks and Recreation	7,587,520	4,800,000	5,000,000	4,900,000	5,245,000	27,532,520
Housing	4,500,000	4,250,000	4,250,000	3,675,000	510,000	17,185,000
Convention & Performing Arts	7,314,434	10,724,838	1,627,394	3,183,741	3,183,742	26,034,149
Technology	6,695,787	6,707,337	6,796,647	6,008,769	5,974,049	32,182,590
Total Expenditures	149,095,741	116,828,735	117,229,896	126,638,955	135,445,684	645,239,012



Five-Year CIP Revenue Summary

Revenue Sources	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Transfers from General Fund (programmed transfers)	9,751,928	10,500,000	11,800,000	12,300,000	12,745,000	57,096,928
Transfers from General Fund (one-time revenues)	7,877,000	-	-	-	-	7,877,000
Transfers from Enterprise and Internal Service Funds	42,133,379	43,974,337	46,224,647	47,622,769	49,729,049	229,684,183
Debt-Financing (bonds)	72,287,000	48,451,000	46,650,000	49,026,000	59,128,000	275,542,000
Interest Income	735,000	840,000	815,000	865,000	825,000	4,080,000
Powell Bill Revenue	5,190,000	5,267,000	5,346,000	5,421,500	5,500,000	26,724,500
Facility Fees (Streets and Parks)	5,750,000	2,150,000	1,950,000	1,750,000	950,000	12,550,000
User Fees and Program Income	2,266,000	2,340,560	2,716,855	5,969,945	2,884,893	16,178,253
Interlocal Funds (Hotel/Rest tax)	1,980,434	2,445,838	1,152,394	2,708,741	2,708,742	10,996,147
Reserve from Prior Years	1,125,000	860,000	575,000	975,000	975,000	4,510,000
Total Revenues	149,095,741	116,828,735	117,229,896	126,638,955	135,445,684	645,239,012



Summary of Five-Year Capital Improvement Plan

Expenditure Summary

General Public Improvements	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
City Facility Maintenance	1,010,000	1,830,000	2,437,000	3,263,000	3,443,000	11,983,000
Public Safety Facilities	7,123,000	3,942,000	1,245,000	1,187,000	1,007,000	14,504,000
Economic Development	1,596,000	410,000	418,000	150,000	150,000	2,724,000
Sustainability	1,500,000	-	-	-	-	1,500,000
Total	11,229,000	6,182,000	4,100,000	4,600,000	4,600,000	30,711,000
Public Utilities	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Water Improvements (cash)	13,891,000	13,615,560	14,466,855	14,519,945	20,224,893	76,718,253
Water Improvements (debt)	8,101,000	8,450,000	13,785,000	6,776,000	15,528,000	52,640,000
Wastewater Improvements (cash)	20,525,000	22,850,000	24,050,000	26,050,000	22,400,000	115,875,000
Wastewater Improvements (debt)	35,275,000	23,350,000	27,615,000	42,250,000	43,600,000	172,090,000
Total	77,792,000	68,265,560	79,916,855	89,595,945	101,752,893	417,323,253
Stormwater	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Lake Preservation	2,250,000	2,750,000	150,000	400,000	100,000	5,650,000
Water Quality Improvement	-	200,000	-	100,000	800,000	1,100,000
General Water Quality	450,000	250,000	548,000	429,000	610,000	2,287,000
Stream Restoration	-	250,000	600,000	500,000	1,125,000	2,475,000
General Drainage	1,250,000	1,207,000	1,250,000	1,750,000	1,350,000	6,807,000
Neighborhood Drainage	1,250,000	905,000	3,310,000	2,400,000	2,045,000	9,910,000
Street Drainage	500,000	385,000	240,000	675,000	385,000	2,185,000
Total	5,700,000	5,947,000	6,098,000	6,254,000	6,415,000	30,414,000
Transportation	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Sidewalks, Pedestrian, & Bicycle	3,482,850	450,000	800,000	1,200,000	750,000	6,682,850
Transit Capital	1,552,695	1,025,000	1,025,000	1,500,000	1,525,000	6,627,695
Street Improvements	7,031,455	5,857,000	5,486,000	5,061,500	4,850,000	28,285,955
Major Bond-Funded Projects	15,020,000	2,000,000	1,500,000	-	-	18,520,000
Parking Facilities	1,190,000	620,000	630,000	660,000	640,000	3,740,000
Total	28,277,000	9,952,000	9,441,000	8,421,500	7,765,000	63,856,500
Parks and Recreation	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Cultural Resources	135,000	175,000	235,000	225,000	135,000	905,000
Facility Improvements	2,000,000	2,015,000	2,005,000	2,135,000	2,175,000	10,330,000
Greenway System	742,520	300,000	345,000	345,000	345,000	2,077,520
Land Acquisition	200,000	200,000	200,000	200,000	200,000	1,000,000
Park Development	2,390,000	600,000	75,000	50,000	200,000	3,315,000
Plans and Studies	565,000	250,000	350,000	450,000	800,000	2,415,000
Site Improvements	1,555,000	1,260,000	1,790,000	1,495,000	1,390,000	7,490,000
Total	7,587,520	4,800,000	5,000,000	4,900,000	5,245,000	27,532,520
Housing	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Joint Venture Rental	2,000,000	2,000,000	2,000,000	1,425,000	-	7,425,000
First-time Home Ownership	1,200,000	1,200,000	1,200,000	1,200,000	-	4,800,000
Other Housing Programs	800,000	550,000	550,000	550,000	-	2,450,000
Loan Servicing and Debt	500,000	500,000	500,000	500,000	510,000	2,510,000
Total	4,500,000	4,250,000	4,250,000	3,675,000	510,000	17,185,000

Convention & Performing Arts	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Convention Center	1,980,434	2,445,838	1,152,394	2,708,741	2,708,742	10,996,149
Performing Arts Center	5,159,000	7,819,000	-	-	-	12,978,000
Walnut Creek Amphitheater	175,000	460,000	475,000	475,000	475,000	2,060,000
Total	7,314,434	10,724,838	1,627,394	3,183,741	3,183,742	26,034,149
Technology	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Debt Service - ERP	3,239,787	3,186,987	3,134,187	3,081,387	3,027,864	15,670,212
New or Replacement Systems	1,411,000	1,960,000	1,875,000	-	-	5,246,000
External Infrastructure	1,045,000	240,000	240,000	240,000	240,000	2,005,000
Major Systems Upgrades	1,000,000	1,000,000	1,000,000	-	-	3,000,000
Reserve for Future Projects	-	320,350	547,460	2,687,382	2,706,185	6,261,378
Total	6,695,787	6,707,337	6,796,647	6,008,769	5,974,049	32,182,590
Grand Total Expenditures	149,095,741	116,828,735	117,229,896	126,638,955	135,445,684	645,239,012

Revenue Summary

Revenue Sources	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Transfers from General Fund (programmed transfers)	9,751,928	10,500,000	11,800,000	12,300,000	12,745,000	57,096,928
Transfers from General Fund (one-time revenues)	7,877,000	-	-	-	-	7,877,000
Transfers from Enterprise and Internal Service Funds	42,133,379	43,974,337	46,224,647	47,622,769	49,729,049	229,684,183
Debt-Financing (bonds)	72,287,000	48,451,000	46,650,000	49,026,000	59,128,000	275,542,000
Interest Income	735,000	840,000	815,000	865,000	825,000	4,080,000
Powell Bill Revenue	5,190,000	5,267,000	5,346,000	5,421,500	5,500,000	26,724,500
Facility Fees (Streets and Parks)	5,750,000	2,150,000	1,950,000	1,750,000	950,000	12,550,000
User Fees and Program Income	2,266,000	2,340,560	2,716,855	5,969,945	2,884,893	16,178,253
Interlocal Funds (Hotel/Rest tax)	1,980,434	2,445,838	1,152,394	2,708,741	2,708,742	10,996,147
Reserve from Prior Years	1,125,000	860,000	575,000	975,000	975,000	4,510,000
Total Revenues	149,095,741	116,828,735	117,229,896	126,638,955	135,445,684	645,239,012

General Public Improvements



Element Overview

The City of Raleigh’s General Public Improvement program focuses on four areas of capital maintenance and development: public safety facilities, remote operations centers, economic development projects and city facility maintenance.

City Facility Maintenance: These maintenance projects focus on the city’s general government facilities, including the Raleigh Municipal Building, One Exchange Plaza, and Dillon Building. The scope of these projects includes major system replacements, life safety items and general building improvements.

Fiscal Year 2014 CIP	Five year CIP	Unfunded Requests
\$1,010,000	\$11,983,000	\$250,000

Public Safety Facilities: The city is evaluating a broad array of public safety capital needs, including facility maintenance, communications equipment, and the need to replace or relocate police and fire stations. Staff is also analyzing the need to construct new facilities. New facility recommendations are based on several factors including studies conducted by the Police and Fire Department consulting teams and staff prioritization. Routine facility condition reviews provide the necessary documentation for capital maintenance items related to building system and roofing repairs. This CIP continues the replacement of two fire stations (#12 on Poole Road and #14 on Lake Boone Trail) as well as land acquisition for the future replacement of Fire Station #3 (South East Street) and a new Fire Station #30.

Fiscal Year 2014 CIP	Five year CIP	Unfunded Requests
\$7,123,000	\$14,504,000	\$34,813,000

Economic Development: These projects foster economic development opportunities within the city. Many of these projects focus on public realm improvements including pedestrian connectors and signage that encourage private sector development. FY 2014 includes over \$1.5 million to improve the Market and Exchange Plazas on Fayetteville Street.

Fiscal Year 2014 CIP	Five year CIP	Unfunded Requests
\$1,596,000	\$2,724,000	\$16,200,000

Outside of these three programmatic areas, the FY 2014 budget also includes \$1.5 million for a new sustainability revolving fund. These funds will support various sustainability initiatives.

General Public Improvement Program Summary

Fiscal Year 2014 CIP	Five year CIP	Unfunded Requests
\$11,229,000	\$30,771,000	\$51,263,000

While not addressed in this 5-year CIP, city staff continue working on three major projects, the Northeast and Downtown Remote Operations Centers, and the Critical Public Safety Facility.

Downtown Remote Operations Center: In December 2007, the City of Raleigh purchased property for this facility. It is anticipated that phase I will include the following components: street maintenance operations, vehicle fleet services, a shared vehicle fuel and wash facility, radio communications shop, and traffic engineering operations. A planned future phase II development will add Parks and Recreation services to the site, as well as an expansion of the existing Brentwood facility.

Northeast Remote Operations Center: In December 2009, the City of Raleigh purchased 19.41 acres on Burwell and Spotswood Streets for the Northeast Remote Operations Facilities. This facility will serve as the base for parks and recreation services, city facility maintenance, street maintenance, vehicle fleet services, and traffic engineering.

Critical Public Safety Facility: In February 2012, City Council authorized the City Manager to take several steps related to the potential development of a new Critical Public Safety Facility on the vacant, city-owned parcel located at the corner of North Raleigh Boulevard and Brentwood Road. The initial evaluation by city staff determined that this could be a suitable site for the development of a public safety facility, including a new emergency communications center (ECC 911 Center), emergency operations center (EOC), and possibly other infrastructure critical to city operations. The potential for the site to accommodate additional phased future public safety uses will also be considered.

GENERAL PUBLIC IMPROVEMENTS

Funded Projects

City Facility Maintenance		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
1	OEP Cooling Tower Replacement	210,000	-	-	-	-	210,000
2	OEP Space Improvements	50,000	230,000	-	-	-	280,000
3	OEP Air Handler Coil	-	850,000	-	-	-	850,000
4	OEP Generator	-	-	200,000	-	-	200,000
5	OEP HVAC Ducts and Air Distribution	-	-	650,000	-	-	650,000
6	OEP Expansion Light Control System	-	-	125,000	-	-	125,000
7	OEP Freight Elevator Replacement	-	-	-	300,000	-	300,000
8	RMB Elevator Upgrade	175,000	-	-	-	-	175,000
9	RMB Boiler Replacement	-	315,000	-	-	-	315,000
10	RMB Caulking and Packaging	-	-	-	250,000	-	250,000
11	RMB Restroom Lifecycle	-	-	-	475,000	-	475,000
12	W. Martin St - Elevator Repair	-	-	300,000	-	-	300,000
13	W. Martin St. - Electric Panel	-	-	50,000	-	-	50,000
14	Downtown System Upgrade	350,000	-	-	-	-	350,000
15	Solar LED Batteries Replacement	25,000	-	-	-	-	25,000
16	Building Envelope Study	50,000	-	-	-	-	50,000
17	Real Estate Acquisition Costs	100,000	-	-	-	-	100,000
18	City Space Needs	50,000	-	-	-	-	50,000
19	General Building Maintenance	-	435,000	1,112,000	2,238,000	3,443,000	7,228,000
	Subtotal	1,010,000	1,830,000	2,437,000	3,263,000	3,443,000	11,983,000
Public Safety Facilities		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
20	ECC Transfer Switch Design	470,000	-	-	-	-	470,000
21	ECC Barwell Rd Backup UPS	-	-	-	-	177,000	177,000
22	Police Six Forks Sewer Pump	-	46,000	-	-	-	46,000
23	Police Six Forks Carpet	-	100,000	90,000	-	-	190,000
24	Police Cabarrus Station Roof	-	-	250,000	-	-	250,000
25	Police Training Center Improvements	-	-	300,000	-	-	300,000
26	Police Six Forks Roof	-	-	-	115,000	-	115,000
27	Police Six Forks HVAC	-	-	-	25,000	225,000	250,000
28	Fire Station Lead Paint and Asbestos	100,000	100,000	100,000	100,000	100,000	500,000
29	Fire Station Building Systems	154,000	325,000	300,000	300,000	300,000	1,379,000
30	Fire Station Improvements	205,000	205,000	205,000	205,000	205,000	1,025,000
31	Fire Station Roof Repair	311,000	84,000	-	-	-	395,000
32	Fire Station 11 Expansion	450,000	-	-	-	-	450,000
33	Fire Station #12 Replacement (Debt)	3,768,000	-	-	-	-	3,768,000
34	Fire Station #14 Replacement (Debt)	1,665,000	3,082,000	-	-	-	4,747,000
35	Fire Stockroom HVAC	-	-	-	145,000	-	145,000
36	Fire Supply Building	-	-	-	297,000	-	297,000
	Subtotal	7,123,000	3,942,000	1,245,000	1,187,000	1,007,000	14,504,000
Economic Development		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
37	Market/Exchange Plaza Improvements	1,546,000	-	-	-	-	1,546,000
38	Façade Improvements	50,000	50,000	50,000	50,000	50,000	250,000
39	Downtown West Gateway Planning	-	260,000	268,000	-	-	528,000
40	Downtown Wayfinding Signs	-	100,000	100,000	100,000	100,000	400,000
	Subtotal	1,596,000	410,000	418,000	150,000	150,000	2,724,000
Sustainability		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
41	Sustainability Revolving Fund	1,500,000	-	-	-	-	1,500,000
	Subtotal	1,500,000	-	-	-	-	1,500,000
Total Funded Projects:		11,229,000	6,182,000	4,100,000	4,600,000	4,600,000	30,711,000

Revenue Sources	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Transfers from General Fund	2,500,000	3,000,000	4,000,000	4,500,000	4,500,000	18,500,000
Transfers from General Fund - One-Time Revenues	1,650,000	-	-	-	-	1,650,000
Interest Income	100,000	100,000	100,000	100,000	100,000	500,000
Bond Proceeds (Fayetteville St. bonds)	1,546,000	-	-	-	-	1,546,000
Future Bond Proceeds	5,433,000	3,082,000	-	-	-	8,515,000
Total Revenues	11,229,000	6,182,000	4,100,000	4,600,000	4,600,000	30,711,000

Balance	-	-	-	-	-	-
----------------	---	---	---	---	---	---

Projects by Revenue Category	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Total Debt-financed Projects	5,433,000	3,082,000	-	-	-	8,515,000
Total Paygo Projects	5,796,000	3,100,000	4,100,000	4,600,000	4,600,000	22,196,000
Total	11,229,000	6,182,000	4,100,000	4,600,000	4,600,000	30,711,000

Unfunded Requests

All requested capital projects are evaluated and prioritized. While the projects below would benefit city operations, they are not approved or funded at this time due to limited revenues or the need for additional business justification. Staff will continue to evaluate these projects in future CIP processes, but these projects are not included in the Council Resolution adopting the CIP program.

City Facility Maintenance		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
42	RMB - Building Envelope Analysis	50,000	-	-	-	-	50,000
43	Downtown Amphitheater Improvements	50,000	-	-	-	-	50,000
44	City Space Needs	150,000	-	-	-	-	150,000
Subtotal		250,000	-	-	-	-	250,000
Public Safety Facilities		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
45	Fire Station 3 Replacement	990,000	1,711,000	3,082,000	-	-	5,783,000
46	Fire Station 30 New	-	-	-	1,180,000	6,457,000	7,637,000
47	Northeast District Station	1,550,000	865,000	3,100,000	-	-	5,515,000
48	Police Special Ops and Fleet Facility	2,530,000	-	-	-	-	2,530,000
49	Fire Training Facility and Driving Pad	3,770,000	6,824,000	-	-	2,754,000	13,348,000
Subtotal		8,840,000	9,400,000	6,182,000	1,180,000	-	34,813,000
Economic Development		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
50	Moore Square Development	1,400,000	14,800,000	-	-	-	16,200,000
Subtotal		1,400,000	14,800,000	-	-	-	16,200,000
Total Unfunded Requests		10,490,000	24,200,000	6,182,000	1,180,000	-	51,263,000

General Public Improvements – Funded Projects

City Facility Maintenance

1. One Exchange Plaza Cooling Tower Replacement: \$210,000
The scope of work includes replacement of the existing cooling tower pump and chiller pump, basin, and piping with variable frequency drive (VFD) that will provide efficient cooling for air conditioning, manufacturing and electric power generation.
2. One Exchange Space Improvements: \$280,000
The scope of work includes several safety and code compliance improvements, including stairwell access controls, emergency generator enhancements, and ceiling tile replacements.
3. One Exchange Plaza Air Handler Coil: \$850,000
The scope of work includes the design and bid package for replacing the main air handler unit coil at One Exchange Plaza.
4. One Exchange Plaza Generator: \$200,000
The scope of work is for installation of an engine generator system and associated equipment. Included is demolition of the existing system as well as the incorporation of mechanical and electrical needs associated with the project.
5. One Exchange Plaza HVAC Ducts and Air Distribution: \$650,000
The scope of work includes mechanical system replacement and rerouting, or replacement of the ductwork, and installation of building automation system controls.
6. One Exchange Plaza Expansion Light Control System: \$125,000
The scope of work consists of installation of lighting controls to all common areas and foyers at One Exchange Plaza. Lighting controls will be tied into the existing building automation control system.
7. One Exchange Plaza Freight Elevator Replacement: \$300,000
The scope of work includes elevator replacement of one freight car and includes a car interior upgrade. Proactive maintenance ensures that elevators work properly and experience a minimum amount of downtime and are structurally safe.
8. Raleigh Municipal Building Elevator Upgrade: \$175,000
The scope of work includes elevator replacement of one freight car. Proactive maintenance ensures that elevators work properly and experience a minimum amount of downtime and are structurally safe.
9. Raleigh Municipal Building Boiler Replacement: \$315,000
The scope of work includes the design and replacement of the boiler at 222 W. Hargett Street. Included is demolition of the existing system as well as the incorporation of mechanical and electrical needs associated with the project.

10. Raleigh Municipal Building Caulking and Packaging: \$250,000
The scope of work is to caulk and seal the building's envelope to prevent air infiltration through cracks and holes in the walls, ceiling and floor.
11. Raleigh Municipal Building Restroom Lifecycle: \$475,000
The scope of work consists of removal of existing toilet partitions in bathrooms throughout the City and replace 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 shower fixtures throughout the building.
12. West Martin Street Elevator Repair: \$300,000
The scope of work includes elevator replacement of one passenger car at 310 W. Martin Street. Proactive maintenance ensures that elevators work properly and experience a minimum amount of downtime, as well as being structurally safe.
13. West Martin Street Electric Panel: \$50,000
Scope of work includes installation of an electrical distribution panel designed to protect fuses or circuit breaker for each circuit, in a common enclosure at 310 W. Martin St.
14. Downtown System Upgrade: \$350,000
Scope of work is for lifecycle replacement of facility systems based on age and condition. Typical systems include: HVAC, boilers, elevators, towers, chillers, roofs, and variable speed drives.
15. Solar LED Batteries Replacement: \$25,000
The scope of work includes replacement of solar LED batteries at various City of Raleigh owned sites.
16. Building Envelope Study: \$50,000
The scope of work is to have a preliminary building envelope analysis performed by an engineering company to determine the heat gain calculations between the glass or wall envelope of the Raleigh Municipal Building located at 222 West Hargett Street.
17. Real Estate Acquisition Costs: \$100,000
The City of Raleigh routinely acquires and sells properties related to economic development projects and improving city services. Under normal circumstances, all real estate costs are included in a project budget. This budget will fund surveys, appraisals, legal, and other costs that sometimes fall outside the scope of any specific project.
18. City Space Needs: \$50,000
City staff plan for the efficient and appropriate use of available office space. These funds will cover repairs, upfit and remodeling costs to re-purpose existing space.
19. General Building Maintenance: \$7,728,000
These funds are programmed in future years for maintenance at city facilities. Future capital improvement programs will dedicate these funds to specific projects based on facility assessments and prioritized needs.

Public Safety

20. ECC Transfer Switch Design: \$470,000
The scope of work includes design and installation of an additional parallel connected UPS module and transfer switch sized to support the total critical load plus redundant modules for enhanced reliability of ECC's 911 and data center.
21. ECC Barwell Road Backup UPS: \$177,000
Scope of work is for scheduled replacement of uninterruptible Power System (UPS) batteries for the backup Emergency Communications Center on Barwell Road. Per the manufacturer this should occur every five years.
22. Police Six Forks Sewer Pump: \$46,000
The scope of work includes installation of the sewer ejector pump including the controller, pumps, piping and tank.
23. Police Six Forks Carpet: \$190,000
The scope of work includes replacing all three floors of carpet, excluding the first floor middle section of the Police headquarters.
24. Police Cabarrus Station Roof: \$250,000
The scope of work is to replace the roof and asbestos removal at Police evidence building.
25. Police Training Center Improvements: \$300,000
The scope includes such maintenance as roof repair; fire hazard reduction, restroom improvements, light fixture replacements, and window replacements.
26. Police Six Forks Roof: \$115,000
The scope of work includes design and replacement of the roof at Police headquarters.
27. Police Six Forks HVAC: \$250,000
The scope of work includes the replacement of three aged, inefficient heating and air conditioning units with new units that have high efficiency gas heat and electric air conditioning.
28. Fire Station Lead Paint and Asbestos: \$500,000
Scope of work includes locating, identifying, and assessing the condition of asbestos containing material (ACM) present at fire station facilities and to develop recommendations based on existing and potential asbestos related hazards.
29. Fire Station Building Systems: \$1,379,000
This project includes the replacement and maintenance of mechanical and structural systems at fire stations, including HVAC, boilers, elevators, towers, chillers, roofs, and variable speed drives.
30. Fire Station Improvements: \$1,025,000
This project will fund repairs to kitchens, bathrooms, floors, windows, driveway and parking areas as well as other repairs/replacements needed to maintain these facilities.

31. Fire Station Roof Repair: \$395,000
This project repairs or replaces the roofs on selected fire facilities evaluated by a roofing consultant and prioritized by Construction Management.
32. Fire Station 11 Expansion: \$450,000
Expansion of the bay area to enable continued placement of new ladder fire truck which is larger than the current bay can accommodate.
33. Fire Station 12 Replacement (Debt-financed): \$3,768,000
Construction costs associated with the relocation Station 12 to provide a more efficient response to assigned area. A larger station is needed to accommodate a ladder company. The total budget for this project, which began in FY13, is \$5,301,755.
34. Fire Station 14 Replacement (Debt-financed): \$4,747,000
Construction costs associated with relocating Fire Station 14. A larger station is needed to accommodate a ladder company. The total budget for this project, which was initially funded in FY13, is \$7,216,718.
35. Fire Stockroom HVAC: \$145,000
Installation of air conditioning unit at the Fire Services stock room.
36. Fire Supply Building: \$297,000
Storage building at Fire Services site for stocking equipment and supplies.

Economic Development

37. Market/Exchange Plaza Improvements: \$1,546,000
Design and implementation of plans to improve the pedestrian plazas, mid-block crosswalk, and walkways on Wilmington Street in the 200 block of Fayetteville Street that connect Fayetteville Street, One Exchange Plaza, the Moore Square Transit Station and Moore Square. The project will include hiring a consultant to design the plazas and pedestrian ways and constructing the improvements, which could include lighting, plantings, furniture, new pavers/sidewalk materials, and public art. Plaza design will meet sustainability standards.
38. Façade Improvements: \$250,000
This program provides funding for the rehabilitation of older commercial properties with matching cash grants for exterior improvements to assure compliance with design standards specific to Pedestrian Business Overlay Districts (PBOD) streetscape plans and the Downtown Element of 2030 Comprehensive Plan.
39. Downtown West Gateway: \$528,000
This project funds the planning and design of the Downtown West Gateway improvements. Construction funds are not included in this project.
40. Downtown Wayfinding Signs: \$400,000
The Downtown Wayfinding Program is a signage system for access to, and circulation within, downtown. The system directs visitors to the City's tourist destinations (museums, districts, convention center). These funds are for signage maintenance and replacement.

41. Sustainability Revolving Fund: \$1,500,000

These funds will support the City's ongoing sustainability initiatives. Funding will be invested in selected projects and cost savings then re-invested in additional sustainability projects.

General Public Improvements – Unfunded Requests

City Facility Maintenance

42. Raleigh Municipal Building – Building Envelope Analysis: \$50,000
The scope of work is to have a preliminary building envelope analysis performed by an engineering company to determine the heat gain calculations between the glass or wall envelope of the Avery Upchurch Complex.
43. Downtown Amphitheater Improvements: \$50,000
Funding for spot towers, sheds, LED lights, and emergency system improvements.
44. City Space Needs: \$150,000
The scope of work is to provide space to accommodate City departments current and future staff growth.

Public Safety

45. Fire Station 3 Replacement: \$5,783,000
Construction costs associated with relocating Fire Station 3 which is almost 60 years old and functionally obsolete for current operations. No additional operational costs are associated with this project since it is a replacement of an existing fire station.
46. Fire Station 30: \$7,637,000
Construction costs associated with building a new, additional fire station needed to maintain service.
47. Northeast District Station: \$5,515,000
The Northeast District Police Station (NED) includes the land acquisition of 3.11 acres, construction, engineering and technology costs. New construction is requested to meet the standards required for LEED Silver Certification.
48. Police Special Ops and Fleet Facility: \$2,530,000
Funds requested to acquire a special operations and police fleet facility. This may involve the purchase of property at 1221 Front St.
49. Fire Training Facility and Driving Pad: \$13,348,000
Design, land acquisition, and construction of a driver training pad (Phase I) and fire training center (Phase II) facility to provide an adequate and safe location to conduct apparatus driver and firefighter training.

Economic Development

50. Moore Square Development: \$16,200,000
Funding to fully implement the Moore Square improvements. Funding is needed for design services to conduct the public process, develop schematic design and design development, create construction documents for permitting and bidding, perform testing and review sustainable opportunities, then implement those designs.

CAPITAL IMPROVEMENT PROJECTS

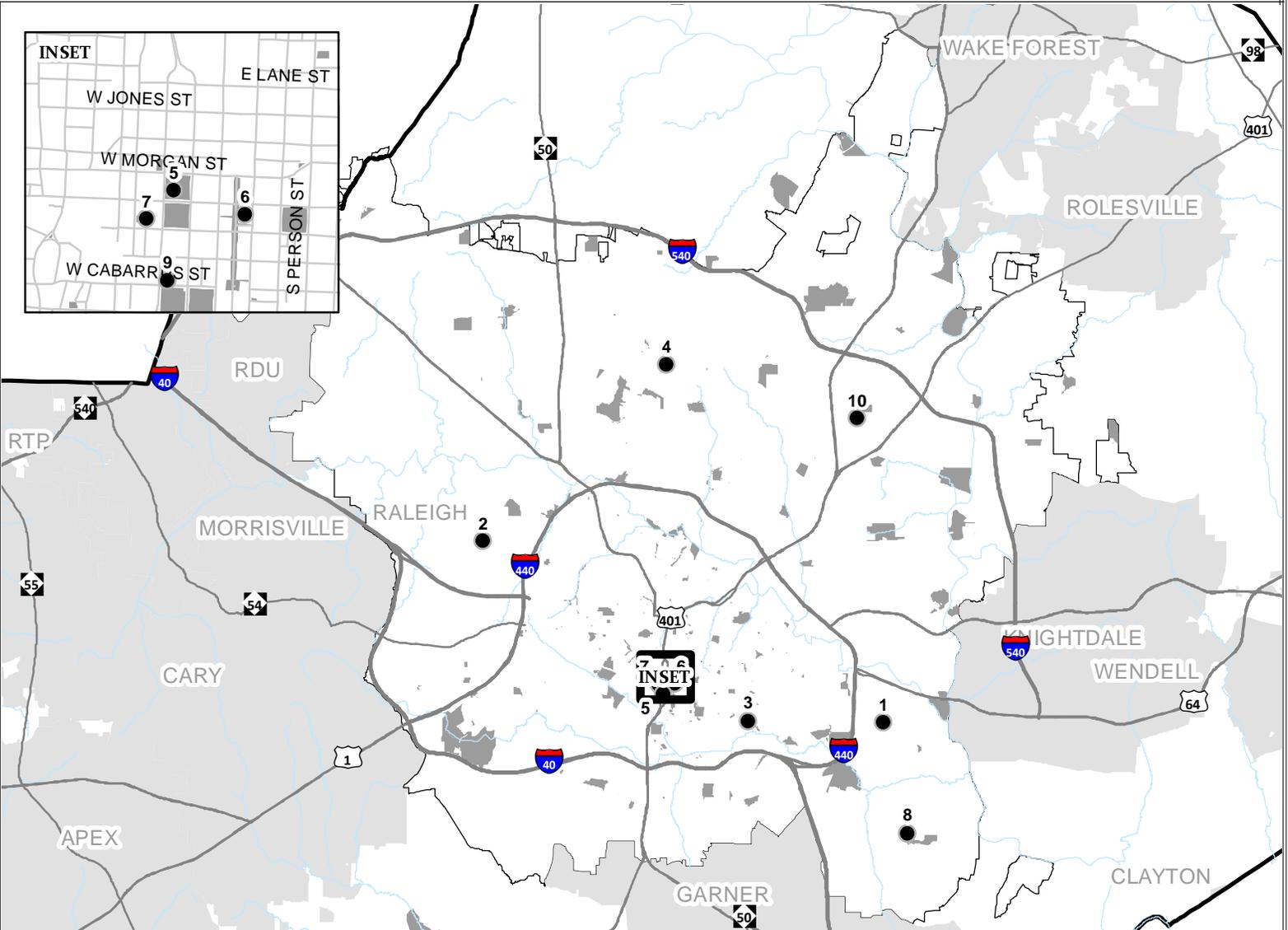


Capital Improvement Projects
General Improvement

- Legend**
- CIP PROJECT POINTS
- Other Data**
- Interstate
 - US Highway
 - NC Highway
 - Parks



Overview Map



General Improvement Projects

ID	PROJECT NAME	ID	PROJECT NAME	ID	PROJECT NAME
1	Fire Station 12 Replacement	6	CEP Space Improvement	8	ECC Barwell Rd Backup UPS
2	Fire Station 14 Replacement	6	CEP Air Handler Coil	9	Police Cabarrus Station Roof
3	Fire Station 11 Expansion	6	CEP Generator	10	Police Training Center Improvements
4	Police Six Forks Sewer Pump	6	CEP HVAC Ducts and Air Distribution		
4	Police Six Forks Carpet	6	CEP Freight Elevator Replacement		
4	Police Six Forks Roof	6	Market Exchange Plaza Improvements		
4	Police Six Forks HVAC	7	RMB Elevator Upgrade		
5	W. Martin St - Elevator Repair	7	RMB Boiler Replacement		
5	W. Martin St - Electric Panel	7	RMB Caulking and Packaging		
6	CEP Cooling Tower Replacement	7	RMB Restroom Lifecycle		

OTHER CIP PROJECTS THAT CANNOT BE MAPPED		
City Facility Maintenance	Public Safety	Sustainability
Downtown System Upgrade	Fire Station Lead Paint and Asbestos	ECC Transfer Switch Design
Solar LED Batteries Replacement	Fire Station Building Systems	Sustainability Revolving Fund
Building Envelope Study	Fire Station Improvements	Economic Development
Real Estate Acquisition Costs	Fire Station Roof Repair	Façade Improvements
City Space Needs	Fire Stockroom HVAC	Downtown West Gateway Planning
General Building Maintenance	Fire Supply Building	Downtown Wayfinding Signs

Map updated February 2012 by City of Raleigh GIS Division
This map is a graphic representation and should only be used for illustrative purposes. In no way should this map be used for exact locations.

Public Utilities



Element Overview

The Public Utilities Department 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 conducted within the confines of a self-supporting enterprise fund, fully funded by revenues received from rates and fees for services, and from fees associated with new development. Funding for projects consists primarily of revenue bonds, pay-go (cash-funded), and State Revolving Fund loans from the North Carolina Department of Environment and Natural Resources. The utility system plans to invest \$1 billion in capital needs over the next 10 years, including \$77.8 million in FY14.

The Public Utilities program 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 construction on several important projects during FY13 including:

- NRWTP Expansion to 75 MGD – Phase I
- Rehabilitation of the North Bank Crabtree Creek Interceptor
- Centennial Campus Reuse Extension – Segment 4
- Wake Forest Inflow and Infiltration Sewer Rehabilitation
- Wendell Inflow and Infiltration Sewer Rehabilitation
- Zebulon Inflow and Infiltration Sewer Rehabilitation
- Lake Johnson Dam Improvements

- Various Water Booster Pump Station Rehabilitations
- Ebenezer Church Road Annexation Water & Sewer Improvements
- EMJWTP Raw Water Pumping Station Electrical Improvements
- Various Water and Sanitary Sewer Main Replacements
- Old Hwy 50 Pump Station Rehabilitation

Notable projects that began but were not completed during FY13 include: Crabtree Basin Wastewater System Conveyance Improvements Phase I; NRWWT Expansion to 75 MGD Phases II & III; LCWWTP Expansion to 2.2 MGD; Wrenn Road Water Plant Residuals Lagoon Improvements; DEBWTP Backwash Waste Recycle Facility; EMJWTP Filter Bottom Rehabilitation; Marsh Creek Sewer Improvements; Mango Creek Sewer Improvements.

Horizon Items

Major initiatives for the Public Utilities Department over the next three to seven years revolve around infrastructure stability, 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; Zebulon Beaverdam Creek Interceptor Improvements.

Public Utilities Capital Improvement Program Summary

Fiscal Year 2014 CIP	Five year CIP	Ten year CIP
\$77,792,000	\$417,323,253	\$1,012,253,394

Abbreviations Used in the Public Utilities Project Descriptions

- DEBWTP – Dempsey E. Benton Water Treatment Plant
- LCWWTP – Little Creek Wastewater Treatment Plant
- EMJWTP – E.M. Johnson Water Treatment Plant
- NRWWTP – Neuse River Wastewater Treatment Plant

PUBLIC UTILITIES CAPITAL

Funded Projects

Water Projects - Cash Funded		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total	FY 2019 to FY 2023	10 Year Total
1	Annexation-Water	100,000	100,000	100,000	100,000	100,000	500,000	500,000	1,000,000
2	Capital Equipment	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	15,000,000	15,000,000	30,000,000
3	EMJWTP Facility Rehab	500,000	500,000	750,000	750,000	750,000	3,250,000	3,750,000	7,000,000
4	EMJWTP Bulk Storage Tank	375,000	-	-	-	-	375,000	250,000	625,000
5	EMJWTP Pilot Plant	1,500,000	-	-	-	-	1,500,000	-	1,500,000
6	Falls Lake Initiative	1,416,000	1,465,560	1,516,855	1,569,945	1,624,893	7,593,253	8,953,141	16,546,394
7	Fire Hydrant Nozzle Replacement	-	700,000	700,000	700,000	700,000	2,800,000	700,000	3,500,000
8	Fire Hydrant Replacement	-	1,000,000	1,000,000	1,000,000	1,000,000	4,000,000	5,000,000	9,000,000
9	Little River Reservoir County	500,000	500,000	500,000	500,000	500,000	2,500,000	2,500,000	5,000,000
10	Main Replacement	4,000,000	4,000,000	5,000,000	5,000,000	6,000,000	24,000,000	30,000,000	54,000,000
11	Security Improvements	100,000	-	-	-	4,650,000	4,750,000	-	4,750,000
12	Thoroughfare Mains	400,000	400,000	400,000	400,000	400,000	2,000,000	2,000,000	4,000,000
13	Water Booster Pump Rehab	200,000	500,000	400,000	400,000	400,000	1,900,000	2,000,000	3,900,000
14	Water Quality Study	500,000	150,000	100,000	100,000	100,000	950,000	500,000	1,450,000
15	Water Tank Maintenance	1,300,000	1,300,000	1,000,000	1,000,000	1,000,000	5,600,000	5,000,000	10,600,000
Subtotal		13,891,000	13,615,560	14,466,855	14,519,945	20,224,893	76,718,253	76,153,141	152,871,394

Water Projects - Revenue Bonds		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total	FY 2019 to FY 2023	10 Year Total
16	1 MGD Pump Upgrade Mt. Herman	-	-	280,000	-	-	280,000	-	280,000
17	3 MGD Pump Shelly Rd	276,000	-	-	-	-	276,000	-	276,000
18	BAIN Pump Station Upgrade	-	-	70,000	-	-	70,000	-	70,000
19	Bethlehem Rd Transmission Main	-	-	-	-	-	-	839,000	839,000
20	Clifford Rd Transmission Main	-	-	-	-	-	-	1,189,000	1,189,000
21	Control Valve Install Wendell Blvd	-	-	130,000	-	-	130,000	-	130,000
22	DEBWTP Transmission Main	-	-	1,400,000	-	10,600,000	12,000,000	-	12,000,000
23	EMJWTP Basin Addition	-	-	-	-	-	-	38,500,000	38,500,000
24	EMJWTP Basin Improvements	-	-	-	-	-	-	36,400,000	36,400,000
25	EMJWTP Clearwell Expansion	-	-	-	-	-	-	21,000,000	21,000,000
26	EMJWTP High Service Discharge	-	-	-	-	-	-	359,000	359,000
27	EMJWTP New Lab Facility	-	4,500,000	-	-	-	4,500,000	-	4,500,000
28	EMJWTP Ozone Expansion	-	-	-	-	-	-	24,500,000	24,500,000
29	EMJWTP Pilot Plant	6,700,000	-	-	-	-	6,700,000	-	6,700,000
30	EMJWTP Pump #1 Upgrade	-	-	-	-	-	-	690,000	690,000
31	EMJWTP Solids Handling	-	-	-	-	-	-	10,000,000	10,000,000
32	EMJWTP UV Solids Handling	-	-	-	2,100,000	-	2,100,000	36,000,000	38,100,000
33	Franklin Street Waterline 12"	-	-	133,000	-	-	133,000	-	133,000
34	Hebron Church Rd Transmission	-	-	-	-	-	-	970,000	970,000
35	Jones Sausage Upgrade I-40	-	-	-	-	-	-	850,000	850,000
36	Lake Glad Rd Waterline Exit	325,000	-	-	-	-	325,000	-	325,000
37	Little River Res Construction	-	-	-	-	-	-	15,600,000	15,600,000
38	Little River Res Impact Statement	800,000	-	-	-	-	800,000	-	800,000
39	Little River Res Monitoring	-	-	-	-	-	-	300,000	300,000
40	Little River Res Property Acquisition	-	2,500,000	2,500,000	2,500,000	2,500,000	10,000,000	12,500,000	22,500,000
41	NC 98 Bypass Waterline	-	-	493,000	-	-	493,000	-	493,000
42	Oak Forest 30 Water Main	-	-	2,900,000	-	-	2,900,000	-	2,900,000
43	Oregon Trail Rd Transmission	-	-	-	-	-	-	1,219,000	1,219,000
44	Poole Rd Booster Pump Station	-	-	2,800,000	-	-	2,800,000	-	2,800,000
45	Pullen Park PS Discharge 24"	-	-	-	-	2,078,000	2,078,000	-	2,078,000
46	Rand Rd Transmission Line	-	-	-	-	-	-	1,029,000	1,029,000
47	Security Improvements	-	-	-	-	350,000	350,000	-	350,000
48	Springdale Tank Replacement	-	1,450,000	-	-	-	1,450,000	-	1,450,000
49	Ten Ten Road Transmission Line	-	-	-	-	-	-	432,000	432,000
50	Ten Ten Road Water Tank	-	FY 2015	-	-	-	-	3,000,000	3,000,000
51	US401/Ligon Mill to Jonesville	-	-	430,000	-	-	430,000	-	430,000
52	Water Plant Settling Basins	-	-	1,200,000	-	-	1,200,000	-	1,200,000
53	Wendell Blvd Water Line	-	-	1,449,000	-	-	1,449,000	-	1,449,000
54	Zebulon Water Line NC 97	-	-	-	2,176,000	-	2,176,000	-	2,176,000
Subtotal		8,101,000	8,450,000	13,785,000	6,776,000	15,528,000	52,640,000	205,377,000	258,017,000

Wastewater Projects -								FY 2019 to	
Cash Funded		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total	FY 2023	10 Year Total
55	Access to Sanitary Sewer Mains	200,000	200,000	200,000	200,000	200,000	1,000,000	1,000,000	2,000,000
56	Annexation-Sewer	200,000	200,000	200,000	200,000	200,000	1,000,000	1,000,000	2,000,000
57	Crabtree Lift Station	100,000	1,000,000	-	-	-	1,100,000	-	1,100,000
58	East Neuse Regional Pump	-	10,050,000	-	-	-	10,050,000	-	10,050,000
59	Lower Walnut Creek Interceptor	-	-	7,550,000	-	-	7,550,000	-	7,550,000
60	Main Replacement	5,000,000	5,000,000	7,000,000	7,000,000	8,000,000	32,000,000	40,000,000	72,000,000
61	Neuse East Parallel Phase 3	-	-	-	-	-	-	75,300,000	75,300,000
62	New Crabtree Creek Pump Station	10,325,000	-	-	-	1,500,000	11,825,000	-	11,825,000
63	NRWWTP Anaerobic Digestors	-	-	-	13,750,000	-	13,750,000	-	13,750,000
64	NRWWTP Electrical Trans Rehab	-	-	300,000	-	-	300,000	-	300,000
65	NRWWTP Facility Improvements	1,400,000	-	-	-	-	1,400,000	-	1,400,000
66	NRWWTP Lab Improvements	600,000	-	-	-	-	600,000	-	600,000
67	NRWWTP Land Purchase	-	-	200,000	200,000	200,000	600,000	1,000,000	1,600,000
68	NRWWTP Reuse System Expand	-	500,000	500,000	2,000,000	2,000,000	5,000,000	10,000,000	15,000,000
69	NRWWTP Thickening Bldg	-	-	300,000	-	-	300,000	-	300,000
70	Sanitary Sewer Siphon Rehab	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	5,000,000	10,000,000
71	Sewer Pump Station Removal	500,000	500,000	1,000,000	1,000,000	1,000,000	4,000,000	5,000,000	9,000,000
72	State Street Interceptor	-	-	-	-	-	-	1,000,000	1,000,000
73	System Capacity Analysis	700,000	200,000	200,000	200,000	200,000	1,500,000	1,000,000	2,500,000
74	Turkey Creek Interceptor Rehab	-	-	-	-	-	-	5,000,000	5,000,000
75	Upper Pigeon House Rehab	-	3,700,000	5,100,000	-	7,600,000	16,400,000	-	16,400,000
76	Utility Field Facility Improvements	500,000	500,000	500,000	500,000	500,000	2,500,000	2,500,000	5,000,000
Subtotal		20,525,000	22,850,000	24,050,000	26,050,000	22,400,000	115,875,000	147,800,000	263,675,000

Wastewater Projects - Revenue Bonds							FY 2019 to	
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total	FY 2023	10 Year Total
77	-	-	-	-	-	-	7,700,000	7,700,000
78	-	2,000,000	-	-	20,600,000	22,600,000	-	22,600,000
79	-	3,350,000	-	-	-	3,350,000	15,000,000	18,350,000
80	-	-	-	-	-	-	7,500,000	7,500,000
81	-	2,000,000	15,450,000	-	-	17,450,000	-	17,450,000
82	-	-	-	-	-	-	3,000,000	3,000,000
83	-	-	3,500,000	5,000,000	-	8,500,000	15,700,000	24,200,000
84	-	-	1,500,000	3,000,000	-	4,500,000	24,000,000	28,500,000
85	-	-	-	-	-	-	34,000,000	34,000,000
86	2,000,000	-	-	-	-	2,000,000	-	2,000,000
87	17,675,000	-	-	-	18,500,000	36,175,000	-	36,175,000
88	15,600,000	10,000,000	-	-	-	25,600,000	-	25,600,000
89	-	-	5,000,000	33,250,000	-	38,250,000	-	38,250,000
90	-	-	1,000,000	1,000,000	1,000,000	3,000,000	5,000,000	8,000,000
91	-	-	-	-	3,500,000	3,500,000	31,500,000	35,000,000
92	-	6,000,000	-	-	-	6,000,000	-	6,000,000
93	-	-	-	-	-	-	2,900,000	2,900,000
94	-	-	-	-	-	-	17,300,000	17,300,000
95	-	-	1,000,000	-	-	1,000,000	-	1,000,000
96	-	-	165,000	-	-	165,000	-	165,000
97	-	-	-	-	-	-	2,000,000	2,000,000
Subtotal	35,275,000	23,350,000	27,615,000	42,250,000	43,600,000	172,090,000	165,600,000	337,690,000
Total Public Utilities Capital	77,792,000	68,265,560	79,916,855	89,595,945	101,752,893	417,323,253	594,930,141	1,012,253,394
Revenue Sources							FY 2019 to	
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total	FY 2023	10 Year Total
Transfer-Public Utilities (water)	12,475,000	12,150,000	12,950,000	12,950,000	18,600,000	69,125,000	67,200,000	136,325,000
Watershed Protection Fees	1,416,000	1,465,560	1,516,855	1,569,945	1,624,893	7,593,253	8,953,141	16,546,394
Bond Proceeds (water)	8,101,000	8,450,000	13,785,000	6,776,000	15,528,000	52,640,000	205,377,000	258,017,000
Transfer-Public Utilities (wastewater)	20,525,000	22,850,000	24,050,000	26,050,000	22,400,000	115,875,000	147,800,000	263,675,000
Bond Proceeds (wastewater)	35,275,000	23,350,000	27,615,000	42,250,000	43,600,000	172,090,000	165,600,000	337,690,000
Total Revenues	77,792,000	68,265,560	79,916,855	89,595,945	101,752,893	417,323,253	594,930,141	1,012,253,394

Public Utilities – Funded Projects

The Public Utilities capital program follows a 10-year financial model. All amounts displayed below reflect the programmed 10-year amounts rather than the usual 5-year amounts.

Water Projects – Cash Funded

1. Annexation - Water: \$1,000,000
The project reflects the City's initiated annexation plans and requests for service within the current City limits for the next five years and the required water service associated with them.
2. Capital Equipment: \$30,000,000
Funding to provide monetary resources for the Capital Equipment Rehabilitation Replacement in the Public Utilities Department.
3. EMJWTP Facility Rehabilitation: \$7,000,000
Rehabilitation and/or replacement of major equipment and associated facilities at the EM Johnson Water Treatment Plant.
4. EMJWTP Bulk Storage Tank: \$625,000
Replacement of Bulk Chemical Storage Tanks at the EMJWTP.
5. EMJWTP Pilot Plant: \$1,500,000
Construction and operation of a permanent pilot testing facility in existing sedimentation basin #5 to demonstrate high rate coagulation for future plant upgrades to 120 MGD. High rate coagulation technologies will most likely be plate or tube settlers installed within the existing basin.
6. Falls Lake Initiative: \$16,546,394
Funding to provide monetary resources to the Conservation Trust of North Carolina for expanding land protection in the Falls Lake watershed.
7. Fire Hydrant Nozzle Replacement: \$3,500,000
Material costs for a 5 year replacement plan of all Raleigh standard thread nozzles to national standard thread nozzles on all non-lead barrel hydrants within the Raleigh system.
8. Fire Hydrant Replacement: \$9,000,000
Material costs for a 10 year replacement plan of all lead barrel Raleigh standard thread fire hydrants to national standard thread hydrants within the Raleigh system.
9. Little River Reservoir County: \$5,000,000
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. Because of the jurisdictional issues, Wake County has managed all land acquisition. This line item is an annual repayment of \$500,000 until the land acquisition costs are repaid.
10. Main Replacement: \$54,000,000
A significant portion of the water distribution system in the City's service area is over 50 years old. Based on the recommendations of most professional utility organizations, 1-2% (~20 miles) of the City's existing 2,300 miles of water distribution pipeline should be replaced each year. A gradual increase in expenditures is expected to keep up with the needs of the City of Raleigh's service area.

11. Security Improvements: \$4,750,000
Improvements to the security measures at the EMJWTP, elevated water tank sites and other remote water facilities.
12. Thoroughfare Mains: \$4,000,000
The continuation of currently funded program to install water mains in conjunction with new thoroughfare projects and adjustment to existing water mains in the thoroughfare widening projects.
13. Water Booster Pump Rehabilitation: \$3,900,000
Rehabilitate and upgrade of existing water booster pumping stations.
14. Water Quality Study: \$1,450,000
Hydraulic modeling of the water distribution system including conducting corrosion control, nitrification and nutrient reduction studies. Water Distribution System Master Plans update every 5 years.
15. Water Tank Maintenance: \$10,600,000
Rehabilitation and maintenance of the Elevated Water Tanks in the water distribution system which includes regularly scheduled washouts, corrosion repairs, painting.

Water Projects – Revenue Bonds

16. 1 MGD Pump Upgrade Mt. Herman: \$280,000
Installation of a 1 MGD pump at the Mt. Herman Road Water Booster Pump Station to accommodate the additional water demand in the 655 Pressure Zone.
17. 3 MGD Pump Shelley Road: \$276,000
Additional large service pump to address growth needs in the 605 pressure zones.
18. BAIN Pump Station Upgrade: \$70,000
Replacement of existing water booster pumps (1 @ 2 MGD & 1 @ 3 MGD) with 2 @ 8 MGD pumps.
19. Bethlehem Road Transmission Main: \$839,000
Install approximately 6,930 linear feet of 16-inch water transmission main along Bethlehem Road from Poole Road to Cross Cut Place.
20. Clifford Road Transmission Main: \$1,189,000
Install approximately 5,530 linear feet of 24-inch water transmission main along Clifford Road from New Bethel Church Road to Hebron Church Road.
21. Control Valve Install Wendell Boulevard: \$130,000
Install a Control Valve at the existing connection between the 462 pressure zone and the 497 pressure zone to allow limited water transfer for water quality purposes.
22. DEBWTP Transmission Main: \$12,000,000
Construction of approximately 41,600 linear feet of 30-in water main from E.B. Bain Re-pump Facility along Walnut Creek to an existing 30-inch water main at Poole Road and Hodge Road in Knightdale.
23. EMJWTP Basin Addition: \$38,500,000
This project is part of Phase I of the E.M. Johnson Water Treatment Plant expansion to 120 MGD. As the initial phase of the plant expansion, this project will incorporate new high rate filters, an additional flocculation and sedimentation basin with plate settlers, improvements to the raw

water transmission lines to the site and to the reservoirs, various chemical improvements, and the installation of miscellaneous electrical/instrumentation/controls.

24. EMJWTP Basin Improvements: \$36,400,000
This project is Phase 2 of the E.M. Johnson Water Treatment Plant expansion to 120 MGD. This project involves flocculation and sedimentation basin improvements (plate or tube settlers) to the existing basins and the installation of new rapid mix basins. Additionally, new raw water yard piping, chemical injection, site electrical and instrumentation/controls are needed as part of this project.
25. EMJWTP Clearwell Expansion: \$21,000,000
This project includes a 3 million gallon (MG) expansion of the northwest clearwell and a new 5 MG clearwell at the EMJWTP.
26. EMJWTP High Service Discharge: \$359,000
Installation of 1,300 linear feet of 30-inch transmission main on the E.M. Johnson Water Treatment Plant site to convey water in the high service 605 pressure zone.
27. EMJWTP New Lab Facility: \$4,500,000
Construct a new facility for laboratory operations either at the EMJ Water Treatment Facility or a Central Laboratory at a location to be determined.
28. EMJWTP Ozone Expansion: \$24,500,000
Installation of a 4th Ozone Generator and associated Destructor.
29. EMJWTP Pilot Plant: \$6,700,000
Construction and operation of a permanent pilot testing facility in existing sedimentation basin #5 to demonstrate high rate coagulation for future plant upgrades to 120 MGD. High rate coagulation technologies will most likely be plate or tube settlers installed within the existing basin.
30. EMJWTP Pump #1 Upgrade: \$690,000
This project would upgrade pump number one on the high service (605 Zone) at E.M. Johnson Water Treatment Plant. This upgrade would install a 15 MGD pump to support greater demand in the high service zone.
31. EMJWTP Solids Handling: \$10,000,000
Rehabilitation and improvement of the EMJWTP Solids Handling System. Project includes replacement of Thickened Sludge Pumps (220k), improvements to Filtrate Pump Station (350k), installation of a Cake Solids Hopper (2.88 M), installation of Lagoond Decant Pump Station (750k), installation of Fourth Belt Filter Press (1.4 M), improved Facilities for Draining Sedimentation Basins (3.2 M), using Recycled Water for Wash Water (360k), and contingency (840k).
32. EMJWTP UV Solids Handling: \$38,100,000
This project is Phase 3 of the E.M. Johnson Water Treatment Plant expansion to 120 MGD. This project includes the construction of a new ultraviolet radiation disinfection facility, improved solids handling facilities to address higher waste flows from an expanded plant capacity, and miscellaneous civil engineering work.
33. Franklin Street Waterline 12": \$133,000
Install approximately 1,600 linear feet of 12-inch waterline along Franklin Street from Friendship Chapel Road to NC 98 Bypass.
34. Hebron Church Road Transmission: \$970,000
Install approximately 4,510 linear feet of 24-inch water transmission main along Hebron Church Road from Clifford Road to White Oak Road.

35. Jones Sausage Upgrade I-40: \$850,000
Install a 16-inch water line along Jones Sausage Road at the intersection of I-40.
36. Lake Glad Road Waterline Extension: \$325,000
Construction of 4,300 linear feet of 6" and 8" water line along Lake Glad Road. This item was identified in the merger document as WD09.
37. Little River Basin Reservoir Wetland Mitigation Construction: \$15,600,000
Wetland Mitigation Construction for wetland enhancement and wetland restoration areas. This would consist of restoring wet conditions and planting trees for mitigation sites acquired through property or conservation easement purchases.
38. Little River Reservoir Impact Statement: \$800,000
An Environmental Impact Statement (EIS) is required for obtaining state permits for the design and construction of an impoundment for a new raw water supply for the City of Raleigh.
39. Little River Reservoir Monitoring: \$300,000
As part of the State and Federal permit for the Little River Reservoir, a monitoring program will be used to quantify the impact of mitigation associated with the reservoir construction.
40. Little River Reservoir Wetland Mitigation Property Acquisition: \$22,500,000
Wetland Mitigation through property or conservation easement purchases.
41. NC 98 Bypass Waterline: \$493,000
Install approximately 5,940 linear feet of 12-inch waterline along NC 98 Bypass from Jones Dairy Road to Franklin Street.
42. Oak Forest 30 Water Main: \$2,900,000
Installation of 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.
43. Oregon Trail Road Transmission: \$1,219,000
Install approximately 5,670 linear feet of 24-inch water transmission main from the D.E. Benton WTP along Oregon Trail to New Bethel Church Road.
44. Poole Road Booster Pump Station: \$2,800,000
The project would construct a regional water booster station to replace the existing aging or undersized booster stations within the Wendell and Zebulon service areas. The project is a component of Wendell merger project WD 11 and Zebulon merger project WD 08. Cost will be divided between the City of Raleigh, Town of Wendell and the Town of Zebulon based upon the cost share memo provided by CH2M Hill as part of the Merger Document.
45. Pullen Park PS Discharge 24": \$2,078,000
Install approximately 9,665 LF of 24-inch water transmission main from the Pullen Park Water Booster Pump Station along Ashe Avenue across Western Boulevard and along Bilyeu Street and Main Campus Drive to Achievement Drive.
46. Rand Road Transmission Line: \$1,029,000
Installation of approximately 12,400 linear feet of 12-inch water line along Rand Road in Garner from NC 50 to Ten Ten Road.
47. Security Improvements: \$350,000
Improvements to the security measures at the EMJWTP, elevated water tanks sites and other remote water facilities.

48. Springdale Tank Replacement: \$1,450,000
This project will replace the current Springdale Tank, which is a 100,000 gallon pedisphere tank that is nearing the end of its service life. The new tank will be relocated within the 655 pressure zone and will be a 500,000 gallon elevated tank.
49. Ten Ten Road Transmission Line: \$432,000
Installation of approximately 5,200 linear feet of 12-inch water line along Ten Ten Road in Garner from Rand Road to Old Stage Road.
50. Ten Ten Road Water Tank: \$3,000,000
Construction of a new 1.0 MG elevated water storage tank in the vicinity of Ten Ten Road and Old Stage Road to support the increasing water demand of the 532 pressure zone.
51. US 401/Ligon Mill Water Line to Jonesville: \$430,000
Install approximately 5,180 of 12-inch waterline along Ligon Mill Road from Margots Avenue to Burlington Mills Road.
52. Water Plant Settling Basins: \$1,200,000
Re-grout and repair deteriorated concrete in the remaining three settling and flocculation basins (basins 3, 4, & 5) that were built in the second expansion of the water plant 20 years ago.
53. Wendell Boulevard Water Line: \$1,449,000
Install approximately 11,978 linear feet of 16-inch water transmission line along Wendell Blvd. from NC 97 to Cypress Street.
54. Zebulon Water Line NC 97: \$2,176,000
Install approximately 17,985 linear feet of 16-inch water transmission line along NC 97 from the intersection of Wendell Boulevard to Riverview Drive.

Wastewater Projects – Cash Funded

55. Access to Sanitary Sewer Mains: \$2,000,000
This project will provide access to clear easements, install access roads, and purchase access easements throughout the system in order to gain access for regulatory required sanitary sewer maintenance.
56. Annexation – Sewer: \$2,000,000
The project funds the required sewer service associated the City's initiated annexation plans and requests for service within the City's current city limits.
57. Crabtree Lift Station: \$1,100,000
Rehabilitate or replace the augers of the existing Crabtree Creek Sanitary Sewer Lift Station located at the interchange of I-440 and Hwy 264/64.
58. East Neuse Regional Pump Station: \$10,050,000
Construction of a new pump station and force main on the east bank of the Neuse River at the confluence of Poplar Creek and the Neuse River across from the Neuse River WWTP or other location as determined by Environmental Impact Statement and Preliminary Engineer Report. This pump station will serve as the backbone to the City's long range sanitary sewer conveyance needs for current wet weather and future growth flows.
59. Lower Walnut Creek Interceptor: \$7,550,000
This project includes the installation of 17,000 feet of 48-inch parallel pipe (or 72-inch replacement pipe) from the Walnut Creek Softball Complex junction box (MH 106042) to the siphon junction box upstream of Walnut Creek PS (MH 106337). Project also includes the

rehabilitation of approximately 14,000 feet of 42" pipe upstream of the Walnut Creek Softball Complex to Rock Quarry Rd.

60. Main Replacement: \$72,000,000
Continuation of program to replace under-sized and deteriorated sanitary sewer collection mains and services with concentration on rehabilitation or replacement, in older areas of the City, such as inside the beltline.
61. Neuse East Parallel Phase 3: \$75,300,000
Installation of 21,000 linear feet of 96-inch gravity sanitary sewer main from the Walnut Creek Lift Station off Barwell Rd. to the proposed East Neuse Regional Pump Station along the east side of the Neuse River.
62. Crabtree Basin Wastewater System Conveyance Improvements Phase II & III: \$11,825,000
Phase II of this project includes construction of approximately 20,000 linear feet of 54-inch sanitary sewer main along Crabtree Creek from near Capital Blvd. to Mine Creek (near Lead Mine Rd.). Phase III includes additional pumping capacity at the Crabtree Creek Lift Station and 14,600 linear feet of 42-inch force main from the Crabtree Lift Station to Phase IV of the Neuse River East Parallel Interceptor.
63. NRWWTP Anaerobic Digestors: \$13,750,000
Construction of 2 thermal hydrolysis pre-digestion facilities and 2 anaerobic digesters at the NRWWTP along with appurtenances such as cogeneration of heat and power (CHP) generators.
64. NRWWTP Electrical Transmission Rehabilitation: \$300,000
Rehabilitation of existing electrical transformers at the Neuse River Wastewater Treatment Plant.
65. NRWWTP Facility Improvements: \$1,400,000
Renovate the existing administrative building at the NRWWTP. Renovation will include the replacement of windows, HVAC system, ceiling, flooring, and several other items.
66. NRWWTP Lab Improvements: \$600,000
Expansion and upgrading the laboratory facility at the NRWWTP including replacement of the existing ventilation system.
67. NRWWTP Land Purchase: \$1,600,000
Continuation of program to purchase land for land application of biosolids from the Neuse River Wastewater Treatment Plant.
68. NRWWTP Reuse System Expansion: \$15,000,000
Continued expansion of the Neuse River Wastewater Treatment Plant off-site reuse system expansion. Project scope includes reuse distribution mains, pump stations, elevated storage tanks and other reuse distribution components necessary for the expansion of the system in accordance with the Reuse Master Plan.
69. NRWWTP Thickening Building: \$300,000
Replacement of the existing Thickening Building Electrical Switchgear at the NRWWTP.
70. Sanitary Sewer Siphon Rehabilitation: \$10,000,000
Rehabilitation of existing sanitary sewer siphons (or "depressed sewers"). Rehabilitation includes cured in place pipe liners, pipe bursting, replacement in place, manhole rehabilitation, and siphon box rehabilitation.

71. Sanitary Pump Station Removal: \$9,000,000
Extension of gravity sanitary sewer mains to eliminate sanitary sewer pump stations. This item also includes rehabilitation or replacement of deteriorated pump station facilities.
72. State Street Interceptor: \$1,000,000
Upsize 1,700 feet of pipe just west of State Street near the Walnut Creek Wetland Education Center in the W6 sub-basin beginning at manhole 63623 and ending at manhole 70077 from 18-inch to 24-inch to eliminate predicted surcharging and overflows.
73. System Capacity Analysis: \$2,500,000
Continuation of the program to collect data and model the sanitary sewer collection system.
74. Turkey Creek Interceptor Rehabilitation: \$5,000,000
Rehabilitate approximately 11,500 feet of 36" sanitary sewer main along Turkey Creek from Glenwood Ave. to Ebenezer Church Rd. at Crabtree Creek.
75. Upper Pigeon House Rehabilitation: \$16,400,000
This project includes the replacement of approximately 10,000 feet of 24-inch sanitary sewer main with 36 and 42 inch sanitary sewer main along Upper Pigeon Creek from Fenton Street to near Peace St. This project will be implemented in four phases.
76. Utility Field Facility Improvements: \$5,000,000
Miscellaneous improvements to various Utility Field Operation Facilities. Improvements include but are not limited to paving of Lake Woodard warehouse storage yard (a result of a dust safety study), emergency generators at South Raleigh and East Raleigh facilities, security improvements at South Raleigh and East Raleigh, and Emergency Management Systems for all facilities.

Wastewater Projects – Revenue Bonds

77. Big Branch Interceptor Parallel: \$7,700,000
Install 16,000 feet of 18-inch (or 30-inch replacement pipe) parallel relief sewer from manhole 118813 to manhole 129145 along the Big Branch from Millbrook Road to the Crabtree Interceptor to eliminate observed surcharging and overflows.
78. Crabtree Valley Sewer Replacement: \$22,600,000
Replace or rehabilitate 6,000 LF of sanitary sewer main along the North Bank of Crabtree Creek from Glenwood Avenue to Hare Snipe Creek.
79. East Neuse Regional Pump Station: \$18,350,000
Construction of a new pump station and force main on the east bank of the Neuse River at the confluence of Poplar Creek and the Neuse River across from the Neuse River WWTP or other location as determined by Environmental Impact Statement and Preliminary Engineer Report. This pump station will serve as the backbone to the City's long range sanitary sewer conveyance needs for current wet weather and future growth flows.
80. Harris Creek Interceptor Parallel: \$7,500,000
This project involves installation of 14,000 feet of 15-inch parallel pipe (or 21-inch replacement pipe) from manhole 122830 to manhole 122552 along the Harris Creek interceptor from Mitchell Mill Rd. to Granite Ridge Trail. The purpose of this project is to eliminate predicted surcharging and overflows.
81. Lower Walnut Creek Interceptor: \$17,450,000
This project includes the installation of 17,000 feet of 48-inch parallel pipe (or 72-inch replacement pipe) from the Walnut Creek Softball Complex junction box (MH 106042) to the siphon junction box upstream of Walnut Creek PS (MH 106337). Project also includes the

rehabilitation of approximately 14,000 feet of 42" pipe upstream of the Walnut Creek Softball Complex to Rock Quarry Rd.

82. Marsh Creek Parallel Phase I: \$3,000,000
Install 8,600 feet of 30-inch (or 36-inch replacement pipe) parallel relief sewer from manhole 120175 to manhole 101187 along the Marsh Branch from Brockton Street to Trawick Street to eliminate observed surcharging and overflows.
83. Neuse East Parallel Phase 3: \$24,200,000
Installation of 21,000 linear feet of 96-inch gravity sanitary sewer main from the Walnut Creek Lift Station off Barwell Rd. to the proposed East Neuse Regional Pump Station.
84. Neuse East Parallel Phase 4: \$28,500,000
Installation of 7,000 linear feet of 84-inch gravity sanitary sewer main from the Walnut Creek Lift Station off Barwell Rd. to the existing Neuse River Pump Station at Anderson Pointe Park off of Rogers Lane. This gravity sewer extension will decommission the existing Neuse River Pump Station at Anderson Pointe Park off of Rogers Lane.
85. Neuse East Parallel Phase 5: \$34,000,000
Install 25,000 feet of pipe of 48-inch parallel pipe (or 66-inch to 72-inch replacement pipe) from the Upper Neuse parallel phase II project to the Neuse River PS. The purpose of this project is to eliminate predicted surcharging and overflows.
86. Neuse River Pump Station Pump Addition: \$2,000,000
Installation of a fourth pump and replacement of the existing generator to accommodate the added load due to the fourth pump at the Neuse River Pump Station located at Anderson Pointe Park.
87. Crabtree Basin Wastewater System Conveyance Improvements Phases II & III: \$36,175,000
Phase II of this project includes construction of approximately 20,000 linear feet of 54-inch sanitary sewer main along Crabtree Creek from near Capital Blvd. to Mine Creek (near Lead Mine Rd.). Phase III includes additional pumping capacity at the Crabtree Creek Lift Station and 14,600 linear feet of 42-inch force main from the Crabtree Lift Station to Phase IV of the Neuse River East Parallel Interceptor.
88. NRWWTP 15 MGD Expansion Phases IV & V: \$25,600,000
Construction of additional waste treatment facilities at the NRWWTP that will increase the treatment capacity of the facility from a 60 MGD plant to 75 MGD. Phases IV & V of the project will include but not be limited to the addition of a fine screen and grit equipment in the new head works building, construction of new secondary clarifiers, and installation of 4 channels of UV equipment at the new UV building.
89. NRWWTP Anaerobic Digestors: \$38,250,000
Construction of 2 thermal hydrolysis pre-digestion facilities and 2 anaerobic digesters at the NRWWTP along with appurtenances such as cogeneration of heat and power (CHP) generators.
90. NRWWTP Onsite Reuse Improvements: \$8,000,000
This project allows for the installation of additional irrigation lines and sprinkler heads for the NRWWTP farm agricultural fields. By using the effluent from the wastewater treatment plant for irrigation, the City reduces the amount of plant effluent and nitrogen that would ultimately be discharged into the Neuse River.
91. NRWWTP Sludge Dryer: \$35,000,000
Expansion of the NRWWTP Biosolids Dewatering Facilities and the addition of a Sludge Dryer. The new dewatering facilities and sludge dryer will be fed from the new anaerobic digesters that will be installed at the plant in 2018.

92. Poplar Creek Interceptor: \$6,000,000
Construct a new 36/42 inch interceptor from the East Neuse Regional Pump Station located near the confluence of the Neuse River and Poplar Creek to the Knightdale Poplar Creek interim pump station at Poole Road.
93. Southwest Beaver Creek Interceptor: \$2,900,000
Install 6,000 feet of 15-inch (or 24-inch replacement pipe) parallel relief sewer manhole 63160 to manhole 71775 along the Southwest Fork of Beaver Creek Branch from Medlin Drive to Glenwood Avenue to eliminate predicted surcharging and overflows.
94. Upper Mine Creek Interceptor: \$17,300,000
Install 24,000 feet of 24/30-inch (or 42-inch replacement pipe) parallel relief sewer from manhole 116161 to manhole 116480 along the Upper Mine Branch from Lead Mine Road/Six Forks Road to Millbrook Road to eliminate observed overflows.
95. Walnut Creek Debris Drying Pads: \$1,000,000
Construction of concrete pads for drying of flush truck debris from pump stations and the wastewater collection system. Additional pads will be constructed at the existing debris drying facility off of Old Williams Rd. and at an undetermined location in Wake Forest.
96. Wendell Lake Glad Road Demo: \$165,000
Demolition of the Lake Glad Road Aeration basins. A portion of this project was listed as a Wendell project adopted in the merger agreement as item WW19. Currently, the basins are being utilized for flow equalization. These flow equalization basins will not be necessary when the force main is shortened and discharges to the Poplar Creek interceptor at Grasshopper Rd that will flow to the East Neuse Regional Pump Station.
97. Wildcat Branch Interceptor Parallel: \$2,000,000
This project involves upsizing 4,000 feet of pipe in the Wildcat sub-basin beginning at manhole 71045 to manhole 70625 from 15-inch to 21-inch & 24-inch to eliminate surcharging and overflows.

Stormwater



Element Overview

The stormwater utility capital element addresses stormwater runoff, flood reduction and mitigation, pollution control, water quality, and drainage improvements. This element also improves watercourses that require erosion control and stream remediation throughout the City. The stormwater utility fees, paid by property owners, fully fund all stormwater capital projects.

Flood mitigation projects improve and replace drainage systems (such as pipes, culverts, bridges, catch basins) in neighborhoods and the city street system. With flood mitigation funds, the city purchases and removes or elevates structures within the 100-year floodplain. These funds also supplement federal and state grants awarded to the city to reduce flood damage in Raleigh.

Stormwater quality and stream restoration projects improve water quality in our streams by reducing pollutants. This program includes projects to restore stream banks, thus reducing sediment loads to the streams. Also, stream management practices such as ponds, cisterns, and rain gardens are installed to filter out pollutants such as nitrogen, sediment, and metals

The Stormwater Utility capital program is broken up into eight categories:

The *Lake Preservation* component of the CIP protects lakes from being removed from the drainage system in order to continue to provide water quality and flood protection benefits. In addition to the Council adopted Lake Preservation Policy, retaining these lakes protects our water features and is part of the City's green infrastructure plan.

The *Water Quality Improvement Projects and the General Water Quality* category of the program help protect the Neuse River and our waterways. These programs are also mandated by the Clean Water Act and assist in improving the water quality in our lakes and streams as well as mitigating stormwater impacts.

The *Stream Restoration* category is in place to prevent erosion and improve water quality as well as preserve or restore aquatic life in our streams. Sediment is the number one pollutant in the US and these projects are designed to restore streams to their natural state.

The *Stormwater/ Watershed Master Planning* category of the stormwater program is a holistic approach to planning for stormwater improvements to reduce flooding, improve water quality, and reduce sediment deposits downstream. These studies (also referred to as drainage basin studies) help ensure stormwater projects with the most potential benefit are prioritized to maximize our financial resources.

The *General Drainage Infrastructure* category is in place to assess, repair, replace, improve or maintain stormwater systems throughout Raleigh. Funds are budgeted for public improvements as well as private property funding assistance to mitigate severe drainage problems on private property. The flood mitigation item provides funding to purchase and remove properties from the floodplain. Property acquisition is also sometimes supplemented by federal grants through the National Flood Insurance Program or other sources.

The *Neighborhood and Street Drainage System Improvement* category are designed to reduce the flooding of streets and buildings as well as replacing deteriorating stormwater drainage infrastructure. These projects help mitigate stormwater impacts while improving neighborhood quality.

Recent Accomplishments

Significant neighborhood and street projects completed during FY 2013 include the North Hills Drive, Breckenridge Avenue street drainage projects and upgrades to Greystone Lake. These projects cost approximately \$7 million.

Three properties including two residences on Woodlea Drive and a commercial property on Capital Blvd. were purchased and structures demolished to prevent future flood damages. The cost of these flood mitigation efforts cost \$1.8 million. The property purchase on Capital Boulevard is a milestone in efforts to implement the Capital Boulevard corridor plan.

Five stormwater quality projects implementing cisterns and rain gardens were completed at a cost of \$250,000. The Pullen Green Street project adjacent to NC State University was a partnership with the university in continuance of implementing green infrastructure plans. Eight fire stations were outfitted with cisterns or rain gardens to improve water quality and conserve potable water utilizing federal stimulus and Clean Water Management Trust Fund grant dollars.

Horizon Items

Approximately 180 stormwater projects, estimated to cost \$60 million, are currently under design or construction. The planned capital improvement program over the next 10 years for stormwater utility projects exceeds \$96 million.

Failing infrastructure in many older neighborhoods as well as downtown and ever increasing state and federal mandates to improve water quality will be major challenges in the coming years. Drainage system assessment and continuing watershed studies to identify and prioritize these needs and improvements will continue.

Stormwater utility fees fund two cost share programs to assist property owners with flooding or erosion problems and the installation of best management practices. Citizen requests for funding assistance through these two programs have increased significantly since the stormwater utility was implemented in FY 2004.

Stormwater Capital Improvement Program Summary

Fiscal Year 2014 CIP	Five year CIP	Unfunded Requests
\$5,700,000	\$30,414,000	-

STORMWATER CAPITAL

Funded Projects

Lake Preservation		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
1	Brockton Dr Dam Lake Rehab	1,000,000	1,500,000	-	-	-	2,500,000
2	Lower Longview Lake Dam Rehab	1,250,000	1,250,000	-	-	-	2,500,000
3	Camp Durant Lake Rehab/ Preservation	-	-	150,000	400,000	-	550,000
4	Wycliff Rd Lake Rehab/ Preservation	-	-	-	-	100,000	100,000
Subtotal		2,250,000	2,750,000	150,000	400,000	100,000	5,650,000
Water Quality Improvement Projects		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
5	Spotswood Bioretention	-	200,000	-	-	-	200,000
6	Pender and Waldrop Constructed Wetland	-	-	-	100,000	400,000	500,000
7	Weybridge FEMA Wetland	-	-	-	-	150,000	150,000
8	Mulberry St Wetland	-	-	-	-	250,000	250,000
Subtotal		-	200,000	-	100,000	800,000	1,100,000
General Water Quality		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
9	Water Quality Cost Share	250,000	250,000	250,000	250,000	250,000	1,250,000
10	Water Quality Retrofit Projects	200,000	-	125,000	179,000	10,000	514,000
11	TMDL Streams Water Quality Projects	-	-	173,000	-	350,000	523,000
Subtotal		450,000	250,000	548,000	429,000	610,000	2,287,000
Stream Restoration		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
12	Rosengarten Ally Stream Restoration	-	100,000	-	250,000	250,000	600,000
13	Pigeon House at Wade Stream Restoration	-	150,000	450,000	-	-	600,000
14	Devereau Meadows Stream Restoration	-	-	150,000	-	375,000	525,000
15	Capital Blvd Stream Restoration	-	-	-	250,000	500,000	750,000
Subtotal		-	250,000	600,000	500,000	1,125,000	2,475,000
General Drainage Infrastructure		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
16	Stormwater System Repairs	500,000	157,000	500,000	500,000	600,000	2,257,000
17	Drainage Petition Projects	750,000	750,000	750,000	750,000	750,000	3,750,000
18	Flood Mitigation	-	300,000	-	500,000	-	800,000
Subtotal		1,250,000	1,207,000	1,250,000	1,750,000	1,350,000	6,807,000
Neighborhood Drainage Improvements		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
19	Five Points Drainage (Phase 2)	1,150,000	-	-	-	-	1,150,000
20	Halifax Park Drainage Repair	100,000	-	-	-	-	100,000
21	Knights Way/Audobon/Rainwood (Phases 4, 5)	-	500,000	-	-	-	500,000
22	Industrial Dr Area Drainage Upgrades	-	55,000	265,000	-	-	320,000
23	Sierra Drive Storm Drainage	-	275,000	-	700,000	700,000	1,675,000
24	Beechwood Dr Area Drainage	-	75,000	-	425,000	-	500,000
25	Fairview - Churchill Culverts (Phase 2)	-	-	1,350,000	-	-	1,350,000
26	Grist Mill/ Harps Mill Drainage (Phase 6)	-	-	600,000	600,000	-	1,200,000
27	Grist Mill Northwest Drainage (Phase 6)	-	-	250,000	250,000	-	500,000
28	Tanbark Way Drainage (Phase 6)	-	-	150,000	125,000	-	275,000
29	Laurel Hills West Neighborhood Improvements	-	-	225,000	300,000	-	525,000
30	Swann St Area Improvements	-	-	350,000	-	645,000	995,000
31	Marsh Ave/Westover Area Improvements	-	-	120,000	-	625,000	745,000
32	Sweetbriar/Crescent Ct Area Improvements	-	-	-	-	75,000	75,000
Subtotal		1,250,000	905,000	3,310,000	2,400,000	2,045,000	9,910,000

Street Drainage System Improvements						
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
33 Drewry Lane Culvert Improvements	500,000	385,000	-	-	-	885,000
34 Acer Ct Drainage Improvements	-	-	190,000	-	-	190,000
35 1709 Lakepark Dr Improvements	-	-	50,000	-	250,000	300,000
36 Shepard/Merriman Storm Drainage	-	-	-	250,000	-	250,000
37 E. Davie St Area Drainage Improvements	-	-	-	425,000	-	425,000
38 8909 Braceridge Rd Area Improvements	-	-	-	-	50,000	50,000
39 5014 Dunbar Rd Drainage Improvements	-	-	-	-	30,000	30,000
40 18 Second Star Ct System Replacement	-	-	-	-	55,000	55,000
Subtotal	500,000	385,000	240,000	675,000	385,000	2,185,000
Total	5,700,000	5,947,000	6,098,000	6,254,000	6,415,000	30,414,000
Revenue Sources						
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Transfers from Stormwater Operations	5,400,000	5,547,000	5,698,000	5,854,000	6,015,000	28,514,000
Interest On Investments	300,000	400,000	400,000	400,000	400,000	1,900,000
Total Revenues	5,700,000	5,947,000	6,098,000	6,254,000	6,415,000	30,414,000

Stormwater – Funded Projects

Lake Preservation

1. Brockton Drive Dam Lake Rehabilitation: \$2,500,000
The existing 24" CMP culvert at 4227 Brockton Drive is undersized and prone to clogging. This has led to upstream flooding on City of Raleigh property and Brockton Drive.
2. Lower Longview Lake Dam Rehabilitation: \$2,500,000
This project will involve repair and rehabilitation of the dam along Longview Lake Drive. The road has been closed due to the potential failure of the dam and the drainage infrastructure.
3. Camp Durant Lake Rehabilitation/Preservation: \$550,000
Design services and construction for the repair of a failing dam.
4. Wycliff Road Lake Rehabilitation/Preservation: \$100,000
This project will repair and rehabilitate the dam at Wycliff Road Pond. The spillway and outlet structure is undersized, causing downstream flooding of Wycliff Road and Lake Boone Shopping Center, and flooding of the apartments around the pond. Improvements will allow the dam to meet North Carolina Dam Safety Standards.

Water Quality Improvement

5. Spotswood Bioretention: \$200,000
This project is located in the Perry Creek watershed, which has been identified by EPA as needing significant water quality improvements. This will require the City to install best management practices such as this bioretention facility to improve water quality.
6. Pender and Waldrop Constructed Wetland: \$500,000
This project is located in the Pigeon House Branch watershed, which has been identified by EPA as needing significant water quality improvements. This requires the City to install best management practices such as this wetland to improve water quality.
7. Weybridge FEMA Wetland: \$150,000
This project is located in the Perry Creek watershed, which has been identified by EPA as needing significant water quality improvements. This requires the City to install best management practices such as this wetland to improve water quality.
8. Mulberry Street Wetland: \$250,000
This project is located in the Pigeon House Branch watershed, which has been identified by EPA as needing significant water quality improvements. This requires requires the City to install best management practices such as this wetland to improve water quality.

General Water Quality

9. Water Quality Cost Share: \$1,250,000
This cost share program is similar to the Drainage Petition Program already managed by the Stormwater Management Division. The Water Quality Cost Share program provides for the construction of water quality best management practices, including cost shares with NCDOT.

Retrofit projects are mandated by the Neuse Nutrient Management Study, also known as the Neuse Rules, as enforced by North Carolina Department of Environment and Natural Resources. Retrofit projects are essential for achieving water quality goals.

10. Water Quality Retrofit Projects: \$514,000

Implementation of best management practices to capture and treat runoff including: (1) Construction of an extensive green roof to be installed on the 6th floor roof of the RMB; (2) a cistern to capture runoff from the parking deck for use in irrigation, the fountain, and possibly vehicle washing; (3) a cistern to capture runoff from the new public safety center; and (4) installation of bioretention and other LID techniques to capture runoff from walkways and other remaining impervious areas.

11. TMDL Streams Water Quality Projects: \$523,000

Funding for the design and construction of water quality projects/BMP's to reduce pollutant discharges in stormwater runoff within the TMDL listed watersheds such as Pigeon House Branch and Perry Creek. The City of Raleigh's NPDES Stormwater Permit requires the development and implementation of a water quality restoration plan for all TMDL listed streams. These practices are considered "green" and promote sustainable development.

Stream Restoration

12. Rosengarten Ally Stream Restoration: \$600,000

To improve water quality in a TMDL listed impaired stream through stabilization of eroding stream banks. This project implements a component of the City's water quality plan, which is mandated by the Clean Water Act. This project will be coordinated with Parks and Recreation's plans for a greenway trail in this area.

13. Pigeon House at Wade Stream Restoration: \$600,000

To improve water quality in a TMDL listed impaired stream through stabilization of eroding stream banks. This project implements a component of the City's water quality plan which is mandated by the Clean Water Act.

14. Devereau Meadows Stream Restoration: \$525,000

To improve water quality in a TMDL listed impaired stream through stabilization of eroding stream banks. This project implements a component of the City's water quality plan which is mandated by the Clean Water Act. This project is also part of the improvements planned as included in the Capital Blvd. corridor plan.

15. Capital Boulevard Stream Restoration: \$750,000

To improve water quality in a TMDL listed impaired stream through stabilization of eroding stream banks. This project implements a component of the City's water quality plan which is mandated by the Clean Water Act. This project is also part of the improvements planned as included in the Capital Blvd. corridor plan.

General Drainage Infrastructure

16. Stormwater System Repairs: \$2,257,000

Repairs to Stormwater facilities made in accordance with City Council policies.

17. Drainage Petition Projects: \$3,750,000
Funding of drainage petition projects approved by City Council for construction under the City Storm Drainage Policy.
18. Flood Mitigation: \$800,000
Project to provide funding for buyout or elevation of structures within the 100-year floodplain, particularly repetitive loss structures.

Neighborhood Drainage Improvements

19. Five Points Drainage Phase 2: \$1,150,000
Stormwater Utility Division prepares construction plans and construct culvert drainage improvements along Fairview Road, Myrtle Road, and Glenwood Avenue in the Five Points neighborhood. The existing storm pipes at Fairview Road and Myrtle Road will be increase in size and an existing culvert under Glenwood Avenue will be replaced with a new jack and bore larger capacity culvert.
20. Halifax Park Drainage Repair: \$100,000

This project is a partnership with Parks and Recreation to replace a failing drainage system in Halifax Park. As a cost share project, the Stormwater Capital Fund will cover 80% of the costs.
21. Knight's Way/Audobon/Rainwood Phases 4 & 5: \$500,000
This project will replace existing drainage systems with an upgraded system to reduce street and structural flooding. Included is replacement of adjacent sanitary sewer, downstream channel stabilization and restoration.
22. Industrial Area Drainage Upgrades: \$320,000
This project will involve the upgrading of drainage systems along Industrial Drive to decrease street flooding and structure flooding in an existing business.
23. Sierra Drive Storm Drainage: \$1,675,000
This project will lessen street and structural flooding along Sierra Drive. The existing pipe system is improperly sized to current City standards.
24. Beechwood Drive Area Drainage: \$500,000
This project will involve the upgrading of drainage systems in the Beechwood Drive neighborhood to decrease street flooding and structure flooding in homes.
25. Fairview – Churchill Culverts Phase 2: \$1,350,000
Replacement of these culverts was identified as a need in the Beaverdam Creek watershed study to prevent structure flooding and overtopping of the streets during flood events.
26. Grist Mill/Harps Mill Drainage Phase 6: \$1,200,000
This project will replace and install storm drainage improvements along Grist Mill and Harps Mill.
27. Grist Mill Northwest Drainage Phase 6: \$500,000
This project will replace and install storm drainage improvements along Grist Mill Road.

28. Tanbark Way Drainage Phase 6: \$275,000
This project will replace and install storm drainage improvements along Tanbark Way.
29. Laurel Hills West Neighborhood Improvements: \$525,000
This project will provide and improve the inadequate and undersized storm drainage system serving Huckleberry and Balsam Drives and other areas of the Laurel Hills West neighborhood community that is currently contributing to street and structural flooding in addition to erosion of right of way and private property.
30. Swann Street Area Improvements: \$995,000
This project will upgrade the undersized storm drainage system serving Swann Street and other areas of the Swann Street drainage basin that is currently contributing to street and structural flooding.
31. Marsh Avenue/Westover Area Improvements: \$745,000
This project will upgrade the inadequate and undersized storm drainage system serving Marsh Avenue and Westover and other areas of the Marsh Avenue drainage basin that is currently contributing to street and structural flooding.
32. Sweetbriar/Crescent Court Area Improvements: \$75,000
This project will upgrade the undersized storm drainage system serving Sweetbriar Dr and Crescent Ct area where there are concerns related to street and property flooding.

Street Drainage System Improvements

33. Drewry Lane Culvert Improvements: \$885,000
This project will replace existing an undersized drainage culvert that needs replacing due to possible future failure under West Drewry Lane within the Drewry Hills residential area.
34. Acer Court Drainage Improvements: \$190,000
This project will add storm drainage structures on Acer Court to relieve street and structural flooding.
35. 1709 Lakepark Drive Improvements: \$300,000
This project will repair and upgrade the deteriorating storm drainage culvert and headwall at Lakepark Drive. This project was identified by the City's street/stormwater maintenance forces.
36. Shepard/Merriman Storm Drainage: \$250,000
There are 18-inch and 24-inch diameter pipes on Shepherd Street and Merriman Avenue that are undersized contributing to flooding of Shepherd Street and the private property on Dixie Trail. These pipes need to be replaced with 30-inch diameter reinforced concrete pipe to address street flooding and minimize flooding of private properties.
37. East Davie Street Area Drainage Improvements: \$425,000
This project will upgrade the undersized storm drainage system under E. Davie Street (near 901 E. Davie) that is currently contributing to street flooding.
38. 8909 Braceridge Road Area Improvements: \$50,000

This project will repair and upgrade the deteriorating storm drainage system along Braceridge Drive.

39. 5014 Dunbar Road Drainage Improvements: \$30,000

This project will repair and upgrade the deteriorating/inadequate storm drainage system along Dunbar Road.

40. 18 Second Star Court System Replacement: \$55,000

This project will repair and upgrade the deteriorating/inadequate storm drainage system along Second Star Court.

Transportation



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 transportation program is \$63.9 million, with \$28.3 million planned for FY 2014. The proposed CIP continues to implement the \$40 million Transportation Bond approved by Raleigh residents in October 2011. These bond proceeds fund street resurfacing, street improvements, greenway projects, transit facility improvements, sidewalk installations, and planning studies.

The proposed CIP includes over \$10 million for major street construction. Each project is consistent with the adopted goals of the 2030 Comprehensive Plan and incorporates "Complete Streets" principles, which integrates bicycle, pedestrian and transit system elements into each project. An increase in facility fee revenues has allowed for the acceleration of the Buck Jones Road widening project by one year in this program. The CIP also includes matching city funds on two planned North Carolina Department of Transportation (NCDOT) highway improvement projects. These projects are widening of the I-440 Beltline in southwest Raleigh, and improvements to the US 70 Corridor from Duraleigh Road to I-540.

The street improvements program of the transportation program is funded at \$34.7 million. Projects include street resurfacing, street improvements, petition paving projects, traffic signal installations, intersection improvements, and median improvements.

The bicycle, pedestrian & planning improvements program of the transportation program includes \$14 million for sidewalk construction, maintenance, and repair, streetlight installations, and bicycle facility improvements. Funds are also allocated for city matches to federal grant projects and future NCDOT bridge replacement projects. Bond proceeds from the 2011 Transportation Bond will fund many of the city's proposed sidewalk projects, which will be prioritized based on the City's new Comprehensive Pedestrian Plan. The bicycle program continues to implement the recommendations of the City's adopted Bicycle Comprehensive Plan.

The CIP has \$9.6 million for transit system planning, system maintenance, equipment, and facilities. This includes an additional \$3 million commitment for development planning of the Union Station multi-modal transit center and associated area improvements. This is in addition to the \$3 million allocated in FY13 from the 2011 Transportation Bond, bringing the City's total commitment to Union Station to \$6 million. Bond proceeds will also fund renovations at the City's Moore Square Station. The parking improvements element includes \$3.2 million for security improvements and maintenance for the downtown parking decks.

In addition to bond proceeds, transportation projects are funded with facility fees, construction-related assessments, and the local share of the state gasoline tax (Powell Bill). In FY 2014, selected projects are funded with one-time transfers from the General Fund. This includes \$3 million for Union Station, as well as funding for sidewalk repair and transit facilities.

Recent Accomplishments

The City has completed several major transportation projects including:

- Falls of Neuse Road widening and realignment (Phase II) from Raven Ridge Road to Fonville Road;
- Jones Sausage Road widening and realignment from I-40 to Rock Quarry Road;
- Rock Quarry Road widening from Sunnybrook Road to New Hope Road;
- Multi-modal improvements to Wade Avenue between Faircloth Road and Ridge Road; and
- Perry Creek Road widening from Capital Boulevard to Louisburg Road.

Through coordination with the Capital Area Metropolitan Planning Organization (CAMPO), the City has leveraged over \$5 million in additional revenue for several miles of sidewalk and bicycle improvements throughout the city. These funds also include programmed street/sidewalk improvements along Lake Wheeler Road, Creedmoor Road, and Six Forks Road.

The City is also coordinating major transportation projects with NCDOT and other agencies that will need to do street improvements within the City. These projects include:

- I-440 Widening (U-2719);
- US 70 Corridor Improvements (U-2823);
- Peace Street Bridge Improvements at Capital Boulevard (B-5121);
- Wade Avenue Bridge Improvements at Capital Boulevard (B-5317);
- Avent Ferry Road Bridge Improvements at Lake Johnson (B-5130); and
- Trailwood Road Bridge Replacement at Walnut Creek.

The benefits of the coordination efforts include significant cost savings for the City, earlier identification of project impacts, managing traffic disruptions from road work, and ensuring consistency of these project with the City’s 2030 Comprehensive Plan.

Horizon Items

Passage of the \$40 million Transportation Bond funded many high-priority capital maintenance projects. But In our growing community, this amount of funding does not address the full range of identified needs. Some partially-funded projects, such as improvements to Buck Jones Road and Mitchell Mill Road, continue to be postponed under this program due to insufficient funds. Over thirty identified street improvement projects remain unfunded. While the Hillsborough Street Phase II and Sandy Forks Road improvement projects are moving forward for design, no funds are available for their implementation. Funds will also need to be identified for thirty-four prioritized streetscape projects throughout the City. Staff has developed corridor studies along New Bern Avenue, Capital Boulevard, and Blue Ridge Road that propose innovative transportation solutions, but there are no funding sources or timeframes for their implementation. Lastly, as NCDOT continues to replace and upgrade its infrastructure, the City will be pressed to provide matching funds for project components.

Transportation Capital Improvement Program Summary

Fiscal Year 2014 CIP	Five year CIP	Unfunded Requests
\$28,277,000	\$63,856,500	-

TRANSPORTATION CAPITAL

Funded Projects

Sidewalk, Pedestrian and Bicycle

Funded Projects		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
1	Advanced Plan Feasibility Study	96,850	-	50,000	50,000	50,000	246,850
2	Six Forks Rd Corridor Study	150,000	-	-	-	-	150,000
3	Union Station Phase II Study	150,000	-	-	-	-	150,000
4	Cameron Village Study	200,000	-	-	-	-	200,000
5	S. Saunders Street Study	150,000	-	-	-	-	150,000
6	Station Area Planning 1 (West Raleigh)	120,000	-	-	-	-	120,000
7	Bicycle Facilities/Parking	20,000	-	25,000	25,000	25,000	95,000
8	Bike Lanes, Markings, Signage	20,000	-	25,000	25,000	25,000	95,000
9	Downtown Pedestrian Safety	42,000	-	-	-	-	42,000
10	Peace St Bridge Replacement	100,000	-	-	-	-	100,000
11	Sidewalk Repair	2,434,000	-	-	-	-	2,434,000
12	S. Saunders/Wilmington St Corridor	-	150,000	-	-	-	150,000
13	Throughfare Streetlight Installation	-	300,000	300,000	300,000	300,000	1,200,000
14	Pedestrian Intersection Safety	-	-	150,000	150,000	150,000	450,000
15	Wetlands Mitigation	-	-	50,000	50,000	50,000	150,000
16	Wade Ave Bridge Replacement	-	-	200,000	-	-	200,000
17	Capital Blvd North Corridor Study	-	-	-	400,000	-	400,000
18	Avent Ferry Rd Bridge Project	-	-	-	200,000	-	200,000
19	Station Area Planning 2 (North Raleigh)	-	-	-	-	150,000	150,000
Subtotal		3,482,850	450,000	800,000	1,200,000	750,000	6,682,850
Revenue Sources		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Powell Bill Revenues		658,850	410,000	760,000	1,160,000	750,000	3,738,850
Transfer from General Fund - One Time Revenue		2,784,000	-	-	-	-	2,784,000
Interest On Investments		40,000	40,000	40,000	40,000	-	160,000
Subtotal		3,482,850	450,000	800,000	1,200,000	750,000	6,682,850

Street Improvements

Funded Projects		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
20	Bridge Repair	120,000	120,000	120,000	120,000	120,000	600,000
21	Street Paving	500,000	300,000	150,000	470,000	500,000	1,920,000
22	Traffic Signal Installation	165,000	165,000	165,000	165,000	165,000	825,000
23	LED Streetlight Program	500,000	-	-	-	-	500,000
24	Transit Bus and Van Replacements	362,695	375,000	375,000	500,000	565,000	2,177,695
25	Transit Preventive Maintenance	940,000	650,000	610,000	960,000	960,000	4,120,000
26	Transit Equipment and Facilities	-	-	40,000	40,000	-	80,000
27	Buck Jones Rd Widening	5,000,000	1,471,635	-	-	-	6,471,635
28	Intersection Improvements	246,455	395,366	410,784	475,000	475,000	2,002,605
29	Intersection Safety Projects	500,000	400,000	400,000	500,000	500,000	2,300,000
30	Jones/Lane Two-Way Conversion	-	1,000,000	-	-	-	1,000,000
31	Street Resurfacing	-	2,004,999	2,340,216	2,031,500	2,490,000	8,866,715
32	Sandy Forks	-	-	900,000	800,000	100,000	1,800,000
33	US 70 Corridor Improvements	-	-	1,000,000	-	-	1,000,000
34	I-440 Widening	-	-	-	500,000	500,000	1,000,000
		8,334,150	6,882,000	6,511,000	6,561,500	6,375,000	34,663,650
Revenue Sources		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
	Interest On Investments	150,000	250,000	225,000	275,000	275,000	1,175,000
	Fee in Leiu / Assessments	750,000	775,000	800,000	825,000	850,000	4,000,000
	Street Facility Fees	1,000,000	1,000,000	900,000	800,000	100,000	3,800,000
	Street Facility Fees-Fund Balance	1,500,000	-	-	-	-	1,500,000
	Powell Bill Revenues	4,531,150	4,857,000	4,586,000	4,261,500	4,750,000	22,985,650
	Transfer from General Fund - One Time Revenue	403,000	-	-	-	-	403,000
	Reserve from Prior Years	-	-	-	400,000	400,000	800,000
		8,334,150	6,882,000	6,511,000	6,561,500	6,375,000	34,663,650

Major Bond-Funded Projects

Funded Projects		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
34	Union Station	3,000,000	-	-	-	-	3,000,000
35	Sidewalk Improvements	1,500,000	1,000,000	1,500,000	-	-	4,000,000
36	Sidewalk Repair	2,000,000	-	-	-	-	2,000,000
37	Street Resurfacing	5,000,000	-	-	-	-	5,000,000
38	Moore Square Station Master Plan	140,000	-	-	-	-	140,000
39	Transit Corridor Improvements	250,000	-	-	-	-	250,000
40	Sidewalk Improvements - Petition	1,000,000	1,000,000	-	-	-	2,000,000
41	Lumley-Westgate Corridor Greenway	1,950,000	-	-	-	-	1,950,000
42	Rosengarten Greenway	430,000	-	-	-	-	430,000
		15,270,000	2,000,000	1,500,000	-	-	18,770,000

Revenue Sources		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
2011 Bond Proceeds		12,130,000	2,000,000	1,500,000	-	-	15,630,000
Transfer from General Fund - One Time Revenue		3,040,000	-	-	-	-	3,040,000
Interest On Investments		100,000	-	-	-	-	100,000
		15,270,000	2,000,000	1,500,000	-	-	18,770,000

Parking Facilities

Funded Projects		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
43	Parking Deck Maintenance/Repair	600,000	600,000	600,000	600,000	600,000	3,000,000
44	Parking Deck Assessments	40,000	20,000	30,000	60,000	40,000	190,000
45	Transfer to Parking Debt Service	550,000	-	-	-	-	550,000
		1,190,000	620,000	630,000	660,000	640,000	3,740,000

Revenue Sources		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Transfer from Parking Operations		640,000	620,000	630,000	660,000	640,000	3,190,000
Appropriation from Prior Year		550,000	-	-	-	-	550,000
		1,190,000	620,000	630,000	660,000	640,000	3,740,000

Transportation Element Totals		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Funded Projects		28,277,000	9,952,000	9,441,000	8,421,500	7,765,000	63,856,500
Revenue Sources		28,277,000	9,952,000	9,441,000	8,421,500	7,765,000	63,856,500

Transportation – Funded Projects

Sidewalks, Pedestrian, and Bicycle

1. Advanced Planning & Feasibility Studies: \$246,850
This funding provides for conducting advance planning and feasibility studies for potential transportation projects and initiatives throughout the City, including initiatives such as corridor documentation, a possible bikesharing program, and other special studies as directed. .
2. Six Forks Road Corridor Study: \$150,000
This study is the next step in the corridor planning process for Six Forks Road. There will be an emphasis on increased multimodal transportation elements including enhanced pedestrian, bicycle, and transit facilities.
3. Union Station Phase II Study: \$150,000
The City of Raleigh was awarded a federal grant totaling \$21 million to assist with the costs associated with the first phase of construction of the multimodal transit center. Phase II of the project includes the design and preliminary engineering of parking facilities to serve the new train station and anticipated development in the area.
4. Cameron Village Study: \$200,000
The Cameron Village Small Area Study will address land use, congestion, mobility, access and safety concerns related to increases in residential and commercial development. The study will assess the overall performance of the area's roadway and multimodal network within a comprehensive framework and evaluate up to three development scenarios. The study will produce a report containing a prioritized list of recommended transportation improvements and guidance on future land-use and zoning classifications consistent with the overall goals of the 2030 Comprehensive Plan.
5. South Saunders/Wilmington Corridor Study: \$150,000
The South Saunders/Wilmington Corridor Study will focus on sustainability through the incorporation of increased multi-modal transit and enhanced pedestrian facilities, as well as anticipated use of green street elements and low impact design. The study is also expected to produce recommendations on how mixed use development can be integrated along the corridor, furthering goals of the Comprehensive Plan.
6. Station Area Planning Phase I (West Raleigh): \$120,000
This project includes the design and preliminary engineering for station area planning for planned light rail and commuter rail stations in West Raleigh.
7. Bicycle Facilities/Parking: \$95,000
This initiative will provide bicycle racks, secure parking bicycle parking stations and supportive facilities per the recommendations of the City's Bicycle Transportation Plan.
8. Bike Lanes, Markings, & Signage: \$95,000
This project will continue providing bicycle lane striping and bicycle emblem installation per the recommendations of the City's Bicycle Transportation Plan. This project will also provide for improvements or replacement of existing bicycle route signage and will install additional signs

and wayfinding equipment, with an emphasis on intersections of the Capital Area Greenway and local streets.

9. Downtown Pedestrian Safety: \$42,000
This funding will provide City matching funds to a federally-funded project install intersection improvements for pedestrians. These improvements include the installation of countdown pedestrian signal heads, pedestrian push button posts, and/or curb ramp improvements.
10. Peace Street Bridge Replacement: \$100,000
This funding will provide City matching funds to replace the Peace Street bridge over Capital Boulevard associated with NCDOT TIP Project B-5121. This project involves reconstruction of the interchange at Peace Street and Capital Boulevard, as well as improvements for pedestrian and bicycle circulation.
11. Sidewalk Repair: \$2,434,000
One-time general fund revenues are being transferred to the Transportation CIP to provide funding for contracted sidewalk repair.
12. South Saunders/Wilmington Street Corridor: \$150,000
This funding will be used to complete a comprehensive corridor study along South Saunders and Wilmington Street from Martin L. King Jr. Blvd to south of Tryon Road. This gateway corridor study will include public visioning and design workshops, resource inventory and analysis, economic market analysis, transportation and land use scenarios, as well as development and redevelopment issues and opportunities reports.
13. Thoroughfare Streetlight Installation: \$1,200,000
This program provides new streetlights along existing thoroughfares and other Phase 1 CIP projects to address capital backlog of the Streetlight Program.
14. Pedestrian Intersection Safety: \$450,000
This program improves pedestrian facilities at major intersections by adding crosswalks, pedestrian refuges, pedestrian signal heads and push button pedestals. Priority will be given to intersections that have high numbers of pedestrians or transit riders.
15. Wetlands Mitigation: \$150,000
This funding will be used to provide resources for possible wetland mitigation and delineation associated with various future roadway/corridor projects throughout the City.
16. Wade Avenue Bridge Replacement: \$200,000
This funding will provide City matching funds to replace the Wade Avenue bridge over Capital Boulevard associated with NCDOT TIP Project B-5317, which is planned to replace the existing interchange at Wade Avenue and Capital Boulevard.
17. Capital Boulevard North Corridor Study: \$400,000
This funding is for a comprehensive corridor study for Capital Boulevard from I-440 to I-540, including the selection of a consultant to lead the corridor planning process. This gateway corridor study will include public visioning and design workshops, resource inventory and analysis, economic market analysis, transportation and land use scenarios, as well as development and

redevelopment issues and opportunities reports. There will be an emphasis on improving multimodal transit and enhanced pedestrian facilities.

18. Avent Ferry Road Bridge Project: \$200,000

This funding provides matching funds to replace the Avent Ferry Road bridge over Lake Johnson associated with NCDOT TIP Project B-5317. This project involves the replacement of the Avent Ferry Road bridge with an improved bridge and causeway that will include bicycle lanes and pedestrian facilities.

19. Station Area Planning Phase 2 (North Raleigh): \$150,000

This project includes the design and preliminary engineering for station area planning for planned light rail and commuter rail stations in North Raleigh.

Street Improvements

20. Bridge Repair: \$600,000

This funding will address necessary repairs and provide maintenance for city owned bridges. A total of 38 structures will be improved on a gradual basis with oldest bridge structures receiving the highest priority.

21. Street Improvements & Petition Paving: \$1,920,000

This program funds the City's petition paving and street improvement program system streets. Projects are initiated by resident petition requests or by the City and approved by the City Council. Property owners are assessed fees which pay for a portion of the project costs.

22. Traffic Signal Installation: \$825,000

This program funds the installation of new traffic signals on City-maintained streets.

23. LED Streetlight Program: \$500,000

The City wishes to begin installing LED streetlights along streets without streetlights and to replace some existing high-pressure sodium streetlights with new LED lights.

24. Transit Bus and Van Replacements: \$2,177,695

This funding will provide for the City's share of replacement of buses and vans in the Capital Area Transit system inventory which have reached their life expectancy.

25. Transit Preventative Maintenance: \$4,120,000

This funding provides for the City's share of costs associated with maintenance of fleet/service vehicles, buildings, and grounds at the Capital Area Transit, as well as for computer hardware and software.

26. Transit Equipment and Facilities: \$80,000

This funding will provide for the City's share of replacement of capital equipment items associated with the operation of the Capital Area Transit System.

27. Buck Jones Road Widening: \$6,471,635

This project will widen Buck Jones Road to a three-lane section with curb and gutter, bike lanes, sidewalks, pedestrian refuges, transit stop improvements, and streetlights from Farmgate Road to Xebec Street.

28. Intersection Improvements: \$2,002,300

This program improves intersections through refurbishment of intersection medians, traffic signal head replacement (LED), overhead street markers, and signage. These funds will also be used to help cover the cost of replacing all of the City's 70,000+ street signs with new reflective sheeting to meet new Federal Highway Administration requirements.

29. Intersection Safety Projects: \$2,300,000

This program will fund infrastructure improvements to address crash patterns at various locations in Raleigh. These locations have been identified as high hazard locations and require substantial changes to reduce the crashes. These improvements can involve intersection reconstruction, hard channelization, and drainage enhancements.

30. Jones Street/Lane Street Two-Way Conversion: \$1,000,000

The project will convert Jones Street and Lane Street from one-way streets to two-way operation. This project is the last phase of the downtown two-way conversion projects as recommended in the Livable Streets Downtown Plan. The project will also evaluate bicycle markings on both streets.

31. Street Resurfacing: \$8,866,715

This program funds the ongoing annual pavement resurfacing and repair of the City system streets.

32. Sandy Forks: \$1,800,000

This project will widen Sandy Forks Road. Improvements include a three lane section with curb and gutter, sidewalks, bicycle lanes, and streetlights stretching from Six Forks Road to Falls of Neuse Road.

33. US 70 Corridor Improvements: \$1,000,000

This funding will provide City matching funds to improve the US 70 Corridor from I-540 to Duraleigh Road associated with NCDOT TIP Project U-2823. This project involves widening of US 70 (Glenwood Avenue) to a six-lane section with traffic signal upgrades and improvements for bicycles and pedestrians.

34. I-440 Widening: \$1,000,000

This funding will provide City matching funds for improvements along I-440 in southwest Raleigh associated with NCDOT TIP Project U-2719. This project will widen I-440 to six lanes from Wade Avenue to I-40 and will involve the reconstruction of several existing interchanges.

Major Bond-Funded Projects

35. Union Station: \$3,000,000

This funding will provide a match for federal TIGER Grant funds for the construction of the Union Station multi-modal transit center and associated area improvements. The FY 2014 appropriation will bring the City's total commitment to Union Station to \$6 million. The FY 2014 amount is funded with one-time revenues transferred from the General Fund.

36. Sidewalk Improvements: \$4,000,000
These funds will be used to construct new sidewalks along thoroughfares and other public streets as prioritized by City Council.
37. Sidewalk Repair: \$2,000,000
These funds will be used to repair broken and deteriorated sidewalk locations as requested by property owners and approved by the City Council. Repairs will address trip hazard abatement and replacement of concrete slabs on sidewalks throughout the City.
38. Street Resurfacing: \$5,000,000
This program funds the ongoing annual pavement resurfacing and repair of City streets.
39. Moore Square Master Plan: \$140,000
This funding will provide the City's share of design, engineering, and construction of facility upgrades at Moore Square Transit Center.
40. Transit Corridor Improvements: \$250,000
This funding will provide for the implementation of new and improved transit amenities such as shelters and benches at stops along priority transit corridors within the operation of the Capital Area Transit System.
41. Sidewalk Improvements – Petition: \$2,000,000
This funding will be used to construct new sidewalks along public streets through petition projects as requested by citizens and submitted to City Council for approval.
42. Lumley-Westgate Corridor Greenway: \$1,950,000
This project will construction bicycle and pedestrian improvements along Lumley Road and Westgate Road in northwest Raleigh. Planned improvements include construction of multiuse paths and/or widening of shoulders for bike lane improvements. These funds may be combined with additional monies provided by the Triangle Commuter Bike Initiative as part of a public/private initiative.
43. Rosengarten Greenway: \$430,000
The Rosengarten Greenway will provide a multiuse trail connection from the proposed Raleigh Union Station to the Rocky Branch greenway beginning at S. Saunders Street and Jamaica Drive. This greenway segment is proposed to be a 10-foot asphalt path along the tributary to Rocky Branch that will serve as a key connection between the Rocky Branch greenway to the south and the Lenoir Street Park and Boylan Heights Neighborhood to the north.

Parking Facilities

44. Parking Deck Maintenance/Repair: \$3,000,000
These funds will be used to fund structural repairs resulting from four deck assessments in FY 2012. Funds will also be used for two elevator upgrades in the Wilmington Station Deck and for ongoing deck structural repairs needed to preserve the lifespan of the decks as well as maintaining public safety.

45. Parking Deck Assessment: \$190,000

Regular structural assessments of parking decks to identify areas requiring both immediate and longer term repair.

46. Transfer to Parking Debt Service: \$550,000

This funding will reimburse a portion of the debt service payments on the principal and interest of the debt issued to fund on-going repair and improvement work for City-owned parking facilities.

CAPITAL IMPROVEMENT PROJECTS



Capital Improvement Projects

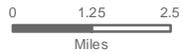
Transportation

Legend

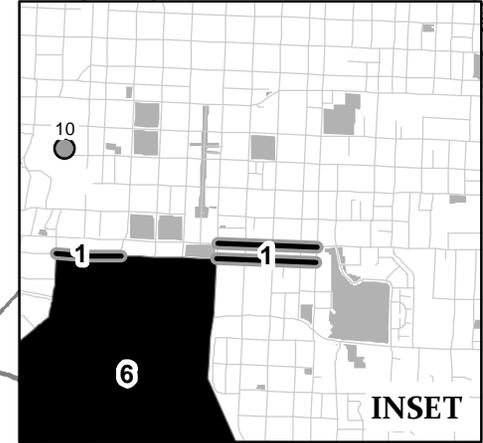
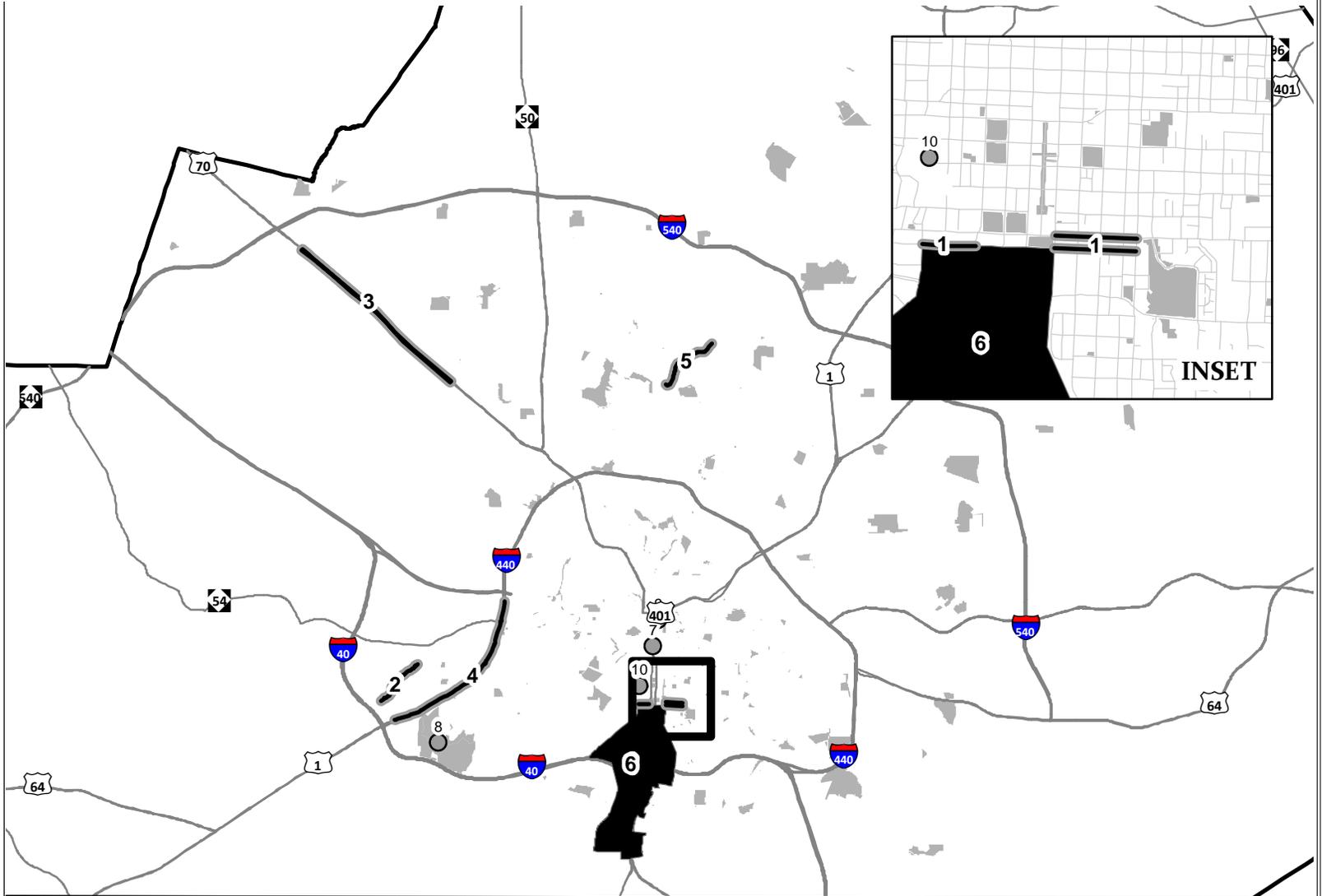
- CIP PROJECT POINTS
- CIP PROJECT LINES
- CIP PROJECT AREA

Other Data

- Interstate
- US Highway
- NC Highway
- Parks



Overview Map



Transportation Projects

ID	PROJECT NAME	ID	PROJECT NAME
1	South Lenoir Street Two Way Street Conversion	6	S. Saunders/Wilmington Corridor Study
2	Buck Jones Rd Street Widening	7	Peace Street Bridge Replacement B-5121
3	US 70 Road Widening	8	Avent Ferry Bridge Replacement B-5130
4	I-440 Road Widening	9	Wade Ave Bridge Replacement B-5317
5	Sandy Forks Rd Road Widening	10	Raleigh Union Station

Map updated May 2013 by City of Raleigh GIS Division

This map is a graphic representation and should only be used for illustrative purposes. In no way should this map be used for exact locations.

Parks and Recreation



Element Overview

The “Parks, Recreation and Greenway” element of the *City of Raleigh’s Comprehensive Plan* along with other elements of the Plan, such as “Environmental Protection,” “Land Use,” “Community Facilities and Services,” as well as *Raleigh Parks Plan* are the primary guiding documents for park development, level of service, and land acquisition. Existing feasibility studies, reports and strategic plans also guide staff on the timing and location of capital investments required to sustain a growing parks and recreation system. The parks and recreation department capital improvement program consists of three types of projects: land acquisition for new park and greenway properties, development of new and existing properties, and capital maintenance and improvement.

The five-year CIP includes \$27.5 million to maintain and improve parks and recreation facilities and about \$7.6 million budgeted in FY 2014 alone. Major funding sources for the program include general fund transfers, facility fees, and bond proceeds. Projects in the five-year program merely represent a fraction of the Parks and Recreation department’s capital needs.

Recent Accomplishments

Fiscal year 2012 was the fourth and final year of the bond program. A majority of the projects were completed by the end of 2012. Projects that were recently completed include: Five Points Center for Active Adults, Anne Gordon Center for Active Adults, House Creek Greenway, Upper Neuse Greenway, Buffalo Road Aquatics Center, and renovations at Carolina Pines and Jaycee Community Center. The remaining projects are either under construction or are in the design and planning phase with anticipated completion by 2014. A 24-acre property, north of I-540 and east of 401, was purchased last fiscal year using land acquisition bond funds. This meets the park needs for a new planned unit development and the surrounding area in North Raleigh. Through an agreement with the developer, private funding is potentially available for creating a park master plan.

In April 2012, City Council approved two-thirds general obligation bonds totaling \$7.5 million for three Parks and Recreation projects. These projects include phase-two development of the Annie Louise Wilkerson, MD Nature Preserve Park; planning, design and development of a southeast Raleigh Tennis Center at Barwell Road Park; and the development of new year-round soccer fields at Dorothea Dix Park and WRAL Soccer Complex.

The project budgets adopted by the City Council for each of these projects are:

- \$2.6 million for Annie Louise Wilkerson, MD Nature Preserve Park (Phase II)
- \$2.4 million for Southeast Raleigh Tennis Center Development and Partnership
- \$2.5 million Capital Area Soccer League Improvements and Partnership

All of these projects began in the fall of 2012 and are currently under design.

Horizon Items

Parks and Recreation Staff has prepared preliminary documentation and plans for a 2014 bond referendum, to be held if authorized by City Council. The Parks and Recreation Department is in the process of developing a new System Plan that will identify the land, facility and programming needs for the next 20 years. In addition to the information from the System Plan Staff is utilizing existing site and facility assessments that reference back log of deferred maintenance as a result of the economic downturn in recent years. Raleigh's park system is mature and aging. With limited pay go funding for the Parks and Recreation capital improvement program over the past several years; it has been difficult to keep up with essential capital maintenance for the expansive system. The 2014 program and draft FY14 bond referendum focus on improving existing infrastructure, facilities, and site amenities throughout the entire parks system. Projects recommended in the bond program will simply concentrate on the most immediate improvement and renovation needs of the system and do not address all identified needs. Unlike recent bonds that focused predominantly on growth, the 2014 bond is needed to address facility and park reinvestments and improvements. However, the bond program also proposes only modest funding for land acquisition, greenway development, and selected new parks and recreation development projects to meet the city's continuing growth.

Parks and Recreation Capital Improvement Program Summary

Fiscal Year 2014 CIP	Five year CIP	Unfunded Requests
\$7,587,520	\$27,532,520	\$104,234,000

PARKS AND RECREATION CAPITAL

Funded Projects

Cultural Resources		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
1	Carousel Animal Restoration	25,000	25,000	25,000	25,000	25,000	125,000
2	Historic Cemetery Restoration	25,000	100,000	25,000	150,000	25,000	325,000
3	Historic Property Exhibits	35,000	25,000	35,000	25,000	35,000	155,000
4	Historic Property Improvements	25,000	25,000	125,000	25,000	25,000	225,000
5	Public Art Preservation/Conservation	25,000	-	25,000	-	25,000	75,000
Subtotal		135,000	175,000	235,000	225,000	135,000	905,000
Facility Improvements		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
6	Aquatic Improvements	135,000	175,000	200,000	200,000	200,000	910,000
7	Backflow Prevention Upgrade	25,000	25,000	25,000	30,000	30,000	135,000
8	Building Improvements	455,000	300,000	300,000	300,000	320,000	1,675,000
9	Comfort Station Improvements	300,000	150,000	150,000	150,000	150,000	900,000
10	Community Facility Upgrades	275,000	375,000	400,000	400,000	400,000	1,850,000
11	Lead Paint Abatement	50,000	50,000	50,000	50,000	50,000	250,000
12	Maintenance Operations Facilities	35,000	35,000	50,000	50,000	75,000	245,000
13	Electrical Systems-Fields and Courts	100,000	135,000	125,000	125,000	125,000	610,000
14	Park Lighting	120,000	340,000	250,000	350,000	275,000	1,335,000
15	Parks Roof Repairs	125,000	130,000	125,000	165,000	125,000	670,000
16	Picnic Shelters	145,000	150,000	150,000	155,000	150,000	750,000
17	Raleigh Little Theatre Improvements	25,000	25,000	25,000	25,000	25,000	125,000
18	Safety Compliance	105,000	50,000	50,000	50,000	50,000	305,000
19	Theater In The Park	25,000	50,000	80,000	60,000	125,000	340,000
20	Marsh Creek Greenhouse	80,000	-	-	-	-	80,000
21	Millbrook Tennis Center	-	25,000	25,000	25,000	25,000	100,000
22	Reused Water Line Extension	-	-	-	-	50,000	50,000
Subtotal		2,000,000	2,015,000	2,005,000	2,135,000	2,175,000	10,330,000
Greenway System		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
23	Greenway Bridge/Boardwalk	300,000	150,000	150,000	150,000	150,000	900,000
24	Greenway Development	50,000	75,000	75,000	75,000	75,000	350,000
25	Greenway Trail Resurfacing	300,000	75,000	120,000	120,000	120,000	735,000
26	Lower Neuse Greenway (connector)	92,520	-	-	-	-	92,520
Subtotal		742,520	300,000	345,000	345,000	345,000	2,077,520
Land Acquisition		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
27	Greenway Acquisition (bonds)	100,000	100,000	100,000	100,000	100,000	500,000
28	Park Site Acquisition	100,000	100,000	100,000	100,000	100,000	500,000
Subtotal		200,000	200,000	200,000	200,000	200,000	1,000,000
Park Development		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
29	5K Course	80,000	-	-	-	-	80,000
30	Abbotts Creek	500,000	-	-	-	-	500,000
31	Halifax	200,000	-	-	-	-	200,000
32	Horseshoe Farm Park (bonds)	1,000,000	-	-	-	-	1,000,000
33	Pullen Park Improvements	160,000	50,000	-	50,000	-	260,000
34	Martin Luther King, Jr Park Expansion	325,000	550,000	-	-	200,000	1,075,000
35	Mordecai Interpretive Center	125,000	-	-	-	-	125,000
36	Canine Park	-	-	75,000	-	-	75,000
Subtotal		2,390,000	600,000	75,000	50,000	200,000	3,315,000

Plans and Studies	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
37 Chavis Master Plan	300,000	-	-	-	-	300,000
38 Forest Ridge DENR Grant Match	20,000	-	-	-	-	20,000
39 Public Art Master Plan	130,000	-	-	-	-	130,000
40 Wooten Meadows	115,000	-	150,000	150,000	150,000	565,000
41 Alvis Farm	-	125,000	-	-	-	125,000
42 Thornton Rd	-	125,000	-	200,000	-	325,000
43 Milburnie Park	-	-	125,000	-	200,000	325,000
44 Latta Property	-	-	75,000	100,000	-	175,000
45 Laurel Hills Master Plan Revision	-	-	-	-	150,000	150,000
46 P&R System Plan	-	-	-	-	300,000	300,000
Subtotal	565,000	250,000	350,000	450,000	800,000	2,415,000

Site Improvements	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
47 ADA Facility Upgrades	450,000	100,000	100,000	100,000	115,000	865,000
48 Fayetteville St Improvements	40,000	40,000	40,000	50,000	50,000	220,000
49 Field Fencing	50,000	100,000	100,000	100,000	100,000	450,000
50 Multipurpose Field Renovation	25,000	25,000	50,000	25,000	50,000	175,000
51 P&R Field Upgrades	30,000	100,000	100,000	100,000	50,000	380,000
52 Park Site Improvements	100,000	125,000	125,000	125,000	125,000	600,000
53 Parks Paving Program	450,000	125,000	150,000	120,000	120,000	965,000
54 Playground Improvements	40,000	50,000	75,000	75,000	75,000	315,000
55 Signage-Parks and Greenways	150,000	100,000	100,000	100,000	75,000	525,000
56 Site Security	25,000	25,000	25,000	25,000	25,000	125,000
57 Street Tree Replacement	40,000	40,000	40,000	40,000	40,000	200,000
58 Structure Repair And Replacement	75,000	150,000	200,000	200,000	150,000	775,000
59 Tennis Resurfacing	25,000	80,000	160,000	65,000	65,000	395,000
60 Volunteerism and Partnership Project	30,000	30,000	50,000	50,000	50,000	210,000
61 Walnut Creek Softball Complex	25,000	85,000	220,000	220,000	250,000	800,000
62 Durant Nature Park	-	25,000	50,000	50,000	-	125,000
63 Lake Johnson Fishing Pier	-	60,000	-	-	-	60,000
64 Parks Irrigation Projects	-	-	25,000	50,000	50,000	125,000
65 Lake Wheeler Replacement Deck	-	-	30,000	-	-	30,000
66 Buffaloe Rd Park	-	-	150,000	-	-	150,000
Subtotal	1,555,000	1,260,000	1,790,000	1,495,000	1,390,000	7,490,000

Total Parks and Recreation Capital 7,587,520 4,800,000 5,000,000 4,900,000 5,245,000 27,532,520

Revenue Sources	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Bond Proceeds (previous bond issues)	1,100,000	-	-	-	-	1,100,000
Transfers from General Fund	3,092,520	3,500,000	3,800,000	3,800,000	4,245,000	18,437,520
Parks Facility Fees	1,250,000	1,150,000	1,050,000	950,000	850,000	5,250,000
Parks Facility Fees-Fund Balance	2,000,000	-	-	-	-	2,000,000
Transfers from Revolving Fund	100,000	100,000	100,000	100,000	100,000	500,000
Interest Income	45,000	50,000	50,000	50,000	50,000	245,000
Total Revenue Sources	7,587,520	4,800,000	5,000,000	4,900,000	5,245,000	27,532,520

PARKS AND RECREATION CAPITAL

Unfunded Requests

The Parks and Recreation Department staff is preparing a new bond-funded capital program. The bond referendum could be held in Fall 2014 (FY2015), and implemented in the FY 2016 to FY 2020 CIP. Staff is creating a new Parks and Recreation 20-Year System Plan, which, using input from City Council and the public, will identify potential projects to include the bond referendum. The table below is a tentative schedule of projects that could be included in the referendum. These projects integrate known deferred maintenance needs and projects requested through various public planning initiatives across the City. These projects are not included in the Council Resolution adopting the CIP. The future referendum would include a tax rate increase to fund the increased debt service, and might include a tax rate increase to fund the increased operating costs of bond-funded projects.

Proposed Bond-Funded Projects	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Total
66 Greenway Improvements	-	-	2,500,000	2,500,000	2,500,000	2,500,000	10,000,000
67 Trenton Rd Greenway	-	-	-	924,000	-	-	924,000
68 Neighborhood Park Improvements	-	-	453,750	2,796,250	1,275,000	-	4,525,000
69 Community Park Improvements	-	-	3,229,000	12,293,500	4,462,500	5,625,000	25,610,000
70 Cultural Site Improvements	-	-	675,000	2,450,000	1,850,000	1,275,000	6,250,000
71 Park Facility and Site Upgrades	-	-	4,400,000	3,450,000	3,000,000	1,000,000	11,850,000
72 Baileywick Community Park	-	-	1,425,000	-	8,075,000	-	9,500,000
73 Lineberry Neighborhood Park	-	-	1,125,000	-	-	-	1,125,000
74 Walnut Creek Wetland Center	-	-	150,000	850,000	-	-	1,000,000
75 Dunn Rd Community Park	-	-	-	975,000	5,525,000	-	6,500,000
76 Pullen Art Center Improvements	-	-	-	-	712,500	4,037,500	4,750,000
77 Parks Planning & Design	-	-	1,000,000	-	1,200,000	-	2,200,000
78 Park Site Acquisition	-	-	5,000,000	5,000,000	5,000,000	5,000,000	20,000,000
Total	-	-	19,957,750	31,238,750	33,600,000	19,437,500	104,234,000

Parks and Recreation – Funded Projects

Cultural Resources

1. Carousel Animal Restoration: \$125,000
Funding for the historic carousel animal restoration at Pullen Park and Chavis Park. Animals must be maintained and restored on a regular basis and on a constant rotation for restoration. With both Pullen and Chavis carousels now operating as year-round facilities, the importance of maintaining and restoring the animals is paramount.
2. Historic Cemetery Restoration: \$325,000
Repairs to and replacement of infrastructure of 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). May include consulting services for re-grading and fence replacement at O'Rorke. Development of a landscape plan at all three cemeteries and preparation of a maintenance manual. Also includes safety related repairs that currently pose a threat to the visiting public and maintenance staff.
3. Historic Property Exhibits: \$155,000
Scope of work to include exhibit design and fabrication for the Historical Resources and Museum Program on a bi-annual schedule for rotating exhibits with a life span of less than five years. Assumes Friends match as needed. Odd years would provide funding for perpetual care of artifacts housed at Mordecai, Raleigh City Museum, and other historic properties.
4. Historic Property Improvements: \$225,000
Continuation of phased maintenance for the Mordecai Historic Park buildings, including the repair and restoration of the kitchen, double door dependency, storage building, Andrew Johnson House, Law Office, Chapel, and Post Office. This program also supports capital improvements for other historic and cultural resources as they are added and assessed.
5. Public Art Preservation/Conservation: \$75,000
Program designed to preserve and conserve City of Raleigh's growing public art collection.

Facility Improvements

6. Aquatic Improvements: \$910,000
Scope of work includes maintenance of pools, 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.
7. Backflow Prevention Upgrade: \$135,000
An ongoing program to install and rebuild backflow preventers within City facilities for code compliance.
8. Building Improvements: \$1,675,000
Scope of work includes interior lighting upgrades, boilers, gas packs, water fountain, and HVAC replacement.

9. Comfort Station Improvements: \$900,000
Ongoing program to maintain, repair, replace, and upgrade existing stand-alone restrooms. Over five years, funding allows for the design and construction of replacement comfort stations at Roberts, Kiwanis, Pullen, and Jaycee Parks in addition to necessary repairs throughout the system.
10. Community Facility Upgrades: \$1,850,000
Scope of work includes interior/exterior painting, gym floor repairs, partitions, countertops, maintaining, repairing, replacing, and upgrading recreation center lighting, interiors, and facades.
11. Lead Paint Abatement: \$250,000
Scope of work includes lead paint and asbestos abatement when repainting facilities. Funding is slated for various Parks facilities and will be primarily used in conjunction with the Building Improvements and Community Facility Upgrade Capital accounts.
12. Maintenance Operations Facilities: \$245,000
Address renovation, upgrade, and required repair for compliance at maintenance facilities associated with the Parks and Recreation Department. Scope includes reorganization and/or expansion of office space, repair/replacement of outside storage buildings, development and up fit of warehouse space, and construction of covered outside storage areas.
13. Electrical Systems-Fields and Courts: \$610,000
Scope of work includes replacing, repairing and maintaining existing electrical systems, including underground feeders and wires at sports fields and tennis courts.
14. Park Lighting: \$1,335,000
Scope of work includes upgrade and replacement of the lighting system at ball fields, tennis courts, and parking lots. Replacement of sports ball field and tennis courts lighting electrical circuitry, controls systems, poles, lighting fixtures and standards throughout the Parks and Recreation system. A recent assessment performed by Musco Lighting revealed that many of the existing sports and tennis lighting systems are in poor condition and are due to be replaced. Many systems do not conform to the new sports lighting standards of 30 to 50 foot candles per square foot. Future projects will be designed and developed based on these standards.
15. Park Roof Repairs: \$670,000
Roof repairs and replacements are scheduled based on consultant evaluations and recommendations at various facilities throughout the park system.
16. Picnic Shelters: \$750,000
Ongoing program to repair, replace, and upgrade existing shelters in addition to constructing new shelters.
17. Raleigh Little Theater Improvements: \$125,000
Facility maintenance and upgrade for various projects including: installation of new locks and keying system for building security; amphitheater seats; and risers; study needs for landscape upgrades at Rose Garden and implement study recommendations.

18. Safety Compliance: \$305,000
Safety and compliance projects that address public or employee safety issues and compliance with mandatory regulations. FY14 projects include one (1) permanent facility fall protection system and two (2) secondary chemical containment systems. FY 15 through FY 18 will fund additional fall protection projects, one per year for four years.
19. Theater in the Park: \$340,000
Multi-year project to implement structural repairs to the main theatre based on study recommendations.
20. Marsh Creek Greenhouse: \$80,000
Greenhouse was constructed in FY11 and opened for full operation in fall of FY12. The project is in need of a pump replacement for coolant pads, pump for connection from cisterns to irrigation system, backup generator and trench drainage system to allow proper water drainage from building.
21. Millbrook Tennis Center: \$100,000
Addresses Comprehensive Plan goals outlined in section F.6 Management and Stewardship. Opportunity to install more efficient lighting and move away from proprietary system. Replacement of 20 year old fencing system.
22. Reuse Water Line Extension: \$50,000
Scope of work includes code compliance to ensure potential public health risk associated with wastewater reuse are evaluated and minimized; and that water reuse applications meet water quality objectives.

Greenway System

23. Greenway Bridge/Boardwalk: \$900,000
Ongoing program to repair and/or replace bridges or boardwalks that are identified in a systematic evaluation program. The structures proposed to be repaired and/or replaced are: Lower Walnut Creek, Little Rock, and Shelley.
24. Greenway Development: \$350,000
Ongoing program to implement small greenway projects each fiscal year and to supplement major greenway projects approved by voters in bond referendums. The majority of these projects are small areas of asphalt tree root invasion repair and replacement of individual deck boards on boardwalks and bridges.
25. Greenway Trail Resurfacing: \$735,000
Ongoing program to resurface and repair aging trail surfaces and structures to maintain a safe, smooth travel surface. Life expectancy of trail surfaces is approximately 10 to 15 years. Trail sections that have met and/or exceeded their life cycle are identified and prioritized by staff assessment. Funds in the amount of \$485,000 over 5 years will allow for the repair and replacement of asphalt on the Wakefield Trail and a portion of the Lake Johnson Trail.
26. Lower Neuse Greenway (Neuse River Connection): \$92,250
The development of a ramp that would transition from ground elevation to the boardwalk platform elevation, a difference of approximately 30 feet, to connect the Neuse Crossing community to the

Neuse River Trail on the west side of NC401. The ramp must meet ADA Outdoor Recreation Trail slope requirements, which allows a longitudinal grade of 8.33% for a maximum distance of 250 feet. To meet these standards, the minimum length of the ramp would be approximately 360 feet. Because of the limited space in this location, the ramp will likely have two 'switchbacks' with three separate landings.

Land Acquisition

27. Greenway Acquisition: \$500,000

Ongoing program to acquire greenway land including missing greenway segments and reimbursements for dedicated greenway easements that become available during development site plan approval procedures.

28. Park Site Acquisition: \$500,000

Ongoing program to acquire park land in areas that are deficient in parks and open space as identified and prioritized in the Comprehensive Plan.

Park Development

29. 5k Course: \$80,000

Staff continues to evaluate existing park and city property, as well as new properties and potential partnerships, for the development of a non-City street 5k race/walk course. Funds would be used to develop one or more courses, tree removal, trail surface and installation.

30. Abbotts Creek: \$500,000

Design and construction of phase two of Dunn Road Community Park. Phase two includes baseball fields, concessions, shelters, and parking.

31. Halifax: \$200,000

\$200,000 Funding for the new playground associated with the Halifax Park and Community Center redevelopment project.

32. Horseshoe Farm Park (bonds): \$1,000,000

Phase 1 development includes improvements to the entrance drive and dam, parking, signage, natural resource management, soft surface walking trails, connection to Neuse River Greenway.

33. Pullen Park Improvements: \$260,000

Scope of work includes replacing the Pullen Park train engine and necessary repairs and upkeep of the park after a successful renovation.

34. Martin Luther King, Jr. Park Expansion: \$1,075,000

Expansion of the existing memorial park in collaboration with Community Advocates for Parks in Southeast Raleigh (CAPSR) and the Martin Luther King Committee. Phase one will be the implementation of the adopted master plan including an outdoor meeting space, restroom facility and additional parking.

35. Mordecai Interpretive Center: \$125,000

Funding for the asbestos and to fully abate lead abatement on the existing structure to be renovated.

36. Canine Park: \$75,000

Comprehensive study to address the location, design, and construction of new dog parks and off-leash pet exercise areas in new and established parks throughout the city. Dog parks are typically sited to take advantage of existing infrastructure (parking, water service, restroom, etc.) and cover 1-2 acres.

Plans and Studies37. Chavis Master Plan: \$300,000

Funding recommended for schematic design, continuing historic research and costs estimates for implementation of the Master Plan currently underway for the 29-acre John Chavis Memorial Park. Includes consultant fees and full public process consistent with City Council adopted Comprehensive Program for Public Participation in Park Planning (CP5) in order to confirm next stage of full Phase 1 design and construction.

38. Forest Ridge DENR Grant Match: \$20,000

These funds will be utilized to assist in the design and construction of the first phase of a single-track trail network at Forest Ridge Park. City matching is required for the Recreation Trail Program (RTP) grant with the NC Department of Environment and Natural Resources (NCDENR).

39. Public Art Master Plan: \$130,000

The public art master plan will provide direction for the expansion of public art throughout the City as well as a comprehensive strategy for art as a critical economic engine and quality of life force for the community.

40. Wooten Meadows: \$565,000

Create a master plan and begin development of a neighborhood park. Note: FY 2010 approved funding was taken for Economic Reserve.

41. Alvis Farm: \$125,000

Funding recommended for the Master Plan of a 96 acre Community Park purchased in 2000. Includes planning consultant fees and full public process consistent with City Council adopted policy for Comprehensive Program for Public Participation in Park Planning (CP5).

42. Thornton Road: \$325,000

Create a master plan and begin development of a community park on the Thornton Road property.

43. Milburnie Park: \$325,000

Create a master plan and begin development of a community park.

44. Latta Property: \$175,000

Research and master planning for the historic site, which contributes to the historic Oberlin community.

45. Laurel Hills Master Plan Renovation: \$150,000

Revise 20-year-old master plan in order to more accurately address current and future community needs. Park was acquired in 1975.

46. Parks and Recreation System Plan: \$300,000

The Parks and Recreation System Plan is a 20 year guiding document that provides direction for the acquisition of land, development of facilities, and the provision of programs. These funds will be used to update the Plan to ensure consistency with overall City Comprehensive Plan and to re-engage the public to discuss needs, priorities, and recommendations.

Site Improvements

47. ADA Facility Upgrades: \$865,000

Current codes, standards, and expectations have changed with regards to the extent of accessibility to park and recreation services. Funds will be used to implement changes in buildings, access routes, etc. to make them ADA compliant.

48. Fayetteville Street Improvements: \$220,000

Replacement and repair of hardscape materials, landscape materials, site furnishings and other structures as a result of routine daily use and special events. Additionally, repair required as a result of vandalism or unanticipated damage from renovation of adjoining properties. Plant material replacement to account for seasonal color replacement and mortality resulting from normal life cycle of material in an urban setting. Contractual power washing and pavement replacement. Due to economic conditions, this program was reduced for FY 2010, 2011, 2012, and 2013.

49. Field Fencing: \$450,000

Ongoing program to repair and replace general park fencing and fencing at ball fields and tennis courts. Process will require removal of existing fencing and replacement with new fencing according to the specifications identified by the department. Additional funding is requested on an annual basis to make substantial repairs to existing fencing that are beyond the funding capacity of the Parks Division operating budget. This would extend the current life cycle of existing installations.

50. Multipurpose Field Renovations: \$175,000

Scope includes renovating existing open space areas at park facilities to accommodate departmental athletic programming and rental of space by outside agencies. Renovation will consist of grading and site preparation, irrigation system installation and installation of sod or sprigs to establish a quality playing surface. Due to reductions in annual funding, all existing open spaces should be upgraded to athletic field space by FY 2013. Additional funding is being requested to complete annual less-extensive repairs attributed to the level of use. Due to economic conditions, this program has been drastically scaled back since 2009. Requested funding for FY 2014 will be used to address safety-related issues that impact use at existing fields.

51. Parks and Recreation Field Upgrades: \$380,000

Scope of work includes the addition of concrete pads and walks for dugouts, scorer's tables and bleachers. Included are the installation of covers for the dugout and scorer table areas. This project will also fund the purchase and installation of player benches, scorer's tables, bleachers

and scoreboards. Continuation of the installation of permanent foul poles at all required fields is included in this program.

52. Park Site Improvements: \$600,000

Repairs and replacements to park grounds and certain non-structural facilities such as concrete and asphalt surfaces, grills, park benches, picnic tables, trash receptacles and other site furnishings to maintain current levels of service. Monies to be used for the phasing in of new park furnishings, additional costs associated with completion of other CIP projects (i.e., landscape installation, furnishings installation), and the purchase of construction-related materials needed to maintain the infrastructure in city parks.

53. Parks Paving Program: \$965,000

An ongoing program to repair and replace existing paved areas, as well as creating new paved surfaces. Types of surfaces include paved walking trails in parks, interior roadways and parking lots, basketball court surfaces, sidewalks, etc. The identified locations are sites that have met and/or exceeded their life cycle. Damage and wear/tear can be attributed to use, adjacent environmental impacts (i.e. tree root intrusion), etc. Project priorities are identified via visual assessment by staff.

54. Playground Improvements: \$315,000

Repairs and replacements of existing playground components to address safety issues and play value. Removal of old wooden structures, correction of entrapments, surfacing materials, and borders to meet Consumer Product Safety Council Guidelines in addition to compliance with ADA and ADAAG. There are currently 69 playgrounds across the City that require routine inspection, repair and maintenance.

55. Signage-Parks and Greenways: \$525,000

Ongoing program to install new signs at parks and greenways in addition to replacing existing signs that have become damaged beyond repair.

56. Site Security: \$125,000

Project addresses security issues throughout the park system, including installation of control access gates to limit vehicular access to facilities after hours and indoor/outdoor security cameras to increase security for parks and facilities.

57. Street Tree Replacement: \$200,000

Contract planting and replacement of trees on public property located in the downtown area and on major thoroughfares. These trees are planted in areas that lack adequate tree canopy or where inter-planting is desired to replace trees that are lost due to storm events, disease or age. Trees in our downtown urban environment have a life expectancy of 10-15 years and require periodic replacement. Trees on major thoroughfares are subject to vehicular damage, which necessitates replacement.

58. Structure Repair and Replacement: \$775,000

Repair and replacement of bridges and/or other structures as determined by a structural engineer. This program is set up to initiate major repairs and/or replace two bridges annually. This funding is used to complete repairs and or replacements that go beyond the capability of the Division operating budget.

59. Tennis Resurfacing: \$395,000
Tennis courts are resurfaced on a five-year cycle to preserve the life of the court surface. There are 120 tennis courts in the city's park system and the average cost to resurface each court is \$3,000.
60. Volunteerism and Partnership Project: \$210,000
Partnering with individuals and groups on projects related to the Adopt-a-Park Program, the Park Improvement Matching Grant Program, playground construction and renovation, and other park improvement projects.
61. Walnut Creek Softball Complex: \$800,000
Improvements at Walnut Creek Softball Complex, which include LED scoreboards, field fencing, irrigation, bleachers, ticket booth, accessible ramps and a picnic shelter.
62. Durant Nature Park: \$125,000
Improvements to existing structures at Durant Nature Park. Scope of work to include an accessible path of travel from training lodge to the boat house, new roof on comfort station, repair to existing Sweet Gum shelter #1, updates/modernization to existing nature/adventure cabin, and an accessible floating fishing dock.
63. Lake Johnson Fishing Pier: \$60,000
This project will fund fishing docks at Lake Johnson Park.
64. Parks Irrigation Projects: \$125,000
Scope of work includes repairing, maintaining, and upgrading automated irrigation systems.
65. Lake Wheeler Replacement Deck: \$30,000
Replace degraded decking on Lake Wheeler waterfront docks with more durable and sustainable material.
66. Buffaloe Road Park: \$150,000
Additional athletic park improvements including a permanent comfort station to replace a temporary unit that has been in place since 2000.

CAPITAL IMPROVEMENT PROJECTS



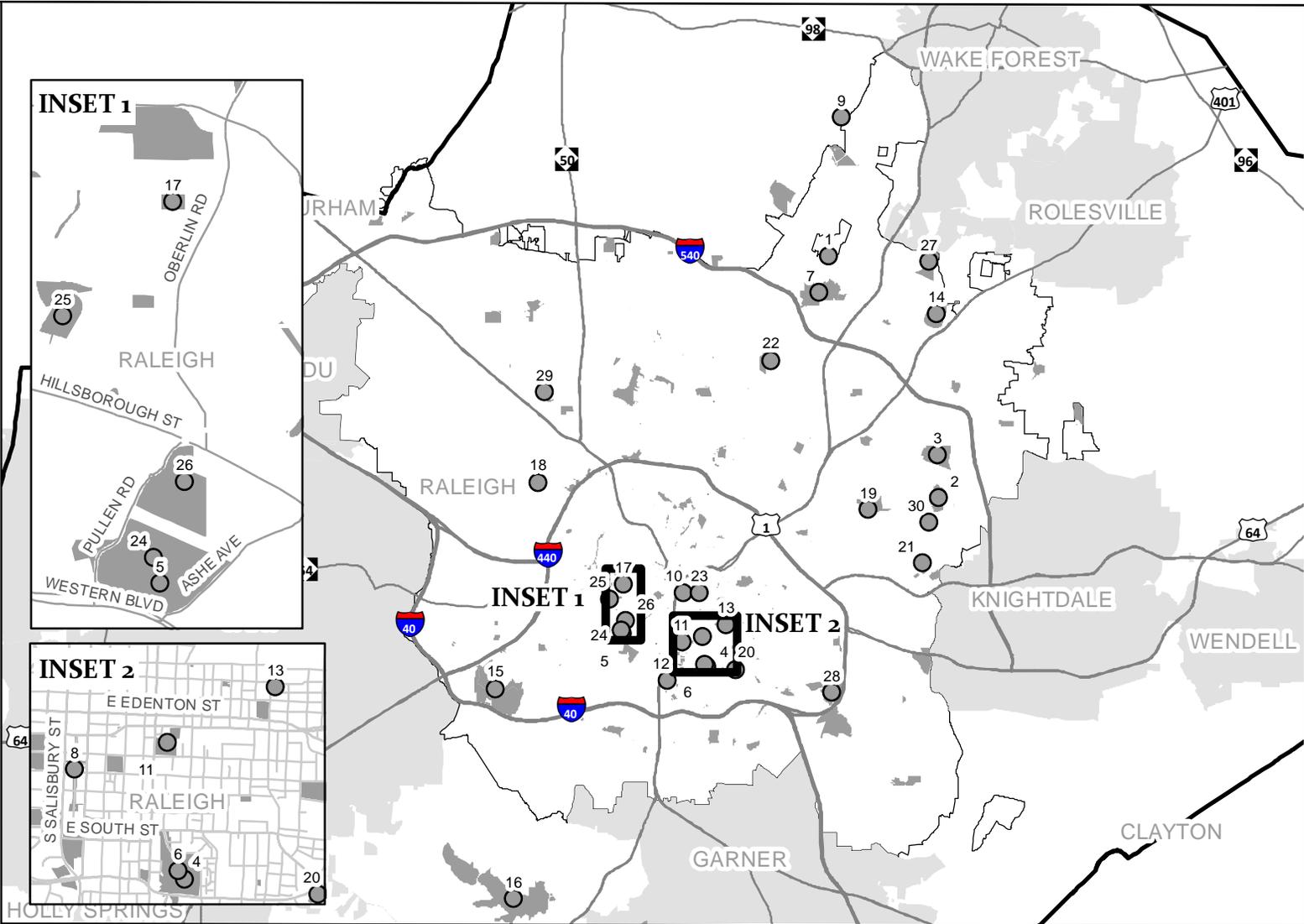
Capital Improvement Projects Parks & Recreation

Legend

- CIP PROJECT POINTS
- Other Data**
- Interstate
- US Highway
- NC Highway
- Parks



Overview Map



Parks & Recreation Projects

ID	PROJECT NAME	ID	PROJECT NAME	ID	PROJECT NAME	ID	PROJECT NAME	ID	PROJECT NAME
1	Abbotts Creek	8	Fayetteville St Improvements	15	Lake Johnson Fishing Pier	22	Millbrook Tennis Center	29	Wooten Meadow
2	Alvis Farm	9	Forest Ridge DENR Grant Match	16	Lake Wheeler Replacement Deck	23	Mordecai Interpretive Center	30	Neuse River Connection
3	Buffaloe Rd Park	10	Halifax	17	Latta Property	24	Pullen Park Improvements		
4	Carousel Animal Restoration (Chavis)	11	Historic Cemetery Restoration (City Cemetery)	18	Laurel Hills Master Plan Revision	25	Raleigh Little Theatre Improve		
5	Carousel Animal Restoration (Pullen)	12	Historic Cemetery Restoration (Mount Hope)	19	Marsh Creek Greenhouse	26	Theater In The Park		
6	Chavis Master Plan	13	Historic Cemetery Restoration (O'Rorke)	20	Martin Luther King, Jr Park Expansion	27	Thornton Rd		
7	Durant Nature Park	14	Horseshoe Farm Park (bonds)	21	Milburnie Park	28	Walnut Creek Softball Complex		

Map updated May 2013 by City of Raleigh GIS Division

This map is a graphic representation and should only be used for illustrative purposes. In no way should this map be used for exact locations.

Housing



Element Overview

The City has funded an affordable housing program since the mid-1980s. Since 1990, the main funding source for the city housing program has been bonds. Housing programs reduce the cost of development, finance the rehabilitation of housing for citizens of low to moderate incomes, and provide down-payment assistance to first time homebuyers.

Housing funds are used in the following ways:

- Loans to developers to supplement development of rental housing using low-income housing tax credits and to add to the city's inventory of rental housing for lower income families.
- Loans to low-income homeowners for limited, emergency-type repairs;
- Loans to low-moderate-income homeowners whose homes need substantial rehabilitation;
- Second mortgage loans provided as a method of reducing the cost of capital, enabling low to moderate income renter families to become first-time homebuyers.

When loan proceeds are repaid to the city, they are considered a resource to apply to other housing developments, homeowner loans, and to retire the debt from bonds.

Recent Accomplishments

Bond funds have been invested in the following projects:

- Raleigh Gardens, to purchase and rehabilitate 125 housing units for low-income families.
- Poyner Spring: 42 new affordable units constructed by Evergreen Construction.
- Southlight's 16 new units for special needs populations.
- Raleigh Inter-Church Housing Corporation, to update 100 rental units (Rich Creek Apartments) to increase energy efficiency and marketability.
- DHIC, to update an elderly development located in a historic building in the downtown area.

Horizon Items

Over the next several years, the city will continue to implement the 2011 bond program. Staff expects to add the following housing resources:

- Create roughly 600 new affordable rental units within the city.
- Enable 200 new families to buy their first house.
- Enable 150 homeowners to make needed repairs to their homes.
- Acquire 50 vacant, blighted structures; Demolish and replace them with new, affordable housing-transforming neighborhoods adjacent to downtown Raleigh.

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 nonprofit sectors.

Housing Capital Improvement Program Summary

Fiscal Year 2014 CIP	Five year CIP	Unfunded Requests
\$4,500,000	\$17,185,000	-

The bond proceeds will be fully budgeted as of FY 2016. Housing programs in FY 2017 are funded with income from housing programs.

HOUSING CAPITAL

Funded Projects

Housing Projects		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
1	Loan Servicing	100,000	100,000	100,000	100,000	110,000	510,000
2	Limited Rehab/Repair	200,000	200,000	200,000	200,000	-	800,000
3	Neighborhood Revitalization	200,000	200,000	200,000	200,000	-	800,000
4	First Time Home Ownership	1,200,000	1,200,000	1,200,000	1,200,000	-	4,800,000
5	Joint Venture Rental	2,000,000	2,000,000	2,000,000	1,425,000	-	7,425,000
6	Housing Units Purchase	150,000	150,000	150,000	150,000	-	600,000
7	Tornado-Homeowner Assistance	250,000	-	-	-	-	250,000
8	Transfer to Debt Service	400,000	400,000	400,000	400,000	400,000	2,000,000
Total		4,500,000	4,250,000	4,250,000	3,675,000	510,000	17,185,000

Revenue Sources		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Bond Proceeds		4,000,000	3,750,000	3,750,000	-	-	11,500,000
Program Income		100,000	100,000	100,000	3,275,000	110,000	3,685,000
Reserve from Prior Years		400,000	400,000	400,000	400,000	400,000	2,000,000
Total Revenues		4,500,000	4,250,000	4,250,000	3,675,000	510,000	17,185,000

Housing Capital – Funded Projects

1. Loan Servicing: \$510,000
The City of Raleigh outsources the servicing of its loan portfolio. This is an eligible Bond activity and this request will fund the cost of servicing only BOND funded loans. The current portfolio has over \$56 Million in assets of which 67% is Bond.
2. Limited Rehabilitation/Repair: \$800,000
The Limited Repair Program provides emergency rehabilitation for low income homeowners within the city limits of Raleigh. Homeowner income must be at or below 50% of the area median and the home must be in need of repairs that if left unattended will pose a threat to the occupant's health and safety. A maximum of \$5000 per unit can be used for each qualifying applicant.
3. Neighborhood Revitalization: \$800,000
This program will support neighborhood revitalization efforts to address issues of slum and blight in Raleigh's older neighborhoods. Activities will support efforts to enhance the quality of life, housing stock and related infrastructure in older neighborhoods.
4. First Time Home Ownership: \$4,800,000
This program will provide Second Mortgage financing to first time homebuyers consisting of low interest loans of up to \$30,000 that can be used to finance down payment and closing costs on a new or existing residence citywide. The City also makes these funds available for low and moderate income homebuyers purchasing homes within City sponsored neighborhood development areas to encourage homeownership within transitioning neighborhoods.
5. Joint Venture Rental: \$7,425,000
The Joint Venture program will continue the City's investment in affordable rental housing for low income renters by leveraging funds with private and other public lending institutions. Financing is made available to both non-profit and for-profit developers for the construction or rehabilitation of rental units.
6. Housing Units Purchased: \$600,000
This program will provide for the acquisition of new units to be added to the citywide affordable housing stock and/or to rehabilitate units to ensure continued marketability of units to potential renters. In addition, the ongoing preventive maintenance protects the City's real estate assets and investments. The affordable rental units provide housing for citizens with incomes below 50% of the area median. This program accomplishes a two-fold objective, addressing both affordable housing and neighborhood revitalization goals simultaneously. This program meets the city's scattered site policy.
7. Tornado Homeowner Assistance: \$250,000
To provide financial assistance, up to \$20,000, to low- and moderate-income homeowners whose homes were declared "unsafe" by the City Inspections Department and who have exhausted all other available resources, including homeowners insurance, FEMA and Small Business Administration (SBA).

8. Transfer to Debt Service: \$2,000,000
The Housing element transfers \$400,000 each fiscal year to the City's general debt service fund to partially offset the cost of housing-related debt payments.

CAPITAL IMPROVEMENT PROJECTS



Capital Improvement Projects

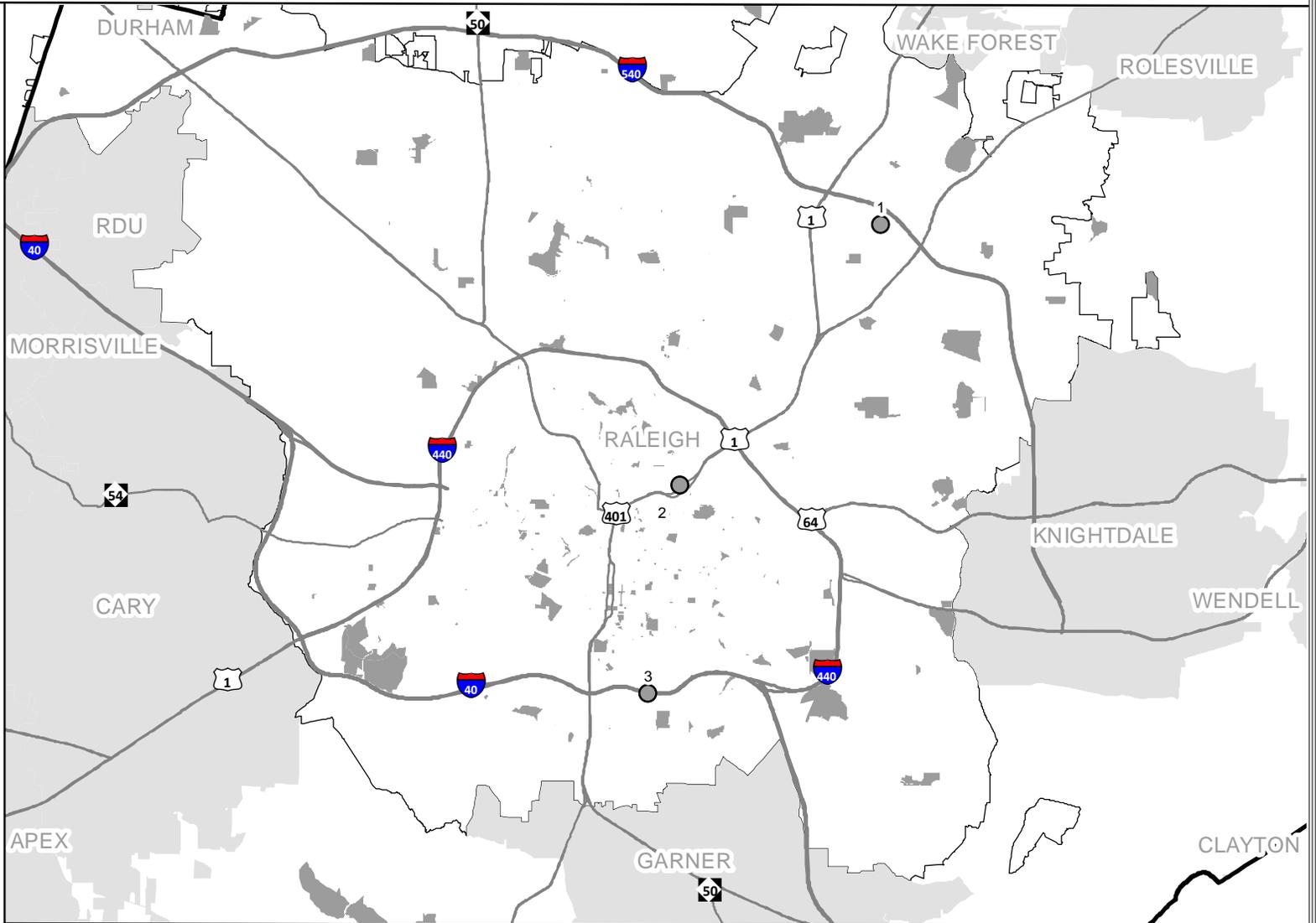
Community Development

Legend

- CIP PROJECT POINTS
- Other Data**
- Interstate
- US Highway
- NC Highway
- Parks



Overview Map



Map updated May 2013 by City of Raleigh GIS Division

This map is a graphic representation and should only be used for illustrative purposes. In no way should this map be used for exact locations.

Community Development Projects

ID	PROJECT NAME
1	Poyner Spring Apartments Joint Venture Rental
2	Salvation Army Council Action
3	SouthLight Joint Venture Rental

Convention and Performing Arts Complex



Element Overview

The five-year capital improvement plan includes \$26.0 million, \$7.3 million in FY 2014, to maintain four city facilities: the Raleigh Convention Center (RCC), Performing Arts Center, downtown amphitheater, and Walnut Creek 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 an average of 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 LEED designation makes it a key component to the city's downtown. 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, including \$11 million from FY 2014 to FY 2018.

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 CIP includes \$12.5 million in debt-financing to replace building systems and complete other maintenance. Combined with the \$5.6 million appropriated for this facility in FY 2013, the total commitment to the Performing Arts Center is \$18.1 million.

The downtown amphitheater opened in 2010. This 5,990 person capacity venue hosts concerts, festivals, and other events. The amphitheater was recently 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

Staff is currently working with designers and contractors to implement the comprehensive capital maintenance assessment plans performed for both the Raleigh Convention Center and the Performing Arts Center.

At the Performing Arts Center, roof repairs were completed and the skylight in the main lobby in Memorial Auditorium will be replaced in early summer. Sud Associates has been contracted to assess the HVAC system, which needs a complete replacement and is in the process of determining the time line for design and construction of the new system. Additional maintenance and renovation is planned over the next few years.

In Spring 2012, the City of Raleigh and Wake County signed an interlocal agreement to fund ongoing capital maintenance at the Raleigh Convention Center. The FY14-FY18 capital plan uses this funding to address a wide array of maintenance and improvements as projected in the capital maintenance assessment plan. Security improvements have been made with the addition of new cameras and new

recording devices. The center’s kitchen has been improved with a new industrial size dishwasher and such cooking equipment as combo-ovens, slicers, and tilt skillets. Staff continues to improve energy efficiency by replacing light fixtures and ballast with LED fixtures and enhance the center’s HVAC equipment to reduce electricity costs.

Horizon Items

Staff continues to evaluate needed capital requirements in accordance with the implementation of the capital maintenance assessment plans.

The prior year’s CIP addressed the highest priority maintenance needs at the Performing Arts Facility, including three years’ worth of financing for renovations. Maintaining the performance space, however, will likely require additional investments in the future as the building’s systems and fixtures age and need replacement.

**Raleigh Convention Center and Performance Facilities
Capital Improvement Program Summary**

Fiscal Year 2014 CIP	Five year CIP	Unfunded Requests
\$7,314,000	\$26,034,000	\$8,476,000

Convention and Performing Arts Complex

Funded Projects

Raleigh Convention Center

Funded Projects	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
1 Life Safety and Security	-	884,760	-	-	-	884,760
2 Site Improvements	48,626	173,184	-	36,568	30,228	288,606
3 Building Systems	47,194	86,592	-	534,085	471,864	1,139,735
4 Technology	711,574	-	854,512	-	-	1,566,086
5 Interior Finishes	1,173,040	1,257,359	6,299	2,138,088	2,206,650	6,781,436
6 Building Envelope	-	43,943	291,583	-	-	335,526
	1,980,434	2,445,838	1,152,394	2,708,741	2,708,742	10,996,149

Revenue Sources	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Interlocal Funding	1,980,434	2,445,838	1,152,394	2,708,741	2,708,742	10,996,147
	1,980,434	2,445,838	1,152,394	2,708,741	2,708,742	10,996,147

Performing Arts Center

Funded Projects	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
7 Life Safety and Security	116,431	299,082	-	-	-	415,513
8 Site Improvements	389,936	-	-	-	-	389,936
9 Building Systems	3,047,085	5,676,615	-	-	-	8,723,700
10 Technology	480,291	-	-	-	-	480,291
11 Interior Finishes	668,257	1,843,303	-	-	-	2,511,560
12 General Facility Maintenance	457,000	-	-	-	-	457,000
	5,159,000	7,819,000	-	-	-	12,978,000

Revenue Sources	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Future Bond Proceeds	4,702,000	7,819,000	-	-	-	12,521,000
Transfer from RCC Operating	457,000	-	-	-	-	457,000
	5,159,000	7,819,000	-	-	-	12,978,000

Walnut Creek Amphitheater

Funded Projects		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
13	Amphitheater Improvements	-	460,000	475,000	475,000	475,000	1,885,000
14	Facility Expansion	175,000	-	-	-	-	175,000
		175,000	460,000	475,000	475,000	475,000	2,060,000

Revenue Sources		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Amphitheater Rent		-	-	300,000	300,000	300,000	900,000
Reserve From Prior Years		175,000	460,000	175,000	175,000	175,000	1,160,000
		175,000	460,000	475,000	475,000	475,000	2,060,000

Element Totals		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Funded Projects		7,314,434	10,724,838	1,627,394	3,183,741	3,183,742	26,034,149
Revenue Sources		7,314,434	10,724,838	1,627,394	3,183,741	3,183,742	26,034,147

Unfunded Requests

Performing Arts Center		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
Site Improvements		-	-	-	29,419	-	29,419
Building Systems		-	-	1,207,727	1,456,566	337,858	3,002,151
Technology		-	-	1,268,273	58,067	686,129	2,012,469
Interior Finishes		-	-	-	1,218,948	2,213,013	3,431,961
		-	-	2,476,000	2,763,000	3,237,000	8,476,000

Convention and Performing Arts Complex – Funded Projects

Raleigh Convention Center

1. Life Safety and Security: \$884,760
These are Raleigh Convention Center projects associated with the safety of all staff and citizens when in the buildings, these included improvements such as emergency exit signs, fire alarm equipment, and security cameras.
2. Site Improvements: \$288,606
This will encompass exterior safety projects and improvement to the appearance of the grounds both hard and softscapes around the Convention Center. This may include paving, concrete sidewalk repair, plants, signage and stone work.
3. Building Systems: \$1,139,735
Major building systems repairs, upgrades and replacement including HVAC, plumbing, fire protection and kitchen equipment in the Convention Center.
4. Technology: \$1,566,086
The repair, upgrade, or complete replacement of major technology system in the Convention Center that includes communications, data/computer systems, CCTV system and digital monitors for guest information.
5. Interior Finishes: \$6,781,287
This addresses the repair and replacement of interior building finishes. These projects may include painting, flooring, cabinetry and various tables, chairs and couches within the Convention Center.
6. Building Envelope: \$335,526
Replacement and/or repair of the exterior of the Raleigh Convention Center including roofs, windows and doors.

Performing Arts Center

7. Life Safety and Security: \$415,513
Projects associated with the safety of all staff and citizens when in the buildings, these included improvements such as emergency exit signs, fire alarm equipment, and security cameras.
8. Site Improvements: \$389,936
This will encompass exterior safety projects and improvement to the appearance of the grounds both hard and softscapes around the Performing Arts Center. This may include paving, concrete sidewalk repair, plants, signage and stone work.
9. Building Systems: \$8,723,700
Major building systems repairs, upgrades and replacement including HVAC, plumbing, fire protection and kitchen equipment in the Performing Arts Center.

10. Technology: \$480,291

The repair, upgrade, or complete replacement of major technology systems in the Performing Arts Center that includes communications, data/computer systems, CCTV system and digital monitors for guest information.

11. Interior Finishes: \$2,511,560

This addresses the repair and replacement of interior building finishes. These projects may include painting, flooring, cabinetry and various tables, chairs and couches within the Performing Arts Center.

12. General Facility Maintenance: \$457,000

Cash transfers from the Raleigh Convention Center enterprise funds will be used for additional maintenance projects. Specific uses will be identified in future capital plans.

Walnut Creek Amphitheater13. Amphitheater Improvements: \$1,885,000

Maintenance projects include safety and structural improvements. These may include roofing, plumbing and building systems.

14. Facility Expansion: \$175,000

Amphitheater will consider expansion to accommodate improved busy operations and to continue to attract a wide range of performances.

Technology



Program Overview

The Information Technology Fund (Tech Fund) provides funding for the city’s major technological infrastructure and major business system projects. The proposed five-year CIP provides \$32.2 million, with \$6.7 million budgeted in FY 2014 to maintain existing systems and invest in new systems designed to improve city operations. The CIP also funds debt service on the city’s financial system. Initiatives currently underway include a land management system, work order management system (Cityworks), talent acquisition management system, and the build-out of a fiber network. Each of these systems positively affects operations and enhances city services.

Recent Accomplishments

The Information Technology Department (IT) is currently working with a broad range of internal stakeholders and Woolpert, Inc. on the business process improvements needed to implement Cityworks. An upgrade to the server version of Cityworks is complete, eliminating the need to update the software on local machines. An assessment is complete for the enterprise content management system, which will provide a long-term, comprehensive approach to records retention and document workflow. The RFP process is complete for a land management solution, which will track and manage land use and community development activities including: permits, building safety, inspections, fire prevention, investigations, plan reviews, zoning, electronic project plans, complaints, violations, code compliance, and economic development. Lastly, IT staff is collaborating with public and private entities on the business evaluation for further development of the City’s fiber infrastructure.

Horizon Items

As the city implements new systems designed to improve the effectiveness and efficiency of operations, these systems require long-term maintenance and support. Staff will continue to address these maintenance needs, as well as the need for new technology solutions. All this planning will be conducted as the economic, technological, and business environment changes constantly.

Information Technology Capital Improvement Program Summary

Fiscal Year 2014 CIP	Five year CIP	Unfunded Requests
\$6,695,786	\$32,182,590	-

TECHNOLOGY CAPITAL

Funded Projects

Technology Projects		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
1	ERP Debt Transfer	3,239,787	3,186,987	3,134,187	3,081,387	3,027,864	15,670,212
2	Land Management System	671,000	960,000	75,000	-	-	1,706,000
3	Electronic Content Management	-	1,000,000	1,800,000	-	-	2,800,000
4	Fiber Network	1,045,000	240,000	240,000	240,000	240,000	2,005,000
5	VMWare (Windows 7 transition)	297,000	-	-	-	-	297,000
6	Candidate Gateway / TAM	215,000	-	-	-	-	215,000
7	Peoplesoft Maintenance Upgrade	1,000,000	1,000,000	1,000,000	-	-	3,000,000
8	Cityworks	228,000	-	-	-	-	228,000
	Reserve for Future Projects	-	320,350	547,460	2,687,382	2,706,185	6,261,378
	Total	6,695,787	6,707,337	6,796,647	6,008,769	5,974,049	32,182,590

Revenue Sources		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
<u>Transfers in for ERP Debt:</u>							
	Transfer from General Fund	1,138,164	1,119,615	1,101,066	1,082,517	1,063,714	5,505,075
	Transfer from Public Utilities	1,608,684	1,582,466	1,556,249	1,530,032	1,503,455	7,780,886
	Transfer from Vehicle Fleet Services	42,619	41,925	41,230	40,535	39,831	206,141
	Transfer from Solid Waste	174,270	171,430	168,590	165,750	162,871	842,911
	Transfer from Transit	9,282	9,131	8,980	8,829	8,675	44,897
	Transfer from Parking Operations	14,607	14,369	14,131	13,893	13,652	70,653
	Transfer from Stormwater Utility	148,026	145,614	143,202	140,789	138,344	715,975
	Transfer from RCC Operating	79,937	78,634	77,331	76,029	74,708	386,639
	Transfer from Community Development	24,197	23,802	23,408	23,014	22,614	117,035
	Subtotal	3,239,787	3,186,987	3,134,187	3,081,387	3,027,864	15,670,212
<u>Transfers in for Selected Projects:</u>							
	Transfer from General Fund	3,021,244	2,880,385	2,898,934	2,917,483	2,936,286	14,654,333
	Transfer from Public Utilities	244,467	356,526	410,630	5,849	5,849	1,023,321
	Transfer from Vehicle Fleet Services	20,609	33,925	47,495	-	-	102,030
	Transfer from Solid Waste	81,280	131,654	165,515	-	-	378,449
	Transfer from Transit	2,537	4,175	5,844	-	-	12,556
	Transfer from Stormwater Utility	44,961	46,358	39,782	4,050	4,050	139,200
	Transfer from RCC Operating	33,292	54,802	76,723	-	-	164,817
	Transfer from Community Development	7,610	12,526	17,536	-	-	37,673
	Subtotal	3,456,000	3,520,350	3,662,460	2,927,382	2,946,185	16,512,378
	Total Revenues	6,695,787	6,707,337	6,796,647	6,008,769	5,974,049	32,182,590

Unfunded Requests

Projects		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	5 Year Total
9	Records Management (RPD)	-	1,528,000	-	-	-	1,528,000

Technology - Funded Projects

1. Transfer to Debt Service (ERP Debt): \$15,670,212

This transfer funds debt service on the city's financial system. The annual debt service was reduced during FY 2013 after the debt was re-financed. FY 2018 is the final year of debt service.

2. Land Management System: \$1,706,000

This new system tracks and manages land use and community development activities including: permits, building safety, inspections, fire prevention, investigations, plan reviews, zoning, electronic project plans, complaints, violations, code compliance, and economic development. The greatest need for the system is to provide a seamless integration of all land development activities described above, regardless of their business origination, in a hierarchical, systematic and rational basis, where GIS-based location identification links all activities for a parcel of land.

3. Electronic Content Management: \$2,800,000

This project will encompass the strategies, methods and tools used to capture, manage, store, preserve and deliver content and documents related to organizational processes in a collaborative environment. The functionality provided by this system will include imaging, workflow, document management and records management.

4. SONET Ring Fiber Network – City Facility Connectivity: \$2,005,000

The Fiber Network will provide a city-owned and maintained network for city facilities. Currently, these facilities use rented network connections (from TimeWarner or AT&T) that are costly and have reliability issues. This project consists of running fiber to city buildings and implementing network equipment to carry network traffic across the fiber. This will result in a secure, resilient network that will provide high-bandwidth to sites and position the city for future network growth.

5. Wanova (Windows 7 Transition) – VMWare Mirage: \$297,000

Installation of VMWare's Mirage software product which is an application management and end user recovery software product that will be utilized by the IT Customer Support Center to support end users. This product is needed to facilitate the transition of the City's personal computers to Windows 7. It will provide a standard support platform for end users that will easily backup and recover user end points significantly reducing user downtime and increasing user productivity.

6. Candidate Gateway/TAM: \$215,000

Candidate Gateway/TAM is human resource software that enhances efficiency by enabling applicants and employees to search and apply for open positions and collaborate with recruiters in real time. The solution keeps candidates informed of their applicant status and allows the posting of job offers online for candidates' review, update and acceptance. Capabilities also include the ability to submit and confirm employee referrals, view awards and view eligibility status via easy to use self-service transactions for employees and external applicants.

7. PeopleSoft Maintenance Upgrade: \$3,000,000

The current PeopleSoft version used by the city is 9.0. These funds will be used to assess, plan and upgrade the current system to the next version. This upgrade is part of ongoing needs to keep the system up-to-date and offers improved functionality. Among other improvements include: enhanced mobile computing, better analytics with pivot grids, personalized work centers to allow for end user improved access to key functions, system navigation, ongoing maintenance level of effort, and improved search functions. In June 2015, PeopleSoft will discontinue active support and maintenance for version 9.0.

8. Cityworks: \$288,000

Cityworks is a GIS-based asset management system. This system will streamline maintenance operations and expand asset management capabilities for the city's Public Utilities, Public Works, Solid Waste and Parks and Recreation departments. Cityworks will integrate with a number of core city business applications, including PeopleSoft (payroll, HR, finance), Oracle (customer care and billing system), the City's new Master Address Database, and SeeClickFix

Technology – Unfunded Projects

9. Records Management System (RMS): \$1,528,000

Raleigh Police Department requests the Records Management System (RMS) project to join Wake County's OSSI system. The system will improve data sharing capabilities, enhance crime analysis tools, and provide more real-time data to law enforcement officers. This change is also needed to meet upcoming federal mandates regarding law enforcement data sharing. This request is not funded because capital budget allocated funding to other high-priority needs identified by the City's Information Resources Management Committee. Staff from Information Technology will continue working with RPD to establish the needs and scope for this project. Staff will also continue evaluating all technology projects and identify options to fund the RMS project in the next capital plan.