

City of Raleigh

Capital Improvement Program

Fiscal Years 2009-10 through 2018-19

The City Council

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James P. West, Mayor Pro Tem
Mary-Ann Baldwin
Thomas G. Crowder
Nancy McFarlane
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Rendering of new City Plaza courtesy of City of Raleigh*

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City Of Raleigh

North Carolina

July 1, 2008

Mayor Charles C. Meeker
Mayor Pro Tem James P. West
Councilor Mary-Ann Baldwin
Councilor Thomas Crowder
Councilor Philip R. Isley
Councilor Rodger Koopman
Councilor Nancy McFarlane
Councilor Russ Stephenson

Dear Mayor and Councilors:

Presented in this document is the annual *Capital Improvement Program* (CIP) for the City of Raleigh, as adopted by the City Council on June 16, 2009.

Summarized below are changes to the *Proposed Capital Improvement Program* made by Council prior to the adoption of the program. Detailed changes to Phase I of the program can be found in Resolution No. (2009)-942; *A Resolution Adopting the Capital Improvement Program for Fiscal Years 2009-10 through 2018-19*. A copy of the resolution is located at the end of the *Adopted Capital Improvement Program* document.

1. The Upper Neuse Initiative and Water Quality Improvements (Falls Lake Initiative) funding was increased by \$500,000 for a total appropriation of \$1,500,000 in the FY10 Public Utilities capital program. A \$200 increase in the water nutrient fee is the source for the additional \$500,000 in funding for this initiative.

City administration is prepared to implement the projects authorized by Council's adoption of this *Capital Improvement Program*.

Sincerely,

J. Russell Allen
City Manager





City Of Raleigh

North Carolina

May 19, 2009

Mayor Charles C. Meeker
Mayor Pro Tem James P. West
Councilor Mary-Ann Baldwin
Councilor Thomas G. Crowder
Councilor Philip R. Isley
Councilor Rodger Koopman
Councilor Nancy McFarlane
Councilor Russ Stephenson

Dear Mayor and Councilors:

The 10-year Capital Improvement Program (CIP) for the City of Raleigh, spanning fiscal years 2009-10 through 2018-19, is hereby submitted to the City Council for consideration. The Phase I program, encompassing the first five years of the CIP, includes projects approved by Council in previous editions of the CIP as well as additional projects recommended as the result of planning processes. The Phase II program, spanning the second five year period, includes projects and capital maintenance needs necessary for the continuation of services to the citizens of the city.

This edition of the annual CIP for the City of Raleigh represents a \$1.2 billion investment to address its capital needs over a five year Phase I period, an 18% reduction from the FY09 Adopted CIP. It reflects our response to the current national economic downturn in a significant reduction to FY10 project funding. This CIP strives to fund the growing infrastructure and operational needs of the City while continuing to be fiscally responsible in navigating these challenging economic times.

Factors limiting revenues to support the proposed FY10 CIP include a 35% reduction in Powell Bill funding, a reduction in interest income of 50%, a 50% reduction in general fund pay-go capital, a 38% reduction in Public Utilities pay-go capital, and a projected decline in facility fee revenues of 57%. Uncertainties in financial markets are also affecting not only current bond funded projects but also the decision as to when future bond funded projects can be initiated. In FY09, Council approved a tax increase that included a 1.68 cents dedication to the debt model and capital projects to support the Clarence E. Lightner Public Safety Center (\$205.3 million), continued planning and development of the Remote Operations Facilities concept (\$240.1 million), and the 2007 Parks Bond (\$67.7

million). These projects continue to be funded in this proposed FY10 CIP as long as sufficient revenue is dedicated in future years to General Fund Debt Service Model.

Capital Investment Financing

The capital program continues to be primarily financed by the use of debt instruments. Phased issuance of the General Obligation bonds approved in referendum for Parks (2007), Transportation (2005) and Housing (2005) projects, and funds dedicated to the debt model for the CEL Public Safety Center and Remote Operations Facilities remain the hallmark of the General Fund capital program. Future transportation projects rely on proposed bond funding totaling \$136.8 million, to be pursued with bond referenda beginning in late 2010 and continue throughout Phase II

Public Utilities continues its capital investment program with projects spread throughout all service areas. Transfers from Revenue Bonds of approximately \$284.2 million will serve to finance the water, wastewater, and reuse water projects necessary to ensure efficient and effective services to the fully-merged service area. Increasing debt service on capital projects already completed or underway will be supported by revenues from rate increases effective May 1, 2009 and fee increases effective July 1, 2009, as well as additional rate increases approved for December 1, 2009.

Capital Investment Proposal

Total appropriations for Phase I of the CIP are proposed at the following levels for the six major program areas:

1. Transportation\$192.4 million
2. Public Utilities\$374.9 million
3. Parks.....\$85.8 million
4. Stormwater Utility and Neuse Basin
Environmental Program\$36.5 million
5. Housing.....\$15.0 million
6. General Public Improvements.....\$496.7 million

Programmatic Investment

Transportation

Funding of \$192.4 million is proposed for transportation infrastructure improvements, including the phased completion of projects funded by the 2005 Street Bonds, and a proposed \$136.8 million bond referendum to be sought in late 2010 to fund the remainder of the 2005 Street Bond projects along

with new projects in FY 2011 and beyond. A projected reduction in thoroughfare facility fees due to the economy has been addressed in this program.

- Major Streets: Eighteen major street widening and road improvement projects are included in the transportation program.
- Street Improvements: Funding is allocated to the street resurfacing program and repairs to city-owned bridges. The program also includes the construction of additional workspace and improvements to existing facilities located within the Traffic Engineering Center.
- Transit: Provides funds for replacement buses and feeder vans as well as for maintenance and upgrades to facilities and equipment that support transit system operations. Federal and State grants are expected to pay 90% of the cost of capital equipment needed for transit services.
- Parking Program: Includes funding for necessary assessment of condition of City-owned parking decks and subsequent repairs. This program is funded directly from the city's Parking Fund.

Public Utilities

The utilities program continues to execute an extensive number of investment projects, as well as initiatives to improve water and wastewater operations throughout the Raleigh service area which now includes providing service and capital investment to infrastructure located within the municipalities of Garner, Knightdale, Wake Forest, Rolesville, Wendell and Zebulon. A total investment program of \$374.9 million is proposed over Phase I of the capital program.

Environmental projects represented in the utilities program include an appropriation of \$1.0 million to the Falls Lake Initiative in FY10, a water quality preservation initiative.

Parks

Phase I of the parks capital improvement program earmarks \$1.6 million for property acquisition, \$16.4 million for development projects, and \$67.7 million for phased expenditures from the 2007 Parks Bonds. The 39% decrease in facility fee revenue and other pay-go capital has resulted in limited land acquisition for future parks and greenway projects, reduced greenway development, and delayed repairs and improvements to parks and other infrastructure.

Stormwater Utility and Neuse Basin Environmental Program

The FY09 capital budget appropriated an infusion of \$20.2 million for stormwater projects funded by revenue bonds. This year's CIP returns to a program of \$36.5 million in Phase I financed through operating transfers, also known as pay-go funding.

General Public Improvements

All other capital facility and maintenance needs fall under the category of General Public Improvements (GPI). Included in this program is the construction of fire stations and other public safety initiatives that support police and emergency communications operations. A total of \$491.9

million in general improvement projects and \$4.8 million in economic development initiatives make up the \$496.7 million investment proposal for the Phase I program.

Major project categories within the GPI portion of the CIP include:

- **Bond Funded Facilities and Major Renovation Construction:** The Clarence E. Lightner Public Safety Center (\$205.3 million), and the continued development of the Remote Operations Facilities concept (\$240.1 million), are funded through a multi-year debt model strategy that includes 1.68 cents of the property tax rate increase adopted by Council in FY 2009, along with subsequent year increases as projected in the debt service model. Three new fire stations, expansion of the fire training facility, police district stations, and a police training facility are also identified needs in Phase I of the CIP. The total construction cost of these projects is estimated at \$23.9 million in Phase I, with an additional \$10.9 million needed in Phase II. As there is no identified funding source for these additional projects, bond funding is recommended.
- **Facilities and Major Renovations Planning:** Projects in this category (\$4.0 million) focus on the design, planning and land acquisition costs associated with future projects, as well as the completion of Fire Station 29.
- **Facility Improvements:** These projects address the major infrastructure repairs and maintenance of City-owned buildings and facilities (\$6.4 million).
- **Technology, Equipment, Other:** Funds technology (\$2.8 million) and public safety communication upgrades (\$845,000), as well as other projects (\$4.8 million) with dedicated revenue sources or council commitments.
- **Economic Development:** Projects in this category (\$4.9 million) target areas of the City, with particular emphasis in the downtown core, to accommodate and promote economic growth.

Summary

The annual *Capital Improvement Program* represents a commitment to maintain and improve our existing infrastructure as well as fund the construction of major new city facilities and economic development projects deserving of our first class city. It utilizes available resources in an effective and responsible manner, and is in line with direction set by the Council. Administration is available to assist the Council and respond to questions and concerns as you review this proposal.

Respectfully submitted,



J. Russell Allen
City Manager

Overview of Capital Improvement Program

Capital improvement programming is a procedure for analyzing major facility needs, projecting fiscal resources, establishing priorities, and developing schedules for the development of capital facilities. For the purpose of the *Capital Improvement Program* (CIP), capital facilities are generally defined as fixed assets with a useful life greater than ten years and with a cost of greater than \$25,000. Regular purchases of vehicles and equipment for routine operations and most maintenance and repair costs for city facilities are funded through the equipment fund and 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. It is recognized that the policy represented by the CIP reflects the best judgment of the City Council at the time, and that additional needs and constraints are likely to become apparent before the program is completed.

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 with regard to the following matters:

1. Preparation of the capital portion of the annual operating budget. The first two years of the CIP serve as the basis for the capital portion of the annual operating budget and biannual budget projection.
2. Scheduling and prioritization of project planning and design.
3. Site selection and property acquisition.
4. Financial modeling and planning, especially with regard to the financing of debt.
5. Coordination with federal, state, county and other local agencies.
6. Private planning efforts of businesses, developers, and neighborhood organizations.

Capital improvement programming is one element in the planning process of the city. It is a bridge between general long-term plans and short-term project planning. In the capital improvement programming process, the long range objectives of the city are reviewed with growth trends, and translated into a more specific multi-year program. This program provides a framework for individual project decisions consistent with multi-year needs, priorities, and financial resources.

The **Capital Improvement Program** looks ahead ten years to predict and plan for capital needs. **Phase I**, covering fiscal years 2009-10 through 2013-14, addresses both project needs and a financial strategy for this period. **Phase II**, covering fiscal years 2014-15 through 2018-19, provides a more general review of anticipated project needs for the balance of the plan.

Capital Improvement Program Expenditures

Phase I of the *Capital Improvement Program* spans five fiscal years, from 2009-10 through 2013-14. Project costs, descriptions and funding plans are presented in six programmatic categories for Phase I: Transportation, Public Utilities, Parks, Stormwater Utility and Neuse Basin Environmental, Housing, and General Public Improvement. The information provided with each programmatic category also includes a listing of estimated capital needs expected in the five-year period immediately following Phase I.

The major initiatives represented in the 2009-10 edition of the *Capital Improvement Program* include a presentation of project expenditure proposals associated with the 2007 Parks Bonds, 2005 Transportation and Affordable Housing Bonds, as well as from a proposed 2010 Transportation Bond. The program also projects Certificates of Participation for the Public Safety and Remote Operation Facilities.

The Phase I **transportation program** addresses thoroughfare needs and other street improvements, major street maintenance, sidewalk construction, bicycle facilities, and transit capital needs at a total Phase I projected cost of \$192,426,717.

The **public utilities program** includes treatment plant design, construction and improvements, storage and pumping facility maintenance and improvements, and the maintenance and extension of water and sewer mains for a total Phase I projected cost of \$375,403,500.

The **parks program** includes funding for park site and greenway trail acquisition, major maintenance projects, and the design and development of parks located throughout the city jurisdiction. The Phase I cost for the parks program is \$85,785,953.

The **stormwater utility and Neuse Basin environmental program** 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, and provide methods for pollution control and improving water quality within the Neuse River drainage basin. The program cost for projects in Phase I is \$36,500,680.

The **housing program** will provide capacity for increasing the stock of affordable housing throughout the city. The program cost for projects included in Phase I is \$14,990,000.

The **general public improvement program** includes funding for various public improvement projects and initiatives, including the maintenance and construction of public safety structures such as fire stations and police training facilities, general maintenance of city-owned buildings and infrastructure, economic development and other general needs. The projected cost, excluding proposed alternative financing, for Phase I is \$496,702,209.

The **total** projected cost for Phase I *Capital Improvement Program* is \$1,201,809,059.

Capital Improvement Program Funding Resources

Funding resources for capital improvement projects include: 1) designated revenues, 2) bond proceeds, and 3) annual revenues. Certain revenues are designated for particular capital purposes by federal guidelines, state statute, or by previous action of the City Council. Annual revenues may be used to supplement the resources available from designated sources. Bond proceeds are generally used for larger projects and for programs that require financing at substantially greater levels than are generally available from annual resources. Major funding resources for Phase I of the *Capital Improvement Program* (CIP) are described below:

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 city-system streets, sidewalks, and bicycle facilities located within the city limits. The city has traditionally allocated a portion of the revenues to street maintenance operations and a portion to capital improvements. Capital expenditures from Powell Bill funds are scheduled at \$19,860,580 over the next five years.

General Fund

Supplemental and optional sales taxes, previously designated as major sources of revenue for the capital program, are now funneled to the program via the General Fund. This source of funding provides a significant revenue stream to fund primarily the general public improvement capital program. Funding in the amount of \$23,550,000 is projected over the next five years.

Facility Fees

The facility fee program is expected to provide \$11,590,000 for thoroughfares and \$6,306,174 for parks over the next five years. These funds are restricted by statute to be allocated to the purposes for which they are collected. An additional \$18,863,600 in facility fees is projected to go to debt service fund over this same time period.

Annual Revenues

The funding plan projects the use of \$83,500,000 in annual revenue from the public utilities operating fund for the five-year public utilities capital program. The CIP also projects funding in the amount of \$36,500,680 from the stormwater utility operating fund for the five-year stormwater and Neuse Basin environmental capital program.

Capital Fund Reserves

Capital reserves are an accumulation of residual funding after projects have been completed. They are expected to provide \$8,599,100 in funding resources for capital improvements over the next five years.

Interest and Assessments

Street, sidewalk, water, sewer capital and other accounting funds receive revenues from fees, interest earnings, assessments, payments in lieu of taxes/assessments, as well as other sources. They are expected to provide \$17,181,826 in funding resources for capital improvements over the next five years.

Debt Financing

Bond authorizations within the Phase I include \$284,153,500 in revenue bonds for utility improvements; \$145,539,137 for street improvements; \$10,375,000 for the housing program; and \$67,681,953 for parks. Transportation program includes proposed bond funding totaling \$136.8 million, to be pursued with bond referenda beginning in late 2010 and continue throughout Phase II. The general public improvement program includes a proposed \$445,364,824 in Certificates of Participation, and \$27,474,000 of which there is currently no dedicated funding source.

Capital Improvement Expenditure Summary by Program

TRANSPORTATION	2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary	Phase II Summary	10 Year Summary
Major Streets	\$ 7,123,151	\$ 19,651,095	\$ 30,923,431	\$ 28,281,000	\$ 32,390,000	118,368,677	\$ 409,380,000	\$ 527,748,677
Street Improvements	5,600,250	12,315,000	13,090,000	13,605,000	14,790,000	59,400,250	74,475,000	133,875,250
Pedestrian Projects	200,000	1,873,000	2,150,000	1,625,000	1,500,000	7,348,000	8,798,000	16,146,000
Transit Projects	1,589,330	1,698,750	659,250	533,330	416,130	4,896,790	2,313,260	7,210,050
Parking Improvements	214,000	692,000	543,000	482,000	482,000	2,413,000	7,370,700	9,783,700
Subtotal, Transportation	\$ 14,726,731	\$ 36,229,845	\$ 47,365,681	\$ 44,526,330	\$ 49,578,130	\$ 192,426,717	\$ 502,336,960	\$ 694,763,677

PUBLIC UTILITIES

Water Projects	\$ 34,965,000	\$ 21,721,000	\$ 13,125,000	\$ 12,227,500	\$ 17,300,000	\$ 99,338,500	\$ 315,221,000	\$ 414,559,500
Wastewater Projects	28,500,000	17,900,000	64,800,000	119,515,000	45,350,000	276,065,000	236,755,000	512,820,000
Subtotal Public Utilities	\$ 63,465,000	\$ 39,621,000	\$ 77,925,000	\$131,742,500	\$ 62,650,000	\$ 375,403,500	\$ 551,976,000	\$ 927,379,500

PARKS

Acquisition Projects	\$ 100,000	\$ 200,000	\$ 200,000	\$ 400,000	\$ 650,000	\$ 1,550,000	\$ 83,000,000	\$ 84,550,000
Development Projects	2,290,000	2,668,000	3,274,000	3,732,000	4,590,000	16,554,000	212,430,000	228,984,000
2007 Park Bond	33,030,732	27,101,221	7,550,000	-	-	67,681,953	-	67,681,953
Subtotal, Parks	\$ 35,420,732	\$ 29,969,221	\$ 11,024,000	\$ 4,132,000	\$ 5,240,000	\$ 85,785,953	\$ 295,430,000	\$ 381,215,953

STORMWATER UTILITY and NEUSE BASIN ENVIRONMENTAL

Neuse Environmental	\$ 1,150,000	\$ 2,060,000	\$ 2,200,000	\$ 1,750,000	\$ 2,250,000	\$ 9,410,000	\$ 30,900,000	\$ 40,310,000
Stormwater Utility	3,960,000	4,978,680	5,290,000	6,407,000	6,455,000	27,090,680	42,565,000	69,655,680
Subtotal, Stormwater	\$ 5,110,000	\$ 7,038,680	\$ 7,490,000	\$ 8,157,000	\$ 8,705,000	\$ 36,500,680	\$ 73,465,000	\$ 109,965,680

HOUSING

Housing Projects	\$ 4,625,000	\$ 4,625,000	\$ 4,550,000	\$ 1,100,000	\$ 90,000	\$ 14,990,000	\$ -	\$ 14,990,000
Subtotal, Housing	\$ 4,625,000	\$ 4,625,000	\$ 4,550,000	\$ 1,100,000	\$ 90,000	\$ 14,990,000	\$ -	\$ 14,990,000

GENERAL PUBLIC IMPROVEMENT

Bond Funded-Fac/Major Renov.	\$284,172,576	\$ 51,693,913	\$ 38,937,584	\$ 42,875,495	\$ 55,159,256	\$ 472,838,824	\$ 10,907,800	\$ 483,746,624
Facilities/Major Renov. Planning	230,000	1,170,000	1,060,000	1,225,000	500,000	4,185,000	500,000	4,685,000
Facility Improvements	1,170,000	1,310,000	905,000	1,270,000	1,735,000	6,390,000	5,500,000	11,890,000
Technology, Equipment, Other	1,181,677	901,677	2,156,677	1,906,677	2,311,677	8,458,385	4,798,582	13,256,967
Economic Development	555,000	740,000	1,040,000	1,305,000	1,190,000	4,830,000	6,935,000	11,765,000
Subtotal, GPI	\$287,309,253	\$ 55,815,590	\$ 44,099,261	\$ 48,582,172	\$ 60,895,933	\$ 496,702,209	\$ 28,641,382	\$ 525,343,591

Total, All Programs	\$410,656,716	\$173,299,336	\$192,453,942	\$238,240,002	\$187,159,063	\$1,201,809,059	\$ 1,451,849,342	\$2,653,658,401
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Capital Improvement Program Phase I Funding by Source

	2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Pay-Go and Miscellaneous Funds						
Powell Bill	\$ 3,600,580	\$ 3,870,000	\$ 3,950,000	\$ 4,130,000	\$ 4,310,000	\$ 19,860,580
General Fund	2,800,000	3,900,000	5,200,000	5,800,000	5,850,000	23,550,000
Revolving Fund	100,000	100,000	100,000	100,000	100,000	500,000
Public Utility Revenues	3,500,000	5,000,000	15,000,000	30,000,000	30,000,000	83,500,000
Stormwater Utility Revenues	5,110,000	7,038,680	7,490,000	8,157,000	8,705,000	36,500,680
Walnut Creek Amphitheater Rent	386,677	401,677	416,677	431,677	446,677	2,083,385
Convention Center Interlocal Agreement	-	500,000	500,000	500,000	500,000	2,000,000
Sidewalk Fund	93,000	196,000	199,000	202,000	205,000	895,000
Street Fund	825,000	850,000	875,000	900,000	925,000	4,375,000
Parking Operations	214,000	692,000	543,000	482,000	482,000	2,413,000
Artspace Building Sale Proceeds	400,000	-	-	-	-	400,000
Program Income	-	75,000	75,000	875,900	90,000	1,115,900
Subtotal, Pay-Go and Miscellaneous Funds	\$ 17,029,257	\$ 22,623,357	\$ 34,348,677	\$ 51,578,577	\$ 51,613,677	\$ 177,193,545

Reserve Funds

Streets, Sidewalk and Powell Bill	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000
Public Utility	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
Housing	1,075,000	1,000,000	1,200,000	224,100	-	3,499,100
General Public Improvement	-	-	-	-	-	-
Parks	-	-	-	-	-	-
Subtotal, Reserve Funds	\$ 2,175,000	\$ 2,000,000	\$ 2,200,000	\$ 1,224,100	\$ 1,000,000	\$ 8,599,100

Facility Fees

Streets	\$ 800,000	\$ 1,040,000	\$ 2,000,000	\$ 3,250,000	\$ 4,500,000	\$ 11,590,000
Parks	556,174	750,000	1,000,000	1,500,000	2,500,000	6,306,174
Subtotal, Reserve Funds	\$ 1,356,174	\$ 1,790,000	\$ 3,000,000	\$ 4,750,000	\$ 7,000,000	17,896,174

Interest and Assessments

Subtotal, Interest and Assessments	\$ 4,454,826	\$ 2,823,000	\$ 3,052,000	\$ 3,302,000	\$ 3,550,000	\$ 17,181,826
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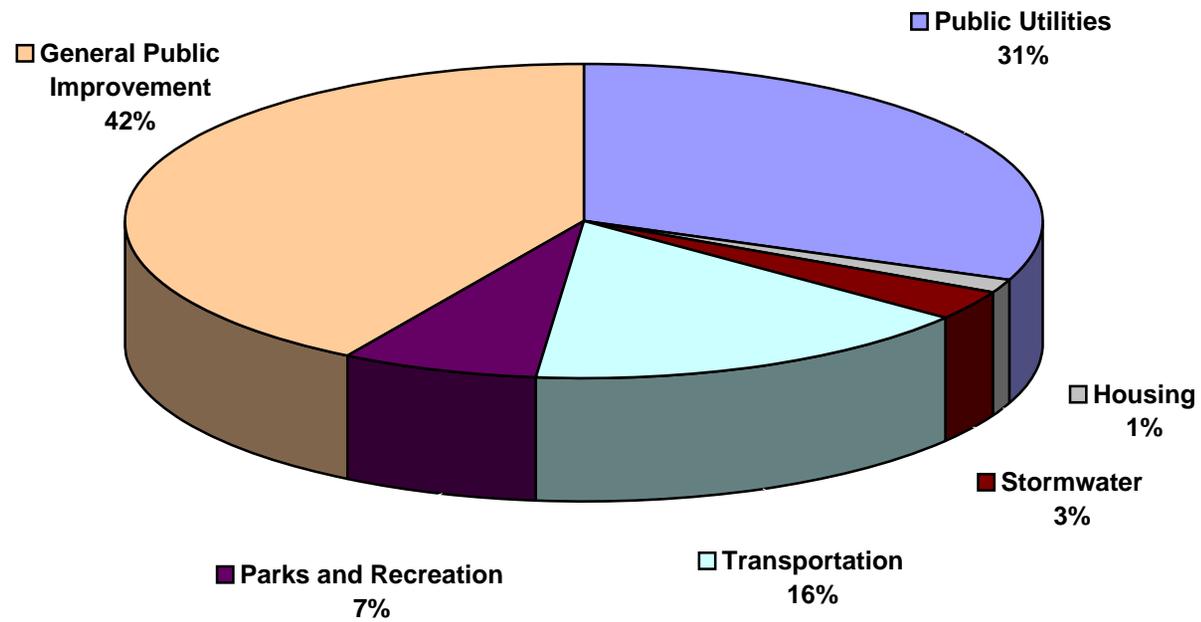
Capital Improvement Program Phase I Funding by Source

	2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Debt Financing						
Utility	\$ 56,215,000	\$ 33,621,000	\$ 61,925,000	\$ 100,742,500	\$ 31,650,000	\$ 284,153,500
Streets	8,323,151	28,096,845	38,165,681	33,767,330	37,186,130	145,539,137
Housing	3,550,000	3,550,000	3,275,000	-	-	10,375,000
Parks	33,030,732	27,101,221	7,550,000	-	-	67,681,953
General Public Improvement	284,172,576	51,693,913	38,937,584	42,875,495	55,159,256	472,838,824
Bond Reserves	350,000	-	-	-	-	350,000
Subtotal, Debt Financing	\$ 385,641,459	\$ 144,062,979	\$ 149,853,265	\$ 177,385,325	\$ 123,995,386	\$ 980,938,414

Total Funding by Source \$ 410,656,716 \$ 173,299,336 \$ 192,453,942 \$ 238,240,002 \$ 187,159,063 \$ 1,201,809,059

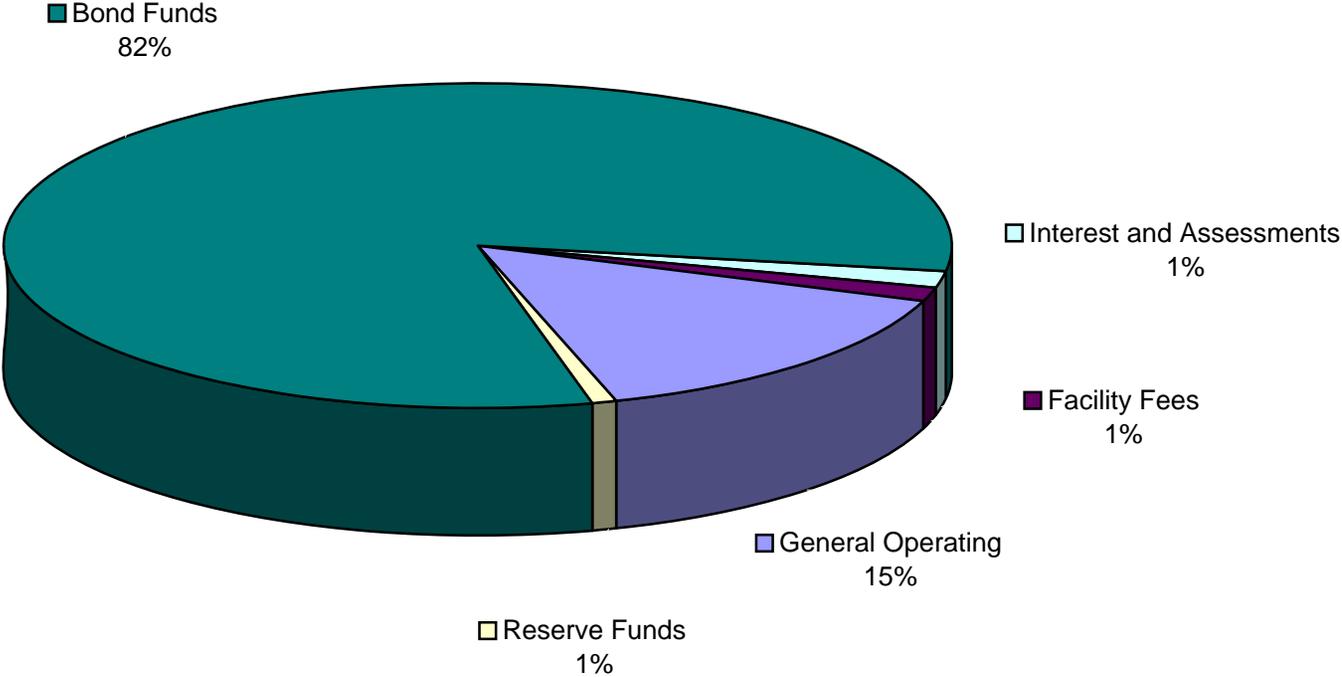
Capital Improvement Program Expenditure Summary

Phase I Total Expenditures



Capital Improvement Program Funding Summary

Phase I Total Funding





Transportation

The transportation program includes major street construction, street improvements, pedestrian and bicycle projects, and transit projects. Total Phase I funding for the transportation program is \$192,426,717, including the phased completion of projects funded by the 2005 Transportation Bond, proposed bond funding totaling \$136.8 million, to be pursued with bond referenda beginning in late 2010 and continue throughout Phase II, and annual funding. Projects within Phase I for **major streets** are comprised of eighteen widening and road improvement projects.

The **street improvements** component of the transportation program includes funding for street resurfacing, street improvements, petition paving projects, traffic signal installations, intersection improvements, and median improvements. Funding is allocated to the street resurfacing program and repairs to city-owned bridges. The program also includes the construction of additional workspace and improvements to existing facilities located within the Traffic Engineering Center.

The **bicycle, pedestrian & planning improvements** element of the transportation program includes funding for new curb ramps, thoroughfare streetlight installation, intersection pedestrian improvements and funding for sidewalk construction, maintenance, and repair. The bicycle program is a new element of the capital improvement program following the recommendations of the newly adopted Bicycle Comprehensive Plan. This section also includes matching funds to be provided to NCDOT for construction of sidewalks associated with state projects. These funds will be used to improve intersections between greenways and public streets and to conduct advanced planning for future thoroughfare corridors.

The **parking improvements** section includes funding for the city's off-street parking facilities maintenance and repair needs.

The **transit section** provides funds for replacement buses and feeder vans as well as for maintenance and upgrades to facilities and equipment that support transit system operations. Federal and state grants are expected to pay 90% of the cost of capital equipment needed for transit service. Funds shown here represent the local 10% match for each program.

The **major funding sources** for transportation projects in Phase I include facility fees, the local share of the state gasoline tax (Powell Bill), and general obligation bonds. A listing and a brief description of projects proposed for the five years following Phase I are provided at the end of the Transportation section. The cost of the projects for the second five years is summarized below as Phase II costs.

The table provides a summary of transportation costs in the Capital Improvement Program.

Ten-Year Summary of the Transportation Program

	PHASE I	PHASE II	TOTAL
Major Street Projects	\$ 118,368,677	\$ 409,380,000	\$ 527,748,677
Street Improvements	59,400,250	74,475,000	133,875,250
Pedestrian Improvements	7,348,000	8,798,000	16,146,000
Transit Projects	4,896,790	2,313,260	7,210,050
Parking Improvements	2,413,000	7,370,700	9,783,700
TOTAL	\$ 192,426,717	\$ 502,336,960	\$ 694,763,677

Project Costs for Transportation

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Major Streets							
1	Buck Jones Road Widening (+)	\$ -	\$ 6,896,095	\$ -	\$ -	\$ -	\$ 6,896,095
2	Falls of Neuse Road Realign and Widen (*,+)	2,000,000	2,000,000	-	-	-	4,000,000
3	Jones Franklin Road Widening (+)	-	-	1,945,000	2,154,000	12,538,000	16,637,000
4	Lake Wheeler Road Improvements (+)	-	255,000	257,000	1,637,000	-	2,149,000
5	Leesville Rd Widening - Westgate to O'Neal (+)	-	-	-	-	748,000	748,000
6	Leesville Road Widening - 1-540 North (+)	-	1,850,000	7,683,747	-	-	9,533,747
7	Mitchell Mill Road Widening (+)	-	4,185,000	12,892,684	-	-	17,077,684
8	New Bern Avenue Improvements (+)	-	-	-	-	562,000	562,000
9	Old Wake Forest Road Widening (+)	-	-	1,939,000	3,581,000	12,494,000	18,014,000
10	Poole Road Widening (+)	-	1,431,000	2,331,000	9,202,000	-	12,964,000
11	Public-Private Partnerships Reserve (+)	-	2,000,000	2,000,000	1,000,000	1,000,000	6,000,000
12	Rock Quarry Road Widening - Part A (+)	-	-	-	1,285,000	778,000	2,063,000
13	Rock Quarry Road Widening, Part B (*)	4,450,000	-	-	-	-	4,450,000
14	Sandy Forks Road Improvements (+)	-	1,034,000	1,675,000	6,646,000	-	9,355,000
15	Six Forks Road Widening (+)	-	-	-	-	1,293,000	1,293,000
16	South/Lenoir Two-Way Conversion, Part 2 (+)	-	-	200,000	1,500,000	-	1,700,000
17	Tryon Road Part C (+)	-	-	-	1,276,000	2,977,000	4,253,000
18	Wade Avenue Improvements (*)	673,151	-	-	-	-	673,151
Subtotal, Major Streets		\$ 7,123,151	\$ 19,651,095	\$ 30,923,431	\$ 28,281,000	\$ 32,390,000	\$ 118,368,677

Street Improvements							
1	East Visioning/South Park Area Infrastructure	\$ -	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 500,000
2	Median Repair/Signage Improvements	-	325,000	375,000	475,000	475,000	1,650,000
3	Repair and Maintenance City Bridges	10,000	100,000	125,000	140,000	625,000	1,000,000
4	Street Improvements and Petition Paving Projects	-	1,000,000	1,200,000	1,400,000	1,600,000	5,200,000
5	Street Resurfacing (*,+)	5,240,250	10,000,000	10,500,000	11,000,000	11,500,000	48,240,250
6	Traffic Calming and Pedestrian Safety (+)	-	600,000	600,000	300,000	300,000	1,800,000
7	Traffic Engineering Center Improvements	350,000	-	-	-	-	350,000
8	Traffic Signal Installation	-	165,000	165,000	165,000	165,000	660,000
Subtotal, Street Improvements		\$ 5,600,250	\$ 12,315,000	\$ 13,090,000	\$ 13,605,000	\$ 14,790,000	\$ 59,400,250

Project Costs for Transportation

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Bicycle, Pedestrian, and Planning Projects							
1	ADA Curb Ramps (+)	\$ -	\$ 100,000	\$ 175,000	\$ 175,000	\$ 175,000	\$ 625,000
2	Advanced Planning Feasibility Studies	50,000	50,000	50,000	50,000	50,000	250,000
3	Bike Lane Marking and Signage	-	250,000	250,000	250,000	250,000	1,000,000
4	Blue Ridge Rd/State Fairgrounds (+)	-	250,000	500,000	-	-	750,000
5	Edwards Mill Road Greenway (E-4978) (+)	-	28,000	-	-	-	28,000
6	Facilities/Parking and Stations	-	25,000	25,000	25,000	25,000	100,000
7	Greenway/Street Intersection Improvements	-	20,000	-	-	-	20,000
8	Intersection Pedestrian Improvements	-	150,000	150,000	150,000	150,000	600,000
9	Road Diet Capacity Study	-	150,000	-	-	-	150,000
10	Sidewalk Improvements (+)	-	500,000	500,000	500,000	500,000	2,000,000
11	Sidewalk Repairs	25,000	25,000	25,000	25,000	25,000	125,000
12	SSDA Handbook Update	100,000	-	-	-	-	100,000
13	Thoroughfare Streetlight Installation (+)	-	300,000	300,000	300,000	300,000	1,200,000
14	Tryon Road Widening (U-4432)	-	-	-	150,000	-	150,000
15	Western-Hillsborough Sidewalks (B-4656)	-	-	150,000	-	-	150,000
16	Wetland Mitigation & Delineation	25,000	25,000	25,000	-	25,000	100,000
Subtotal, Bicycle, Pedestrian & Planning Projects		\$ 200,000	\$ 1,873,000	\$ 2,150,000	\$ 1,625,000	\$ 1,500,000	\$ 7,348,000

Transit Projects

1	Bus and Van Replacement	\$ 446,500	\$ 1,286,500	\$ 250,000	\$ 103,000		\$ 2,086,000
2	Design/Engineering/Construction	255,000					255,000
3	Maintenance Operations Facility Construction	500,000					500,000
4	Preventive Maintenance	350,000	370,000	380,000	390,000	400,000	1,890,000
5	Transit Equipment and Facilities	37,830	42,250	29,250	40,330	16,130	165,790
Subtotal, Transit Projects		\$ 1,589,330	\$ 1,698,750	\$ 659,250	\$ 533,330	\$ 416,130	\$ 4,896,790

Parking Improvement Program

1	Parking Deck Maintenance & Imps	\$ 214,000	\$ 692,000	\$ 543,000	\$ 482,000	\$ 482,000	\$ 2,413,000
3	Parking Meter Replacement						-
4	Parking Deck Assessment & Repairs						-
5	LED Lighting		-				-
Subtotal, Parking Improvements		\$ 214,000	\$ 692,000	\$ 543,000	\$ 482,000	\$ 482,000	\$ 2,413,000

(*) = Includes 2005 Street Bond Proceeds

(+) = Includes Proposed Street Bond Proceeds

Total Projects Costs, Transportation \$ 14,726,731 \$ 36,229,845 \$ 47,365,681 \$ 44,526,330 \$ 49,578,130 \$ 192,426,717

Funding Plan for Transportation

	2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Street Facility Fees	\$ 800,000	\$ 1,040,000	\$ 2,000,000	\$ 3,250,000	\$ 4,500,000	\$ 11,590,000
Powell Bill	3,600,580	3,870,000	3,950,000	4,130,000	4,310,000	19,860,580
Interest Income	771,000	1,485,000	1,633,000	1,795,000	1,970,000	7,654,000
Sidewalk Fund Revenue	93,000	196,000	199,000	202,000	205,000	895,000
Sidewalk Fund Reserves	100,000	-	-	-	-	100,000
Street Fund Revenue	825,000	850,000	875,000	900,000	925,000	4,375,000
Parking Operations	214,000	692,000	543,000	482,000	482,000	2,413,000
2005 Street Bond Proceeds	8,323,151	-	-	-	-	8,323,151
Proposed Bond Proceeds from 2010 Referendum	-	28,096,845	38,165,681	33,767,330	37,186,130	137,215,986

Total Funding Plan, Transportation \$ 14,726,731 \$ 36,229,845 \$ 47,365,681 \$ 44,526,330 \$ 49,578,130 \$ 192,426,717

Phase I - Transportation

Major Streets

1. Buck Jones Road Widening (+): \$6,896,095

This project will widen Buck Jones Road from south of Farmgate Road to Xebec Way to a three-lane curb and gutter section with sidewalks and streetlights on both sides.

2. Falls of Neuse Road Realignment and Widening (+,*): \$4,000,000

These funds are the remainder of the city's contribution to a joint project with NCDOT to improve the Falls of Neuse corridor north of Raven Ridge Road (U-4901). This includes widening the existing roadway to a four-lane median-divided facility from Raven Ridge Road to Fonville Road and the construction of New Falls of Neuse Road as a four-lane median-divided facility across the Neuse River. Improvements will also include sidewalks and streetlights on both sides of the project.

3. Jones Franklin Road Widening (+): \$16,637,000

This project will widen Jones Franklin Road between Powell Drive and the I-440 Interchange to a four-lane median-divided curb and gutter section with sidewalks and streetlights on both sides.

4. Lake Wheeler Road Improvements (+): \$2,149,000

This project will construct a multi-use path along the west side of the roadway and will provide turning lanes at two intersections along Lake Wheeler Rd between Tryon Road and the I-40 interchange.

5. Leesville Road Widening, Westgate to O'Neal (+): \$748,000

This project will widen Leesville Road between Westgate Road and O'Neal Road to a four-lane median-divided curb and gutter section with sidewalks and streetlights on both sides.

6. Leesville Road Widening, I-540 North (+): \$9,533,747

This project will widen Leesville Road from the I-540 interchange to the intersection of New Leesville Boulevard and Hickory Grove Church Road to a four-lane median-divided curb and gutter section with sidewalks and streetlights on both sides.

7. Mitchell Mill Road Widening (+): \$17,077,684

This project will widen Mitchell Mill Road between Louisburg Road and Watkins Road to a four-lane median-divided curb and gutter section with sidewalks and streetlights on both sides. Also included in this project will be turn lane improvements and a culvert replacement at the intersection of Mitchell Mill Road and Forestville Road.

8. New Bern Avenue Improvements: \$562,000

This project involves the construction of curb and gutter, drainage, sidewalks, streetlights, and bicycle and transit amenities on both sides of New Bern Avenue between Poole Road and Sunnybrook Road.

9. Old Wake Forest Road Widening (+): \$18,014,000

This project will widen Old Wake Forest Road between Litchford Road to Capital Boulevard to a four-lane median-divided curb and gutter section with sidewalks and streetlights on both sides. This project will include widening the existing railroad bridge east of Litchford Road.

10. Poole Road Widening (+): \$12,964,000

This project will widen Poole Road from Maybrook Drive to Barwell Road to a four-lane median-divided curb and gutter section with sidewalks and streetlights on both sides.

11. Public-Private Partnership Reserve (+): \$6,000,000

These funds are proposed to be used in partnerships with new private developments for new thoroughfare construction. These funds would also be available to assist with construction of collector streets along the US Highway corridors (US 70, US 1, US 64) as part of the parallel street system for these highways.

12. Rock Quarry Road Widening, Part A (+): \$2,063,000

This project will widen Rock Quarry Road between Olde Birch Road and Sunnybrook Road as a five-lane curb and gutter section with sidewalks and streetlights on both sides. This project includes widening the existing bridge over I-440.

13. Rock Quarry Road Widening, Part B (*): \$4,450,000

This project will widen Rock Quarry Road to a five-lane curb and gutter section with sidewalks and streetlights on both sides from Sunnybrook Road to New Hope Road and includes replacement of the existing bridge between Jones Sausage Road and New Hope Road.

14. Sandy Forks Road Improvements (+): \$9,355,000

This project will improve Sandy Forks Road between Six Forks Road and Falls of Neuse Road to a three-lane curb and gutter roadway with sidewalks and streetlights on both sides.

15. Six Forks Road Widening (+): \$1,293,000

This project will widen Six Forks Road between Rowan Street and Sandy Forks Road to a six-lane median divided curb and gutter section with sidewalks and streetlights on both sides. These improvements will also include turn lane improvements at the intersection of Six Forks Road and Millbrook Road.

16. South/Lenoir Two-Way Conversion, Part 2 (+): \$1,700,000

This project will provide improvements to complete the conversion of South Street and Lenoir Street from one-way to two-way operation between South Saunders Street and East Street. This project will also include pedestrian safety improvements, including curb extensions and traffic signal upgrades.

17. Tryon Road, Part C (+): \$4,253,000

This project will widen Tryon Road between Lake Wheeler Road and the Norfolk-Southern Railroad bridge to a four-lane median-divided curb and gutter section with sidewalks and streetlights on both sides. Phase II funding: \$8,482,000.

18. Wade Avenue Improvements (*): \$673,151

This project will add curb and gutter, sidewalks and streetlights to Wade Avenue between Ridge Road and Faircloth Street.

Street Improvements1. East Visioning / South Park Area Infrastructure: \$500,000

This funding will provide curb and gutter, sidewalk, and street repairs above our routine maintenance program. Increased costs of repairs and additional citizen expectations have created a need for specialized funding for neighborhood infrastructures.

2. Median Repair/ Signage Improvements: \$1,650,000

This is a program to improve services at intersections through refurbishment of intersection medians, LED signal head replacements and overhead street markers which are being placed at all signalized intersections.

3. Repair and Maintenance City Bridges: \$1,000,000

This project will address necessary bridge repairs and provide maintenance for city-owned bridges. This funding will provide for addressing needs of 51 bridges on a gradual basis and will focus on the oldest with the most needs first.

4. Street Improvements and Petition Paving Projects: \$5,200,000

This is funding for street improvements made by resident petition requests or by projects initiated by the city and approved by City Council. Property owners are assessed fees which pay for part of the project cost.

5. Street Resurfacing (+,*): \$48,240,250

Resurfacing deteriorating streets helps to avoid more serious and costly repairs at a later date and maintain the integrity and usability of roadways. Resurfacing activities include pavement milling, pavement patching, utility adjustments, and pavement resurfacing. A bi-annual pavement condition survey, along with further inspections by Street Maintenance personnel, identifies the streets that require resurfacing. The resurfacing is performed by contract.

6. Traffic Calming and Pedestrian Safety (+): \$1,800,000

This program provides assistance on residential streets experiencing significant speeding problems. A portion of these funds may be used to retain consultant services to assist with design and construction of these street improvements.

7. Traffic Engineering Center Improvements: \$350,000

This funding will provide for the construction of a new sign screening building, storage shelters and resurfacing of the Signal and Services Shop parking lot.

8. Traffic Signal Installation: \$660,000

This program provides funding to contract for the installation of new traffic signals within the city and provide signal timing plans along major thoroughfares.

Bicycle, Pedestrian and Planning Projects1. ADA Curb Ramps (+): \$625,000

The Americans with Disabilities Act requires installation of wheelchair accessible ramps at intersections where sidewalks adjoin streets. These ramp installations are completed in conjunction with the city's annual street resurfacing program.

2. Advanced Planning and Feasibility Studies: \$250,000

This program will fund engineering studies and environmental documentation/permitting for the multiple future thoroughfare corridors throughout the city.

3. Bike Lane Marking and Signage: \$1,000,000

Provide bicycle lane striping and bicycle emblem installation per the recommendation of the City of Raleigh Bicycle Transportation Plan. This project will also provide the necessary improvements or replacement of existing bicycle route signage and install additional signs and way finding equipment.

4. Blue Ridge Road / State Fairgrounds (+): \$750,000

This project would construct sidewalks along the west side of Blue Ridge Road between Hillsborough Street and Wade Avenue adjacent to the NC State Fairgrounds. Construction is anticipated with a future NCDOT enhancement grant; these funds would provide the required local match.

5. Edwards Mill Road Greenway (+): \$28,000

These funds would provide the local match for NCDOT TIP Project E-4978, which will construct a multiuse trail along the east side of Edwards Mill Road from Trinity Road to Reedy Creek Road.

6. Facilities/ Parking and Stations: \$100,000

Provide bicycle racks, secure parking bicycle parking stations and supportive facilities per the recommendation of the City of Raleigh Bicycle Transportation Plan.

7. Greenway / Street Intersection Improvements: \$20,000

This project will install improvements at various intersections between Capital Area Greenways and local streets. Potential improvements include new signage, curb cuts, crosswalks, and other traffic controls.

8. Intersection Pedestrian Improvements: \$600,000

This program improves pedestrian facilities at major intersections that have high numbers of pedestrians or transit riders. Improvements will include pedestrian refuge areas, curb extensions, and signal upgrades.

9. Road Diet Capacity Study: \$150,000

This study will examine the feasibility of reducing vehicular capacity along streets recommended for lane reductions, also known as a "road diet," per the recommendations of the Comprehensive Bicycle Plan. Road diets are typically implemented to provide accommodations for bicycles by changing the existing striping patterns along a street.

10. Sidewalk Improvements (+): \$2,000,000

Construct new sidewalks along thoroughfares and other public streets, to improve pedestrian safety and accessibility.

11. Sidewalk Repairs: \$125,000

This is funding for sidewalk repairs as approved by the City Council. Most repair costs are assessed to the adjoining property owners.

12. SSDA Handbook Update: \$100,000

This project will update the City's Streets, Sidewalks, and Driveway Access Handbook, which includes the city's standards, policies and regulations for street design. These funds will be used to secure consulting services to develop the updated handbook.

13. Thoroughfare Streetlight Installation (*,+): \$1,200,000

This program installs streetlights along improved thoroughfares to improve nighttime visibility for drivers, pedestrians and cyclists.

14. Tryon Road Widening: \$150,000

These funds would provide the local match for new sidewalk construction associated with NCDOT TIP Project U-4432, which will replace the existing bridge at Tryon Road and the Norfolk-Southern Railroad.

15. Western-Hillsborough Sidewalks (B-4656): \$150,000

These funds would provide the local match for new sidewalk construction associated with NCDOT TIP Project B-4656, which will replace the existing flyover bridge at Western Boulevard and Hillsborough Street.

16. Wetland Mitigation and Delineation: \$100,000

This program will provide a separate fund for wetland mitigation and delineation associated with various future roadway/corridor projects throughout the city.

Transit1. Bus and Van Replacement: \$2,086,000 City Funding

This funding will provide for the city share of replacement of buses and vans in the Capital Area Transit System which have reached their life expectancy.

2. Design/Engineering/Construction: \$255,000

This funding will provide for the city's share of design, engineering and technology in the Capital Area Transit System.

3. Maintenance Operations Facility: \$500,000

This funding will provide for the city's share of design, engineering and construction of the new bus maintenance and operations facility to serve the Capital Area Transit System.

4. Preventive Maintenance/Technology: \$1,890,000 City Funding

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

5. Transit Equipment and Facilities: \$165,790 City Funding

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.

Parking Improvements1. Parking Deck Maintenance and Improvements: \$2,413,000

This funding will provide for necessary maintenance and repairs on the city's off-street parking facilities.

(*) = Includes 2005 Street Bond Proceeds

(+) = Includes Proposed Street Bond Proceeds

Phase II – Transportation Projects

Major Streets

Barwell Road / Rock Quarry Road / Pearl Road Intersection Improvements: \$1,625,000

Realign Pearl Road to Barwell Road, widen turn lanes Pearl Road and westbound Rock Quarry Road.

Blue Ridge Road / Lake Boone Trail: \$2,365,000

Widen southbound Blue Ridge Road and westbound Lake Boone Trail for dual left turn lanes.

Blue Ridge Road Widening: \$10,705,000

Widen the existing two-lane roadway to a multi-lane curb and gutter facility from Duraleigh Road to Glen Eden Drive with sidewalks on both sides per the Crabtree Pedestrian Plan.

Capital Boulevard Median Replacement: \$2,650,000

Construction funding to remove and reconstruct the concrete median barrier and glare screen on Capital Boulevard from the railroad bridge north of Lane Street to the Wade Avenue flyover.

Carolina Pines Drive Widening: \$11,862,000

Right-of-way and construction funding for widening the existing two-lane roadway to a three-lane facility with curb and gutter and sidewalks on both sides from Lake Wheeler Road to Granite Street.

Chapel Hill Road Widening: \$13,528,000

Widen this existing roadway to a four-lane median-divided curb and gutter section with sidewalks on both sides from Hillsborough Street to Corporate Center Drive.

Coxindale Road Extension: \$3,217,000

Complete the 630 foot Coxindale Road connection between Gresham Lake Road and Litchford Road as a 41' b-b curb and gutter section with sidewalk on one side.

Hillsborough Street Improvements, Phase II: \$20,000,000

This project will enhance pedestrian and vehicular safety along the Hillsborough Street corridor from Faircloth Street/Gorman Street to Gardner Street.

Jones Franklin Road Widening, Part A: \$9,126,000

Widen Jones Franklin Road from Western Boulevard to I-440 to a three-lane section with curb and gutter and sidewalk on both sides.

Jones Franklin Road Widening, Part C: \$7,314,000

Widen Jones Franklin Road from Dillard Drive to Tryon Road as a multi-lane section with curb and gutter and sidewalks.

Lake Wheeler Road Widening, North: \$12,228,000

Widen the existing two-lane facility to a five-lane curb and gutter section with sidewalks on both sides from South Saunders Street to Centennial Parkway.

Lake Wheeler Road Widening, South: \$16,722,000

Widen Lake Wheeler Road to a four-lane divided section with curb and gutter and sidewalks on both sides between I-40 and Tryon Road.

Leesville Road Widening, Part A: \$6,279,000

Widen Leesville Road to a four-lane divided section with curb and gutter and sidewalks on both sides between Westgate Road to O'Neal Road.

Millbrook Road/Creedmoor Road: \$1,779,000

Widen eastbound Millbrook Road at Creedmoor Road to provide dual left turns.

New Bern Avenue Improvements: \$4,565,000

This project involves the construction of curb and gutter, drainage, sidewalks, and streetlights on both sides of New Bern Avenue between Poole Road and Sunnybrook Road.

New Hope Church Road/Atlantic Avenue: \$1,152,000

Widen westbound New Hope Church Road at Atlantic Avenue for dual left turn lanes.

New Hope Road Widening: \$17,980,000

This project will complete the four-lane divided curb and gutter section of New Hope Road from New Bern Avenue to the US 64 Bypass interchange. This will include sidewalks on both sides.

New Leesville Boulevard Extension: \$7,273,000

Extend existing New Leesville Boulevard as a four-lane median section with curb and gutter and sidewalks on both sides to Carpenter Pond Road. This project includes the realignment of the existing intersection of Carpenter Pond Road and Shady Grove Road.

Old Lead Mine Road Widening: \$2,350,000

Widen the existing two-lane roadway to a three-lane curb and gutter section with a sidewalk from Lead Mine Road to Forum Drive.

Pleasant Valley Road Widening: \$4,244,000

Widen existing Pleasant Valley Road from Duraleigh Road to Glenwood Avenue/U.S. 70 to a four-lane section with curb and gutter and sidewalks on both sides.

Ray Road Widening: \$22,006,000

Widen the existing two-lane roadway to a three-lane curb and gutter section with sidewalks on both sides from Leesville Road to Strickland Road.

Rock Quarry Road Widening, Part A: \$8,849,000

This project will widen Rock Quarry Road between Olde Birch Road and Sunnybrook Road as a five-lane curb and gutter section with sidewalks and streetlights on both sides. This project includes widening the existing bridge over I-440.

Rock Quarry Road Widening, Part C: \$19,227,000

Widen the existing two-lane roadway from the vicinity of New Hope Road to Battle Bridge Road as a multi-lane section with curb and gutter and sidewalks on both sides.

Six Forks Road Widening: \$14,181,000

This project will widen Six Forks Road between Rowan Street and Sandy Forks Road to a six-lane median divided curb and gutter section with curb and gutter and streetlights on both sides. These improvements will also include turn lane improvements at the intersection of Six Forks Road and Millbrook Road.

Skycrest Drive Extension: \$41,920,000

Extend Skycrest Drive from Southall Road to the I-540 interchange as a four-lane divided facility with curb and gutter and sidewalks on both sides.

Southall Road Extension, Part A: \$3,673,000

Construct Southall Road from Rogers Lane to tie to existing Southall Road at Hedingham Boulevard. Construction will be as multi-lane section with curb and gutter and sidewalks on both sides.

Southall Road Extension and Widening, Part B: \$14,696,000

Construct and widen Southall Road from Skycrest Drive to existing Buffaloe Road as a multi-lane section with curb and gutter and sidewalks.

Spring Forest Road Extension: \$30,228,000

Construct a new four-lane divided facility with curb, gutter and sidewalks on both sides from Louisburg Road to Buffaloe Road.

Spring Forest Road Widening: \$7,792,000

Widen existing Spring Forest Road from Fox Road to Louisburg Road as a multi-lane facility with curb and gutter and sidewalk on both sides.

Strickland Road Widening: \$28,454,000

Widen existing Strickland Road to a multi-lane facility with curb and gutter and sidewalks on both sides from Leesville Road to Creedmoor Road.

Tryon Road Extension, Part A: \$18,491,000

Tyron Road will be extended as a four-lane divided facility with sidewalks on both sides from Garner Road to Creech Road.

Tryon Road Widening, Part C: \$8,714,000

This project will widen Tryon Road between Lake Wheeler Road to the Norfolk-Southern Railroad bridge as a four-lane median-divided curb and gutter section with sidewalks and streetlights on both sides.

Wade Avenue Improvements: \$2,600,000

Add an additional outside westbound lane from Glenwood Avenue Ramp at Williamson Drive to St. Mary's Street with curb and gutter and sidewalk on one side. This addition will extend the acceleration lane from Glenwood Avenue interchange and a two-way left turn lane on Wade Avenue.

Wade Avenue at Jaycee Park Entrance: \$3,635,000

Widen Wade Avenue for a westbound left turn lane into the Jaycee Park.

Western Boulevard Extension: \$27,950,000

Completion of four-lane divided connection on new location between Cary Towne Boulevard and Western Boulevard. The roadway will have curb and gutter and sidewalks on both sides.

Street ImprovementsStreet Resurfacing: \$65,000,000

For ongoing program of routine street resurfacing.

Street Improvements and Petition Paving Projects: \$4,400,000

For paving dirt and other substandard streets as approved by City Council and in response to petitions for improvements.

Median Repair and Signal Improvements: \$2,125,000

Funding for improved services at intersections to improve safety and reduce congestion.

Traffic Signal Installations: \$825,000

Provides funding for traffic signal installations on city system streets each year.

Traffic Calming and Pedestrian Safety: \$1,500,000

Funding for program for reducing speeds in residential areas.

Bridge Repair and Maintenance: \$625,000

This project will address necessary bridge repairs and provide maintenance for city-owned bridges. This funding will provide for addressing needs of 51 bridges on a gradual basis and will focus on the oldest with the most needs first.

Bicycle, Pedestrian and Planning ProjectsADA Curb Ramps: \$875,000

Continued installation of curb ramps as needed for compliance with the Americans with Disabilities Act.

Bike Lane Marking and Signage: \$2,000,000

Provide bicycle lane striping and bicycle emblem installation per the recommendation of the City of Raleigh Bicycle Transportation Plan. This project will also provide the necessary improvements or replacement of existing bicycle route signage and install additional signs and way finding equipment.

Facilities/Parking and Stations: \$225,000

Provide bicycle racks, secure parking bicycle parking stations and supportive facilities per the recommendation of the City of Raleigh Bicycle Transportation Plan.

Sidewalk Improvements: \$2,500,000

Continued funding for city-initiated and petition sidewalk projects approved by City Council.

Sidewalk Repairs: \$125,000

Funding to repair broken, cracked and uneven sidewalks

Intersection Pedestrian Improvements: \$750,000

This funding will establish a program to improve pedestrian facilities at major intersections that have high numbers of pedestrians or transit riders. Improvements will include pedestrian refuge areas and pedestrian signals with push buttons.

Thoroughfare Streetlight Installation: \$1,500,000

This proposal will provide streetlights for improved thoroughfares and other CIP projects in order to address capital backlog of the Streetlight Program.

Advanced Planning and Feasibility Studies: \$250,000

This program will fund engineering studies and environmental documentation/permitting for the multiple future thoroughfare corridors throughout the city.

Wetland Mitigation and Delineation: \$125,000

This program will provide a separate fund for wetland mitigation and delineation associated with various future roadway/corridor projects throughout the city.

Tryon Road Widening (U-4432): \$448,000

City participation in 50% of cost with NCDOT TIP Project U-3111 to construct sidewalks on Tryon Road Extension from Garner Road to Rock Quarry Road.

TransitTransit Support: \$2,313,260 City Funding

Funding for replacement of buses, transit equipment, and preventive maintenance is recommended for Phase II.

Parking ImprovementsLED Lighting: \$2,040,600

This funding will provide the installation of LED lighting in parking decks.

Parking Deck Assessment and Repair: \$2,068,500

This funding will provide for necessary condition assessment and subsequent repairs on the city's off-street parking facilities.

Parking Deck Improvements: \$2,134,000

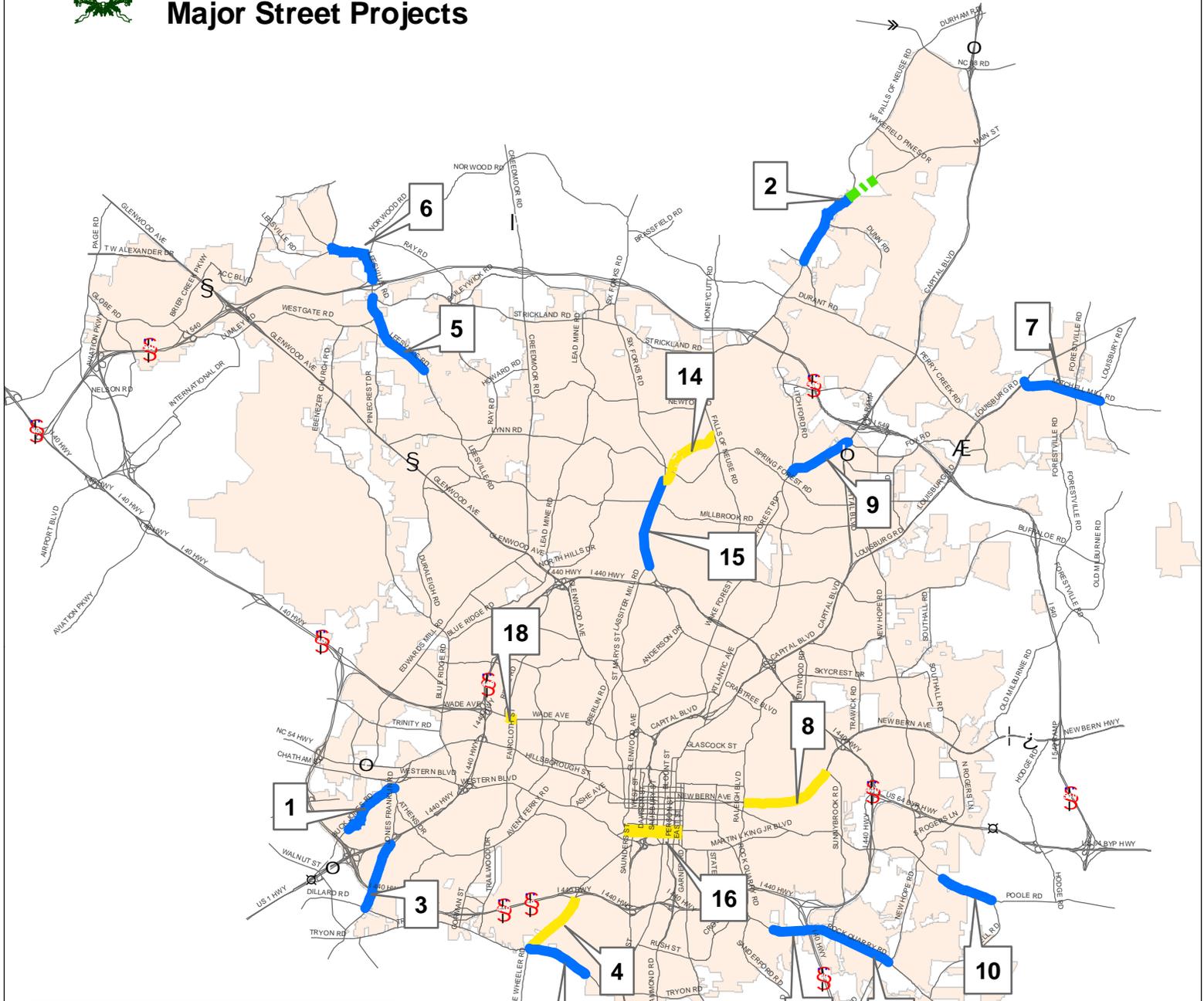
This funding will provide for necessary assessment of condition of parking decks and subsequent repairs.

Parking Meter Replacement: \$1,127,600

This funding will begin the process of replacing sections of several individual parking meters with one multi-space meters.



City of Raleigh Public Works Department Major Street Projects



CAPITAL IMPROVEMENT PROGRAM Phase I Major Street Projects

- 1 Buck Jones Road Widening
- 2 Falls of Neuse Road Realign and Widen
- 3 Jones Franklin Road Widening
- 4 Lake Wheeler Road Improvements
- 5 Leesville Road Widening, Westgate to O'Neal
- 6 Leesville Road Widening, I-540 North
- 7 Mitchell Mill Road Widening
- 8 New Bern Avenue Improvements
- 9 Old Wake Forest Road Widening
- 10 Poole Road Widening
- 12 Rock Quarry Road Widening, Part A
- 13 Rock Quarry Road Widening, Part B
- 14 Sandy Forks Road Improvements
- 15 Six Forks Road Widening
- 16 South/Lenoir Two-Way Conversion, Part 2
- 17 Tryon Road, Part C
- 18 Wade Avenue Improvements

- Widening**
- Improvements**
- New Location**
- Raleigh City Limits**



Public Utilities

The public utilities program includes projects for the treatment and distribution of the city's drinking water supply; projects associated with the collection and treatment of wastewater; projects associated with the extension of both water and sewer service for service area growth; maintenance projects involving water and sewer mains, elevated water storage tanks, and pumping stations; and projects for the delivery of reused water that has been processed by the wastewater treatment plant. Phase I cost projections for all such projects totals \$375,403,500.

The Phase I public utilities program includes improvements to the various components of each of the program's delivery systems. Funding for public utilities capital projects is primarily provided through the issuance of revenue bonds. Additional funding is provided by the Public Utilities operating fund, which also supports all debt service requirements for revenue bonds issued.

The table below provides a summary of utility costs for this Capital Improvement Program. A listing and brief description of the projects proposed for the five years following Phase I are provided at the end of the Public Utilities section. The Phase II funding shown below is described in the section immediately following the descriptions for Phase I projects.

Ten-Year Summary of the Public Utility Program

	PHASE I	PHASE II	TOTAL
Water Projects	\$ 99,338,500	\$ 315,221,000	\$ 414,559,500
Wastewater Projects	276,065,000	236,755,000	512,820,000
TOTAL	\$ 375,403,500	\$ 551,976,000	\$ 927,379,500

Project Costs for Public Utilities

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Water Projects							
1	3 MGD pump addition to Shelly Road PS (A303)	\$ -	\$ 276,000	\$ -	\$ -	\$ -	\$ 276,000
2	Benson Road Transmission Main 16-inch (A502)	620,000	-	-	-	-	620,000
3	DEBWTP Backwash Waste Recycle Facility	6,800,000	-	-	-	-	6,800,000
4	DEBWTP Settling Tank Waste Dewatering Facility	-	6,800,000	-	-	-	6,800,000
5	Elevated Water Tank Rehabilitation and Maintenance	500,000	500,000	500,000	500,000	500,000	2,500,000
6	Emergency Water Interconnections	1,000,000	-	-	-	-	1,000,000
7	EMJ WTP DAF Pilot Plant Facility	-	-	1,000,000	-	-	1,000,000
8	EMJ WTP High Service Pump No. 1 Upgrade (B301)	-	-	-	690,000	-	690,000
9	EMJ WTP Sodium Permanganate Facility	600,000	-	-	-	-	600,000
10	EMJ WTP Wastewater Facilities Expansion	2,500,000	-	-	-	-	2,500,000
11	EMJWTP Clearwell Rehabilitation	350,000	-	-	-	-	350,000
12	EMJWTP Facility/Equipment Rehabilitation	500,000	500,000	500,000	500,000	500,000	2,500,000
13	EMJWTP Spill Containment Improvements	500,000	-	-	-	-	500,000
14	Falls Lake Initiative	1,500,000	-	-	-	-	1,500,000
15	Falls Lake RWPS Improvements	2,400,000	-	-	-	-	2,400,000
16	Garner Road Transmission line 16-inch (B504)	600,000	-	-	-	-	600,000
17	Lake Glad Road Waterline Extension	-	-	325,000	-	-	325,000
18	Little River Res. Wetland Mitig. Property Acquis.	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	12,500,000
19	Little River Reserv Wake City Land Acqu Reimbursement	500,000	500,000	500,000	500,000	500,000	2,500,000
20	Little River Reservoir	-	-	-	-	6,000,000	6,000,000
21	Little River Reservoir Environmental Impact Statement	2,100,000	1,225,000	1,000,000	1,000,000	800,000	6,125,000
22	New Rand Road Transmission Main 16-in (A503)	300,000	-	-	-	-	300,000
23	Oak Forest 30" Water Main (Atlantic Ave. to Capital Blvd.)	-	2,900,000	-	-	-	2,900,000
24	Poole Road Booster Pump Station (B102)	-	-	-	-	500,000	500,000
25	Property Acquisitions	1,300,000	-	-	-	-	1,300,000
26	Remote Operations Center	575,000	-	-	-	-	575,000
27	Service Area Growth (Annex- Water)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
28	Telemetry Upgrades	1,250,000	-	-	-	-	1,250,000
29	Thoroughfare Mains	400,000	400,000	400,000	400,000	400,000	2,000,000
30	Water Booster Pump Station Rehabilitation	500,000	500,000	200,000	200,000	200,000	1,600,000

Project Costs for Public Utilities

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
31	Water Distribution WQ Program, Study, Eval. & Design	150,000	150,000	150,000	150,000	150,000	750,000
32	Water Main Replacement/Rehab	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	20,000,000
33	Water Plant Settling Basin Rehabilitation	-	-	800,000	400,000	-	1,200,000
34	Water Service Replacement	250,000	250,000	250,000	250,000	250,000	1,250,000
35	Wendell Boulevard Transmission Extension (A901)	225,000	-	-	-	-	225,000
36	Wendell Water Distribution Improvements	1,000,000	-	-	-	-	1,000,000
37	Zebulon Water Booster PS Generator	350,000	-	-	-	-	350,000
38	Zebulon Water Distribution Improvements	695,000	-	-	-	-	695,000
39	Zebulon Water Tank Rehabilitation	-	220,000	-	137,500	-	357,500
Subtotal, Water Projects		\$ 34,965,000	\$ 21,721,000	\$ 13,125,000	\$ 12,227,500	\$ 17,300,000	\$ 99,338,500

Wastewater Projects

1	Cemetery Sewer Main Replacement	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ 800,000
2	Conversion of Garner 201 Facility	-	-	4,200,000	-	-	4,200,000
3	Crabtree Interceptor Siphons (C23)	-	900,000	9,600,000	-	-	10,500,000
4	Crabtree Lift Station Improvements	-	-	100,000	1,000,000	-	1,100,000
5	Crabtree Valley Sewer Replacement (C14)	-	-	-	1,600,000	3,000,000	4,600,000
6	Dunn Road Sewer Replacement	2,000,000	-	-	-	-	2,000,000
7	East Neuse Regional Pump Station & Force Main (W16A&17A)	-	-	1,500,000	2,200,000	11,200,000	14,900,000
8	Lower Crabtree North Sewer Main	-	-	500,000	-	-	500,000
9	Main Replacement	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	25,000,000
10	Neuse River East Parallel Interceptor Phase II	8,000,000	-	-	-	-	8,000,000
11	Neuse River Off-site Reuse System Expansion	500,000	500,000	500,000	500,000	500,000	2,500,000
12	Neuse River Pump Station Pump Addition	-	-	-	-	2,000,000	2,000,000
13	North Bank Crabtree Creek Replacement	-	-	4,000,000	300,000	3,250,000	7,550,000
14	NW Crabtree Creek Pump Station & Equalization (C21&C22)	2,000,000	8,800,000	17,000,000	39,000,000	-	66,800,000
15	NPDES Permit Renewals	-	-	150,000	-	-	150,000
16	NRWWTP 15 MGD Capacity Expansion (Includes W15A)	-	-	-	66,200,000	-	66,200,000
17	NRWWTP Electrical Improvements	7,000,000	-	-	-	-	7,000,000
18	Poplar Creek Interceptor	-	-	-	600,000	6,000,000	6,600,000
19	Sanitary Sewer Pump Station Removal/Rehab/Repl	500,000	500,000	500,000	500,000	500,000	2,500,000
20	Service Area Growth	2,500,000	2,000,000	2,000,000	2,000,000	2,000,000	10,500,000

Project Costs for Public Utilities

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
21	Sewer System Capacity	200,000	200,000	200,000	200,000	200,000	1,000,000
22	Upper Pigeon House Rehabilitation <i>(Portion of C8)</i>	-	-	-	-	7,500,000	7,500,000
23	Walnut Creek/NRWWTP Influent Lift Station Improvmts	-	-	2,500,000	-	-	2,500,000
24	Wendell Buffalo Creek Basin Sewer Imps.	-	-	800,000	-	-	800,000
25	Wendell East Wake Sewer Costshare	-	-	-	-	3,300,000	3,300,000
26	Wendell Lake Glad Rd. Demolition	-	-	-	165,000	-	165,000
27	Wendell Marshburn Road Sewer Improvements	-	-	2,000,000	-	-	2,000,000
28	Wendell Various Gravity Sewer Projects	-	-	150,000	250,000	900,000	1,300,000
29	Zebulon LCWWTP Biosolids Improvements	-	-	2,900,000	-	-	2,900,000
30	Zebulon LCWWTP Expansion/Improvements (Phase I)	-	-	11,200,000	-	-	11,200,000
Subtotal, Wastewater Projects		\$ 28,500,000	\$ 17,900,000	\$ 64,800,000	\$ 119,515,000	\$ 45,350,000	\$ 276,065,000

Total Projects Costs, Public Utilities \$ 63,465,000 \$ 39,621,000 \$ 77,925,000 \$ 131,742,500 \$ 62,650,000 \$ 375,403,500

Funding Plan for Public Utilities

	2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Public Utility Fund	\$ 3,500,000	\$ 5,000,000	\$ 15,000,000	\$ 30,000,000	\$ 30,000,000	\$ 83,500,000
Public Utilities Capital Reserves	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
Interest Income	2,750,000	-	-	-	-	2,750,000
Revenue Bonds	56,215,000	33,621,000	61,925,000	100,742,500	31,650,000	284,153,500

Total Funding Plan, Public Utilities \$ 63,465,000 \$ 39,621,000 \$ 77,925,000 \$ 131,742,500 \$ 62,650,000 \$ 375,403,500

Phase I – Public Utilities

Water Projects

1. 3 MGD Pump Addition to Shelly Road PS: \$276,000

The water distribution system has nine separate pressure zones. Growth in water demand in these pressure zones necessitate upgrades to the pump stations that support these pressure zones. This project will provide an additional large service pump to address growth needs in the 605 pressure zone.

2. Benson Road Transmission Main 16-inch: \$620,000

Transmission main to be installed on Benson Road from Foxbury Drive to Timber Drive for a length of 1,980 feet to allow the new water treatment plant to provide adequate water transmission main capacity size from the DEB WTP through critical locations within the 532 pressure zone.

3. DEBWTP Backwash Waste Recycle Facility: \$6,800,000

This project will develop a backwash recycle facility to clarify the backwash water from the treatment process using diffused air filtration (DAF) and UV disinfection. The newly cleaned recycle water, which represents approximately 868,000 in average daily flow, will be returned to Lake Benson for future use in the treatment process.

4. DEBWTP Settling Tank Waste Dewatering Facility: \$6,800,000

This project will develop a settling tank waste dewatering facility to handle all industrial wastes produced by the potable water treatment process. The resulting dewatered sludge will be trucked in thickened form to final disposal through composting or other environmentally beneficial uses

5. Elevated Water Tank Rehabilitation and Maintenance: \$2,500,000

Elevated water storage tanks throughout the utility system need refurbishment and maintenance because of storage tank age and service life projections.

6. Emergency Water Interconnections: \$1,000,000

This project will provide addition emergency connections to Johnston County and Durham County. As a response to the record drought of 2007-08, Governor Easley asked all community water systems to pursue all emergency interconnections possible to insure available water supplies could be provided to drought stressed communities.

7. EM Johnson WTP DAF Pilot Plant Facility: \$1,000,000

Construction and operation of a permanent pilot testing facility to demonstrate high rate coagulation for future plant upgrades to 120 MGD. The pilot evaluations are required to demonstrate that performance of high rate coagulation (DAF or Plate Settling) and associated processes will provide for water quality that will consistently meet SDWA standards for future plant upgrades.

8. EMJohnson WTP High Service Pump No. 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.

9. EM Johnson WTP Sodium Permanganate Facility: \$600,000

The project would construct a new building to house four metering pumps and associated piping, valves and flow measurement meters. Two new 10,000-gallon liquid storage tanks, spill containment and transfer pumping for the sodium permanganate would also be constructed.

10. EMJ WTP Wastewater Facilities Expansion: \$2,500,000

This project will expand, replace and modify the wastewater solids handling capacity at the E.M. Johnson Water Treatment Plant to maintain waste disposal standards for compliance.

11. E.M. Johnson WTP Clearwell Rehabilitation: \$350,000

Clean and repair the clearwells and construct baffles in the existing clearwells.

12. E. M. Johnson WTP Facility and Equipment Rehabilitation: \$2,500,000
Rehabilitation and/or replacement of major equipment and associated facilities at the EM Johnson Water Treatment Plant. This includes the conversion of the old generator building to a training facility and 3rd floor expansion for additional office space.
13. E. M. Johnson WTP Spill Containment Improvements: \$500,000
Construct spill containment structures at the chemical and fuel storage facilities.
14. Falls Lake Initiative: \$1,500,000
Funding to provide monetary resources to help support water quality initiatives and the Conservation Trust of North Carolina for expanding land protection in the Falls Lake watershed.
15. Falls Lake RWPS Improvements: \$2,400,000
Installation of a new utility sub-station and 5kV switchgear and replacement of existing 25 MGD Raw Water Pump. The existing pump has reached its service life and additional pumping capacity is required to provide for future demands.
16. Garner Road Transmission Line: \$600,000
This project would install a new transmission main along Garner Road from New Rand Road to Jones Sausage Road for a distance of 3,800 linear feet.
17. Lake Glad Road Waterline Extension: \$325,000
This funding is for construction of 4,300 LF of 6" and 8" water line along Lake Glad Road. This item was identified in the merger document.
18. Little River Reservoir Wetland Mitigation Property Acquisition: \$12,500,000
Wetland Mitigation through property or conservation easement purchases
19. Little River Reservoir County Reimbursement: \$2,500,000
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.
20. Little River Reservoir: \$6,000,000
Design of the Little River Dam and associated reservoir as a new water supply for the City of Raleigh.
21. Little River Reservoir Environmental Impact Statement: \$6,125,000
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. Due to the projected population growth in the service area, an additional water supply is needed.
22. New Rand Road Transmission Main 16-inch: \$300,000
Project will install a new 16-inch transmission main in New Rand Road from US 70 to Wakeland Drive for a distance of 3, 586 feet.
23. Oak Forest 30" Water Main (Atlantic Ave. to Capital Blvd.): \$2,900,000
Installation of approximately 6,700 LF of 30-inch water main from Atlantic Avenue to Capital Boulevard for the purpose of meeting addition water flow demands based upon growth in the potable water distribution system.
24. Poole Road Booster Pump Station: \$500,000
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 and Zebulon project. 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.
25. Property Acquisitions: \$1,300,000
Purchasing property for future water main easements, booster pump stations, elevated tank sites, and additional land at the E.M. Johnson WTP.

26. Remote Operations Center: \$575,000

To develop a remote operations center for the Operating Divisions of Maintenance, Construction and Meters. The center will consist of office and crew rooms, as well as material and equipment storage areas for the divisions.

27. Service Area Growth: \$5,000,000

The city annexes areas that reach levels of development appropriate for municipal services when authorized by City Council. This funding pays for extending water service to households and businesses in newly annexed areas and is estimated for the next five year period.

28. Telemetry Upgrades: \$1,250,000

The existing remote telemetry system needs to be upgraded to accommodate future growth in the City's service area. New "High Speed" Ethernet radio network will allow for faster communications, radios will be able select the quickest path for transferring information and there will be no limitations on the number of remote sites.

29. Thoroughfare Mains: \$2,000,000

This funding will continue the program to install water mains in construction of new thoroughfare projects and adjustment to existing water mains in thoroughfare widening projects. (Projects include Tryon Road, US Hwy 401, Perry Creek Road, NC 98 Bypass, TW Alexander Road, Leesville Road, etc.)

30. Water Booster Pump Station Rehabilitation: \$1,600,000

Install weatherproof enclosure for existing MCC, provide enclosure and maintenance platform for existing generator and extend access road at Shelley Road Booster Pump Station. Replace existing gas operated pump, associated underground fuel storage tank and install emergency generator at North Hills Booster Pump Station. Replace 9 MGD pump at Pullen Park Booster Pump Station and complete misc. facility upgrades at Wade Avenue Booster Pump Station.

31. Water Distribution Water Quality Program, Study, Evaluation & Design: \$750,000

Conducting corrosion control, nitrification and nutrient reduction studies, developing a water line rehabilitation/replacement program, preliminary design for elevated storage tank mixing improvements and development of a uniform directional flushing program.

32. Water Main Replacements and Rehabilitation: \$20,000,000

This funding will continue the program to replace undersized mains, existing transit mains and other older water mains.

33. EMJ Water Plant Settling Basin Rehabilitation: \$1,200,000

Re-grout and repair deteriorated concrete in the remaining three settling and flocculation basins that were built in the second expansion of the water plant 20 years ago.

34. Water Service Replacement: \$1,250,000

This project would focus on the rehabilitation of service lines that are in need of replacement but the water distribution mains they are connected to do not need immediate replacement. Staff estimates that 6,000 service lines are comprised of older material such as galvanized iron and are in need of replacement to preserve water quality.

35. Wendell Boulevard Transmission Extension: \$225,000

This project will install a 12 inch water line along Wendell Boulevard from North Cypress Steeet to North Selma Road for a distance of 2,708 linear feet, to accommodate additional growth of the water system.

36. Wendell Water Distribution Improvements: \$1,000,000

Modeling study of the Wendell service area distribution system, including investigation of chlorine residual issues and the resulting project to address deficiencies found by the study.

37. Zebulon Water Booster Generator: \$350,000

Installation of a new, larger generator for the water booster pump station sized to run both pumps at the facility. This item was identified in the merger document.

38. Zebulon Water Distribution Improvements: \$695,000

Potable water distribution lines have a finite service life. Failure to establish and maintain a replacement schedule would lead to increase service interruptions, escalating maintenance costs and compounding capital replacement costs as failing water mains accumulate, requiring immediate action.

39. Zebulon Water Tank Rehabilitation: \$357,500

This CIP item is for the cleaning and inspection of the Greenpace Road one million gallon elevated storage tank in FY08 and the exterior painting of that tank in FY10.

Wastewater Projects1. Cemetery Branch Sewer Main Replacement: \$800,000

Replacement of 5,000 LF of 12-inch and 18-inch sanitary sewer line along Cemetery Branch from Pigeon House Creek at Capital Boulevard to the Oakwood Cemetery.

2. Conversion of the Garner 201 Facility: \$4,200,000

The project will convert the wastewater treatment plant to an irrigation site to allow for the disposal of process reject water from the D.E. Benton water treatment plant. Conversion may include the installation of high density Polyethylene lagoon liner and clearing and grubbing the wooded spray field area to facilitate spray irrigation of process reject water.

3. Crabtree Interceptor Siphons: \$10,500,000

This project involves the upgrade of eight wastewater collection system inverted siphons on both the North and South Bank Crabtree Creek Interceptors. Siphons allow gravity sewer lines to cross under creeks, rivers and streams. This project will reduce flow restrictions at these eight locations.

4. Crabtree Lift Station Improvements: \$1,100,000

Rehabilitate the augers to extend the life and maintain efficiency of the lift station.

5. Crabtree Valley Sewer Replacement: \$4,600,000

Repair and replace 6,000 LF of sanitary sewer main because of age and hydraulic constraints. This line runs from Glenwood Avenue to Hare Snipe Creek.

6. Dunn Road Sewer Replacement: \$2,000,000

Replace about 6,000 LF of 8-inch sewer main with a new 18-inch sewer main from the existing 18-inch sewer main at the end of Dunn Road west toward Falls of Neuse Road.

7. East Neuse Regional Pump Station and Force Main: \$14,900,000

Construction of a new pump station on the east bank of the Neuse River at the confluence of Poplar Creek and the Neuse River across from the Neuse River WWTP. This new pump station will pump a peak one hour flow rate of 89 MGD with five 20 MGD pumps. The purpose of this pump station will convey flow from the Neuse basin and Walnut Creek basin to the Neuse River WWTP. This construction will require a new force main. This force main will consist of 2,500 linear feet of 48-inch parallel lines that will convey 107 MGD peak flow.

8. Lower Crabtree Creek North Sewer Main: \$500,000

Installation of approximately 6,300 LF of 8-in sewer main from the Turf Grass and Kingsborough Pump Stations to the Neuse River Interceptor on the north side of Crabtree through Anderson Point Park. This will provide gravity service to other areas along north side of Crabtree Creek.

9. Main Replacement: \$25,000,000

This funding will continue the program to replace under-sized and deteriorated sanitary sewer collection mains and services. The program will concentrate on rehabilitation or replacement in older areas of the city, such as inside the beltline.

10. Neuse River East Parallel Interceptor Phase II: \$8,000,000

Construction of a new interceptor along the east side of the Neuse River from just south of Buffalo Road to Harris Creek.

11. Neuse River Off-site Reuse System Expansion: \$2,500,000

Continued expansion of the Neuse River Wastewater Treatment Plant off-site reuse system expansion. Project scope includes reuse distribution mains, pump stations, and other reuse distribution components necessary for the expansion of the system in accordance with the Reuse Master Plan.

12. Neuse River Pump Station and 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. This will provide for future growth in this portion of the service area.

13. North Bank Crabtree Creek Interceptor Replacement: \$7,550,000

This project is currently planned to be implemented over four phases. This project involves the replacement or rehabilitation of approximately 29,500 LF of 30 and 36-inch sanitary sewer line between Raleigh Boulevard and Glenwood Avenue along the north bank of Crabtree Creek because of age and Hydraulic loading.

14. NW Crabtree Creek Pump Station & Equalization: \$66,800,000

This project will construction a new 20-MGD liftstation upstream of the confluence of Mine Branch and Crabtree Creek to pump all flow from the upper basin to the Neuse River pumpstation. The project also includes 51,800 feet of 36-inch forcemain from the new station to the Neuse River liftstation and a 4 million gallon equalization storage tank.

15. NPDES Permit Renewals: \$150,000

Permitting the discharges associated with the EM Johnson WTP, Neuse River WWTP, Smith Creek WWTP and Little Creek WWTP. The City's water and wastewater treatment plants utilize a NPDES (National Pollutant Discharge Elimination System) permit to discharge process wastewater. This project would engage engineering services to seek renewal of this permit.

16. Neuse River WWTP 15 million gallons per day Capacity Expansion: \$66,200,000

Construction of additional waste treatment facilities at the Neuse River WWTP that will increase the treatment capacity of the facility from 60 MGD to 75 MGD, this is necessary due to anticipated growth in the service area.

17. Neuse River WWTP Electrical Improvements: \$7,000,000

Installation of a fourth 3 Megawatt emergency standby generator, parallel 25kV switchgear, and parallel 25kV splitter switchgear at the Neuse River Wastewater Treatment Plant.

18. Poplar Creek Interceptor / Regional Pump Station: \$6,600,000

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 in FY12.

19. Sanitary Sewer Pump Station Removal, Repair, and Replacement: \$2,500,000

Extension of gravity sanitary sewer mains to eliminate sanitary sewer pump stations. This item also include rehabilitation or replacement of deteriorated pump station facilities.

20. Service Area Growth: \$10,500,000

The city annexes areas that reach levels of development appropriate for municipal services when authorized by City Council. This funding reflects the sewer service extensions associated with the annexation plan for the next five years.

21. Sewer System Capacity Analysis: \$1,000,000

This funding will continue the program to collect data and model the sanitary sewer collection system. A system-wide capacity analysis is currently under contract w/ CDM. This analysis provides information on the existing sewer collection system which is utilized to evaluate available system capacity and to guide future system improvements. This is a Capacity, Management, Operations, and Maintenance recommendation.

22. Upper Pigeon House Rehabilitation/Replacement: \$7,500,000

Pigeon House Creek has been listed as "impaired" for fecal coliform bacteria. One possible source could be the deteriorated Pigeon House Creek sewer line, herein targeted for repair. The age and condition of this line indicates the need for replacement. This project also conforms with City Council goals as set forth in Chapter 4, part 2 of the Comprehensive Plan.

23. Walnut Creek/Influent Lift Station Pumps: \$2,500,000

Installation of the 4th VT pump and replacing the drive units and augers at the Walnut Creek Lift Station in FY10.

24. Wendell Buffalo Creek Basin Sewer Improvements: \$800,000

Construction of a new pump station and force main along Buffalo Creek near the county line to discharge into the Lake Glad Road facility. The proposed pump station size was 1220 GPM pumping through 6,200 LF of new 12" force main. This was listed as a Wendell CIP item adopted in the merger agreement.

25. Wendell East Wake Sewer Cost Share: \$3,300,000

This is Wendell's portion of the cost share for the Wendell Falls pump station and force main along Poole Road from Lake Myra to the Poplar Creek interceptor. Also included in this estimate is for 5,760 LF of 12" gravity sewer extension in the upper Marks Creek basin and upsizing of 16,400 LF of gravity interceptor through Wendell Falls. This was listed as a Wendell project adopted in the merger agreement.

26. Wendell Lake Glad Road Demolition: \$165,000

Demolition of the Lake Glad Road Aeration basins (2) and extension of the aerial gravity sewer line and splitter box. This was listed as a Wendell project adopted in the merger agreement.

27. Wendell Marshburn Road Sewer Improvements: \$2,000,000

Construction of a new pump station along Marshburn Road near Little River discharging to the gravity sewer at Hanor Lane. The proposed pump station was sized at 700 GPM pumping through 5,000 LF of new 10" force main. This was listed as a Wendell CIP item adopted in the merger agreement.

28. Wendell Various Gravity Sewer Projects: \$1,300,000

Gravity sewer extensions were identified in the merger agreement over the next several years. They are the Wendell Park gravity sewer to the Buffalo Interceptor in '10 (1,000 LF of 8" gravity sewer), the Lake Glad Road sewer extension from Wellington Pump Station in '11 (2,000 LF of 8" gravity sewer), the Old Wilson Road extension (3,035 LF of 8" gravity sewer), the Lizard Lick Interchange sewer (1,700 LF of 8" gravity sewer), and the Old Zebulon Road sewer extensions (3,000 LF of 8" gravity sewer) in '12.

29. Zebulon Little Creek WWTP Bio-solids Improvements: \$2,900,000

This project would add an additional digester for batching the aerobically digested bio-solids and then sending to the bio-solids to the holding tank for post digestion thickening. This would allow staff to complete a 30 day VSR test prior to sending bio-solids to the holding tanks where it will be blended with other batches. Project would also include the replacement of the existing bar screen system with fine screen (3-5 mm) technology that will fit into the existing influent structure and work with existing hydraulics. Discharge into a new compactor to dry grit prior to discharge into dumpster.

30. Little Creek WWTP Expansion/Improvements (Phase I): \$11,200,000

The project is a re-rating of the Little Creek Wastewater Treatment Plant from 1.85 MGD to 2.2 MGD and is phase I of the planned expansion of this facility. The project includes improvements to influent lift pumps, grit removal system, bio-solids removal, anoxic mixed liquor suspension units and odor control systems. New filters to remove nutrients and covers for the aerobic digesters, sludge holding tanks and influent structure are also included in the project. A new generator will be added that will accept the entire plant load and a new aerobic digester for batch processing will be added. The project is a composite of merger projects.

Phase II – Public Utilities Projects

Water Projects

Water Main Replacements: \$25,000,000

Continuation of the program to replace and/or rehab undersized and deteriorated water mains in Raleigh.

Service Area Growth: \$5,000,000

Estimated cost of extending water lines for projected annexation and service growth.

Water Storage Tank Rehabilitation/Replacement: \$5,000,000

Rehabilitation or replacement of water storage tanks.

Water Booster Station Rehabilitation/Replacement: \$2,000,000

Rehabilitate or replace existing water booster pumping stations.

E.M. Johnson WTP Facility & Equipment Rehabilitation: \$3,750,000

Rehabilitation and/or replacement of major equipment and associated facilities at the EM Johnson WTP.

Remote Operations Center: \$900,000

To develop a satellite Operations Center site in the North Raleigh area.

Thoroughfare Mains: \$2,000,000

Continuation of currently funded program to install water mains in the construction of new thoroughfare projects and make adjustments to existing water mains in thoroughfare widening projects.

E.M. Johnson WTP Chemical Storage Tank Replacement: \$250,000

Due to the corrosive nature of chemicals in storage, periodic replacement of aged bulk chemical storage tanks is required.

E.M. Johnson WTP Clearwell Addition: \$1,100,000

To meet future water supply demands, an additional clearwell will be required at the water treatment plant. An additional clearwell facility will be designed, permitted, and constructed.

Water Distribution System Plan Update: \$500,000

Engineering field study of the existing water system performance, hydraulics, and related water quality modeling issues as well as subsequent computer modeling of the distribution system.

Property Acquisitions: \$1,000,000

Acquire property for water main easements, booster pump stations, and elevated water tanks.

Little River Reservoir: \$51,000,000

Design and construction of the Little River Reservoir as a new raw water supply for the City of Raleigh.

Little River Reservoir Wake County Land Acquisition Reimbursement: \$2,500,000

Wake County purchased approximately 2,050 acres for approximately \$15,000,000 for the construction of the Little River Reservoir and Dam. The City of Raleigh plans to reimburse Wake County for the land acquisition with annual payments of \$500,000.

Little River Reservoir Wetland Mitigation (property acquisition): \$12,500,000

As part of the State and Federal permit for the Little River Reservoir existing wetlands will be removed or otherwise impacted. This project will purchase additional property for the purpose of remediation and/or replacement of these wetlands.

Little River Reservoir Wetland Mitigation (construction): \$15,600,000

As part of the State and Federal permit for the Little River Reservoir, existing wetlands will be removed or otherwise impacted. This project will utilize the land purchase under to construct replacement wetlands.

Little River Mitigation 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.

E.M. Johnston WTP Ozone Expansion: \$24,500,000

As the water plant expands to its maximum capacity, an additional Ozone generator will be required to maintain proper treatment levels. Includes Installation of a 4th Ozone Generator and an associated Destructor.

Water Services Replacement: \$1,250,000

Continuation of the program to replace old existing water services that have deteriorated over time.

Bethlehem Road Transmission Main 16-inch: \$839,000

Install approximately 6,930 linear feet of 16-inch water transmission_main along Bethlehem Road from Poole Road to Cross Cut Place.

EMJ WTP Flocculation Sedimentation Basin Improvements: 42,900,000

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 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.

EMJ WTP UV/Solids Handling: \$35,100,000

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.

EMJ WTP Filter/Sed/Floc Basin Additions: \$38,500,000

This project is part of Phase 1 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.

Auburn Church Rd Transmission Line 16-inch (B505): \$150,000

Install approximately 14,840 linear feet of 16-inch water transmission line along Auburn Church Road.

DEBWTP Water Transmission Main: \$12,000,000

Construction of approximately 41,594 linear feet of 30-inch diameter water transmission main along Walnut Creek from the old EB Bain WTP to Poole Road.

VA Security Improvements: \$1,000,000

Improvements to security measures at EMJ WTP, elevated water tanks sites and other remote water facilities.

EMJWTP New Laboratory Facility: \$4,500,000

Construct a new facility for the laboratory operations.

EMJWTP Sludge Storage Canopy: \$400,000

Design and construction of a canopy to cover the existing sludge storage thus reducing the overall transportation costs of the sludge disposal.

EMJWTP Reservoir and Lagoon Sludge Removal: \$1,600,000

Design and construction of a canopy to cover the existing sludge storage area located at the EMJ waste treatment facility.

Wake Forest WTP Decommissioning: \$ 345,000

Project Description: Demolition, waste disposal and other miscellaneous cost associated with the closing of the GG Hill WTP in Wake Forest.

EMJWTP Warehouse Expansion: \$3,000,000

Expansion of the existing EMJ WTP warehouse by approximately 8,000 square feet.

Pullen Park Discharge Transmission Upgrade (B202): \$ 2,078,000

Upgrade of the transmission main for the Pullen Park Booster Pump Station in order to accommodate the larger volumes generated by project B201.

EMJWTP Additional High Service Discharge Pipe (B302): \$359,000

Installation of 1,300 linear feet of 30-inch transmission main on the E.M. Johnson Water Treatment Plant site to convey the higher flows generated by project B301.

1 MGD Pump Upgrade at Mt. Herman PS (B401): \$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.

Replace Springdale Tank (B402): \$1,650,000

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.

Ten Ten Road Water Tank (B503): \$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.

Jones Sausage Road Upgrade Under I-40 (B512): \$850,000

Install a 16-inch water line along Jones Sausage Road at the intersection of I-40.

Control Valve Installation at Wendell Blvd (B901): \$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.

Rand Road Transmission Line 12-inch (B513): \$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.

Ten Ten Road Transmission Line 12-inch (B514): \$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.

Bain Pump Station Upgrade (B103): \$70,000

Replacement of existing water booster pumps.

Oregon Trail Road Transmission Main 24-inch (B509): \$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.

Clifford Road Transmission Main 24-inch (B510): \$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.

Hebron Church Road Transmission Main 24-inch (B511): \$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.

Franklin Street Waterline 12-inch (B602): \$133,000

Install approximately 1,600 linear feet of 12-inch waterline along Franklin Street from Friendship Chapel Road to NC 98 Bypass.

NC 98 Bypass Waterline 12-inch (B603): \$493,000

Install approximately 5,940 linear feet of 12-inch waterline along NC 98 Bypass from Jones Dairy Road to Franklin Street.

Ligon Mill Road Waterline 12-inch (B604): \$430,000

Install approximately 5,180 of 12-inch waterline along Ligon Mill Road from Margots Avenue to Burlington Mills Road.

Pooler Road Booster Pump Station (B102): \$2,800,000

Construction of a regional water booster pump station to replace the existing aging/undersized booster stations within the Wendell and Zebulon services areas.

Wendell Blvd Water line from NC 97 to Cypress St (B902): \$1,449,000

Install approximately 11,978 linear feet of 16-inch water transmission line along Wendell Blvd. from NC 97 to Cypress Street.

Zebulon Water line on NC 97 (B903): \$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 ProjectsSewer Main Replacements: \$35,000,000

Continuation of the program to replace undersized and deteriorated sanitary sewer collections mains and eliminate sewer pump stations.

Service Area Growth: \$10,000,000

Projected cost to the City to provide for the extension of sewer lines into projected annexation areas during the period encompassed by Phase II of the Capital Improvement Program.

Sewer System Capacity: \$750,000

This project will continue to collect data and model the sanitary sewer collection system. This analysis provides information on the existing sewer collection system which is utilized to evaluate available system capacity and to guide future system improvements.

Neuse River Off-site Reuse System Expansion: \$10,000,000

Continued expansion of the Neuse River Wastewater Treatment Plant off-site reuse system expansion. Project scope includes reuse distribution mains, pump stations, and other reuse distribution components necessary for the expansion of the system in accordance with the Reuse Master Plan.

NRWWTP Land Purchase: \$1,000,000

Purchase of additional property adjacent to the NRWWTP for biosolids application and additional buffers.

Sewer Pump Station Removal/Rehabilitation/Replacement: \$5,000,000

The planned removal of sewer pump stations by extending gravity sewer lines reduces operational and maintenance costs to the utility system. Routine repair and upgrading of necessary pump stations reduces the utility's exposure to sanitary sewer overflows. This project extends gravity sewer lines and removes, repairs, and replaces pump stations throughout the utility system.

Access to Sanitary Sewer Mains: \$1,000,000

This project will clear easements, install driveways and purchase access easements throughout the system.

Crabtree Valley Sewer Replacement: \$18,000,000

Repair and replace 6,000 LF of sanitary sewer main from Glenwood Avenue to Hare Snipe Creek.

North Bank Crabtree Creek SS Rehabilitation: \$5,250,000

Continuation of the four phased replacement/repair/rehabilitation of the North Bank Crabtree Creek Sanitary Sewer Interceptor. This project represents phases three and four ending at Glenwood Avenue.

NRWWTP Facilities Improvements: \$2,050,000

Renovate the existing filter and administrative building at the NRWWTP. Renovation will include the replacement of windows, HVAC system, ceiling, instrumentation, and several other items that are in dire need of renovating.

NRWWTP Dewatering and 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 2015.

NRWWTP Onsite Reuse Improvements: \$5,000,000

Installation of additional spray irrigation facilities for the NRWWTP farm agricultural fields.

NRWWTP Pump Station Shop/Warehouse/Farm Equipment Storage: \$1,000,000

Construct a pump station maintenance shop, warehouse, and farm equipment storage shelter. All buildings are pre-engineered metal.

Residential Backflow: \$500,000

Install backwater valves on residential sewer services that meet the established requirements in order to avoid property damage and the resulting insurance claims caused by sewer back-ups into homes.

NRWWTP Lab Improvements: \$600,000

Expansion and upgrading the laboratory facility at the NRWWTP in accordance with the Hazen & Sawyer lab study.

Zebulon LCWWTP Lab/Office Renovations: \$55,000

Renovation to the Office and Laboratory building, required by building age and wear.

Neuse River WWTP Instrumentation Improvements: \$500,000

Annual replacement of aging and obsolete electronic process control equipment. The vast majority of plant process controls are monitored and maintained by digital electronic equipment. All electronics have a fixed operational life and must be upgraded or replaced on a regular basis.

East Neuse Regional Pump Station: \$22,500,000

Construction of a new pump station on the east bank of the Neuse River at the confluence of Poplar Creek and the Neuse River across from the Neuse River WWTP. This new pump station will pump a peak one hour flow rate of 89 MGD with five 20 MGD pumps. The purpose of this pump station will convey flow from the Neuse basin and Walnut Creek basin to the Neuse River WWTP. Phase II improvements provide additional wet well and pump capacity.

Neuse River WWTP Anaerobic Digesters: \$52,000,000

Construction of new anaerobic digester at the Neuse River WWTP. This will provide a fuel source (methane gas) for the thermal sludge dryer while simultaneously digesting sludge.

Lower Walnut Creek Interceptor Parallel: \$25,000,000

This project includes installation of a new junction box to divert flow from existing interceptors to new parallel pipe. The project also includes installation of 17,000 feet of 48-inch parallel pipe (or 72-inch replacement pipe) from the softball field junction box (MH 106042) to the siphon junction box upstream of Walnut Creek PS (MH 106337).

Walnut Creek Interceptor Tributaries Rehabilitation/Replacement: \$2,500,000

To prevent instances of overflows, existing sewer mains that warrant maintenance will be repaired or replaced. Project provides for maintenance work on sewer lines along major tributaries of Walnut Creek.

Wendell Highway NC 97 Gravity Sanitary Sewer: \$700,000

Extension of 6,300 LF of gravity sewer along NC Highway 97 northeast to the Lizard Lick Area. This project is identified in the Raleigh/Wendell Utility Merger agreement.

Wendell Green Willow Pump Station Upgrade: \$200,000

This project would increase the pump capacity to 285 GPM and rehabilitate the wet well. It is also identified in the Raleigh/Wendell Utility Merger agreement.

Wendell Whitley Way Pump Station and Force Main Improvements: \$750,000

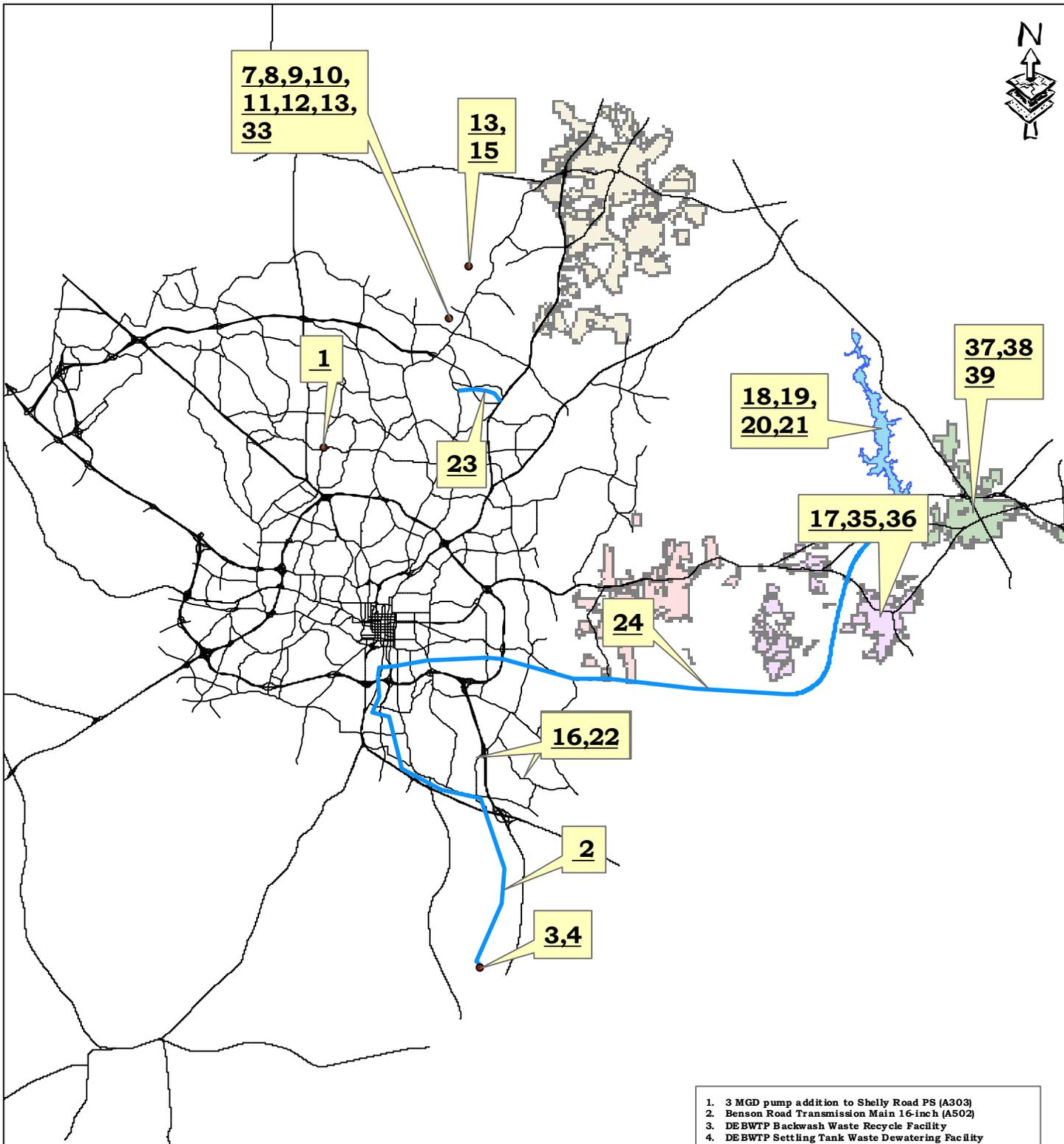
Upgrade the existing Whitley Way pump station to deliver 430 GPM through 10,200 LF of new 8-inch force main. This project is identified in the Raleigh/Wendell Utility Merger agreement.

Wendell Wellington Sewer Basin Improvements: \$1,400,000

Construction of 5,100 LF of 12" gravity sewer, elimination of the Deerfield and Selma pump station and upgrade to the Wellington pump station. Project identified in Raleigh/Wendell Utility Merger agreement.

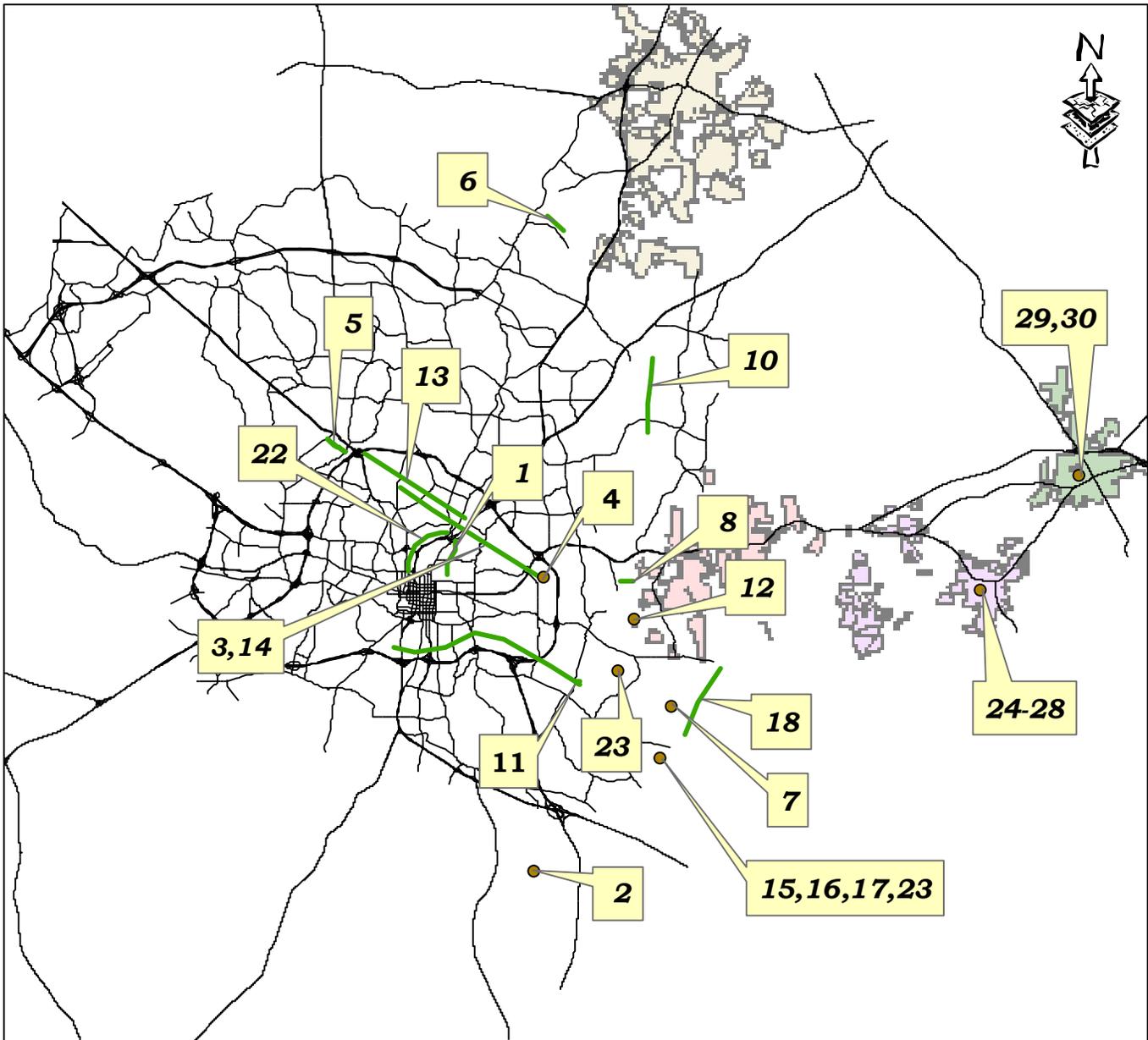
Debris Drying Pads: \$1,000,000

Expansion of the existing debris drying pad facility located off of Old Williams Rd. in Raleigh, NC and construction of a new debris drying facility in Wake Forest, NC.



**City of Raleigh
Public Utilities Department
Water Projects
2010-2014**

- 1. 3 MGD pump addition to Shelly Road PS (A303)
- 2. Benson Road Transmission Main 16-inch (A502)
- 3. DEBWTP Backwash Waste Recycle Facility
- 4. DEBWTP Settling Tank Waste Dewatering Facility
- 7. EMJ WTP DAF Pilot Plant Facility
- 8. EMJ WTP High Service Pump No. 1 Upgrade (B301)
- 9. EMJ WTP Sodium Permanganate Facility
- 10. EMJ WTP Wastewater Facilities Expansion
- 11. EMJWTP Clearwell Rehabilitation
- 12. EMJWTP Facility/Equipment Rehabilitation
- 13. EMJWTP Spill Containment Improvements
- 15. Falls Lake RWPS Improvements
- 16. Garner Road Transmission line 16-inch (B504)
- 17. Lake Glad Road Waterline Extension
- 18. Little River Res. Wetland Mitig. Property Acquis.
- 19. Little River Reservoir Wake City Land Acq. Reimbursement
- 20. Little River Reservoir
- 21. Little River Reservoir Environmental Impact Statement
- 22. New Rand Road Transmission Main 16-in (A503)
- 23. Oak Forest 30" Water Main (Atlantic Ave. to Capital Blvd.)
- 24. Poole Road Booster Pump Station (B102)
- 33. Water Plant Settling Basin Rehabilitation
- 35. Wendell Boulevard Transmission Extension (A901)
- 36. Wendell Water Distribution Improvements
- 37. Zebulon Water Booster PS Generator
- 38. Zebulon Water Distribution Improvements
- 39. Zebulon Water Tank Rehabilitation



**CITY OF RALEIGH
PUBLIC UTILITIES
DEPARTMENT
SEWER PROJECTS
2010-2014**

- 1. Cemetary Sewer Main Replacement
- 2. Conversion of Garner 201 Facility
- 3. Crabtree Interceptor Siphons (C23)
- 4. Crabtree Lift Station Improvements
- 5. Crabtree Valley Sewer Replacement (C14)
- 6. Dunn Road Sewer Replacement
- 7. East Neuse Regional PS & Force Main (W16A&17A)
- 8. Lower Crabtree North Sewer Main
- 10. Neuse River East Parallel Interceptor Phase II
- 11. Neuse River Off-site Reuse System Expansion
- 12. Neuse River Pump Station Pump Addition
- 13. North Bank Crabtree Creek Replacement
- 14. NW Crabtree Creek Pump Station & Equalization (C21&C22)
- 15. NPDES Permit Renewals
- 16. NRWTP 15 MGD Capacity Expansion (Includes W15A)
- 17. NRWTP Electrical Improvements
- 18. Poplar Creek Interceptor
- 22. Upper Pigeon House Rehabilitation (Portion of C8)
- 23. Walnut Creek/NRWTP Influent Lift Station Improvements
- 24. Wendell Buffalo Creek Basin Sewer Imps.
- 25. Wendell East Wake Sewer Costshare
- 26. Wendell Lake Glad Rd. Demolition
- 27. Wendell Marshburn Road Sewer Improvements
- 28. Wendell Various Gravity Sewer Projects
- 29. Zebulon LCWWTP Biosolids Improvements
- 30. Zebulon LCWWTP Expansion/Improvements (Phase I)



Parks and Recreation

The Parks, Recreation and Greenway element of the City of Raleigh's Comprehensive Plan is the document that guides park development, level of service and land acquisition. The parks capital program consists of the acquisition of new park and greenway properties, development of existing park sites, and the maintenance and improvement of various park facilities. Phase I funding for the parks program totals \$85,785,953 which includes previously authorized bond proceeds allocated to specific projects as shown herein. Phase II funding of this program consists of a continued investment in the improvements in existing parks, continued resources to acquire new park and greenway land and the funding for the planning, design and development of new facilities.

Major funding sources for projects scheduled in Phase I of the program include facility fees, sales tax revenue, and existing bond proceeds. A \$47 million Parks, Recreation & Greenway bond package was approved in referendum in October, 2003 and an \$88.6 million bond package was approved in 2007. The final 2003 bond projects were completed in FY09, and first year funding for several 2007 bond projects was initiated.

The table below contains a summary of Parks program expenditures included in this edition of the Capital Improvement Program.

Ten-Year Summary of the Parks and Recreation Program

	PHASE I	PHASE II	TOTAL
Parks and Recreation Acquisition	\$ 1,550,000	\$ 83,000,000	\$ 84,550,000
Development Projects	16,554,000	212,430,000	228,984,000
2007 Park Bond	67,681,953	-	67,681,953
TOTAL	\$ 85,785,953	\$ 295,430,000	\$ 381,215,953

Project Costs for Parks and Recreation Program

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Parks and Recreation Acquisition							
1	Greenway Acquisition	\$ 100,000	\$ 100,000	\$ 100,000	\$ 200,000	\$ 325,000	\$ 825,000
2	Park Site Acquisition	-	100,000	100,000	200,000	325,000	725,000
Subtotal, Acquisition		\$ 100,000	\$ 200,000	\$ 200,000	\$ 400,000	\$ 650,000	\$ 1,550,000

Development Projects							
1	ADA Facility Upgrades	\$ -	\$ 20,000	\$ 25,000	\$ 75,000	\$ 75,000	\$ 195,000
2	Alvis Farm Master Plan	-	-	-	-	125,000	125,000
3	Aquatic Improvements	173,000	125,000	125,000	150,000	150,000	723,000
4	Buffaloe Road Facilities	-	-	50,000	50,000	25,000	125,000
5	Building Improvements	265,000	265,000	265,000	300,000	300,000	1,395,000
6	Camp Durant Nature Park Improvements	75,000	-	50,000	25,000	-	150,000
7	Carousel Animal Restoration	25,000	43,000	75,000	50,000	50,000	243,000
8	Chavis Way Planning	-	75,000	-	-	-	75,000
9	City Cemetery	-	20,000	50,000	25,000	50,000	145,000
10	Comfort Station Improvements	-	110,000	125,000	140,000	150,000	525,000
11	Community Facility Upgrades	220,000	250,000	275,000	325,000	400,000	1,470,000
12	Electrical - Fields/Courts	36,000	75,000	75,000	100,000	60,000	346,000
13	Facility Backflow Preventers	-	25,000	25,000	25,000	25,000	100,000
14	Fayetteville Street Renovation Impacts	25,000	50,000	75,000	75,000	75,000	300,000
15	Field Upgrades	50,000	30,000	30,000	75,000	170,000	355,000
16	Greenway Bridge/Boardwalk Repairs	75,000	50,000	75,000	75,000	75,000	350,000
17	Greenway Development	-	-	100,000	150,000	200,000	450,000
18	Greenway Trail Resurfacing	100,000	50,000	50,000	100,000	200,000	500,000
19	Irrigation Projects	-	10,000	15,000	50,000	100,000	175,000
20	Lake Johnson Fishing Dock	-	35,000	-	-	-	35,000
21	Lake Wheeler Replacement Deck	-	-	75,000	-	-	75,000
22	Lane Street Improvements	-	55,000	-	-	-	55,000
23	Latta House	-	50,000	-	75,000	-	125,000
24	Laurel Hills Master Plan Revision	-	100,000	-	-	-	100,000
25	Lead Paint/Asbestos Abatement	55,000	60,000	50,000	75,000	75,000	315,000
26	Maintenance Operations Facilities	75,000	50,000	50,000	75,000	100,000	350,000

Project Costs for Parks and Recreation Program

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
27	Marsh Creek Improvements	-	25,000	25,000	-	25,000	75,000
28	Milbrook Exchange Tennis Center	-	-	50,000	-	70,000	120,000
29	Milburnie Park Master Plan	-	-	-	-	125,000	125,000
30	MLK Memorial Garden Expansion	-	35,000	60,000	50,000	75,000	220,000
31	Moore Square Improvements	50,000	-	100,000	100,000	100,000	350,000
32	Mordecai Improvements	-	-	25,000	15,000	15,000	55,000
33	Multipurpose Field Renovation	20,000	20,000	30,000	35,000	50,000	155,000
34	Nash Square Improvements	-	25,000	25,000	-	-	50,000
35	Park Fencing	75,000	50,000	50,000	50,000	185,000	410,000
36	Park Lighting	-	100,000	100,000	150,000	150,000	500,000
37	Park Signage	-	-	50,000	50,000	50,000	150,000
38	Park Site Improvements	145,000	200,000	200,000	225,000	275,000	1,045,000
39	Paving Improvements	70,000	30,000	30,000	50,000	125,000	305,000
40	Picnic Shelters	50,000	50,000	50,000	135,000	140,000	425,000
41	Playground Improvements	-	25,000	50,000	75,000	100,000	250,000
42	Pullen Train Engine Replacement	-	-	100,000	-	-	100,000
43	Raleigh Little Theatre Improvements	25,000	25,000	25,000	25,000	50,000	150,000
44	Re-use Greywater Line Extensions	-	-	-	50,000	-	50,000
45	Roof Repairs	142,000	125,000	125,000	125,000	100,000	617,000
46	Safety Compliance	115,000	50,000	50,000	50,000	50,000	315,000
47	Site Security	35,000	20,000	34,000	35,000	50,000	174,000
48	Solar Hot Water Heaters	-	-	25,000	-	-	25,000
49	Street Tree Replacement	40,000	40,000	40,000	75,000	75,000	270,000
50	Structure Repair and Replacement	40,000	50,000	75,000	75,000	75,000	315,000
51	SW Raleigh Neighborhood Park Master Plan	-	-	75,000	-	-	75,000
52	Tennis Court Upgrades	24,000	25,000	25,000	62,000	65,000	201,000
53	Theater in the Park (TIP)	150,000	30,000	25,000	25,000	50,000	280,000
54	Thornton Road Masterplan	-	-	-	100,000	-	100,000
55	Urban Forestry Standards	-	25,000	-	-	-	25,000
56	Volunteerism and Partnership	60,000	60,000	60,000	60,000	60,000	300,000
57	Walnut Creek Softball Complex Improve	25,000	75,000	50,000	50,000	50,000	250,000

Project Costs for Parks and Recreation Program

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
58	Wooten Meadows Master Plan	50,000	-	-	-	-	50,000
59	Worthdale Park Improvements	-	35,000	60,000	50,000	75,000	220,000
Subtotal, Development Projects		\$ 2,290,000	\$ 2,668,000	\$ 3,274,000	\$ 3,732,000	\$ 4,590,000	\$ 16,554,000

2007 Park Bond Projects

B66	Aquatic Facility	\$ 7,250,000	\$ -	\$ -	\$ -	\$ -	\$ 7,250,000
B58	Barwell Road Park Development	-	150,000	1,550,000	-	-	1,700,000
B59	Carolina Pines Community Center Expansion	600,000	-	-	-	-	600,000
B61	Chavis Height Carousel Building Adaptive Reuse	-	500,000	-	-	-	500,000
B51	Crabtree Crk. Ext East to Neuse	-	5,988,721	-	-	-	5,988,721
B52	Halifax Center Improvements	2,800,000	-	-	-	-	2,800,000
B53	Jaycee Center Expansion	1,040,732	-	-	-	-	1,040,732
B69	Lake Johnson Facility	250,000	2,350,000	-	-	-	2,600,000
B73	Land Acquisition	8,000,000	-	2,000,000	-	-	10,000,000
B64	Mordecai Park Interpretive Center	150,000	1,412,500	-	-	-	1,562,500
B75	NE Raleigh Active Recreation Partnerships	-	1,000,000	-	-	-	1,000,000
B74	NE Raleigh Community Center	2,650,000	5,500,000	-	-	-	8,150,000
B55	Neuse River Greenway Completion	1,000,000	4,500,000	3,000,000	-	-	8,500,000
B60	Pullen Park Carriageway Bridge	-	2,000,000	-	-	-	2,000,000
B62	Raleigh Senior Center	7,040,000	-	-	-	-	7,040,000
B65	Randleigh Farm	400,000	-	-	-	-	400,000
B76	Unsatisfied Neighborhood Park Search Areas	-	1,000,000	1,000,000	-	-	2,000,000
B56	Walnut Creek Greenway Ext. to Neuse River	-	2,700,000	-	-	-	2,700,000
B63	Wilkerson Nature Preserve	1,850,000	-	-	-	-	1,850,000
Subtotal, 2007 Park Bond Projects		\$ 33,030,732	\$ 27,101,221	\$ 7,550,000	\$ -	\$ -	\$ 67,681,953

Total Projects Costs, Parks and Recreation	\$ 35,420,732	\$ 29,969,221	\$ 11,024,000	\$ 4,132,000	\$ 5,240,000	\$ 85,785,953
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Funding Plan for Parks and Recreation

	2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Park Facility Fees	\$ 556,174	\$ 750,000	\$ 1,000,000	\$ 1,500,000	\$ 2,500,000	\$ 6,306,174.00
General Fund	650,000	900,000	1,200,000	1,300,000	1,350,000	5,400,000
Interest Income	733,826	1,118,000	1,174,000	1,232,000	1,290,000	5,547,826
Revolving Fund	100,000	100,000	100,000	100,000	100,000	500,000
Bond Reserves	350,000	-	-	-	-	350,000
2007 Bond Proceeds	33,030,732	27,101,221	7,550,000	-	-	67,681,953
Total Funding Plan, Parks and Recreation	\$ 35,420,732	\$ 29,969,221	\$ 11,024,000	\$ 4,132,000	\$ 5,240,000	\$ 85,785,953

Phase I – Parks and Recreation Program

Parks and Recreation Acquisition

1. Greenway Acquisition: \$825,000

This funding is for acquisition of greenway land. The items funded include missing greenway segments, reimbursements for dedicated greenway easements that become available during development site plan approval procedures.

2. Park Site Acquisition: \$725,000

This funding is for acquisition of park land in areas that are deficient in parks and open space. The areas and priorities of potential park site acquisitions are identified in the Comprehensive Plan.

Development Projects

1. Americans with Disabilities Act (ADA) Facility Upgrades: \$195,000

Current codes, standards, and expectations have changed with regard to the extent of accessibility to park and recreation services. Funds would be provided annually to implement changes in buildings and access routes to make them ADA compliant.

2. Alvis Farm Master Plan: \$125,000

Master planning for this community park to meet the current and future anticipated growth of the City.

3. Aquatic Improvements: \$723,000

This funding is for general aquatic maintenance, including water treatment systems (filters and chemical feed systems) and maintenance of the pool, decks and supporting structures.

4. Buffaloe Road Facilities: \$125,000

This funding is to establish a structure that would include restrooms, storage, offices, and score keeper area and parking lot.

5. Building Improvements: \$1,395,000

Funding will target interior/exterior painting, siding repairs, and boilers and HVAC replacement.

6. Camp Durant Nature Park Improvements: \$150,000

This funding is for improvements to existing structures at Camp Durant Nature Park.

7. Carousel Animal Restoration: \$243,000

This funding will be used to Restore Pullen and Chavis Park Carousel animals.

8. Chavis Way Planning: \$75,000

Funding needed for the planning of the connection of the Chavis Way greenway to the downtown.

9. City Cemetery Restoration: \$145,000

Developing a "Strategic Plan for the Inventory and Restoration of Raleigh's three Historic Cemeteries" - - (O'Rourke, City Cemetery and Mount Hope). The overall project is to take place in several phases: the first is currently starting to take place with the development of a plan; the second is to inventory and assess the condition of the sites, landmarks and resources and the final phase is to begin restoration of these historic sites.

10. Comfort Station Improvements: \$525,000

Continued funding to repair, replace and upgrade comfort stations at various park sites.

11. Community Facility Upgrades: \$1,470,000

This funding is for maintaining, repairing, replacing, and upgrading recreation center lighting, interiors, and facades.

12. Electrical Improvements – Fields/Courts: \$346,000

This funding is for replacing, repairing and maintaining existing electrical systems, including underground feeders and wires at sports fields and tennis courts.

13. Facility Backflow Preventers: \$100,000

This is an ongoing program to install and rebuild backflow preventers to city facilities to comply with code.

14. Fayetteville Street Renovation Impacts: \$300,000

Replace the hardscape materials, site furniture, and structures. Because of the expected volume of use and damage, loss per year is expected to be 10%.

15. Field Upgrades: \$355,000

Athletic fields will be upgraded with additional concrete pads and walks for dugouts, scorer's table, bleachers, and player's benches.

16. Greenway Bridge/Boardwalk Repairs: \$350,000

An annual funding amount for the purposes of repairing and/or replacing bridges or boardwalks that are identified in a systematic evaluation program.

17. Greenway Development: \$450,000

This funding is for constructing, studying and managing greenway trails. Costs for construction include permitting, professional services such as engineers and construction administration, environmental and site surveys.

18. Greenway Trail Resurfacing: \$500,000

Resurface older greenway trails to improve safety of walking surface. Older trails will be widened to meet current standards.

19. Irrigation Projects: \$175,000

This funding is for repairing/maintaining and upgrading automated irrigation systems.

20. Lake Johnson Fishing Dock: \$35,000

This funding is to provide a designated fishing area for patrons and classes. This would eliminate fishing from the walking bridge, which has caused safety issues for pedestrians passing by. It would also allow a daily fishing permit fee to offset costs with approximate average revenue of \$10,000-\$12,000. A fishing pier is currently included in the Lake Johnson Master Plan and this is a slight modification of scope.

21. Lake Wheeler Replacement Deck: \$75,000

The existing wooden deck at this facility has reached its useful life and will be replaced.

22. Lane Street Improvements: \$55,000

Make improvements to Lane Street Mini-park based on neighborhood desires. This may potentially include adding a play area, replacing the existing basketball court and associated fencing and other park site improvements such as, block wall repair/ replacement, benches, picnic tables, and trash cans.

23. Latta House: \$125,000

Planning and development of the local cultural site.

24. Laurel Hills Master Plan Revision: \$100,000

Master Plan revision is needed to meet the current and future recreation demand due to the City's population growth. of the City's population.

25. Lead Paint/ Asbestos Abatement: \$315,000

These are additional costs associated with repainting facilities with lead paint and/or asbestos.

26. Maintenance Operations Facilities: \$350,000

This funding is for the hiring of a consultant to evaluate the current facility center at Marsh Creek in order to develop recommendations on how to develop and utilize the current space in the most efficient and effective manner. Funding may also be available to assist with the Mt. Herman Road site that has been designated as a NW Parks Operations Facility.

27. Marsh Creek improvements: \$75,000

This funding is for various projects at Marsh Creek Community Park and may include improvements to the in-line skating rink that currently exists at the park, etc.

28. Milbrook Exchange Tennis Center: \$120,000

Improvements to the Millbrook Exchange Tennis Center including additional parking, upgrade of tennis court lights to tournament standards, and court resurfacing.

29. Milburnie Park Master Plan: \$125,000

Master planning for this community park is necessary to meet the current and future anticipated growth of the City.

30. MLK Memorial Garden Expansion: \$220,000

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 funding will include an outdoor meeting space, restroom facility and additional parking.

31. Moore Square Improvements: \$350,000

Creation of a Master Plan for Moore Square. Funding to be used in the first year to partner with key stakeholders in the creation of this plan. Funds are requested in subsequent years to implement the approved plan.

32. Mordecai Improvements: \$55,000

This funding will continue the phased improvements to buildings at the Mordecai Historic Park. This maintenance will include the repair and restoration of the kitchen, double door dependency, storage building, Andrew Johnson House, Law Office, Chapel, and Post Office.

33. Multipurpose Field Renovation: \$155,000

Installation of new irrigation systems, addition of soil and amendments and contractual sprigging of several multi-purpose fields yet to be renovated for use under the department's new open space policy and program.

34. Nash Square Improvements: \$50,000

Extent of upgrades to include site furnishing upgrade, landscape improvements and lighting upgrades to both the pathways and repair to the tree lighting. Projected funding request was reallocated for FY 09-10 through 11-12 to strategically plan for the upgrades to the Square. A Landscape Architect will be retained to create a comprehensive plan for the facility with upgrades to occur in following years.

35. Park Fencing: \$410,000

Fencing is repaired and replaced as needed, primarily at ball fields and tennis courts.

36. Park Lighting: \$500,000

This funding will upgrade and replace the lighting system at ball fields, tennis courts, and parking lots.

37. Park Signage: \$150,000

Update park entry and other signs to improve identification and information communication.

38. Park Site Improvements: \$1,045,000

This funding is for repairs/replacements to grounds and certain non-structural facilities such as concrete and asphalt surfaces, grills, tables and benches to maintain our current levels of service.

39. Parks Paving Improvements: \$305,000

This is a continuing program to repair/replace existing paved areas, as well as the creation of new paved surfaces. These 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. This is identified via visual assessment by staff.

40. Picnic Shelters: \$425,000

This funding is for replacing and upgrading existing shelters as well as constructing new shelters.

41. Playground Improvements: \$250,000

This funding is for repairs/replacements of existing playgrounds to address safety issues and play value; this includes removal of old wooden structures, correction of entrapments, surfacing materials, and borders to meet Consumer Product safety Council Guidelines.

42. Pullen Park Train Engine Improvements: \$100,000

Replace the current CP Hunnington Train Engine at Pullen Park due to age of current engine.

43. Raleigh Little Theatre Improvements: \$150,000

Improve fire protection with the installation of a sprinkler system for the main stage area; improve security by replacing locks and the key system. The carpet at the main stage and lobby will also be replaced and the climate control system will be upgraded. Conditions within the building will also be documented.

44. Re-use Waterline Extensions: \$50,000

This project is to extend the Re-use Waterline north to the Walnut Creek Softball complex to provide irrigation for fields.

45. Roof Repairs: \$617,000

Roof repairs and replacements are scheduled based on consultant evaluations and recommendations at various facilities throughout the park system.

46. Safety Compliance: \$315,000

Sites and facilities in need of improvements to be compliant with safety regulations are identified through staff inventory assessments and are evaluated in terms of facility age, levels of use, demand, etc.

47. Site security: \$174,000

Sites and facilities in need of improvements to be compliant with safety regulations are identified through staff inventory assessments and are evaluated in terms of facility age, levels of use, demand, etc.

48. Solar Hot Water Heaters: \$25,000

To incorporate solar hot water heater to existing recreation center buildings. This is not to replace the existing system, but rather be the primary hot water source with the conventional existing system as backup.

49. Street Tree Replacement: \$270,000

This funding is for planting and replacing trees on public property along downtown streets as well as the Neighborhoods Program.

50. Structure Repair and Replacement: \$315,000

To fund the repair and replacement of bridges and/or other structures as determined by structural engineer. This program will be set up to initiate major repairs and/or replace 2 bridges annually. This funding would be used to complete repairs and or replacements that go beyond the capability off the division operating budget.

51. SW Raleigh Neighborhood Park Master Plan: \$75,000

Master planning for this community park is necessary to meet the current and future anticipated growth of the City.

52. Tennis Court Upgrades: \$201,000

Tennis courts are resurfaced on a five-year cycle to preserve the life of the court surface. There are 113 tennis courts in the city system.

53. Theatre in the Park: \$280,000

This funding is for structural repairs to the deteriorated main theatre floor.

54. Thornton Road Master Plan: \$100,000

Master planning for this community park is necessary to meet the current and future anticipated growth of the City.

55. Urban Forestry Standards: \$25,000

One year project. Hire a professional consultant to evaluate the existing documents: Policies and Standards Governing Activities Which Impact City Trees document and Sec. 9-8 Tree and Vegetation City Code. Consultant will compare municipal street tree ordinances nationwide to create a comprehensive up-to-date final document and user manual. Consultant will facilitate the Department peer review process, public comment process (if needed), and Council approval.

56. Volunteerism and Partnership Projects: \$300,000

Funds for the purpose of partnering with individuals and groups in projects related to Adopt-a-Park, playground builds, and other park improvement projects.

57. Walnut Creek Softball Complex Improvements: \$250,000

This project will fund improvements for Walnut Creek Softball Complex.

58. Wooten Meadows Master Plan: \$50,000

This project will fund the master planning of this neighborhood park.

59. Worthdale Park Improvements: \$220,000

This funding will be allocated for master planning of this neighborhood park. Additional site improvements include: 1/2 mile walking trail, picnic shelter (with accessible path and water).

2007 Bond Projects**B-66. Aquatic Facility: \$7,250,000**

Design and construction of a new aquatics facility at Buffalo Road Park.

B-58. Barwell Road Park Development: \$1,700,000

This would develop the first phase outdoor recreational opportunities around the new Community Center.

B-59. Carolina Pines Community Center Expansion: \$600,000

This project would include the renovation and expansion of the existing center building to accommodate the recreational/classroom/meeting space needs in this changing neighborhood.

B-61. Chavis Height Carousel Building Adaptive Reuse: \$500,000

Old Carousel Bldg will be adaptively re-used for the Community to use as a public space.

B-51. Crabtree Creek Extension East to Neuse: \$5,988,721

Complete the greenway segment from Buckeye Trail at New Bern Avenue to the Neuse River at Anderson Point Park.

B-52. Halifax Center Improvements: \$2,800,000

This project would include the renovation and expansion of the existing center building to accommodate the recreational/classroom/meeting space needs in this changing neighborhood.

B-53. Jaycee Center Expansion: \$1,040,732

The proposed project is to expand the classroom/meeting space to address excess programming demand.

B-69. Lake Johnson Facility: \$2,600,000

New multiple use facility as per the adopted master plan.

B-73. Land Acquisition: \$10,000,000

This funding is used to purchase various future park sites according to the city's Comprehensive Plan needs.

B-64. Mordecai Park Interpretive Center: \$1,562,500

Design and Construction of a new interpretive center at the Historic Site as per master plan.

B-75. NE Raleigh Active Recreation Partnerships: \$1,000,000

Funding for partnerships to provide active recreational opportunities in NE Raleigh.

B-74. NE Raleigh Community Center: \$8,150,000

Design and construction of a new community center in NE Raleigh.

B-55. Neuse River Greenway Completion: \$8,500,000

Complete major portions of the Neuse River Greenway and seek partnerships to complete all the way to Johnston County.

B-60. Pullen Park Carriageway Bridge: \$2,000,000

New bridge as per the master plan to safely connect two portions of the park.

B-62. Raleigh Senior Center: \$7,040,000

This funding is for the design and construction of a new Raleigh Senior Center.

B-65. Randleigh Farm: \$400,000

First phase funding for Randleigh Farm as per overall master plan for site.

B-76. Unsatisfied Neighborhood Park Search Areas: \$2,000,000

This project will provide funding to acquire or renovate locations to provide services in areas that we can not meet as per the Comprehensive Plan, using non-traditional methods for the delivery of recreational services.

B-56. Walnut Creek Greenway Extension to Neuse River: \$2,700,000

The portion of the greenway system will move the connection towards the Neuse River.

B-63. Wilkerson Nature Preserve: \$1,850,000

Funding to be used for design and first phased development of the Nature Preserve.

Phase II – Parks and Recreation Program

Parks and Recreation Acquisition

1. Greenway Acquisitions: \$13,000,000

Continued funding for acquisition of land for greenway parcels. The items funded include missing greenway segments, reimbursements for dedicated greenway easements that become available during development site plan approval procedures.

2. Park Site Acquisitions: \$70,000,000

Continued funding for acquisition of land for community parks. The areas and priorities of potential park site acquisitions are identified in the Comprehensive Plan.

Development Projects

1. ADA Facility Upgrades: \$750,000

Continued funding to improve access to city recreational centers and services. Funds would be provided annually to implement changes in buildings and access routes to ensure compliance with the Americans with Disabilities Act.

2. Aquatic Improvements and Facility Development: \$43,000,000

Design and construction of the second phase aquatic facility at Buffalo Road Park, improvements at Chavis Parks and other major renovations, as well as general aquatic maintenance including: DE filter element replacements, automated chemical feed system improvements, locker replacements, pool deck and tile re-grouting.

3. Building Improvements: \$11,500,000

Continued funding for building maintenance and repairs; including interior and exterior painting and HVAC repairs/replacements.

4. Carousel Animal Restoration: \$375,000

Pullen and Chavis Park Carousel animal restoration. Funding is for continuous maintenance and restoration and deterioration of Carousels from regular use.

5. City Cemetery Restoration: \$500,000

The first phase of developing a "Strategic Plan for the Inventory and Restoration of Raleigh's three Historic Cemeteries", consisting of O'Rourke, City Cemetery and Mount Hope. The three City Cemetery grounds are currently maintained by the Parks & Recreation Department with the exception of headstone and cemetery plot maintenance. This project takes into account industry standards and public/philanthropic involvement to develop a strategic plan as to the maintenance and restoration of these sites.

6. Comfort Station Improvements: \$1,500,000

Continued funding to repair, replace and upgrade comfort stations at various park sites.

7. Community Facility Upgrades: \$5,000,000

Continued funding to maintain, repair, replace, and upgrade community center systems such as plumbing, lighting, and HVAC.

8. Fayetteville Street Renovation Impacts: \$500,000

Continued funding for replacement of hardscape materials, site furniture and structures on Fayetteville Street.

9. Field Fencing: \$1,000,000

Ongoing program to repair/replace existing fencing primarily at ballfields and tennis courts.

10. Greenway Bridge and Boardwalk Repair/Replacement: \$675,000

An annual funding amount for the purposes of repairing and/or replacing bridges or boardwalks that are identified in a systematic evaluation program.

11. Greenway Development and Improvements: \$36,330,000

Continued funding to construct, study and manage greenway trails. Costs for construction include permitting, professional services, such as engineers and construction administration, environmental and site surveys.

12. Greenway Trail Resurfacing: \$2,350,000

Resurface older greenway trails to provide a safe walking surface and to widen older trails to current standards.

13. Lead Paint/Asbestos Abatement: \$500,000

Costs associated with repainting facilities with lead paint and/or asbestos.

14. Mordecai Improvements: \$500,000

Continued funding to upgrade the facilities at Historic Mordecai Park.

15. Multipurpose Field Renovations: \$675,000

Installation of new irrigation systems, addition of soil and amendments and contractual sprigging of several multi-purpose fields yet to be renovated for use under the department's new open space policy and program.

16. P&R Electrical – Field/Courts: \$700,000

Replace, repair and maintain existing electrical systems at sports fields and tennis courts in parks.

17. P&R Field Upgrades: \$1,000,000

The athletic field upgrades include the repair/replacement of concrete pads and walks for the dugouts, scorer's table, and bleachers. Also included is the purchase and installation of player's benches, score boards and scorer's table and bench.

18. Park Lighting: \$1,300,000

Repair, replace, and maintain lighting at park sites, ball fields, tennis courts, and other facilities.

19. Park Sight Improvements: \$2,000,000

Continued funding for repairs/replacements to grounds and certain non-structural facilities such as concrete and asphalt surfaces, grills, tables and benches to maintain our current levels of service

20. Parks Irrigation Projects: \$1,000,000
Ongoing program to repair/maintain and upgrade automated irrigation systems.
21. Parks Paving Program: \$2,500,000
Continued funding for improving, repairing and replacing pavement at city facilities.
22. Parks Roof Repairs: \$1,900,000
Continued funding for repairing and replacing facility roofs and coverings.
23. Picnic Shelters: \$1,500,000
Continued funding to replace shelters that are at the end of their useful lifecycle.
24. Playground Improvements: \$2,000,000
Continued funding for repairs/replacements of existing playgrounds to address safety issues and play value – such as the removal of old wooden structures, correction of entrapments, surfacing materials, and borders to meet Consumer Product Safety Council guidelines.
25. Raleigh Little Theatre Improvements: \$650,000
Continued funding for capital improvement at the Raleigh Little Theatre Building.
26. Re-use Waterline Extension: \$200,000
This project is to extend the Re-use Waterline north to Walnut Creek Softball complex to provide field irrigation.
27. Safety Compliance: \$675,000
Sites and facilities in need of improvements to be compliant with safety regulations are identified through staff inventory assessments and are evaluated in terms of facility age, levels of use, demand, etc.
28. Signage – Parks & Greenways: \$1,300,000
Implementation of signage study to replace park entry and informational signs.
29. Solar Hot Water Heaters: \$675,000
To incorporate solar hot water heater to existing recreation center buildings. This is not to replace the existing system, but rather be the primary hot water source with the conventional existing system as backup.
30. Street Tree Replacement: \$500,000
Typical lifespan of a tree in downtown streetscape is 10-12 years. Replacement of thoroughfare trees damaged or destroyed by vehicular traffic.
31. Structure Repair and Replacement: \$500,000
Repair and replacement of bridges and/or other structures as determined by Structural Engineer. This program will be set up to initiate major repairs and/or replace 2 bridges annually.
32. Tennis Court Upgrades: \$400,000
Continued funding for court resurfacing in order to maintain life expectancy.
33. Theatre in the Park: \$500,000
Continued funding for Theatre in the Park Building improvements.
34. Volunteerism and Partnerships: \$675,000
Continued funding for partnering with individuals and groups in projects related to Adopt-a-Park, playground builds, and other park improvement projects.
35. Athletic Complex: \$10,000,000
Acquisition, design and development of a new indoor and outdoor athletic complex.
36. Buffaloe Road Park: \$4,000,000
Expansion to Buffaloe Raod Athletic Park as per the Council-adopted Master Plan
37. Site Security: \$300,000
Adding security cameras, gates both manual and automatic to sites and also additional measures to provide optimum site security.

38. Maintenance Operations Facilities: \$1,000,000

Renovations and expansion of existing Maintenance and Operations Facilities and the research, acquisition, design and development of new ones.

39. Master Plans: \$1,000,000

Revision of existing outdated Master Plans, New Master Plans on undeveloped / unplanned properties.

40. Park Development: \$22,000,000

New Park Development and Existing Park Development, Additional Park Elements, Future Park Phases to Existing Master Plans.

41. Senior, Nature and Community Centers: \$49,000,000

Design and construction of new senior centers, nature centers and community centers to be located at strategic locations around the City of Raleigh based on the Comp Plan.

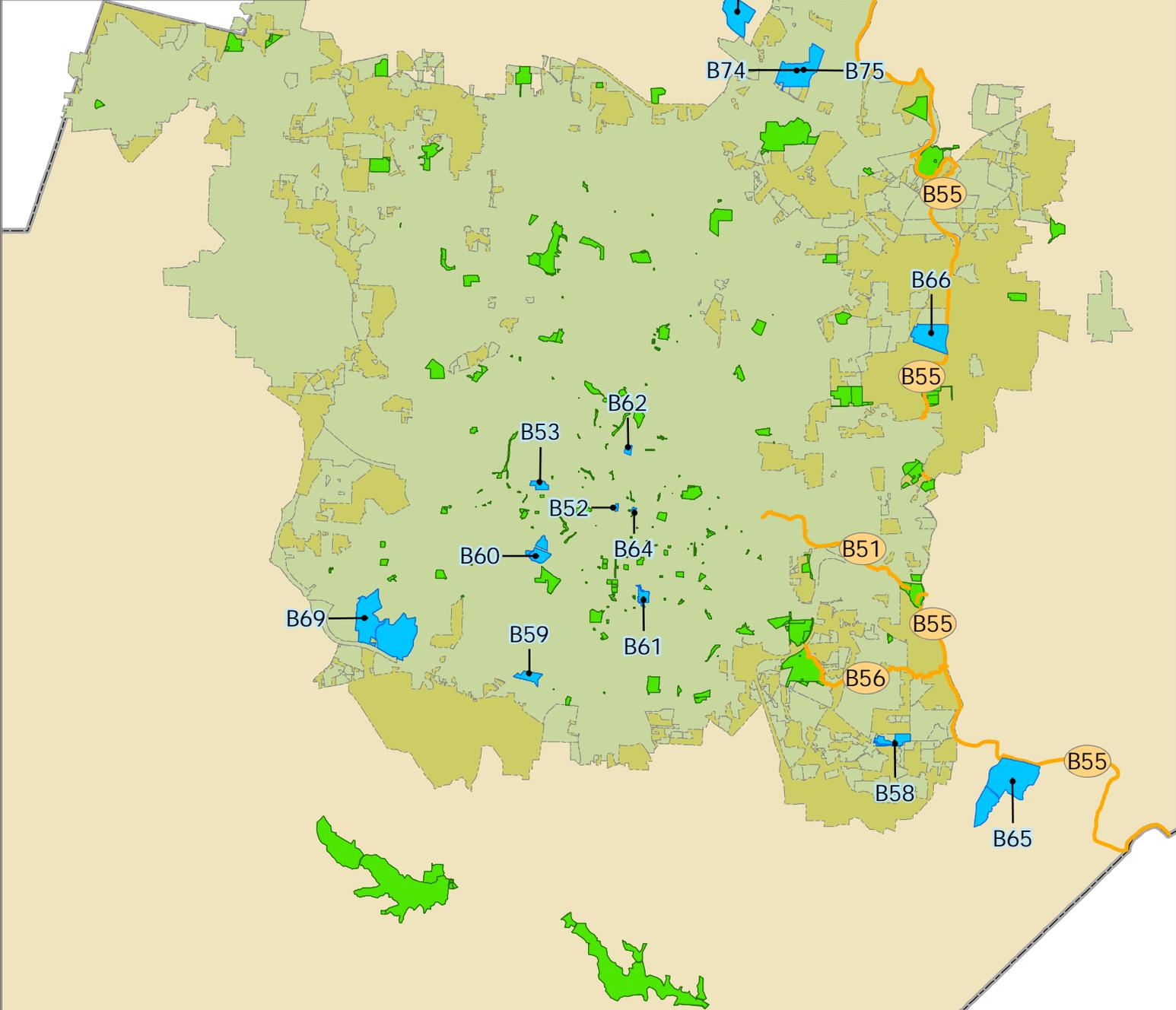
Parks & Recreation 2007 Bond Projects



2007 Bond Projects: Greenways
 2007 Bond Projects: Parks
 Raleigh Parks
 City of Raleigh
 Raleigh ETJ
 Wake County

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ID# 2007 Bond Projects

B-51	Crabtree Creek Extension to Neuse River	B-59	Carolina Pines Community Center Expansion	B-65	Randleigh Farm
B-52	Halifax Center Improvements	B-60	Pullen Park Carriageway Bridge	B-66	Aquatic Facility
B-53	Jaycee Center Expansion	B-61	Chavis Height Carousel Building Adaptive Reuse	B-69	Lake Johnson Facility
B-55	Neuse River Greenway Completion	B-62	Raleigh Senior Center-Whitaker Mill	B-73	Land Acquisition *
B-56	Walnut Creek Greenway Extension to Neuse River	B-63	Annie Louise Wilkerson, MD Nature Preserve	B-74	NE Raleigh Community Center
B-58	Barwell Road Park Development	B-64	Mordecai Historic Park Interpretive Center	B-75	NE Raleigh Active Recreation Partnerships
				B-76	Unsatisfied Neighborhood Park Search Areas *

(*) Not Displayed on Map



Stormwater Utility and Neuse Basin Environmental Program

The stormwater utility and Neuse Basin environmental program funds projects associated with stormwater runoff, pollution control and water quality, drainage improvements, alleviation of flooding, and improvements to watercourses that require erosion control and streambed remediation throughout the city's jurisdiction.

Raleigh established a monthly stormwater fee during fiscal year 2003-2004. In conjunction with the establishment of the stormwater fee, the City Council created the Stormwater Management Advisory Commission. The Commission advises the City Council on issues related to the stormwater management program; local, state, and federal regulations and their application to city stormwater programs; and options for alleviating the impact of stormwater and other drainage issues to private property.

All revenue from fees is programmed for expenditure within the stormwater utility and Neuse Basin environmental program. A list of projects covered by fees and bonds are itemized on the following pages.

Ten-Year Summary of the Stormwater Program

	PHASE I	PHASE II	TOTAL
Neuse Basin Environmental Program	\$ 9,410,000	\$ 30,900,000	\$ 40,310,000
Stormwater Utility Program	27,090,680	42,565,000	69,655,680
TOTAL	\$ 36,500,680	\$ 73,465,000	\$ 109,965,680

Project Costs and Funding Plan for Stormwater Utility and Neuse Basin Environmental

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Neuse Basin Environmental Program							
1	City Facility Water Quality Retrofit Projects	\$ 150,000	\$ 150,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 600,000
2	City Hall Water Quality Retrofit Projects	300,000	150,000	100,000	-	-	550,000
3	Fallon Park Water Quality Improvements	-	60,000	350,000	-	-	410,000
4	Lake Preservation	-	500,000	500,000	500,000	500,000	2,000,000
5	Rainwater Harvesting	450,000	50,000	-	-	-	500,000
6	Simmons Branch Channel Restoration	-	-	-	-	500,000	500,000
7	Stormwater Management Studies	-	400,000	400,000	400,000	400,000	1,600,000
8	Stream Restoration / Stabilization	-	500,000	500,000	500,000	500,000	2,000,000
9	Water Quality Cost Share	250,000	250,000	250,000	250,000	250,000	1,250,000
Subtotal, Neuse Basin Projects		\$ 1,150,000	\$ 2,060,000	\$ 2,200,000	\$ 1,750,000	\$ 2,250,000	\$ 9,410,000

Stormwater Program							
1	3900 Western Blvd Drainage	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000
2	Aycock Street Storm Drain	-	183,000	-	-	-	183,000
3	Deboy Street Drainage	-	-	-	30,000	200,000	230,000
4	Drainage System Inventory	500,000	500,000	540,000	500,000	500,000	2,540,000
5	Five Points Drainage	-	800,000	2,200,000	-	-	3,000,000
6	Flood Mitigation	-	500,000	500,000	500,000	500,000	2,000,000
7	Frank Street Drainage	-	-	-	90,000	575,000	665,000
8	Grist Mill Northwest Drainage	110,000	-	-	-	-	110,000
9	Grist Mill/ Harps Mill Drainage	250,000	-	-	-	-	250,000
10	Harps Mill Road/ Haymarket Drainage	2,100,000	500,000	-	-	-	2,600,000
11	Knights Way Drainage	-	336,000	-	-	-	336,000
12	Maintenance Reserve	-	500,000	750,000	1,000,000	1,000,000	3,250,000
13	Method Road Drainage	-	-	-	60,000	410,000	470,000
14	Old Buffalo Road Pipe Upgrade	-	219,000	-	-	-	219,000
15	Parkwood Drive Drainage Upgrade	-	-	-	282,000	-	282,000
16	Quince Street Drainage	-	-	-	25,000	170,000	195,000
17	Roanoke Park Neighborhood Drainage	-	-	-	900,000	-	900,000
18	Shephard/Merriman Storm Drain	-	-	-	250,000	1,500,000	1,750,000

Project Costs and Funding Plan for Stormwater Utility and Neuse Basin Environmental

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
19	Simmons Branch Tributary Drainage	-	-	-	500,000	-	500,000
20	Stormwater Petition Projects	500,000	500,000	500,000	500,000	500,000	2,500,000
21	Stormwater System Repairs	500,000	800,000	800,000	800,000	800,000	3,700,000
22	Strothmore/Harps Mill Way Drainage	-	-	-	470,000	-	470,000
23	Tanbark Way Drainage	-	140,680	-	-	-	140,680
24	Valley Lake Dam/Spillway Improvements	-	-	-	400,000	-	400,000
25	Woodbend Drive Culvert Upgrade	-	-	-	-	300,000	300,000
Subtotal, Stormwater Projects		\$ 3,960,000	\$ 4,978,680	\$ 5,290,000	\$ 6,407,000	\$ 6,455,000	\$ 27,090,680

Total Projects Costs, Stormwater \$ 5,110,000 \$ 7,038,680 \$ 7,490,000 \$ 8,157,000 \$ 8,705,000 \$ 36,500,680

Program Funding Resources		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
63	Stormwater Utility Operating Fund	\$ 5,110,000	\$ 7,038,680	\$ 7,490,000	\$ 8,157,000	\$ 8,705,000	\$ 36,500,680

Total Funding Plan, Stormwater \$ 5,110,000 \$ 7,038,680 \$ 7,490,000 \$ 8,157,000 \$ 8,705,000 \$ 36,500,680

Phase I - Stormwater Utility & Neuse Basin

Neuse Basin Environmental Program

1. City Facility Water Quality Retrofit Projects: \$600,000

Implementation of retrofit best management practices on City owned facilities including: (1) installation of vortex type devices to capture oil, trash and other large solids and to serve as spill containment; (2) installation of additional bio-retention and other best management practices to treat runoff from remaining areas of Vehicle Fleet Services on West Street; installation of bio-retention and other best management practices to treat runoff from the Street Maintenance operation on the west side of West Street; and (4) installation of proprietary devices to capture and remove floatables and other trash from the main stem of Pigeon House Branch.

2. City Hall Water Quality Retrofit Projects: \$550,000

Implementation of several best management practices to capture and treat runoff from the City Hall block including: (1) Construction of an extensive green roof to be installed on the sixth 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 bio-retention and other LID techniques to capture runoff from walkways and other remaining impervious areas. There would also be an opportunity to create a water feature such as a water sculpture utilizing the treated runoff.

3. Fallon Park Water Quality Improvements: \$410,000

Provide water quality enhancements in the Oxford tributary to Crabtree Creek through: (1) removal of existing curb and replacement with rolled curb along Oxford Road at Fallon Park to allow sheet flow along with utilizing naturalization and installation of supplemental plantings to provide treatment through the riparian buffer; and (2) utilize bioengineering to stabilize severely eroded sections of the stream within Fallon Park.

4. Lake Preservation: \$2,000,000

Various lake preservation and water quality enhancement projects will be implemented, including the upgrade/replacement of existing dams, engineering design, dredging and other efforts to support the lake preservation.

5. Rainwater Harvesting: \$500,000

Partnership between Raleigh Fire Department and Wake County to install rainwater harvesting cisterns at 12 fire stations throughout the City of Raleigh and Wake County and to install rain gardens at six of those 12 locations. Of the 12 project sites, nine are owned by City of Raleigh and three are owned by Wake County.

6. Simmons Branch Channel Restoration: \$500,000

Improve 4,000 feet of channel along Simmons Branch to decrease flooding and erosion.

This also will improve water quality by reducing sediment loads and decrease flooding to homes and roads.

7. Stormwater Management Studies: \$1,600,000

Study stormwater impact on various drainage basins within the city. This project will also develop remedial strategies for flooding, runoff control and water quality.

8. Stream Restoration/ Stabilization: \$2,000,000

Restore and stabilize degraded streams within the city to improve water quality. The city is mandated by the federal Clean Water Act to improve the water quality of impaired streams.

9. Water Quality Cost Share: \$1,250,000

This cost share program will be similar to the Drainage Petition Program already managed by the Stormwater Management Division. The Water Quality Cost Share program will be for the construction of water quality best management practices, including cost shares with the North Carolina Department of Transportation.

Stormwater Utility Program1. 3900 Western Blvd Drainage: \$100,000

This project will evaluate the existing drainage system at 3900 Western Boulevard and design a solution to alleviate the structural flooding at that address.

2. Aycock Street Storm Drain: \$183,000

This project includes the replacement of existing 24 and 30 inch pipes in Aycock Street and adding additional storm drainage to prevent street flooding.

3. Deboy Street Drainage: \$230,000

This project will replace an existing undersized and deteriorating culvert on Deboy Street.

4. Drainage System Inventory: \$2,540,000

This funding is for consultant assistance to develop an inventory of drainage systems in Raleigh.

5. Five Points Drainage: \$3,000,000

This project will provide additional drain inlets and upgrade the capacity of the storm drainage pipes in the road along Fairview Road and side streets near Glenwood Avenue.

6. Flood Mitigation: \$2,000,000

This project will provide funding for buyout or the elevation of structures within the 100-year floodplain, particularly the repetitive loss structures.

7. Frank Street Drainage: \$665,000

This project will replace an existing undersized culvert on Frank Street.

8. Grist Mill Northwest Drainage: \$110,000

Replace existing storm drainage system as recommended in the Brown and Caldwell study of drainage systems in the North Ridge area.

9. Grist Mill/ Harps Mill Drainage: \$250,000

Replace existing storm drainage system as recommended in the Brown and Caldwell study of drainage systems in the North Ridge area.

10. Harps Mill Road/ Haymarket Drainage: \$2,600,000

Replace existing storm drainage system as recommended in the Brown and Caldwell study of drainage systems in the North Ridge area.

11. Knights Way Drainage: \$336,000

This drainage improvement project will address street flooding on Knights Way. The project involves removal and replacement of existing storm pipes and replacement with significantly larger storm drainage pipes and/or box culverts.

12. Maintenance Reserve: \$3,250,000

Implement funding for recommendations made by the Stormwater Utility Funding Study.

13. Method Road Drainage: \$470,000

This project will replace and install storm drainage improvements along Method Road and behind the houses on Wilder Road and Steadman Road.

14. Old Buffalo Road Pipe Upgrade: \$219,000

This project is for providing storm drainage improvements under Old Buffalo Road. A 24-inch pipe will be upgraded to a 36-inch pipe.

15. Parkwood Drive Drainage Upgrade: \$282,000

There is an existing 36-inch diameter reinforced concrete pipe that crosses Parkwood Drive, which is downstream from Pleasant Valley Promenade Mall. The existing pipe was installed before the construction of the mall, but is currently undersized for the amount of drainage that comes to the pipe.

16. Quince Street Drainage: \$195,000

This project will replace an existing deteriorated culvert on Frank Street.

17. Roanoke Park Neighborhood Drainage: \$900,000

This project will replace and install storm drainage improvements along Greenwood Street, Cherokee Drive, and Fairview Road.

18. Shepherd/ Merriman Storm Drain: \$1,750,000

There are 18-inch and 24-inch diameter pipes on Shepherd Street and Merriman Avenue that are oversized 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.

19. Simmons Branch Tributary Drainage: \$500,000

Replace and upgrade the drainage piping along the Simmons Branch tributary at eight locations from Kaplan Drive to Swift Drive. This project will decrease flooding to residences and roads.

20. Stormwater Petition Projects: \$2,500,000

Fund stormwater and drainage projects requested by petition and approved by the City Council for implementation under the auspices of the city's Storm Drainage Policy.

21. Stormwater System Repairs: \$3,700,000

Repair stormwater system facilities, and construct stormwater drainage projects on city property or within the right-of-way.

22. Strothmore/ Harps Mill Way Drainage: \$470,000

This drainage improvement project will address street flooding on Strothmore Court and Harps Mill Road and some limited structural flooding of residential properties. The project involves removal and replacement of existing storm pipes and replacement with significantly larger storm drainage pipes and/or box culverts.

23. Tanbark Way Drainage: \$140,680

This drainage improvement project will address street flooding on Tanbark Way. The project involves removal and replacement of existing storm pipes and replacement with significantly larger storm drainage pipes and/or box culverts.

24. Valley Lake Dam/ Spillway Improvements: \$400,000

This project will reconstruct the entire dam embankment and spillway. The lake is being upgraded to meet North Carolina Dam Safety standards. In addition, this project is designed to be a water quality feature and will help the City reach nitrogen removal requirements set forth by the State.

25. Woodbend Drive Culvert Upgrade: \$300,000

This project will replace the existing arch culvert with three 10-feet by 10-feet concrete box culverts, which will reduce flooding to three apartment buildings and the road.

Phase II - Stormwater Utility & Neuse Basin

Neuse Basin Environmental Program

Kensington Park Stream Restoration: \$2,200,000

Improve 1,600 feet of channel along Bushy Branch to decrease flooding and remove heavy sediment deposition within the culvert under Avent Ferry Road.

Lake Preservation: \$13,200,000

Preserve and upgrade the existing lakes that reduce stormwater and improve water quality.

Simmons Branch Channel Restoration: \$2,500,000

Improve 4,000 feet of channel along Simmons Branch to decrease flooding and erosion.

This also will improve water quality by reducing sediment loads and decrease flooding to homes and roads.

Stormwater Management Studies: \$3,000,000

Study stormwater effects using a basin-wide approach and develop remedial strategies for stormwater problems.

Stream Restoration/ Stabilization: \$5,000,000

Restore and stabilize degraded streams on public property as recommended in the drainage basin studies.

Water Quality Cost Share: \$5,000,000

This cost share program will be similar to the Drainage Petition Program already managed by the Stormwater Management Division. The Water Quality Cost Share program will be for the construction of water quality best management practices, including cost shares with the North Carolina Department of Transportation.

Stormwater Utility ProgramDrainage System Inventory: \$2,500,000

Funding for consultant assistance to inventory the city's drainage systems.

Flood Mitigation: \$2,500,000

Funding to buyout or elevate structures within the 100 year floodplain.

Grist Mill Northwest Drainage: \$420,000

Replace existing storm drainage pipes to reduce roadway and structural flooding.

Grist Mill / Harps Mill Drainage: \$1,100,000

Replace existing storm drainage pipes to reduce roadway and structural flooding.

Longstreet Drive Culvert: \$1,300,000

Replace corrugated metal 72-inch pipe with a 10-foot wide by 8-foot high concrete box culvert. This will reduce flooding to eight (8) condominiums and two (2) residences.

Maintenance Reserve: \$10,000,000

Funding of a maintenance program as recommended by the Stormwater Utility Funding Study.

New Hope Church Road Culvert Upgrade: \$1,750,000

Replace existing undersized culvert under the New Hope Church Road along the New Hope Tributary. Roadway approach grades will need to be adjusted.

Newton Road Culvert: \$1,650,000

Replace existing 72-inch pipes with a 10-foot wide by 8-foot high concrete box culvert.

Simmons Branch Tributary Drainage: \$4,000,000

Replace and upgrade pipes along the Simmons Branch Tributary from Kaplan Drive to Swift Drive at eight locations to reduce roadway and structural flooding.

Stormwater Inventory Software Update: \$110,000

Funding for consultant assistance to develop and update the inventory software for the city's inventory collection program.

Stormwater Petition Projects: \$3,500,000

Fund stormwater and drainage projects initiated by citizen petition, approved by City Council and constructed under the city's Storm Drainage Policy.

Stormwater System Repairs: \$10,435,000

Repair to stormwater system facilities in accordance with policies approved by City Council.

Valley Lake Spillway Improvements: \$2,000,000

Project will upgrade spillway to meet Dam Safety standards by replacing existing dam and spillway. This project is recommended in the Mine Creek Stormwater study.

Woodbend Drive Culvert Upgrade: \$1,300,000

Replace existing arch culvert with three 10 by 10 concrete box culverts. Project will decrease structure flooding to three (3) apartment buildings and road flooding. This project is recommended in the Mine Creek Stormwater study.



City of Raleigh
Public Works Department
Stormwater Utility



- STORMWATER PROGRAM**
1. 3900 Western Blvd Drainage
 2. Aycock Street Storm Drain
 3. Deboy Street Drainage
 5. Five Points Drainage
 7. Frank Street Drainage
 8. Grist Mill Northwest Drainage
 9. Grist Mill/ Harps Mill Drainage
 10. Harps Mill Road/ Haymarket Drainage
 11. Knights Way Drainage
 13. Method Road Drainage
 14. Old Buffalo Road Pipe Upgrade
 15. Parkwood Drive Drainage Upgrade
 16. Quince Street Drainage
 17. Roanoke Park Neighborhood Drainage
 18. Shepard/Merriman Storm Drain
 19. Simmons Branch Tributary Drainage
 22. Strothmore/Harps Mill Way Drainage
 23. Tanbark Way Drainage
 24. Valley Lake Dam/Spillway Improvements
 25. Woodbend Drive Culvert Upgrade

**2010-2014 STORMWATER UTILITY
Capital Improvement Projects (CIP) Phase 1**

- NEUSE BASIN ENVIRONMENTAL PROGRAM**
2. City Hall Water Quality Retrofit Projects
 3. Fallon Park Water Quality Improvements
 6. Simmons Branch Channel Restoration



Housing Program

The City has provided funding for an affordable housing program since the mid-1980s. The program's resources are utilized to reduce the cost of development and/or to finance the rehabilitation of housing for citizens of low to moderate incomes.

Typically, housing program funds are leveraged as loans to developers, contractors, or first-time homebuyers as a method of reducing the cost of capital. When loan proceeds are repaid to the City, they are considered as a resource that may be applied to other housing developments or to retire the debt from bonds, if that was the source of original financing.

Funding for this program will be applied in several ways: as second mortgage loans to first-time homebuyers; as loans to supplement development of rental housing using low-income housing tax credits; to add to the City's inventory of rental housing for lower income families; as loans to low-income homeowners for limited, emergency-type repairs; as loans to non-profit developers supporting the ten-year plan to end homelessness; as loans to low-income homeowners whose homes need substantial rehabilitation and to revitalize the City's inner core of older neighborhoods.

Funding for Phase I of the housing program includes \$10,375,000 approved in the October 2005 Bond referendum and \$4,615,000 in program income and prior year reserves. The main source of funding for the housing program is bonds. Additional City and Federal funding for comparable affordable housing development and rehabilitation activities is included in the operating budget of the Community Development Department.

Ten-Year Summary of the Housing Program

	PHASE I	PHASE II	TOTAL
Housing	\$ 14,990,000	\$ -	\$ 14,990,000
TOTAL	\$ 14,990,000	\$ -	\$ 14,990,000

Project Costs and Funding Plan for Housing Program

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Community Development Projects							
1	First Time Home Ownership	\$ 800,000	\$ 800,000	\$ 800,000	\$ 500,000	-	\$ 2,900,000
2	Homelessness Plan and Support	350,000	350,000	350,000	-	-	1,050,000
3	Homeowner Repair Loan Program	995,000	990,000	915,000	510,000	-	3,410,000
4	Joint Venture Rental	1,370,000	1,370,000	1,370,000	-	-	4,110,000
5	Limited Repair Program	150,000	150,000	150,000	-	-	450,000
6	Loan Servicing	85,000	90,000	90,000	90,000	90,000	445,000
7	Neighborhood Revitalization	500,000	500,000	500,000	-	-	1,500,000
8	Rehab/ Purchase of Housing Units and Land	375,000	375,000	375,000	-	-	1,125,000
Total Projects Costs, Community Development		\$ 4,625,000	\$ 4,625,000	\$ 4,550,000	\$ 1,100,000	\$ 90,000	\$ 14,990,000

Program Funding Resources		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
2005 Bond Proceeds		\$ 3,550,000	\$ 3,550,000	\$ 3,275,000	-	-	\$ 10,375,000
Program Income		-	75,000	75,000	875,900	90,000	1,115,900
Prior Year Reserves		1,075,000	1,000,000	1,200,000	224,100	-	3,499,100
Total Funding Plan, Community Development		\$ 4,625,000	\$ 4,625,000	\$ 4,550,000	\$ 1,100,000	\$ 90,000	\$ 14,990,000

Phase I - Housing

1. First Time Home Ownership: \$2,900,000

These funds will be used to provide second mortgage financing consisting of low-interest loans of up to \$20,000 that can be used to finance a down payment on a new or existing residence citywide and up to \$30,000 for residences located in the inner city redevelopment areas including the State Street/ Garner Road and other approved developments.

2. Homelessness Plan and Support: \$1,050,000

These funds will go towards housing programs in support of the ten-year plan to end homelessness, focusing on single individuals needing housing and other services.

3. Homeowner Repair Loan Program: \$3,410,000

This project will provide loans for substantial rehabilitation to homes of eligible homeowners who live within the targeted areas. Loans will discount and can be used with other repaying and forgivable loans.

4. Joint-Venture Rental: \$4,110,000

These funds will provide low-interest loans to private housing developers (both non-profit and for profit) to construct or rehabilitate affordable rental housing units. This program leverages other funds including Wake County Housing dollars; NCHFA tax credits and funds from private lenders.

5. Limited Repair Program: \$450,000

These funds will provide emergency rehabilitation for low income homeowners within the city limits of Raleigh. Homes must be occupied by an owner with income at or below 50% of the 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 \$5,000 per unit can be used for each qualifying applicant.

6. Loan Servicing: \$445,000

This activity will allow funding for the servicing of the loans funded with Bond funds. The City has outsourced this activity and fees will be paid from funds generated from interest earned on the repaying loans

7. Neighborhood Revitalization: \$1,500,000

These funds will support neighborhood preservation and revitalization efforts to improve the quality of life for Raleigh's residents by increasing and improving the existing housing stock and undertaking redevelopment type activities to mitigate blighted conditions citywide.

8. Rehabilitation/ Purchase of Housing Units and Land: \$1,125,000

These funds will be used to purchase land, rehabilitate multifamily units or construct new city owned rental units for low income citizens or Raleigh who do not qualify for public housing.

Phase II - Housing

No funds have been budgeted for Phase II at this time. Phase I projected expenditure estimates include revenues generated from prior year loan repayments.



General Public Improvement

This section of the Capital Improvement Program includes projects for public safety, general facility improvements, and economic development. Public improvements associated with the support of City operations are not set aside in distinct CIP programs. Improvements include the construction and outfitting of new fire stations and other City support facilities, workspace for office and operational requirements, downtown streetscapes and improvement projects, and general repairs and maintenance of public buildings and facilities.

Total funding for general public improvement projects in Phase I is \$496,702,209. Major sources of funding for projects within this section are the 1/2-cent local option sales tax, and projected Certificates of Participation for the Public Safety and Remote Operation Facilities. Three new fire stations, expansion of the fire training facility, police district stations, and a police training facility are identified needs in Phase I of the CIP. The total construction cost of these projects is estimated at \$23.9 million in Phase I, with an additional \$10.9 million needed in Phase II. There is no identified funding source for these additional projects and bond funding is recommended. The current Phase II funding needs are estimated at \$28,641,382.

Ten-Year Summary of the General Public Improvement Program

	PHASE I	PHASE II	TOTAL
Bond Funded Fac. & Major Renovation Const.	\$ 472,838,824	\$ 10,907,800	\$ 483,746,624
Facilities & Major Renovation Planning	4,185,000	500,000	4,685,000
Facility Improvements	6,390,000	5,500,000	11,890,000
Technology, Equipment, Other	8,458,385	4,798,582	13,256,967
Economic Development	4,830,000	6,935,000	11,765,000
TOTAL	\$ 496,702,209	\$ 28,641,382	\$ 525,343,591

Project Costs for General Public Improvement Program

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
Bond Funded Facilities and Major Renovation Construction							
B-1	CEL Public Safety Center w/ Office or Parking	\$ 205,270,000	\$ -	\$ -	\$ -	\$ -	\$ 205,270,000
B-2	Remote Operations Facility, Downtown	41,800,000	12,725,000	5,154,888	12,806,000	21,345,497	93,831,385
B-3	Remote Operations Facility, Mt. Herman	15,500,000	6,100,000	8,252,455	21,423,000	27,784,759	79,060,214
B-4	Remote Operations Facility, Northeast	-	3,000,000	-	-	-	3,000,000
B-5	Remote Operations Facility, Wilder's Grove	14,350,000	13,718,913	4,225,241	-	-	32,294,154
B-6	Marsh Creek Maintenance Facility	7,252,576	16,150,000	6,725,000	1,781,495	-	31,909,071
B-7	Fire Station 12 Relocation	-	-	165,000	3,365,000	-	3,530,000
B-8	Fire Station 3 Replacement	-	-	-	1,000,000	2,700,000	3,700,000
B-9	Fire Station 30	-	-	-	-	164,000	164,000
B-10	Fire Training Facility Expansion	-	-	-	-	665,000	665,000
B-11	Police District Stations	-	-	-	2,500,000	2,500,000	5,000,000
B-12	Police Training Center Facility	-	-	14,415,000	-	-	14,415,000
Subtotal, Bond Funded Facilities/Major Construction		\$ 284,172,576	\$ 51,693,913	\$ 38,937,584	\$ 42,875,495	\$ 55,159,256	\$ 472,838,824

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Facilities and Major Renovation Planning

1	Fire Station 12 Relocation	\$ -	\$ 175,000	\$ -	\$ -	\$ -	\$ 175,000
2	Fire Station 29 (completion of construction)	230,000	-	-	-	-	230,000
3	Fire Station 3 Replacement	-	-	560,000	-	-	560,000
4	Fire Station 30	-	-	-	425,000	-	425,000
5	Fire Training Facility Expansion	-	-	-	300,000	-	300,000
6	Police District Stations	-	-	500,000	500,000	500,000	1,500,000
7	Police Training Center Facility	-	995,000	-	-	-	995,000
Subtotal, Facilities and Major Renovation Planning		\$ 230,000	\$ 1,170,000	\$ 1,060,000	\$ 1,225,000	\$ 500,000	\$ 4,185,000

Facility Improvements

1	Air Handler Unit Variable Speed Drive	\$ 255,000	\$ 480,000	\$ 340,000	\$ -	\$ -	\$ 1,075,000
2	City Space Needs	-	-	-	-	150,000	150,000
3	Design and Boiler Replacement at Municipal Bldg	-	-	-	350,000	-	350,000
4	Downtown System Upgrades	-	-	-	-	350,000	350,000
5	Fire Station Backflow Prevention Devices	55,000	-	55,000	-	-	110,000
6	Fire Station Backup Generators	400,000	420,000	-	460,000	475,000	1,755,000
7	Fire Station Improvements	150,000	150,000	200,000	150,000	200,000	850,000

Project Costs for General Public Improvement Program

		2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
8	Fire Station Roof Repair & Replacement	310,000	-	310,000	310,000	310,000	1,240,000
9	General Facility Maintenance	-	-	-	-	250,000	250,000
10	Generator Installation, Wade Ave Building	-	260,000	-	-	-	260,000
Subtotal, Facility Improvements		\$ 1,170,000	\$ 1,310,000	\$ 905,000	\$ 1,270,000	\$ 1,735,000	\$ 6,390,000

Technology, Equipment, Other

1	Fire 800 MHz Radios	\$ 95,000	\$ -	\$ 250,000	\$ 250,000	\$ 250,000	\$ 845,000
2	Sonet Fiber Network	-	-	990,000	725,000	1,115,000	2,830,000
3	Alliance Medical Ministries	50,000	-	-	-	-	50,000
4	Contemporary Art Museum	400,000	-	-	-	-	400,000
5	Convention and Performing Arts Center Reserve	-	500,000	500,000	500,000	500,000	2,000,000
6	Hospice Capital	150,000	-	-	-	-	150,000
7	Interact Capital	100,000	-	-	-	-	100,000
8	Walnut Creek Amphitheater Improvements	386,677	401,677	416,677	431,677	446,677	2,083,385
Subtotal, Technology, Equipment, Other		\$ 1,181,677	\$ 901,677	\$ 2,156,677	\$ 1,906,677	\$ 2,311,677	\$ 8,458,385

Economic Development

1	Downtown Wayfinding Program	\$ 55,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 215,000
2	Downtown West Gateway	-	-	-	-	500,000	500,000
3	Façade Grant Program	100,000	100,000	50,000	50,000	50,000	350,000
4	Market Plazas (One Exchange to Transit Station)	-	-	600,000	865,000	250,000	1,715,000
5	Moore Square Implementation Strategy	150,000	350,000	350,000	350,000	350,000	1,550,000
6	Peace Street Streetscapes	250,000	250,000	-	-	-	500,000
Subtotal, Economic Development		\$ 555,000	\$ 740,000	\$ 1,040,000	\$ 1,305,000	\$ 1,190,000	\$ 4,830,000

Total Projects Costs, General Public Improvements \$ 287,309,253 \$ 55,815,590 \$ 44,099,261 \$ 48,582,172 \$ 60,895,933 \$ 496,702,209

Funding Plan for General Public Improvement

	2009-10	2010-11	2011-12	2012-13	2013-14	Phase I Summary
General Fund	\$ 2,150,000	\$ 3,000,000	\$ 4,000,000	\$ 4,500,000	\$ 4,500,000	\$ 18,150,000.00
Interest Income	200,000	220,000	245,000	275,000	290,000	1,230,000
Artspace Building Sale Proceeds	400,000	-	-	-	-	400,000
Walnut Creek Amphitheater Rent	386,677	401,677	416,677	431,677	446,677	2,083,385
Convention Center Interlocal Agreement Funding	-	500,000	500,000	500,000	500,000	2,000,000
Certificates of Participation	284,172,576	51,693,913	24,357,584	36,010,495	49,130,256	445,364,824
Alternative Finance Funding	-	-	14,580,000	6,865,000	6,029,000	27,474,000

Total Funding Plan, General Public Improvements \$ 287,309,253 \$ 55,815,590 \$ 44,099,261 \$ 48,582,172 \$ 60,895,933 \$ 496,702,209

Phase I – General Public Improvement

Bond Funded Facilities and Major Renovation Construction

B-1. Clarence Lightner Public Safety Center: \$205,270,000

Construction of a Public Safety Center located in the Downtown Business District. The facility will comprise an estimated 174,973 net square feet and include ECC, Emergency Operations, Traffic Signal Control and Public Safety Center functions. This building will also include general office space as part of a proposed 305,000 gross square foot office tower.

B-2. Remote Operations Facility, Downtown: \$93,831,385

This item is for the construction of a new Downtown Remote Operations Facility for new Street Maintenance, Vehicle Fleet Service, Building Maintenance, Parks and Recreation and Traffic Engineering facilities. The estimate includes building and site work costs, off-site development costs, design development contingency, escalation and a construction contingency.

B-3. Remote Operations Facility, Mt. Herman: \$79,060,214

This item is for the construction of a new North West Remote Operations Facility for new Street Maintenance, Vehicle Fleet Service, Building Maintenance, Parks and Recreation and Traffic Engineering facilities. The estimate includes building and site work cost estimates as well as estimate of off-site development costs, design development contingency, escalation and construction contingency.

B-4. Remote Operations Facility, Northeast: \$3,000,000

This item is for the acquisition and construction of a new north East Remote Operations Facility for new Street Maintenance, Vehicle Fleet Service and Traffic Engineering facilities. This facility would be used for emergency storm operations. The estimate includes building and site work costs, off-site development costs, design development contingency, escalation and a construction contingency.

B-5. Remote Operations Facility, Wilder's Grove: \$ 32,294,154

This item is for the construction of a new Solid Waste and Vehicle Fleet Services Operations Facility on the existing Wilders Grove Landfill. The estimate includes building and site work costs, off-site development costs, design development contingency, escalation and a construction contingency.

B-6. Marsh Creek Maintenance Facility: \$31,909,071

This Parks Operation facility is currently located on an existing property so no real estate acquisition is anticipated. Estimate of building and development costs were prepared using space requirements developed in a study by Carter Burgess. The estimate includes building and site work cost estimates as well as estimate of off-site development costs, design development contingency, escalation and construction contingency.

B-7. Fire Station 12 Relocation: \$3,530,000

Relocate Station 12 to provide a more efficient response to assigned area. These funds will also construct a larger station, enabling a ladder company to deploy from the station and thus provide necessary ladder coverage to this area of the City. This estimate includes the LEED policy.

B-8. Fire Station 3 Replacement: \$3,700,000

This is a proposal to construct a new fire station to replace Station 3, located at 13 South East Street. Station 3, built in 1951, is inadequate to serve as a city fire station. Though there have been improvements, it remains functionally obsolete and is too small. A new fire station, located in the same area, would be better equipped to respond to the needs of those in this area of Raleigh. No additional operational costs are associated with this project since it is a replacement of an existing fire station. LEED policy.

B-9. Fire Station 30: \$164,000

This estimate reflects the cost of constructing and equipping a fire station that includes LEED policy. The cost of a fire apparatus (one engine) and station equipment have been added to last fiscal year's budget office projection. This station would be staffed by 15 personnel.

B-10. Fire Training Facility Expansion: \$665,000

The Fire Department is growing and the current training facility is inadequate. It is not clear whether it will be possible to expand the Keeter Training Center or whether it will be necessary to secure land and construct a second facility elsewhere in the city. It is proposed that a consultant be engaged in FY13 to assess City needs and provide recommendations.

B-11. Police District Stations: \$5,000,000

Currently the Police Department leases space throughout the City housing satellite Police Stations (Precincts). As part of the FY09 Adopted CIP, the Police Department received funding for a study to identify and purchase available property and to explore the use of the procured land to build City-Owned Precinct Buildings to eliminate future leasing. Facilities that are built to the specifications of the Police department will address the safety and security concerns unique to a full-service Police station. However, opportunities also exist for co-location of other City departments at key locations throughout the city. This request includes funding for the procurement of land and constructions costs of building a City-Owned Precinct Buildings at the rate of one building a year.

B-12. Police Training Center Facility: \$14,415,000

This funding is the initial investment in the construction of a Police Training Center on City-owned land at Battle Bridge Road adjacent to the current Police Range facilities. The facility will be approximately 50,000 square feet in size. Construction costs include landscaping, phones/data wiring, CCTV, high-density storage, testing and permitting. The current training facility at Spring Forest Road is too small for current needs. The remaining funding is budgeted in Phase II.

Facilities and Major Renovation Planning**1. Fire Station 12 Relocation: \$175,000**

This funding accounts for the design and engineering costs associated with the project as listed above (See description under *Bond Funded New Construction and Major Renovation*).

2. Fire Station 29: \$230,000

This is an estimate construct a fire station to serve a rapidly developing area where engine and ladder response times are excessive. This Station would be staffed by 30 personnel, 10 per shift who would be assigned to ladder and engine companies. The current recommendation is to locate this station in the northwestern portion of the city to address extreme growth in Brier Creek and surrounding areas. Expansion of the project includes the incorporation of LEED policy and replacing a portion of previously budgeted funds which were diverted for a strategic land acquisition to relocate Station 12.

3. Fire Station 3 Replacement: \$560,000

This funding accounts for the design and engineering costs associated with the project as listed above (See description under *Bond Funded New Construction and Major Renovation*).

4. Fire Station 30: \$425,000

This funding accounts for the design and engineering costs associated with the project as listed above (See description under *Bond Funded New Construction and Major Renovation*).

5. Fire Training Facility Expansion: \$300,000

This funding accounts for the design and engineering costs associated with the project as listed above (See description under *Bond Funded New Construction and Major Renovation*).

6. Police District Stations: \$1,500,000

This funding accounts for the design and engineering costs associated with the project as listed above (See description under *Bond Funded New Construction and Major Renovation*).

7. Police Training Center Facility: \$995,000

This funding accounts for the design and engineering costs associated with the project as listed above (See description under *Bond Funded New Construction and Major Renovation*).

Facility Improvements1. Air Handler Unit Variable Speed Drive: \$1,075,000

The current Variable Speed Drive Air Handler Unit was installed in 1983 with a life cycle of 25 years. In 2008 this equipment reached its life expectancy, and needs to be replaced.

2. City Space Needs: \$150,000

This funding request is for providing City department space in order to accommodate their current and future staff growth. The funding will go towards upfitting City owned or leased space in order to meet the O'Brien Atkins' space guidelines as well as the operational needs of the department. Possible space funding needs includes: upfit current city owned space, secure/upfit potential lease space, relocation of departments/divisions.

3. Design and Boiler Replacement at Municipal Building: \$350,000

The City of Raleigh Municipal Building boiler has reached the end of its life cycle, and needs to be replaced. Energy efficient concepts will be applied into design and project implementation.

4. Downtown System Upgrades: \$350,000

This funding will act as a reserve for unanticipated future necessities.

5. Fire Station Backflow Prevention Devices: \$110,000

This project will install backflow devices within the water supplies at 14 fire stations throughout the City in accordance with municipal requirements.

6. Fire Station Backup Generators: \$1,755,000

Newer fire stations were equipped with backup generators when they were constructed in accordance with Department of Homeland Security recommendations. Older stations do have portable gasoline-powered generators; however, these generators cannot be left unattended, will not power the entire facility, and gasoline may not always be available to fuel them. This funding will allow standby generators to be installed at all facilities over the next four years.

7. Fire Station Improvements: \$850,000

This project will provide maintenance to the City's fire stations, half of which are over 30 years old. Others are more than 40 years old. Renovations are needed at many of these stations. Over the next five years, this request will pay for roof, kitchen, bathroom, floor, window, boiler, driveway and parking area repaving as well as other repair/replacements needed to maintain these facilities.

8. Fire Station Roof Repair and Replace: \$1,240,000

This project involves a range of work from simple repairs to complete roof replacement to existing fire station roofs based on a study performed in late 2006. The roof repairs and replacements that were deemed the most pressing were prioritized by a roof consultant and proposed in the FY07/08. All roofs have been studied for repairs/replacement and prioritized by year in this funding request. Most are 30 to 40+ years old.

9. General Facility Maintenance Program: \$250,000

This funding is for the lifecycle replacement of facility systems based on system age and condition. Typical systems include: HVAC, boilers, elevators, towers and chillers, and variable speed drives.

10. Generator Installation, Wade Avenue Building: \$260,000

This project will install an emergency back-up generator for the administrative and service areas in the Wade Avenue Parks and Recreation Building. This building serves as the main hub for events, programs, and camps.

Technology, Equipment, Other1. Fire 800 MHz Radios: \$845,000

This request is a continuation of the previous three years' CIP projects which provided funding for 800 MHz radios. The FY09 request provides for base radios and the FY10 request provides for the addition of a fifth hand held radio on those 19 fire apparatus with 5 personnel assigned.

2. Sonet Fiber Network: \$2,830,000

The SONET network will provide a City-owned and maintained network for all city facilities. Currently, these facilities use rented network connections (from Time Warner 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.

3. Alliance Medical Ministries: \$ 50,000

This funding is for the Capital Campaign of the Alliance Medical Ministries, Inc.

4. Contemporary Art Museum: \$400,000

This funding will provide capital matching funds to the Contemporary Art Museum.

5. Convention and Performing Arts Centers Reserve: \$2,000,000

This is reserve funding from a portion of the annual appropriation the city receives from the Wake County Prepared Food and Beverage tax, to be utilized for future, undesignated capital maintenance at both the Convention and Performing Arts Centers.

6. Hospice Capital: \$150,000

This capital funding will contribute towards a 20-bed inpatient and residential hospice facility.

7. Interact Capital: \$100,000

This capital funding will contribute towards expanding Interact's shelter space in order to increase capacity.

8. Walnut Creek Amphitheater Facility Improvements: \$2,083,385

This funding will provide for various facility maintenance and improvements to the amphitheater structure and grounds.

Economic Development1. Downtown Wayfinding Program: \$215,000

The Downtown Wayfinding Program intends to design a new wayfinding system for access to and circulation within downtown addressing the deficiencies of the existing wayfinding signage, acknowledging the particular constraints of a mode of travel (vehicular speed, one way streets, pedestrians, new visitors, etc.) The system will serve to both direct visitors (and therefore reduce unnecessary traffic) and inform them of our tourist destinations (museums, districts, convention center).

2. Downtown West Gateway: \$500,000

This proposal will provide funding to address needed improvements to streets, sidewalks, street trees, parking, public areas, utility relocations, and other public improvements in the areas surrounding the Downtown Multi-Modal Transportation Center (MTC) and the South Saunders Redevelopment Area as part of the implementation of the Downtown West Gateway Small Area Plan. This request will be used to accumulate sufficient funds to make the necessary public improvements.

3. Façade Grant Program: \$350,000

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, the Fayetteville Street Urban Design Manual or the existing Downtown Urban Design Guidelines.

4. Market Plazas (One Exchange to Transit Station): \$1,715,000

Design and implementation of plans to improve the pedestrian plazas, crosswalk, and transit station pedestrian areas in the 200 block of Fayetteville Street that connect Fayetteville Street, One Exchange Plaza, the Moore Square Transit Station and Moore Square. It would 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.

5. Moore Square Implementation Strategy: \$1,550,000

This program is intended to implement the Moore Square South Development Strategy. The development strategy targets the use/development of City-owned property to further catalyze private sector residential development on the south and east of Moore Square and strengthen the connection between these areas and the Downtown Core. This program provides funding for assessing needed infrastructure improvements, engineering feasibility studies and construction of improvements to support the redevelopment of City- and privately-owned parcels identified in the Moore Square South Development Strategy area.

6. Peace Street Streetscapes: \$500,000

Preparation of streetscape construction plan for West Peace Street from St. Mary's Street to West Street to include as built survey, data collection and analysis, schematic design, design development, construction documents, bidding and pricing for the improvements. The general improvements will include sidewalks, street trees with tree grates, selected curb replacement, driveway consolidation, intersection signal poles and mastarms, undergrounding of Progress Energy secondary and service lines, and undergrounding of all BellSouth and Time Warner service drop lines.

Phase II - General Public Improvement

Bond Funded Facilities and Major Renovation Construction

Fire Station 30: \$3,907,800

This estimate reflects the cost of constructing and equipping a fire station that includes LEED policy. This station would be staffed by 15 personnel.

Fire Training Facility Expansion: \$2,000,000

This is a long range goal that will need to be addressed due to the growth of the fire department and the inadequacy of the current training facility. It might be possible to expand the Keeter Training Center but it could be necessary to secure land and construct a second facility somewhere else in the city. It is proposed that a consultant be engaged early to assess our needs and provide a recommendation. At that point, it will be possible to provide more concrete cost projections for this project.

Police District Stations: \$5,500,000

This funding continues the investment for improving the Police Department's precincts based on the results of the FY09 precinct study.

Facility Improvements

City Space Needs: \$750,000

This funding request is for providing City department space in order to accommodate their current, and future, staff growth. Possible space funding needs includes: upfit current city owned space, secure/upfit potential lease space, relocation of departments/divisions.

Fire Station Backup Generators: \$1,000,000

Project purpose is to install stand by generators at all fire department facilities.

Fire Station Improvements: \$1,000,000

More than half of the city's fire stations are over 30 years old. Others are more than 40 years old. Renovations are needed at many of these stations. Over the next five years, this request will pay for repairs to kitchens, bathrooms, floors, windows, boilers, driveway and parking areas as well as other repairs/replacements needed to maintain these facilities.

Fire Station Roof Repair & Replacement: \$1,750,000

Repair or replace the roofs on selected fire facilities, many of which are 30 to 40+ years old. In conjunction with Construction Management an evaluation of all station roofs has been completed by a roofing consultant.

General Facility Maintenance: \$1,000,000

This funding is for the lifecycle replacement of facility systems based on system age and condition. Typical systems include: HVAC, boilers, elevators, towers and chillers, and variable speed drives.

Technology, Equipment, OtherFire 800 MHz Radios: \$1,250,000

Continuation of previous CIP projects which provided funding for new and replacement costs for 800 MHz radios.

Sonet Fiber Network: \$1,048,582

This funding continues the investment for the SONET network, a City-owned and maintained network for all City facilities.

Convention and Performing Arts Center Reserve: \$2,500,000

This is reserve funding from a portion of the annual appropriation the city receives from the Wake County Prepared Food and Beverage tax, to be utilized for future, undesignated capital maintenance at both the Convention and Performing Arts Centers.

Economic DevelopmentDowntown Wayfinding Program: \$250,000

The Downtown Wayfinding Program intends to design a new wayfinding system for access to and circulation within downtown addressing the deficiencies of the existing wayfinding signage, acknowledging the particular constraints of a mode of travel (vehicular speed, one way streets, pedestrians, new visitors, etc.) The system will serve to both direct visitors (and therefore reduce unnecessary traffic) and inform them of our tourist destinations (museums, districts, convention center).

Downtown West Gateway: \$800,000

This proposal will provide funding to address needed improvements to streets, sidewalks, street trees, parking, public areas, utility relocations, and other public improvements in the areas surrounding the Downtown Multi-Modal Transportation Center (MTC) and the South Saunders Redevelopment Area as part of the implementation of the Downtown West Gateway Small Area Plan. This request will be used to accumulate sufficient funds to make the necessary public improvements.

Façade Grant Program: \$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, the Fayetteville Street Urban Design Manual or the existing Downtown Urban Design Guidelines.

Fayetteville Street: \$1,500,000

This program is intended to place funds for the continuation of the Fayetteville Street Renaissance project - Phase III. It includes a continuation of the Fayetteville streetscape through Development Sites 2 and 3 between South and Lenoir Streets. It would include streetscape improvements on both sides of the street, traffic signals at the two intersections, and signage.

Market Plazas (One Exchange to Transit Station): \$35,000

Design and implementation of plans to improve the pedestrian plazas, crosswalk, and transit station pedestrian areas in the 200 block of Fayetteville Street that connect Fayetteville Street, One Exchange Plaza, the Moore Square Transit Station and Moore Square. It would 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.

Moore Square Implementation Strategy: \$350,000

This program is intended to implement the Moore Square South Development Strategy. The development strategy targets the use/development of City-owned property to further catalyze private sector residential development on the south and east of Moore Square and strengthen the connection between these areas and the Downtown Core. This program provides funding for assessing needed infrastructure improvements, engineering feasibility studies and construction of improvements to support the redevelopment of City- and privately-owned parcels identified in the Moore Square South Development Strategy area.

Parking Decks Retail Ground Floor Upfit: \$1,000,000

This program is to develop architectural plans and a construction budget for upfit of street level space in City-owned Downtown parking structures, including the Convention Center Parking Deck; Wilmington Street Parking Deck; Performing Arts Center Parking Deck and the new Blount Street Parking deck.

Public Realm Improvements: \$2,750,000

This funding will provide for a program to continue implementation of the "Five-in-Five" strategy to improve the pedestrian environment in the downtown area. Potential improvements include the widening of sidewalks, improvements to crosswalks and street crossing treatments, pedestrian friendly signalization, and minimizing crossing distances. It will also include funding devoted to undertaking a public realm study which will give the City a baseline to begin identifying needed improvements.



CIP Account Codes for Capital Projects

TRANSPORTATION			
Major Streets		Fund	Org
1	Falls of Neuse Road Realign and Widen (*)	531	9455
3	Rock Quarry Road Widening, Part B (*)	531	9458
7	Wade Avenue Improvements (*)	531	9899
Street Improvements			
1	Street Resurfacing	525/531	8380
6	Traffic Engineering Center Improvements	525	9775
8	Repair and Maintenance City Bridges	525	9449
Bicycle, Pedestrian and Planning Improvements			
3	Sidewalk Repairs	515	8298
11	SSDA Handbook Update	515	8029
12	Advanced Planning Feasibility Studies	515	9904
13	Wetland Mitigation & Delineation	515	9905
Transit Projects			
1	Transit Equipment and Facilities	525	8420
2	Bus and Van Replacement	525	8420
3	Preventive Maintenance	525	8420
4	Design/Engineering/Construction	525	8420
5	Maintenance Operations Facility Construction	525	8420
Parking Improvement Program			
1	Parking Deck Maintenance & Imps	446	9277
PUBLIC UTILITIES			
Water Projects		Fund	Org
2	Benson Road Transmission Main 16-inch (A502)	348	9367
3	DEBWTP Backwash Waste Recycle Facility	348	8030
5	Elevated Water Tank Rehabilitation and Maintenance	348	9026
6	Emergency Water Interconnections	348	9939
9	EMJ WTP Sodium Permanganate Facility	348	9778
10	EMJ WTP Wastewater Facilities Expansion	348	9777
11	EMJWTP Clearwell Rehabilitation	348	9285
12	EMJWTP Facility/Equipment Rehabilitation	348	9207
13	EMJWTP Spill Containment Improvements	348	9574
14	Falls Lake Initiative	348	9937
15	Falls Lake RWPS Improvements	348	9490
16	Garner Road Transmission line 16-inch (B504)	348	8037
18	Little River Res.Wetland Mitig. Property Acquis.	348	9940
19	Little River Reserv Wake City Land Acqu Reimbursement	348	9782
21	Little River Reservoir Environmental Impact Statement	348	9491
22	New Rand Road Transmission Main 16-in (A503)	348	8035
25	Property Acquisitions	348	9282
26	Remote Operations Center	320	9396
27	Service Area Growth (Annex- Water)	320	8010
28	Telemetry Upgrades	348	9776
29	Thoroughfare Mains	320	8337
30	Water Booster Pump Station Rehabilitation	348	9019
31	Water Distribution WQ Program, Study, Eval. & Design	348	9487

CIP Account Codes for Capital Projects

PUBLIC UTILITIES (continued)

		Fund	Org
32	Water Main Replacement/Rehab	348	8468
34	Water Service Replacement	348	8031
35	Wendell Boulevard Transmission Extension (A901)	348	8036
36	Wendell Water Distribution Improvements	348	9787
37	Zebulon Water Booster PS Generator	348	9792
38	Zebulon Water Distribution Improvements	348	9789

Wastewater Projects

1	Cemetary Sewer Main Replacement	349	9028
6	Dunn Road Sewer Replacement	349	9411
9	Main Replacement	349	8468
10	Neuse River Off-site Reuse System Expansion	349	8530
13	NW Crabtree Creek PS & Equalization (C21&C22)	349	8040
16	NRWWTP Electrical Improvements	349	9302
18	Sanitary Sewer Pump Station Removal/Rehab/Repl	349	9030
19	Service Area Growth	325/349	8011
20	Sewer System Capacity	325	8039
43	Neuse River East Parallel Interceptor Phase II	349	9983

COMMUNITY DEVELOPMENT

	Community Development	Fund	Org
1	First Time Home Ownership	724	8666
2	Homelessness Plan and Support	724	7589
3	Homeowner Repair Loan Program	723	7593
4	Joint Venture Rental	724	8667
5	Limited Repair Program	724	7587
6	Loan Servicing	720	7501
7	Neighborhood Revitalization	724	7588
8	Rehab/ Purchase of Housing Units and Land	724	8668

PARKS AND RECREATION

	Parks and Recreation Acquisition	Fund	Org
2	Greenway Acquisition	636	8431

	Development Projects	Fund	Org
4	Building Improvements	636	9138
5	Park Site Improvements	625	8232
7	Tennis Court Upgrades	625	8334
8	Roof Repairs	625	8237
9	Paving Improvements	625	8236
10	Park Fencing	625	8106
14	Community Facility Upgrades	636	8574
15	Picnic Shelters	636	8847
16	Aquatic Improvements	625/636	8849
17	Greenway Trail Resurfacing	625	8124
18	Field Upgrades	625	8939
19	Electrical - Fields/Courts	625	8942
20	Street Tree Replacement	625	9037
21	Lead Paint/Asbestos Abatement	625	8851
23	Carousel Animal Restoration	625	9040
24	Multipurpose Field Renovation	625	9548

CIP Account Codes for Capital Projects

PARKS AND RECREATION (continued)

		Fund	Org
25	Safety Compliance	625	9812
27	Raleigh Little Theatre Improvements	625	9041
30	Theater in the Park (TIP)	625	8335
32	Volunteerism and Partnership	625	9385
35	Fayetteville Street Renovation Impacts	625	9386
39	Moore Square Improvements	625	9820?
40	Maintenance Operations Facilities	625	9821
43	Camp Durant Nature Park Improvements	625	9922
44	Greenway Bridge/Boardwalk Repairs	625	9923
52	Structure Repair and Replacement	625	9925
53	Walnut Creek Softball Complex Improve	636	8366
54	Wooten Meadows Master Plan	625	8606
68	Site Security	625	8028

2007 Park Bond Projects

B52	Halifax Center Improvements	636	9928
B53	Jaycee Center Expansion	636	9929
B55	Neuse River Greenway Completion	636	9930
B73	Land Acquisition	636	9932
B59	Carolina Pines Community Center Expansion	636	8533
B62	Raleigh Senior Center	636	9482
B63	Wilkerson Nature Preserve	636	9933
B64	Mordecai Park Interpretive Center	636	8198
B65	Randleigh Farm	636	9825
B66	Aquatic Facility	636	8012
B74	NE Raleigh Community Center	636	9881
B69	Lake Johnson Facility	636	8491

STORMWATER

	Stormwater Program	Fund	Org
4	Drainage System Inventory	470	9685
8	Grist Mill Northwest Drainage	470	8022
9	Grist Mill/ Harps Mill Drainage	470	8023
10	Harps Mill Road/ Haymarket Drainage	470	8027
20	Stormwater Petition Projects	470	9139
21	Stormwater System Repairs	470	8659

Neuse Basin Environmental Program

1	City Facility Water Quality Retrofit Projects	470	8018
2	City Hall Water Quality Retrofit Projects	470	8019
5	Rainwater Harvesting	470	8021
9	Water Quality Cost Share	470	8371

GENERAL PUBLIC IMPROVEMENT

	General Public Improvement	Fund	Org
<i>New Facilities and Major Renovation Construction</i>			
B-1	CEL Public Safety Center w/ Office or Parking	507	9908
B-2	Remote Operations Facility, Downtown	506	9396
B-3	Remote Operations Facility, Mt. Herman	506	9912
B-5	Remote Operations Facility, Wilder's Grove	506	9915
B-6	Marsh Creek Maintenance Facility	506	9914

CIP Account Codes for Capital Projects

GENERAL PUBLIC IMPROVEMENT (continued)			
<i>New Facilities and Major Renovation Planning</i>		Fund	Org
1	Fire Station 29 (completion of project)	505	8990
<i>Facility Improvements, Maintenance & Systems</i>			
1	Air Handler Unit Variable Speed Drive	505	8042
5	Fire Station Backflow Prevention Devices	505	8961
6	Fire Station Backup Generators	505	9694
7	Fire Station Improvements	505	9512
8	Fire Station Roof Repair & Replacement	505	9842
<i>Technology, Equipment, Other</i>			
1	Fire 800 MHz Radios	505	9438
3	Alliance Medical Ministries	505	9921
4	Contemporary Art Museum	505	9470
6	Hospice Capital	505	9860
7	Interact Capital	505	9859
8	Walnut Creek Amphitheater Improvements	650	8361
<i>Economic Development</i>			
1	Downtown Wayfinding Program	505	9703
3	Façade Grant Program	505	9209
5	Moore Square Implementation Strategy	505	8043
6	Peace Street Streetscapes	505	9093

RESOLUTION NO. 2009 – 942

**RESOLUTION ADOPTING THE CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 2009-10 THROUGH 2018-19**

WHEREAS, a Proposed Capital Improvement Program for Fiscal Years 2009-10 through 2018-19 was presented to the City Council on May 19, 2009; and

WHEREAS, the Proposed Capital Improvement Program described major capital projects, funding schedules, and a capital financing plan recommended by the City Administration; and

WHEREAS, the Capital Improvement Program provides a comprehensive framework for accomplishing needed public improvements;

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RALEIGH:

Section 1. That the document titled "*Proposed Capital Improvement Program, 2009-10 through 2018-19*" is hereby amended as follows:

Upper Neuse Initiative and Water Quality (Falls Lake Initiative) – \$1,500,000. This project has been increased by \$500,000 in FY10 of the Public Utilities Program, Page 20, Item 14.

Section 2. That the document titled "*Proposed Capital Improvement Program, 2009-10 through 2018-19*" is adopted as a policy to guide capital budgeting, financial planning, project schedules, and other activities related to the accomplishment of capital projects.

Section 3. That the adopted Capital Improvement Program supersedes all previously adopted Capital Improvement Programs.

Section 4. Authorized project expenditures for 2009-10 represent appropriations necessary for the completion of projects and therefore do not require re-appropriation in any subsequent fiscal year.

Section 5. That the adopted Capital Improvement Program may be amended by the City Council with budgetary actions or other actions related to the authorization of specific projects and by the adoption of future Capital Improvement Programs.

Adopted: June 16, 2009

Effective: July 1, 2009

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