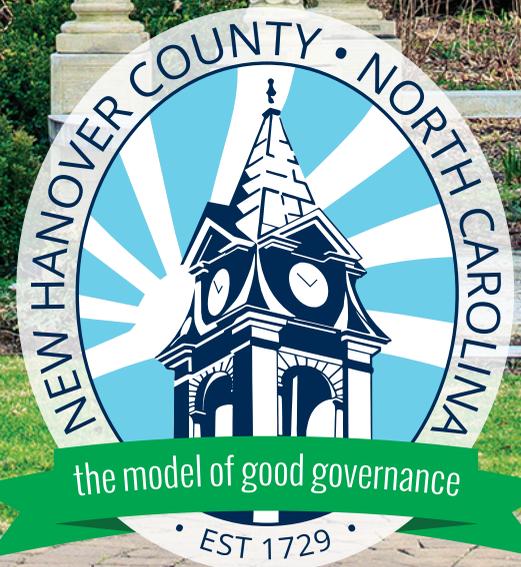


FY16-20

Recommended Capital Improvement Plan



Cover design by *Ginny Brinkman*
Photography by *Brett Cottrell*
NHC Public Affairs





1.0 Purpose

To maintain strong financial performance, the Capital Improvement Plan is essential to identify capital needs, establish priorities, develop defined project schedules and project fiscal resources for New Hanover County. Capital projects, for the purpose of the Capital Improvement Plan (CIP), are generally defined as fixed assets that have a useful life greater than five years, have a cost of \$100,000 or more and require more than 12 months to complete. Regular purchases of vehicles and equipment for routine operations and most maintenance and repair cost for County facilities are funded through the annual operating budget.

A CIP Committee was established to evaluate capital improvement project requests. The committee includes staff from Property Management, Engineering, Finance, Budget, Legal, and Risk Management. Each request for a capital improvement project is rated based on predetermined criteria related to how the project improves safety, meets mandates, completes an existing project, increases tax base, enhances economic development, the project's impact to services, the financing source, any changes to operating cost, effects to the environment, and the readiness of the project. In this process, the long-term objectives of the County are reviewed and translated into a more specific and well defined, multi-year plan of five years. In January, the committee recommends the CIP to the County Manager.

The County Manger recommends a final Five-Year CIP to the Board of Commissioners for adoption with the annual budget. The CIP adopted by the Board may be amended as needed to allow for changing capital priorities and fiscal constraints.

2.0 Dedicated Revenue for Capital Reserve Fund

General Statute 153-18, authorizes local government entities to establish a capital reserve fund for any purpose that the local government is authorized to issue bonds. The capital reserve fund shall be established by the Board of Commissioners' adoption of a resolution or ordinance which states the purposes for which the fund is created, the approximate periods of time during which the funds are to be accumulated for each purpose, the approximate amounts to be accumulated for each purpose, and the sources of funds for each purpose. The resolution or ordinance may be amended. Withdrawals from the capital reserve fund are authorized by resolution or ordinance for the purposes specified in the establishment ordinance or resolution or amendments to the original ordinance or resolution.

The New Hanover County Board of Commissioners has formally established the goal of maintaining unassigned fund balance in the General Fund in an amount of twenty-one percent (21%). A portion of fund balance in excess of twenty-one percent shall be transferred to the Capital Reserve Fund, as determined by the County Manager.

CAPITAL IMPROVEMENT PLAN FY16-FY20

3.0 Current Capital Improvement Projects – General Government

Page			FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
3	Emerg Mgt	800 MHz Public Safety Radio System Update	1,950,000					1,950,000
4	Emerg Mgt	Back-up 911 Center and Emergency Operations Center	901,077					901,077
5	Prop Mgt	Elevator Replacements	800,000	310,000				1,110,000
6	Library	Carolina Courtyard Renovation	302,000					302,000
7	Prop Mgt	Roof Replacements: Gov Ctr/Main and NE Libraries	13,000	455,000				468,000
8	Prop Mgt	HVAC Replacements: Main and NE Library	253,000	500,000				753,000
9	Econ Dev	Hwy 421 Water & Sewer Expansion	2,000,000	2,500,000	2,500,000	2,500,000	2,500,000	12,000,000
10	Health	Health Building Renovation - Phase II	400,200	3,902,000				4,302,200
11	Health	Health Building Renovation - Phase III	13,500	135,000				148,500
12	Engineering	Drainage Improvements	140,000	140,000	140,000	140,000	140,000	700,000
13	Prop Mgt	Government Center Physical Plant		1,000,000	1,000,000			2,000,000
14	Pks & Gdn	Castle Hayne/Northern Regional Park Phase 2		60,000	2,925,000			2,985,000
15	Pks & Gdn	Ogden Park Walking Trail		10,000	350,000			360,000
16	Library	Myrtle Grove Branch Library		300,000	2,464,680	1,330,840		4,095,520
17	Plan & Insp	Bike/Ped South Smith Creek Trail		345,000	255,000			600,000
18	Plan & Insp	Bike/Ped Middle Sound Loop Road Widening Project		172,500	127,500			300,000
19	Pks & Gdn	Olsen Park Phase 2			180,000	854,050		1,034,050
20	Pks & Gdn	Smith Creek Park Phase 2A			80,000	1,000,000		1,080,000
21	Sheriff	Detention Expansion			3,612,787	27,975,336		31,588,123
22	Pks & Gdn	Kings Grant Improvements			275,000			275,000
23	Elections	Precinct Equipment Replacement			1,271,000			1,271,000
24	Plan & Insp	Bike/Ped Laney High School Greenway			1,640,719	1,072,777	1,072,777	3,786,273
25	Plan & Insp	Bike/Ped Market Street Multi-Use			650,000	425,000	425,000	1,500,000
26	Pks & Gdn	Synthetic Turf Field					900,000	900,000
TOTAL EXPENDITURE			6,772,777	9,829,500	17,471,686	35,298,003	5,037,777	74,409,743

SOURCES OF REVENUE

	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total	
911 Grant - 800 MHz Public Radio System Update	1,185,687					1,185,687	
911 Fund Balance	716,434					716,434	
Monthly Surcharge Distribution	47,879					47,879	
911 Grant - Back-up 911 Center & EOC	901,077					901,077	
Park Bonds - Library Carolina Courtyard	150,000					150,000	
Fund raising - Library Carolina Courtyard	52,000					52,000	
Book sales - Library Carolina Courtyard	100,000					100,000	
Loan proceeds - Hwy 421 Water & Sewer	2,000,000	2,500,000	2,500,000	2,500,000	2,500,000	12,000,000	
Escrow - Medicaid Maximization Funds - Health Renov	413,700	382,124				795,824	
County Credit - Olsen Park Phase 2			180,000	229,670		409,670	
Possible Grant - PARTF Castle Hayne/Northern Regional			350,000			350,000	
Fund raising - Myrtle Grove Library			150,000			150,000	
Possible Grants for Bike & Pedestrian Projects		414,000	2,138,575	1,198,222	1,198,222	4,949,019	
Loan proceeds - Detention Expansion			3,612,787	27,975,336		31,588,123	
Sale of existing Myrtle Grove Library Property				1,200,000		1,200,000	
Possible Grant - PARTF Smith Creek Phase 2A				500,000		500,000	
Fund raising - Smith Creek Phase 2A				250,000		250,000	
General government revenues	1,206,000	6,533,376	8,540,324	1,444,775	1,339,555	19,064,030	
TOTAL REVENUE		6,772,777	9,829,500	17,471,686	35,298,003	5,037,777	74,409,743

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: 800 MHz Public Radio System Update (software & equipment)

Department: Emergency Management

Description: New Hanover County's current public safety radio system was purchased in February 2007. New Hanover County's original Astro 25 system was Motorola's version 7.1. In 2010, the system operating software platform was upgraded to Motorola's Astro 25, version 7.4. Motorola is currently releasing version 7.14 of the Astro 25 platform. The original operating system utilized Microsoft's Windows XP platform, which is no longer supported by Microsoft. The infrastructure components of our Motorola Astro 25 system are approaching end-of-life for service and parts, including switches, network routers and servers.

Justification: This project provides necessary updates to the critical operating components of New Hanover County's 800 MHz public safety radio system. Failure to update these components increases the risk of aging components failing and causing system outages. The Motorola MCC7500 radio consoles will go on parts availability-only support in 2018.

Project Start Date: July 2015

Completion Date: June 2016

Expenditures to Date: \$ - **FY15-16 Budget Request:** \$ 1,950,000

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Radio system upgrade	\$ 1,950,000					\$ 1,950,000
						\$ 1,950,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Grant	\$ 1,185,687					\$ 1,185,687
911 fund balance	\$ 716,434					\$ 716,434
Mthly surcharge distrib	\$ 47,879					\$ 47,879
						\$ 1,950,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
No additional cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Back-Up 911 Center and Emergency Operations Center
Department: Emergency Management

Description: This project will provide New Hanover County with a back-up 911 and Emergency Operations Center. This capital project is contingent upon space being made available at the Federal Point Fire Station, 9815 River Road, or another suitable location.

Justification: New Hanover County's Emergency Operations Center and 911 Communications Center serve critical roles in assuring the health and safety of our residents and guests. These facilities contain the infrastructure required to provide 911 emergency telephone service to the public and house the personnel and equipment for dispatching all fire, EMS and law enforcement assets in the County. The EOC serves as the central operating hub for the County's emergency response and recovery functions during natural and man-made disasters and at other times when conditions warrant. The County's facilities are vulnerable to a wide variety of risks, including fire, earthquakes, tornadoes, hurricanes, winter storms, floods, severe thunderstorms, hazardous materials incidents, biological hazards, radiological incidents and acts of terrorism. Any of these incidents could render the existing 911 Center and EOC totally inoperable, resulting in the loss of critical services. Failure to have adequate back-up facilities presents an immediate and long-term risk for the County and its citizens.

Project Start Date: July 2015
Completion Date: June 2016

Expenditures to Date: \$ - **FY15-16 Budget Request:** \$ 950,563

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Equipment	\$ 860,343					\$ 860,343
Furniture	\$ 40,664					\$ 40,664
						\$ 901,007

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Grant	\$ 901,077					\$ 901,077
						\$ 901,077

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Utilities	\$ 20,000	\$ 24,000	\$ 24,000	\$ 24,000	\$ 24,000	\$ 116,000
Equipment maintenance	\$ 112,383	\$ 134,964	\$ 134,964	\$ 134,964	\$ 134,964	\$ 652,239
Supplies	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 37,500
						\$ 805,739

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Carolina Courtyard Renovations
Department: Library

Description: As part of the 2008 Park Bond issue, the Library has \$150,000 available to create a better park experience in the Carolina Courtyard adjacent to Main Library. Preliminary conceptual work has been completed to transform the courtyard at 3rd and Chestnut Streets into an interactive learning space accessible from the library. This project will create a protected space accessible only through the library building and parklets on the park perimeter to attract visitors to the courtyard for a variety of activities.

Justification: Since construction of the parking deck in 2003, the Courtyard, which lost a quarter of its space, sits in the shadow of the 7-story garage. The Courtyard is experiencing problems with graffiti, loitering and littering. The Library has a strategic priority of Every Child Ready to Read and creating a literacy rich learning environment. Transformation of this space will extend library services for children and adults to the outdoors and create a welcoming exterior to attract citizens to the library and its multitude of resources. The Library's FY15 operating budget included \$48,000 for the design of the project.

Project Start Date: July 2015
Completion Date: June 2016

Expenditures to Date: \$ 48,000	FY15-16 Budget Request: \$ 302,000
Future Cost: \$ 302,000	
Total Project: \$ 350,000	

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Construction	\$ 302,000					\$ 302,000
						\$ 302,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Park bond	\$ 150,000					\$ 150,000
Fundraising	\$ 52,000					\$ 52,000
Book sale escrow	\$ 100,000					\$ 100,000
						\$ 302,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Interactive learning supplies		\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 40,000
Groundskeeping		\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 12,000
Security system	\$ 25,000	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 29,800
						\$ 81,800

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: HVAC Replacement

Department: Property Management

Description: This project will replace two large HVAC units at the Main Library and one large unit at the NE Library. All of these units are over fifteen years of age and have functioned, especially the NE Library, in extreme environmental conditions.

Justification: The purpose of this project is to replace units that are nearing the end of their life cycle, have been operating in a humid environment, which impacts maintenance and energy efficiency, and have a high utility cost. The longer these units remain the more inefficient they become. Because of the aging equipment the County must rely on outside contractors almost exclusively for service. More efficient and modern units will allow us to use in-house technicians for preventative maintenance.

Project Start Date: July 2015

Completion Date: June 2017

Expenditures to Date: \$ -

FY15-16 Budget Request: \$ 253,000

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Design	\$ 3,000					\$ 3,000
NE Library	\$ 250,000					\$ 250,000
Main Library		\$ 500,000				\$ 500,000
						\$ 753,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
General gov't revenues	\$ 253,000	\$ 500,000				\$ 753,000
						\$ 753,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
No additional cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Drainage Improvements

Department: Engineering

Description: This project is to make drainage improvements and emergency repairs in the unincorporated areas of the County.

Justification: This project is for making drainage repairs that are outside of the property owners capability. The projects improve community drainage and correct known drainage deficiencies. The work is primarily done in unowned right-of-ways. Usually these projects require US Army Corps of Engineers permits.

Project Start Date: July 1, 2009

Completion Date: on-going

Expenditures to Date: \$ 544,353

FY15-16 Budget Request: \$ 140,000

Future Cost: \$ 700,000

Total Project: \$ 1,244,353

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Improvements	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 350,000
Emergency repairs	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 350,000
						\$ 700,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
General gov't revenues	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 700,000
						\$ 700,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
No additional cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Myrtle Grove Branch Library

Department: Library

Description: The purpose of this project is to replace the Myrtle Grove Branch Library. The need for a larger facility was first identified in Library's 2005-2010 Strategic Plan as a priority project and has since been reaffirmed as a priority need in the library's 2010-2015 Strategy Map and Plan. The enlargement of the 6,800 sq. ft. to a 20,000 sq. ft. facility would provide enough space to house an adequate and useful collection of new materials, a children's room with its own programming space for story time and other activities, a community meeting room with a capacity of 200-plus, and enough study and computer space to meet a variety of service demands.

Justification: The Myrtle Grove Branch Library was constructed in 1992 and was designed to meet the needs of the Monkey Junction area. Since that time, the service population has more than doubled (area population in 1990 was 31,227; in 2010 it was 73,256) and the growth is expected to continue to increase. By 2020 county planners project a population of almost 95,000 in a 5 mile radius of the branch. The original 6,800 sq. ft. of library space is no longer adequate to meet the growing needs of that community. Circulation for the last ten years has gone up 30.7%, visits to the library are up 35.5% and use of public access computers has risen over 200%. We are currently averaging around 200 children for Wednesday story times (three half-hour programs: lap sit, toddler time and preschool) which creates serious parking and space problems. If this project is not funded, the entire southern portion of the county will lack the services and facilities necessary to meet citizen needs. This will create large disparities between the services offered to resident's downtown and northeast sections of the county and those living in the southern sections of the county.

Project Start Date: July 2016

Completion Date: June 2019

Expenditures to Date: \$ -

FY15-16 Budget Request: \$ -

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Architecture/design/fees		\$ 300,000				\$ 300,000
Construction			\$ 2,164,680	\$ 1,180,840		\$ 3,345,520
Furniture/fixtures/equipment			\$ 300,000	\$ 150,000		\$ 450,000
						\$ 4,095,520

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Sale of property				\$ 1,200,000		\$ 1,200,000
General gov't revenues		\$ 300,000	\$ 2,314,680	\$ 130,840		\$ 2,745,520
Fund raising			\$ 150,000			\$ 150,000
						\$ 4,095,520

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Salaries & benefits				\$ 86,456	\$ 89,906	\$ 176,362
						\$ 176,362

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Olsen Park Phase 2

Department: Parks and Gardens

Description: This project is Phase 2 of the City/County Olsen Park developments. The City of Wilmington will take the lead on the project and funding will be a 50/50 split as identified in the Olsen Park Contract. Phase 2 of the project includes two multi-purpose athletic fields and associated parking and roadway improvements. The City of Wilmington is responsible for the operation of the park.

Justification: This project is a result of the 2006 Parks Bond Referendum. The City and County split project costs and the phases of development are identified in the signed agreement between the parties.

Project Start Date: July 2017

Completion Date: June 2019

Expenditures to Date: \$ -

FY15-16 Budget Request: \$ -

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
*Design & permitting			\$ 180,000			\$ 180,000
*Construction				\$ 854,050		\$ 854,050
						\$ 1,034,050

* Cost provided by the City of Wilmington

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
County credit			\$ 180,000	\$ 229,670		\$ 409,670
General govt revenues				\$ 624,380		\$ 624,380
						\$ 1,034,050

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
No additional cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Smith Creek Park Phase 2A

Department: Parks and Gardens

Description: Construction of Phase 2A of Smith Creek Park will include a new entry road, stormwater improvements, multi-purpose trails, equestrian ring, restrooms and picnic facilities.

Justification: Smith Creek is one of the County's most heavily used parks. We have identified a need for equestrian facilities, including trails (currently no public trails in NHC) and Smith Creek is one of the few parks that could accommodate such use.

Project Start Date: July 2017

Completion Date: June 2019

Expenditures to Date: \$ -

FY15-16 Budget Request: \$ -

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Design & permitting			\$ 80,000			\$ 80,000
Construction				\$ 1,000,000		\$ 1,000,000
						\$ 1,080,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Possible PARTF Grant				\$ 500,000		\$ 500,000
General gov't revenues			\$ 80,000	\$ 250,000		\$ 330,000
Fund raising for equestrian				\$ 250,000		\$ 250,000
						\$ 1,080,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
General maintenance				\$ 5,000	\$ 5,000	\$ 10,000
Salaries & benefits (2)				\$ 73,741	\$ 73,741	\$ 147,482
Utilities - electric/water/sewer				\$ 5,000	\$ 5,000	\$ 10,000
Equipment				\$ 45,000		\$ 45,000
						\$ 212,482

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Bike and Pedestrian Laney High School Greenway

Department: Planning and Inspections

Description: Design and construct 2.5 mile of Greenway along N. College Road centering on Laney High School and connecting the Cape Fear Community College North Campus with Murrayville Apartments. The Greenway is the highest ranking project in the fiscally constrained improvements list to be included in the MPO's Long Range Transportation plan. The greenway is also included in the Wilmington/New Hanover Comprehensive Greenway Plan adopted in 2013. The project will be eligible for grant funding. Annually, the Wilmington Metropolitan Planning Organization receives approximately \$2.5m in federal funds to be used predominately for bicycle/pedestrian projects. The allocation of these funds is a competitive process in which member jurisdictions apply and must supply a minimum 20% local cash match to be eligible for funding. The Planning & Inspections Department would like to fund the entire construction of this trail but would submit grant applications for this project. The Parks and Gardens Department would provide recurring maintenance.

Justification: The Laney High School greenway connects Cape Fear Community College with the Murrayville area and provides access to Laney High School and Trask Middle School for school children and adults in Northchase and Murrayville. This 2.5 mile trail would provide a safe route to school and active recreation, physical fitness, and non-motorized transportation opportunities for over 2000 households in proximate to the school. Nationwide studies and surveys ranging from the National Association of Home Realtors/National Association of Home Builders to the National Parks Service have shown that greenways, trails, and parks generate positive economic benefits to local government, home owners, and businesses through higher property values and corresponding higher tax assessments. Greenways can also improve the health of a community by providing safe and accessible areas for active living. Active living can positively influence the obesity rates which have risen dramatically over the past 25 years.

Project Start Date: July 2017

Completion Date: June 2020

Expenditures to Date: \$ -

FY15-16 Budget Request: \$ -

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Design/permitting			\$ 567,941			\$ 567,941
Construction			\$ 1,072,778	\$ 1,072,777	\$ 1,072,777	\$ 3,218,332
						\$ 3,786,273

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Possible NCDOT grant			\$ 1,312,575	\$ 858,222	\$ 858,222	\$ 3,029,019
General gov't revenues			\$ 328,144	\$ 214,555	\$ 214,555	\$ 757,254
						\$ 3,786,273

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
General maintenance					\$ 1,000	\$ 1,000
						\$ 1,000

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Bike and Pedestrian Market Street Multi-Use

Department: Planning and Inspections

Description: This 2.5 mile segment of Market Street is scheduled to receive access management treatment including medians through NCDOT's Highway Improvement Program from Military Cutoff to Marsh Oaks Drive. Plans for the road improvements include a multi use path. The path would connect to the existing cross city trail and would extend the trail along Market Street to allow access to existing multi use path sections near Marsh Oaks. DOT requires local contribution for the construction of multi use paths. As this project is broken into several phases including the Military Cutoff Extension project, funding sources may be available to augment any match the County can provide. At this time it is not clear if the required match will be 20% or 50%. Both the Market Street Corridor Plan and the Greenway plan identify a multi use path on this road segment. The Parks and Gardens Department would provide recurring maintenance.

Justification: Recent enabling legislation and NCDOT's Complete Streets Policy requires North Carolina counties to contribute where roadway improvements include bike and pedestrian facilities. Nationwide studies and surveys ranging from the National Association of Home Realtors/National Association of Home Builders to the National Parks Service have shown that greenways, trails, and parks generate positive economic benefits to local government, home owners, and businesses through higher property values and corresponding higher tax assessments. Greenways also improve the health of a community by providing safe and accessible areas for active living. Active living can positively influence the obesity rates which have risen dramatically over the past 25 years and are a critical concern in New Hanover County.

Project Start Date: July 2017

Completion Date: June 2020

Expenditures to Date: \$ -

FY15-16 Budget Request: \$ -

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Design/permitting			\$ 225,000			\$ 225,000
Construction			\$ 425,000	\$ 425,000	\$ 425,000	\$ 1,275,000
						\$ 1,500,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Possible NCDOT grant			\$ 520,000	\$ 340,000	\$ 340,000	\$ 1,200,000
General gov't revenues			\$ 130,000	\$ 85,000	\$ 85,000	\$ 300,000
						\$ 1,500,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
General maintenance					\$ 1,000	\$ 1,000
						\$ 1,000

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Synthetic Turf Field

Department: Parks and Gardens

Description: This project will convert one natural turf field to a synthetic turf field. The location of the new turf is still under consideration.

Justification: The demand for athletic field space is so high that we can't meet those demands and balance the health of the turf. We would like to convert one athletic field as a pilot. Most communities are moving to some synthetic fields to allow for play in various weather conditions. We have to close many of our northern park fields for several days following a rain event as the soils in that area do not drain well. This in turn increases play at Veteran's Park (sand based land) and causes major field loss there due to overuse. Having a turf field would help us balance the amount of play on well draining fields and provide a dry alternative to those who play in the northern district.

Project Start Date: July 2019

Completion Date: June 2020

Expenditures to Date: \$ -

FY15-16 Budget Request: \$ -

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Design & construction					\$ 900,000	\$ 900,000
						\$ 900,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
General govt revenues					\$ 900,000	\$ 900,000
						\$ 900,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
No additional cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -



CAPITAL IMPROVEMENT PLAN FY16-FY20

4.0 Current Capital Improvement Projects – Fire Services

Page		FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
28	Ogden Fire Station 16 Replacement	650,000	100,000	2,100,000			2,850,000
29	Roof Replacement Plan - Station 14 & Station 18	70,000	111,780				181,780
TOTAL EXPENDITURE		720,000	211,780	2,100,000	-	-	3,031,780

SOURCE OF REVENUE

	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Fire district revenue	70,000	211,780		-	-	281,780
Loan proceeds	650,000		2,100,000	-	-	2,750,000
TOTAL REVENUE	720,000	211,780	2,100,000	-	-	3,031,780

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Ogden Fire Station 16 Replacement

Department: Fire Services

Description: Replacement of the Ogden Fire Station #16.

Justification: The Ogden Fire Station #16 was constructed in 1961 as an all-volunteer fire station. The 8,800 square foot station has been modified several times over the years to accommodate increasing staff and response demands. Post consolidation, NHCFR leases this facility from the Ogden Volunteer Fire Department Association. There are significant concerns related to maintenance, public access, staff facilities, safety and efficiency. In its current state, staff has endured having only one shower which does not adequately accommodate female staff. The building is not sprinklered and is not fully NFPA compliant. The current configuration is not conducive to firefighter health and safety and is not ADA compliant. The facility becomes more maintenance intensive each year. In the 2009 Fire Protection Master Plan, Fire Station 16 was identified as first priority for station replacement.

Project Start Date: July 2015

Completion Date: June 2018

Expenditures to Date: \$ -

FY15-16 Budget Request: \$ 650,000

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Land purchase	\$ 650,000					\$ 650,000
Design		\$ 100,000				\$ 100,000
Construction			\$ 2,100,000			\$ 2,100,000
						\$ 2,850,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Fire district revenue		\$ 100,000				\$ 100,000
Loan proceeds	\$ 650,000		\$ 2,100,000			\$ 2,750,000
						\$ 2,850,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Utilities			\$ 19,500	\$ 19,500	\$ 19,500	\$ 58,500
Building maintenance			\$ 9,400	\$ 9,400	\$ 9,400	\$ 28,200
Equipment maintenance			\$ 5,800	\$ 5,800	\$ 5,800	\$ 17,400
						\$ 104,100



CAPITAL IMPROVEMENT PLAN FY16-FY20

5.0 Current Capital Improvement Projects – Environmental Management

Page		FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Totals
31	Landfill South End Partial Closure Cell 5B & 6A	1,960,000					1,960,000
32	Leachate Treatment Systems Upgrade	750,000	700,000				1,450,000
33	Landfill West Side Partial Closure Cells 6D & 6E			2,093,000			2,093,000
34	Southern Property Construction Cells 7 & 8			785,000	4,407,000		5,192,000
35	Landfill North & East Side Partial Closure Cells 6E & 2				2,540,700		2,540,700
36	Landfill Final Closure over Vertical Cells 4,5,6 Partial					4,180,190	4,180,190
TOTAL EXPENDITURE		2,710,000	700,000	2,878,000	6,947,700	4,180,190	17,415,890
REVENUE SOURCE		FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Totals
Environmental Management revenue		2,710,000	700,000	2,878,000	6,947,700	4,180,190	17,415,890
TOTAL REVENUE		2,710,000	700,000	2,878,000	6,947,700	4,180,190	17,415,890

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Landfill South End Partial Closure Cells 5B and 6A

Department: Environmental Management

Description: When landfill waste is filled to final elevations, state law requires closure to begin within 180 days. Closure also helps reduce the volume of leachate at the site, which would otherwise have a negative environmental impact and increased cost. Included in this project are Cells 5B (4.1 acres) and 6A (2.7 acres), covering a total of 6.8 acres. The cost projection has increased due to the depletion of on-site soil resources and the resulting need to purchase soil.

Justification: The project closes landfill cells no longer being used to receive solid waste. If this request is not funded, environmental concerns would quickly develop and we would be in violation of state law, along with negative environmental impact through increased leachate and potential risk of groundwater contamination. Costs would increase due to delayed closure.

Project Start Date: July 2015

Completion Date: June 2016

Expenditures to Date: \$ -

FY15-16 Budget Request: \$ 1,960,000

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Design	\$ 218,000					\$ 218,000
Construction	\$ 1,742,000					\$ 1,742,000
						\$ 1,960,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Envir Mgt revenue	\$ 1,960,000					\$ 1,960,000
						\$ 1,960,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
No additional cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Leachate Treatment System Upgrade

Department: Environmental Management

Description: Upgrade to the landfill's leachate treatment system as required by the National Pollutant Discharge Elimination System (NPDES) Permit. The Environmental Protection Agency (EPA) has established new, more restrictive limits for metal discharge. Changes in the existing leachate treatment system will be necessary in order to protect the environment and meet the EPA's new NPDES permit requirements.

The capital project fund was initiated in November, 2013 with \$500,000 in funding. The total project estimate is currently \$3,700,000, including Engineering services, equipment acquisition, an irrigation system for land application, and construction implementation. This amount may change dependent upon the cost of the irrigation system, currently estimated at \$700,000 of the total project cost (in FY17). Of the \$3,700,000, \$500,000 was included in the FY14 adopted budget, \$1,750,000 was included in the FY15 adopted budget, \$750,000 is planned for FY16 and \$700,000 is estimated for FY17.

Justification: Environmental impact via leachate discharge of metals exceeding NPDES permit levels, resulting in receipt of notice of violation and required payment of fines and/or consent orders. Potential groundwater contamination and associated safety issues.

Project Start Date: November 2013

Completion Date: June 2017

Expenditures to Date: \$ 2,250,000

FY15-16 Budget Request: \$ 750,000

Future Cost: \$ 1,450,000

Project Total: \$ 3,700,000

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Construction	\$ 750,000	\$ 600,000				\$ 1,350,000
Design		\$ 100,000				\$ 100,000
						\$ 1,450,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Envir Mgt revenue	\$ 750,000	\$ 700,000				\$ 1,450,000
						\$ 1,450,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Chemicals	\$ 50,000	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275	\$ 265,456
Contracted services	\$ 50,000	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275	\$ 265,456
Equipment maintenance	\$ 100,000	\$ 103,000	\$ 106,090	\$ 109,273	\$ 112,551	\$ 530,914
						\$ 1,061,826

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Southern Property Construction Cells 7 and 8

Department: Environmental Management

Description: Construction services required for landfill Cells 7 & 8 (previously labeled Southern Property Cells 1 & 2) on the Southern Property. The project was initiated in FY15 with \$50,000 for Engineering services (initial design). The construction phase of this project is anticipated to begin with Engineering design services (for the entire 20 acres) in FY17-18, followed by Cell 7 (10 acres) Engineering bidding/CQA and actual construction in FY18-19. The Engineering bidding/CQA services and actual construction of Cell 8 will follow in future years as capacity is needed.

Five (5) layers of liner will be installed to very strict specifications per state and federal regulations. This includes a Geosynthetic clay liner (GCL), Primary, Secondary, Biplaner and Triplaner liners. Each portion of this is contingent upon environmental and weather conditions, which may affect the schedule for completion. Each roll installed must be documented fully for fusion and thickness, sent to an outside laboratory for verification of specifications, monitored and dated. Project will also include new leachate transmission lines, roadways and stormwater control systems. Staff will assist with testing and documentation to save costs.

Justification: If the project is not funded, we would be unable to continue using the landfill for solid waste once there is no remaining disposal capacity in other cells.

Project Start Date: July 2015

Completion Date: June 2019

Expenditures to Date: \$ 50,000	FY15-16 Budget Request: \$ -
Future Cost: \$ 5,192,000	
Project Total: \$ 5,242,000	

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Design			\$ 785,000	\$ 350,097		\$ 1,135,097
Construction				\$ 4,056,903		\$ 4,056,903
						\$ 5,192,000

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Envir Mgt revenue			\$ 785,000	\$ 4,407,000		\$ 5,192,000
						\$ 5,192,000

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
No additional cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -

CAPITAL IMPROVEMENT PLAN FY16-FY20

Project Title: Landfill North and East Side Partial Closure Cells 6E and 2

Department: Environmental Management

Description: When landfill waste is filled to final elevations, state law requires closure to begin within 180 days. Closure also helps reduce the volume of leachate at the site, which would otherwise have a negative environmental impact and increased cost. Included in this project are Cells 6E (1.4 acres) and Cell 2 (7.0 acres), covering a total of 8.4 acres. Costs have increased over initial projections based upon the need to purchase soil due to the depletion of on-site soil reserves.

Justification: The project is needed to comply with state law and avoid environmental safety issues. If not funded, environmental safety concerns would quickly develop and we would be in violation of state laws, along with experiencing a negative environmental impact through increased leachate and potential risk of groundwater contamination. Costs would increase due to delayed closure.

Project Start Date: July 2018

Completion Date: June 2019

Expenditures to Date: \$ -

FY15-16 Budget Request: \$ -

Annual Capital Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Design				\$ 294,000		\$ 294,000
Construction				\$ 2,246,700		\$ 4,787,400
						\$ 5,081,400

Funding Source

Source	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
Envir Mgt revenue				\$ 2,540,700		\$ 2,540,700
						\$ 2,540,700

Increase in Annual Operating Costs by Activity

Activity	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
No additional cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -

CAPITAL IMPROVEMENT PLAN FY16-FY20

Five-Year CIP Summary

CAPITAL PROJECT EXPENDITURES

	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
General Government	6,772,777	9,829,500	17,471,686	35,298,003	5,037,777	74,409,743
Fire Services	720,000	211,780	2,100,000			3,031,780
Environmental Management	2,710,000	700,000	2,878,000	6,947,700	4,180,190	17,415,890
TOTAL EXPENDITURE	10,202,777	10,741,280	22,449,686	42,245,703	9,217,967	94,857,413

CAPITAL PROJECT SOURCES OF REVENUE

	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Total
General government revenues	1,206,000	6,533,376	8,540,324	1,444,775	1,339,555	19,064,030
911 fund balance	716,434					716,434
Fire Services revenues	70,000	211,780				281,780
Environmental Management revenues	2,710,000	700,000	2,878,000	6,947,700	4,180,190	17,415,890
911 monthly surcharge distribution revenues	47,879					47,879
Loan proceeds	2,650,000	2,500,000	8,212,787	30,475,336	2,500,000	46,338,123
Grants	2,086,764	414,000	2,488,575	1,698,222	1,198,222	7,885,783
Fundraising	152,000		150,000	250,000		552,000
County credit			180,000	229,670		409,670
Park Bond	150,000					150,000
Sale of property				1,200,000		1,200,000
Escrow - Medicaid Maximization Funds	413,700	382,124				795,824
TOTAL REVENUE	10,202,777	10,741,280	22,449,686	42,245,703	9,217,967	94,857,413



New Hanover County

FY16-20