



Environmental Protection

Departments and services supporting the conservation and development of natural resources.

Business Area Name	FY 2018-19 Actuals	FY 2019-20 Original	FY 2020-21 Requested	FY 2020-21 Approved	% Change Orig. v. Appr.	Dept. % of Funct. Area
General Services	\$2,136,781	\$2,302,690	\$2,584,803	\$2,510,325	9.02%	54.71%
Engineering & Environ Svcs	\$2,349,902	\$2,682,367	\$4,270,682	\$2,020,653	-24.67%	44.04%
Other Environmental Protection	\$50,015	\$50,506	\$57,528	\$57,528	13.90%	1.25%
Total	\$4,536,698	\$5,035,563	\$6,913,013	\$4,588,506	-8.88%	100.00%

GENERAL SERVICES – SOLID WASTE



GOAL 4 ENVIRONMENTAL STEWARDSHIP AND COMMUNITY PROSPERITY: Protect natural resources and support and promote community and economic vitality for all residents of Durham County.

Description

General Services' Solid Waste Management Division provides safe, efficient and effective waste collection, disposal, litter control and waste reduction outreach and educational services to County residents in order to protect and maintain the natural environment while supporting Goal 4 – Environmental Stewardship of the Strategic Plan.

The Solid Waste Management program provides residents living in the unincorporated areas of Durham County means to properly disposing solid waste, recyclable materials, and special wastes such as white goods and used motor oil at four local convenience. The County's four residential solid waste and recycling convenience sites are in the areas of Bahama, Parkwood, Redwood and Rougemont. Solid Waste management is also charged with contracting roadside recycling collection, litter control investigations and educational waste reduction outreach efforts. Maintenance and monitoring of the closed landfills formerly operated by the County and the enforcement of the Solid Waste and Junked and Abandoned Vehicles ordinances is also a duty of Solid Waste. Additional services provided by the Division include County Government include building recycling collection.

Budget

Category	FY 2018-19 Actual	FY 2019-20 Original	FY 2020-21 Requested	FY 2020-21 Approved	% Change Orig. v. Appr.
Expenditure	\$2,136,781	\$2,302,690	\$2,584,803	\$2,510,325	9.02%
Personnel	\$746,795	\$822,592	\$893,164	\$885,268	7.62%
Operating	\$1,330,094	\$1,480,098	\$1,687,959	\$1,625,057	9.79%
Capital	\$59,892		\$3,680		
Revenue	\$2,344,315	\$2,247,690	\$2,584,803	\$2,445,325	8.79%
Taxes	\$48,701	\$44,000	\$42,000	\$42,000	-4.55%
Intergovernmental	\$1,771				
Service Charges	\$2,293,842	\$2,203,690	\$2,542,803	\$2,403,325	9.06%
Net County Cost	(\$207,534)	\$55,000	\$0	\$65,000	18.18%

FY 2018-19 Actual FTE	FY 2019-20 Original FTE	FY 2019-20 Estimated FTE	FY 2020-21 Requested FTE	FY 2020-21 Approved FTE
17.00	18.00	18.00	18.00	18.00

Budget Highlights

- The Sticker Fee has been flat for the previous four fiscal years, but increased in FY 2020-21 to \$178 from \$158.81. The sticker fee was increased to maintain current service levels, without it the Solid Waste Management Division was facing a multitude of service delivery cuts such as decrease the frequency of collection. In addition, recycling tipping fees have increased for the county due to increased recycling import charges. This is not unique to Durham County, the United States is experiencing increases to the recycling import charges. County residents will continue to experience the same, high-quality, service in the coming fiscal year due to the Sticker Fee increase.
- As a result of changes in recycling policy and demand for recyclable materials there has been a significant increase in processing/tipping fees to the county.
- \$65,000 of the expenditure in this Fund Center reflects costs that the Solid Waste department provides to service County-wide buildings.

Performance Measures

Measure: NUMBER OF DURHAM COUNTY SOLID WASTE CONVENIENCE CENTER VISITORS



Measure description: This measure shows the total number of visitors at the four Solid Waste Convenience Centers: Bahama, Rougemont, Redwood, and Parkwood. This measure helps the department know how well the Convenience Centers are used. In FY 2019, the department received a large boost in visitors after adding fluorescent bulb recycling to services. This year, visits are leveling out a little after that initial increase. *Note: The above chart shows data through Q2 (December) FY 2020.*

Measure: PERCENT OF WASTE STREAM DIVERTED THROUGH RECYCLING (DURHAM COUNTY CONVENIENCE CENTERS)



Measure description: This measures the percent of waste diverted from the landfill to recycling at the Durham County Convenience Centers. Recycling saves the County money through hauling and disposal fees and is better for the environment. The diversion rate is calculated by dividing recyclables tonnage by total recyclables tonnage and trash tonnage. The recycling tonnage only includes single stream recycling; it does not include scrap metals and textiles. We have worked closely with our staff to monitor our recycling in an effort to reduce contamination. We have also increased the enforcement of our "one bulky load per week" policy. Bulky loads cause our trash weight to be disproportionately higher than our recycling, which causes the diversion rate to be lower. The goal for this year was 15% based on previous performance.

COUNTY ENGINEERING & ENVIRONMENTAL SERVICES



GOAL 4 ENVIRONMENTAL STEWARDSHIP AND COMMUNITY PROSPERITY: Protect natural resources and support and promote community and economic vitality for all residents of Durham County.

Description

The Engineering and Environmental Services Department protects regional water quality through the administration of the sewer use, stormwater and erosion control ordinances; improves County facilities through the management of capital projects consistent with the High-Performance Building policy; protects and improves Durham's environment through wise use of natural resources; and preserves natural and scenic lands, farms, and forests. The department consists of the Stormwater and Erosion Control, Sustainability, Capital Project Development and Management, Open Space/Real Estate Management divisions, Economic Development, and Utility divisions. Budget information for the Utility Divisions, Stormwater and Erosion Control, and Economic Development can be found under the Enterprise Fund, Stormwater and Erosion Control Enterprise Fund, and Economic Development tab respectively in the budget document

Programs

Capital Project Development and Management

The Capital Improvement Development and Management program is responsible for improving the functional operation and efficiency of County facilities for the benefit of staff and the citizens of Durham County. The Program is responsible for managing the planning, design, and construction of capital improvement projects related to County-owned facilities. Projects include major renovations and new construction. This includes meeting the Durham County High-Performance Building Policy requiring all newly constructed facilities to achieve LEED Silver or Gold level certification and major renovation projects to achieve LEED Certified level certification.

Open Space Preservation

The Durham County Open Space Program works to enhance the quality of life and sustainability of current and future generations by protecting scenic, natural and historic landscapes, conserving significant habitats, working lands, and cultural and natural resources; and by providing natural areas for public enjoyment. With specific guidance from adopted open space and farmland preservation plans and by leveraging county funds with outside funding sources, the Open Space Program works with landowners, farmers, non-profit groups, public groups, and other stakeholders to identify and protect important lands. The program staff is responsible for easement stewardship and monitoring and management of the County's open space lands, four of which are open to the public for low impact recreational use. Durham's Open Space and Trails (DOST) Matching Grant Program is also administered by Open Space Division staff.

Real Estate

The purpose of the Real Estate program is to guide the County as it acquires, leases, and tracks real property so the County can optimize the use and value of those assets. The Real Estate Program is responsible for all County real property by identifying appropriate lands for County facilities, leased land and office space, and the sale/disposal of all County-owned surplus properties.

Sustainability

The Sustainability Office helps protect and improve Durham's environment through wise use of natural resources by providing guidance and resources to county employees, businesses & residents. The County Sustainability Office implements Durham's Greenhouse Gas Emissions Reduction Plan. Adopted in 2007, the plan sets ambitious goals for reducing greenhouse gas emissions by the government and the community by 2030.

Budget

Category	FY 2018-19 Actual	FY 2019-20 Original	FY 2020-21 Requested	FY 2020-21 Approved	% Change Orig. v. Appr..
Expenditure	\$1,719,781	\$1,912,750	\$2,188,682	\$2,020,653	5.64%
Personnel	\$1,385,337	\$1,434,314	\$1,799,261	\$1,682,260	17.29%
Operating	\$334,444	\$478,436	\$389,421	\$338,393	-29.27%
Revenue	\$164,868	\$42,755	\$150,350	\$150,350	251.65%
Intergovernmental	\$97,797	\$26,149	\$150,000	\$150,000	473.64%
Rental Income	\$1	\$1			-100.00%
Service Charges	\$13,761	\$2,255			-100.00%
Enterprise Charges	\$15,251	\$14,000			-100.00%
Other Revenues	\$38,058	\$350	\$350	\$350	0.00%
Net County Cost	\$1,554,913	\$1,869,995	\$2,038,332	\$1,870,303	0.02%

FY 2018-19 Actual FTE	FY 2019-20 Original FTE	FY 2019-20 Estimated FTE	FY 2020-21 Requested FTE	FY 2020-21 Approved FTE
15.00	15.00	16.00	17.00	16.00

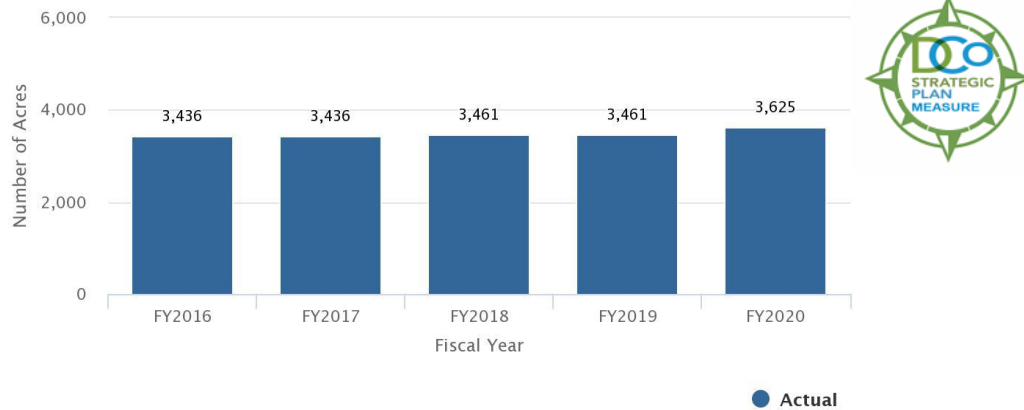
Budget Highlights

- One Transportation position moved from Non-Departmental to Project Management under Engineering. This position caused personnel line to go up %17.29.
- The County also funds a select group of community-based non-profit organizations that support, directly or indirectly, various County department services. These County supported non-profit agencies are selected through a rigorous annual selection and certification process to ensure quality services and outcomes. The supported non-profits shown here are related to services provided by the department being described; however, the appendix of this document has more detail about all Durham County non-profit funding. \$5,000 in non-profit program funds to the Ellerbe Creek Watershed Association for the Smart Program to restore water quality in our streams, rivers, and drinking water supplies. Listed in the Appendix under Goal 4.

Engineering Non-Profit Support	FY 2020-21 Funding
Ellerbe Creek Watershed Association	\$5,000.00
	\$5,000.00

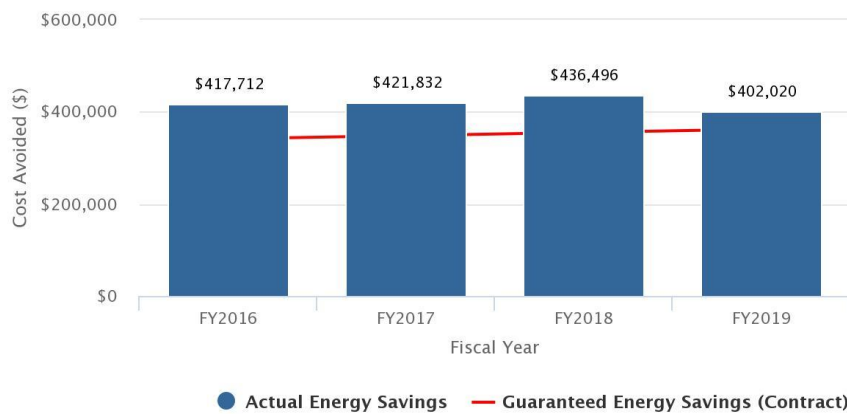
Performance Measures

Measure: NUMBER OF TOTAL ACRES OF OPEN SPACE AND FARMLAND THAT HAVE BEEN PROTECTED/INFLUENCED BY DURHAM COUNTY



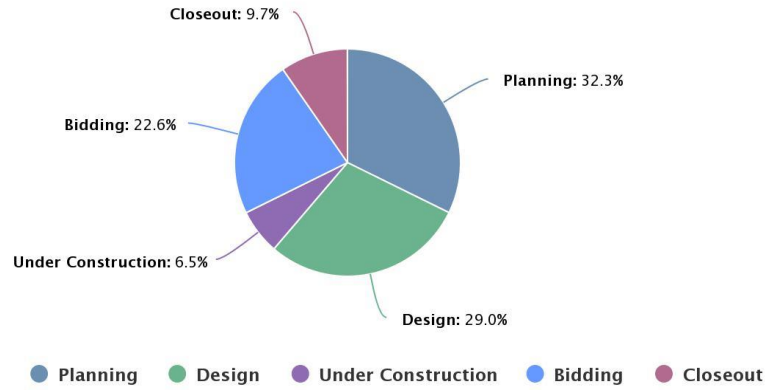
Measure description: Acres protected means the total acreage protected by Durham County, either through acquisition, or through other permanent means such as conservation easements. This is important because the amount of open space protected in a community helps with environmental protection, water quality and wildlife habitat maintenance, and quality of life in a growing community. Durham County has adopted four different open space plans prepared by the Durham City/County Planning department with citizen input, and these are used as implementation guides. In FY 2020, the department closed on five new easements totaling 164 acres of open space and farmland to be protected. Additional staff support could increase the County’s ability to take on more open space projects.

Measure: COSTS AVOIDED THROUGH SUSTAINABILITY ENERGY SAVINGS PERFORMANCE CONTRACTING



Measure description: This measure quantifies the amount of money saved by conserving energy and water in Durham County facilities through the Performance Contracting program. Performance Contracting is a way of implementing energy and water saving measures quickly and paying off the cost through guaranteed utility savings over time. This is important because Durham County is saving taxpayer dollars that can be used for other important County functions rather than sending those dollars to utility companies. In addition, staff is reducing Durham County’s greenhouse gas emissions and conserving natural resources through energy and water savings. Data for this measure is collected through a third party verified process to calculate how much energy, water, and money Durham County is saving due to the retrofits completed on Durham County buildings. Some of the savings are calculated while others are based on the actual utility bills. FY 2019 savings were down significantly from the prior year, but still higher than the guaranteed savings; staff is working with the contractor to understand the cause of the drop in savings. The target is the amount of savings the contractor has guaranteed Durham County would see per the Energy Savings Performance Contract. For FY 2020, this amount is \$380,560.

Measure: CAPITAL PROJECTS ACTIVE PROJECT PORTFOLIO: PERCENT OF TOTAL PROJECT PORTFOLIO IN EACH PHASE
36 TOTAL PROJECTS



Measure description: This is a measure of the activity level of projects throughout the Capital Improvement Plan (CIP) process. This measure provides insight into staffing requirements for the division. The number and scheduling of projects undertaken is based on decisions made by the Board of County Commissioners and County Management. Typical construction processes also factor into timelines for projects. Trends are based on implementation of the CIP and other management-directed initiatives. The projects progress through the project management process based on the funding timing as approved within the CIP or availability of external funding for non-CIP projects.

FOREST PROTECTION



GOAL 4 ENVIRONMENTAL STEWARDSHIP AND COMMUNITY PROSPERITY: Protect natural resources and support and promote community and economic vitality for all residents of Durham County.

Description

Durham County provides financial support for State-administered forest protection services under contract with the North Carolina Department of Agriculture and Consumer Services of N.C. Forest Service, which maintains field offices in all counties of the State. The County pays 40% of the cost of operations and the State pays 60%. One assistant ranger is assigned full time to Durham County. A second ranger is assigned equal time to Durham and Orange Counties as a supervisor over both regions. A Forest Fire Equipment Operator (shared with Wake County and stationed in Wake County), a Service Forester, a Water Quality Forester, a Forest Fire Equipment Operator, and various other District and administrative staff provide support as necessary in Durham County.

Serving all County residents, the Forest Protection Program provides services including, but not limited to forest fire suppression and prevention, forest management, financial assistance, urban and community forestry planning, and insect and disease protection. In addition, the program publicizes the importance of prevention and protection measures through ongoing information and educational programs. Approximately 100,000 acres of forest exist in Durham County.

Budget

Category	FY 2018-19 Actual	FY 2019-20 Original	FY 2020-21 Requested	FY 2020-21 Approved	% Change Orig. v. Appr..
Expenditure	\$50,015	\$50,506	\$57,528	\$57,528	13.90%
Operating	\$50,015	\$50,506	\$57,528	\$57,528	13.90%
Net County Cost	\$50,015	\$50,506	\$57,528	\$57,528	13.90%

Budget Highlights

- Budget increase due to natural salary and benefits growth; no increase to operating budget.