



## Environmental Protection

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

Business Area Name	FY 2019-20 Actuals	FY 2020-21 Original	FY 2020-21 Estimated	FY 2021-22 Requested	FY 2021-22 Approved	% Change Orig. v. Appr.	Dept. % of Funct. Area
General Services	\$2,270,661	\$2,510,325	\$3,195,490	\$2,445,257	\$2,442,757	-2.69%	53.22%
Engineering & Environ Svcs	\$3,216,118	\$2,020,653	\$3,081,122	\$2,057,524	\$2,088,773	3.37%	45.51%
Other Environmental Protection	\$39,047	\$57,528	\$68,987	\$58,640	\$58,640	1.93%	1.28%
<b>Total</b>	<b>\$5,525,826</b>	<b>\$4,588,506</b>	<b>\$6,345,599</b>	<b>\$4,561,421</b>	<b>\$4,590,170</b>	<b>0.04%</b>	<b>100.00%</b>

# 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 dispose solid waste, recyclable materials, and special wastes such as white goods and used motor oil at four local convenience sites. 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

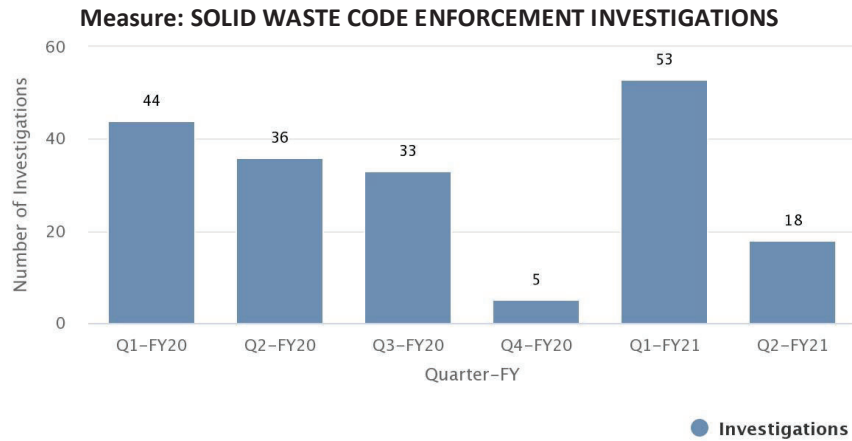
Category	FY 2019-20 Actual	FY 2020-21 Original	FY 2020-21 Estimated	FY 2021-22 Requested	FY 2021-22 Approved	% Change Orig. v. Appr.
<b>Expenditure</b>	<b>\$2,270,661</b>	<b>\$2,510,325</b>	<b>\$3,195,490</b>	<b>\$2,442,757</b>	<b>\$2,442,757</b>	<b>-2.69%</b>
Personnel	\$836,823	\$885,268	\$842,798	\$887,032	\$887,032	0.20%
Operating	\$1,405,506	\$1,625,057	\$2,352,692	\$1,555,725	\$1,555,725	-4.27%
Capital	\$28,332					
<b>Revenue</b>	<b>\$2,282,056</b>	<b>\$2,445,325</b>	<b>\$2,458,638</b>	<b>\$2,391,257</b>	<b>\$2,371,257</b>	<b>-3.03%</b>
Taxes	\$55,521	\$42,000	\$33,500	\$42,000	\$42,000	0.00%
Service Charges	\$2,226,534	\$2,403,325	\$2,424,407	\$2,349,257	\$2,329,257	-3.08%
Other Revenues			\$731			
<b>Net County Cost</b>	<b>(\$11,395)</b>	<b>\$65,000</b>	<b>\$736,852</b>	<b>\$51,500</b>	<b>\$51,500</b>	<b>-20.77%</b>

FY 2019-20 Actual FTE	FY 2020-21 Original FTE	FY 2020-21 Estimated FTE	FY 2021-22 Requested FTE	FY 2021-22 Approved FTE
18.00	18.00	18.00	18.00	18.00

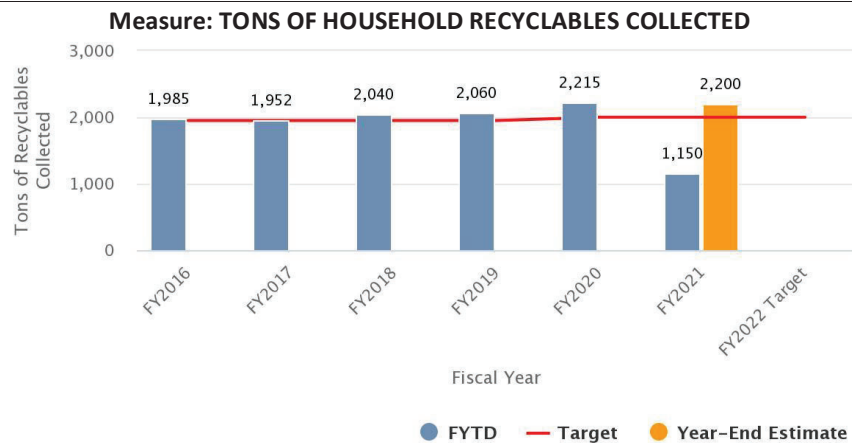
## Budget Highlights

- The Sticker Fee has been flat in recent fiscal years until it increased in FY 2020-21 to \$171.78 from \$158.81. In the FY 2021-22 budget the sticker fee is decreased to \$164. The decrease in the fee is a result of the elimination of construction and demolition waste from the Convenience Sites. Though the ordinance does not allow for the acceptance of any construction and demolition waste at the convenience sites there had been partial compliance in the past. In FY 2020-21 enforcement has been stricter, resulting in reduced tonnage and a decrease in Solid Waste costs.
- As a result of changes in recycling policy and the voluntary “Glass on the Side” recycling program there has been a minor decrease to the total reduction of recyclable tipping fees. A grant has been received from the North Carolina Department of Environmental Quality to assist with further roll out of the Glass on the Side program.

## Performance Measures

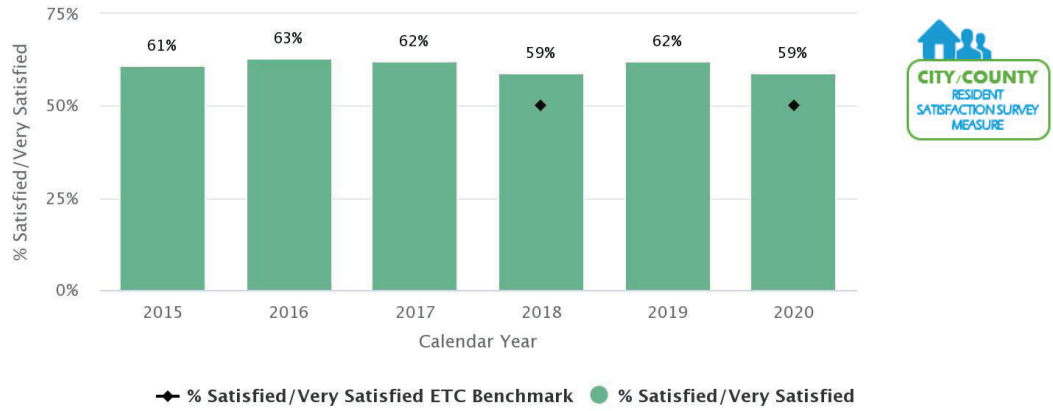


**Measure description:** This measure shows our enforcement of Durham County’s Solid Waste Ordinance and Junk Vehicle Ordinance. Investigations are initiated by citizen complaints, staff observations, and referrals from City/County departments. A property may be inspected more than one time over the course of an investigation. We had a large number of investigations in Q1 due to a backlog of cases from FY20 Q4 caused by the malware attack, COVID-19 pandemic, and a retirement. We were caught up in Q2 and primarily conducting reinspections. We should end the year with 118 inspections, which is equal to the number of inspections conducted in FY 2020. We are training additional staff to assist with reinspections, which should increase our capacity to complete inspections. We are projecting to have roughly 150 inspections next fiscal year.



**Measure description:** The tons of recyclables collected by residents in our Roadside Recycling (curbside) program is being measured. It matters because we want to ensure that residents are taking advantage of the program. The tipping fees for recycling (the amount we are charged per ton to recycle) has increased significantly over the last two years. This measure has strong implications for our budget. The measure continues to trend higher than previous years due to more residents working and schooling from home because of the COVID-19 pandemic. With the reopening of schools and implementation of vaccines, we anticipate the final two quarters will see less at-home recycling. We anticipate that less people will be at home and the numbers will return to pre-pandemic numbers next year as well.

**Measure: OVERALL SATISFACTION WITH DURHAM COUNTY SOLID WASTE CONVENIENCE CENTERS (FROM CITY/COUNTY RESIDENT SATISFACTION SURVEY)**



**Measure description:** This measures the overall customer satisfaction with Durham County Convenience Centers (% satisfied/very satisfied). In response to the ongoing pandemic, in 2020 we reduced Saturday hours and began to enforce the prohibition of construction and demolition debris at the sites. This has resulted in some customers being less satisfied. The new Northern Convenience Site is expected to open in late 2022. The improvements residents will see should increase our satisfaction in the Northern portion of the County. Our goal for 2021 is to be at 65% satisfied/very satisfied.

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# COUNTY ENGINEERING & ENVIRONMENTAL SERVICES

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**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 2019-20 Actual	FY 2020-21 Original	FY 2020-21 Estimated	FY 2021-22 Requested	FY 2021-22 Approved	% Change Orig. v. Appr.
<b>Expenditure</b>	<b>\$2,187,597</b>	<b>\$1,969,605</b>	<b>\$3,030,152</b>	<b>\$2,057,524</b>	<b>\$2,088,773</b>	<b>6.05%</b>
Personnel	\$1,508,964	\$1,682,260	\$1,548,726	\$1,754,484	\$1,725,733	2.58%
Operating	\$337,618	\$287,345	\$1,185,253	\$303,040	\$363,040	26.34%
Capital	\$341,016		\$296,173			
<b>Revenue</b>	<b>\$14,745</b>	<b>\$150,000</b>	<b>\$4,680</b>	<b>\$13,000</b>	<b>\$13,000</b>	<b>-91.33%</b>
Intergovernmental		\$150,000				-100.00%
Service Charges	\$2,932		\$100			
Enterprise Charges	\$11,685		\$4,580	\$13,000	\$13,000	
Other Revenues	\$128					
<b>Net County Cost</b>	<b>\$2,172,852</b>	<b>\$1,819,605</b>	<b>\$3,025,472</b>	<b>\$2,044,524</b>	<b>\$2,075,773</b>	<b>14.08%</b>

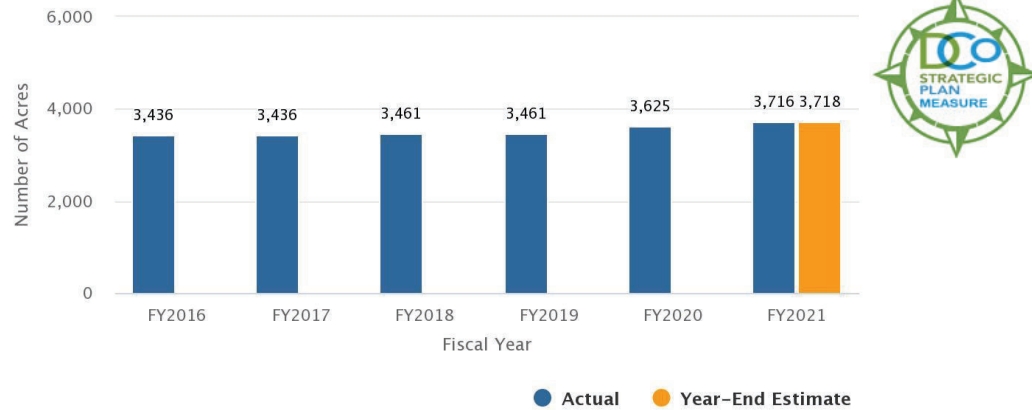
FY 2019-20 Actual FTE	FY 2020-21 Original FTE	FY 2020-21 Estimated FTE	FY 2021-22 Requested FTE	FY 2021-22 Approved FTE
14.00	16.00	15.00	16.00	16.00

## Budget Highlights

- Transportation position has been moved from Engineering Project Management to Transportation fund center under Transportation functional area.
- Durham County Transportation Demand has been moved from Environmental Engineering functional area to Transportation functional area.
- One New FTE:
  - **Land Management Outreach Assistant:** The new Land Management and Outreach Assistant position would assist the Land Manager with regular trail maintenance, walk and mark the county property boundaries on a regular rotation, communicate regularly with neighbors, walk and mark conservation easement boundaries and work to resolve encroachment issues.  
In addition, the new Land Management and Outreach Assistant position would enable the County's open space program to significantly increase community engagement and outreach, including additional volunteer workdays, improving educational materials at preserves, engaging with youth groups and schools on nature-based projects, maintaining online program and preserve information etc.

## Performance Measures

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



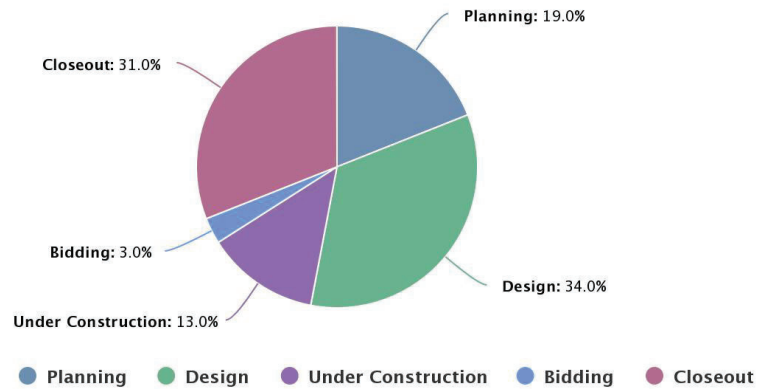
**Measure description:** Acres protected means the total acreage protected by Durham County, either through acquisition, or through other permanent means such as conservation easements. This is important because the amount of open space protected in a community helps with environmental protection, water 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. Open space protection projects typically take several years to complete since they are partly based on grant funds, and the needs and the requirements of the funding agencies must be followed. During the 2020-21 fiscal year, Durham County protected 86.4 acres in 2 different open space projects, comprised of an 83.7-acre easement and 2.7-acre open space acquisition. In FY 2021-22, the County is anticipated to close on 4 smaller easement projects totaling 90 acres (smaller easements take as much work as larger acreage projects); therefore, the total goal for FY 2021-22 is roughly 3,803 acres.

### 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. 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. This measure is trending in a positive direction (more costs avoided) because Durham County continues to save energy and water in facilities and because energy costs are increasing. As energy costs increase over time, the amount of money saved also goes up. The FY 2020-21 year-end estimate of \$419,110 is the verified energy and water savings for the Performance Contract project. The cumulative savings for this project over the past 6 years is \$2,916,563. The FY 2021-22 target of \$369,567 is the annual savings amount guaranteed by the contractor for next year.

**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. Our projects are based primarily on the specific authorizations included in the Capital Improvement Plan and preliminary planning studies/assessments. The trending along the project development timeline is dependent upon the timing of funding for each project, as determined in the CIP, as well as the relative complexity of each project. The project list will remain consistent. EMS 1 will complete construction; SL Warren Library Water Intrusion project will move to Bidding; Northern Solid Waste Convenience Center will begin Construction; 300 Block Mixed Use Development will have begun Construction. The CIP program count will remain relatively consistent, chiefly dependent upon Board and Management direction. Administration Building 1 Renovation will have completed construction in FY 2022. The focus for FY 2022 will be key investments in public safety facilities as directed by the Board in upcoming CIP discussions. Currently planned for construction start in FY 2022 are the Joint Fire/EMS Station 18, the Sheriff’s Tactical Training Facility, and the New Youth Home and Assessment Center. Current CIP candidates under discussion for new projects starting in FY 2022 include a new Emergency Operations Center on the Broad Street site, new EMS facilities in the MLK, Duke West, and Far East vicinities, the Public Safety Service Center, a new Animal Shelter at the Junction Road site. Projects also gaining increased focus during FY 2022 are design, public outreach, and coordination activities for the 500 Block Mixed Use Development, potential DSS Main St. Public-Private-Partnership discussions, and the DHA/CJRC Redevelopment. The incorporation of retail spaces, public art, extensive public engagement, and co-location and other partnering initiatives add to project complexity and continue to stretch the resources of the division.



# 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 2019-20 Actual	FY 2020-21 Original	FY 2020-21 Estimated	FY 2021-22 Requested	FY 2021-22 Approved	% Change Orig. v. Appr.
<b>Expenditure</b>	<b>\$39,047</b>	<b>\$57,528</b>	<b>\$68,987</b>	<b>\$58,640</b>	<b>\$58,640</b>	<b>1.93%</b>
Operating	\$39,047	\$57,528	\$68,987	\$58,640	\$58,640	1.93%
<b>Net County Cost</b>	<b>\$39,047</b>	<b>\$57,528</b>	<b>\$68,987</b>	<b>\$58,640</b>	<b>\$58,640</b>	<b>1.93%</b>