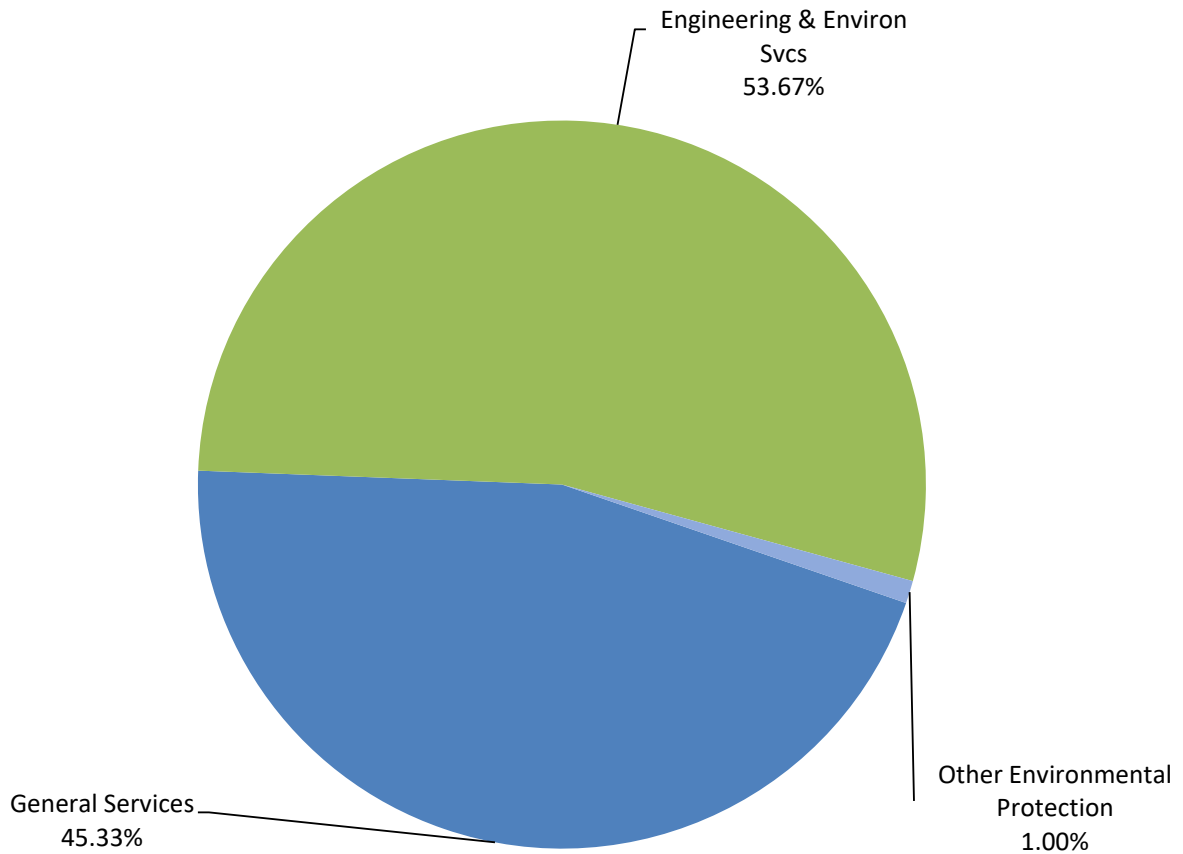


## Environmental Protection Recommended Budget



Business area	2016-2017 Actual Expenditures	FY2017-18 Original Budget	FY2017 12 Month Estimate	FY2018-19 Department Requested	FY2018-19 Manager Recommended
General Services	\$2,060,092	\$2,102,681	\$2,266,639	\$2,154,413	\$2,284,792
Engineering & Environ Svcs	\$1,873,086	\$2,304,519	\$2,298,943	\$2,698,483	\$2,704,855
Other Environmental Protection	\$50,193	\$51,342	\$51,342	\$50,589	\$50,589
<b>Grand Total</b>	<b>\$3,983,371</b>	<b>\$4,458,542</b>	<b>\$4,616,924</b>	<b>\$4,903,485</b>	<b>\$5,040,236</b>

# GENERAL SERVICES - SOLID WASTE



**GOAL 5 ACCOUNTABLE, EFFICIENT AND VISIONARY GOVERNMENT:** An effective organization committed to continuous innovation, exceptional customer service, transparency and fiscal responsibility.

## MISSION

The mission of the General Services' Solid Waste Management Division is to provide safe, efficient and effective waste collection, disposal, litter control and waste reduction outreach and educational services to the citizens of Durham County that protect and maintain the natural environment while supporting Goal 4 – Environmental Stewardship of the Strategic Plan.

## GENERAL SERVICES – SOLID WASTE

**Program Purpose:** The purpose of the Solid Waste Management Program is to provide residents living in the unincorporated areas of Durham County with an efficient and cost-effective means of properly disposing municipal solid waste (MSW), recyclable materials and special wastes.

**Program Description:** Solid Waste Management Program provides residents living in the unincorporated areas of Durham County means of properly disposing solid waste, recyclable materials and special wastes such as white goods and used motor oil at 4 local convenience sites, contracted roadside recycling collection, litter control investigations and educational waste reduction outreach efforts to all Durham County residents.

The County's Solid Waste Management Program is administered by the Department of General Services' Solid Waste Management Division whose office is located at 4527 Hillsborough Road. The program consists of the maintenance and operation of the County's four residential solid waste and recycling convenience sites (Bahama, Parkwood, Redwood and Rougemont); roadside recycling collection services; litter control cleanup and investigation program; 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. Additional services provided by the Division include County Government building recycling collection. Staff consists of a total of 17 FTEs.

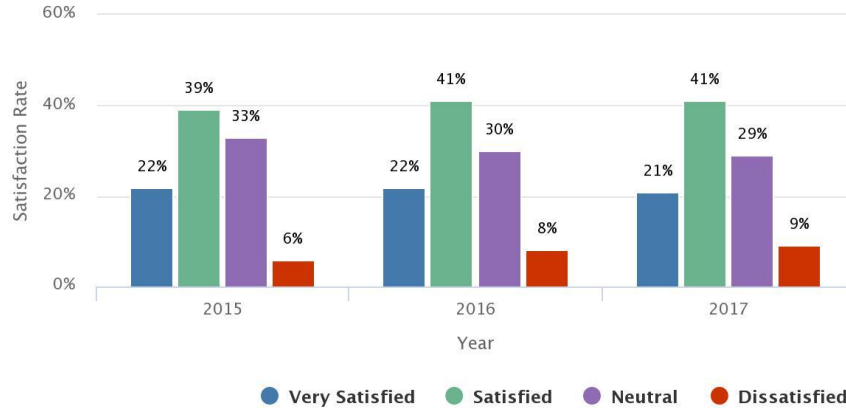
Summary	2016-2017 Actual Exp/Rev	2017-2018 Original Budget	2017-2018 12 Month Estimate	2018-2019 Department Requested	2018-2019 Manager Recommended
<b>Expenditures</b>					
Personnel	\$669,471	\$723,292	\$689,489	\$749,389	\$749,389
Operating	\$1,390,621	\$1,379,389	\$1,421,984	\$1,386,024	\$1,416,403
Capital	\$0	\$0	\$155,166	\$19,000	\$119,000
<b>Total Expenditures</b>	<b>\$2,060,092</b>	<b>\$2,102,681</b>	<b>\$2,266,639</b>	<b>\$2,154,413</b>	<b>\$2,284,792</b>
<b>Revenues</b>					
Taxes	\$52,691	\$44,000	\$43,599	\$44,000	\$44,000
Intergovernmental	\$0	\$0	\$0	\$5,313	\$5,313
Service Charges	\$2,288,237	\$2,215,131	\$2,291,993	\$2,128,279	\$2,177,879
<b>Total Revenues</b>	<b>\$2,340,928</b>	<b>\$2,259,131</b>	<b>\$2,335,592</b>	<b>\$2,177,592</b>	<b>\$2,227,192</b>
<b>Net Expenditures</b>	<b>(\$280,836)</b>	<b>(\$156,450)</b>	<b>(\$68,953)</b>	<b>(\$23,179)</b>	<b>\$57,600</b>
FTEs	17.00	17.00	17.00	17.00	17.00

## 2018-19 BUDGET HIGHLIGHTS

- The sticker fee will remain at \$158.81, which is the same level as the prior 2 fiscal years
- The Pilot Program for Durham County hauling its own containers will continue during FY2018-19, with the analysis driving future recommendations about adding to the Roll-off container truck purchased in early 2018

**PERFORMANCE MEASURES:**

**Measure: OVERALL SATISFACTION WITH DURHAM COUNTY SOLID WASTE CONVENIENCE CENTERS**

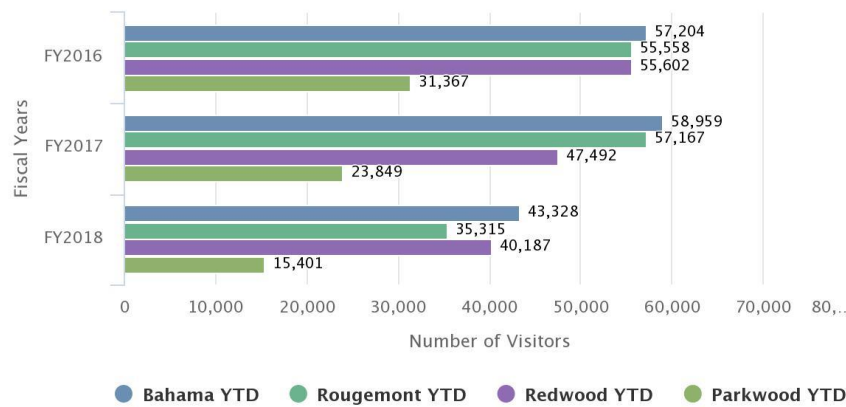


**Measure description:** This measure shows overall customer satisfaction with Durham County Solid Waste Convenience Centers. Durham County currently has four Solid Waste Convenience Centers: Bahama, Parkwood, Redwood, and Rougemont.

**Trend explanation:** Data for this measure is collected annually via the City/County Resident Satisfaction Survey. The “Very Satisfied” number went down 1% and the “Dissatisfied” went up 1% in 2017; the department installed safety rails at all of the Convenience Centers to conform with OSHA safety regulations, but they were not well received due to added inconvenience.

**FY2018-19 target projection:** This measure does not have a target other than to improve performance over previous years.

**Measure: NUMBER OF DURHAM COUNTY SOLID WASTE CONVENIENCE CENTER VISITORS**

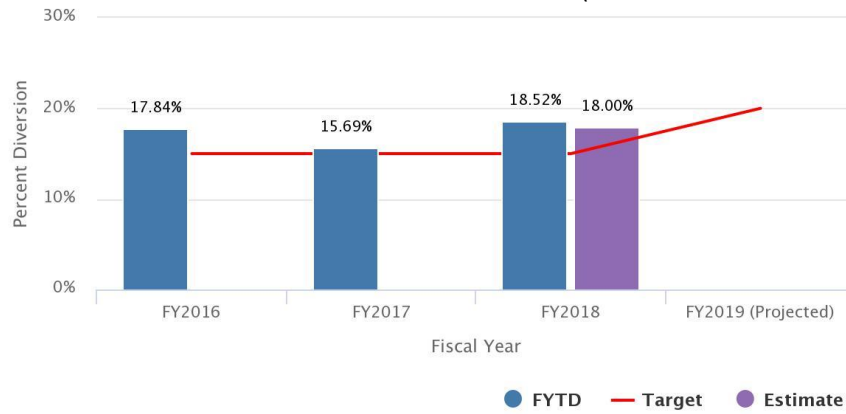


**Measure description:** This measure shows the total number of visitors at the four Solid Waste Convenience Centers: Bahama, Rougemont, Redwood, and Parkwood. This measure helps the department know how well used the Convenience Centers are.

**Trend explanation:** The number of visitors is trending down in FY18, probably due to a number of days that the Convenience Centers were closed due to winter storms. Also, Durham County residents have told attendants that they are visiting less due to the increased capacity in their recycling carts.

**FY2018-19 target projection:** There is no true target for this measure. Without substantial weather closings, the department projects around 180,000 visitors for FY19. The department will also be adding fluorescent tube recycling, so there may be an increase in visits with that program

**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 it 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 the single stream recycling program at the Convenience Centers. It does not include special programs such as scrap metal and textiles.

**Trend explanation:** The waste diversion percentage increased in FY18 Q2 (15.14%) from the previous quarter (13.65%). Continued staff training in what is recyclable as well as updated signage in the recycling area could improve the diversion rate.

**FY2018-19 target projection:** The FY19 target of 20% is a stretch goal from previous performance (the FY18 target was 15%).

# 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.

## PROGRAM 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 and is stationed at the Cooperative Extension Building, 721 Foster Street. 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, Water Quality Forester, 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.

Summary	2016-2017 Actual Exp/Rev	2017-2018 Original Budget	2017-2018 12 Month Estimate	2018-2019 Department Requested	2018-2019 Manager Recommended
▼ <i>Expenditures</i>					
Operating	\$50,194	\$51,342	\$51,342	\$50,589	\$50,589
<b>Total Expenditures</b>	<b>\$50,194</b>	<b>\$51,342</b>	<b>\$51,342</b>	<b>\$50,589</b>	<b>\$50,589</b>
▼ <i>Revenues</i>					
<b>Total Revenues</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Net Expenditures</b>	<b>\$50,194</b>	<b>\$51,342</b>	<b>\$51,342</b>	<b>\$50,589</b>	<b>\$50,589</b>

# 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.

## MISSION

The mission of the Durham County Engineering and Environmental Services Department is to protect regional water quality through the administration of the sewer use, stormwater and erosion control ordinances; to improve County facilities through the management of capital projects consistent with the High-Performance Building policy; and to preserve natural and scenic lands, farms, and forests.

## DEPARTMENT DESCRIPTION

The Engineering and Environmental Services Department includes the Stormwater and Erosion Control, Sustainability, Project Management, Open Space/Real Estate Management, and Utility divisions. The Sustainability division is funded by both Durham County and the City of Durham based on an inter-local agreement between the two governments. Budget information for the Utility Division can be found under the Enterprise Fund tab in the recommended budget document.

Summary	2016-2017 Actual Exp/Rev	2017-2018 Original Budget	2017-2018 12 Month Estimate	2018-2019 Department Requested	2018-2019 Manager Recommended
<b>Expenditures</b>					
Personnel	\$1,506,930	\$1,790,602	\$1,602,759	\$2,043,836	\$2,043,836
Operating	\$366,160	\$513,917	\$528,070	\$654,647	\$661,019
Capital	\$0	\$0	\$168,114	\$0	\$0
<b>Total Expenditures</b>	<b>\$1,873,090</b>	<b>\$2,304,519</b>	<b>\$2,298,943</b>	<b>\$2,698,483</b>	<b>\$2,704,855</b>
<b>Revenues</b>					
Licenses & Permits	\$847,917	\$632,500	\$562,220	\$507,000	\$507,000
Intergovernmental	\$74,244	\$96,247	\$96,247	\$121,025	\$121,025
Rental Income	\$6	\$0	\$1	\$0	\$0
Service Charges	\$637	\$0	\$1,216	\$60	\$60
Enterprise Charges	\$9,274	\$10,000	\$10,048	\$14,000	\$14,000
Sewer Connect. Fees	\$3,360	\$3,150	\$5,460	\$5,000	\$5,000
Other Revenues	\$11,276	\$0	\$915	\$850	\$850
<b>Total Revenues</b>	<b>\$946,714</b>	<b>\$741,897</b>	<b>\$676,107</b>	<b>\$647,935</b>	<b>\$647,935</b>
<b>Net Expenditures</b>	<b>\$926,376</b>	<b>\$1,562,622</b>	<b>\$1,622,836</b>	<b>\$2,050,548</b>	<b>\$2,056,920</b>
FTEs	18.00	19.00	19.00	21.00	21.00

## 2018-19 BUDGET HIGHLIGHTS

- 2 Project Managers recommended to support current and projected Capital Project workloads, coupled with the demand for additional special studies and initiatives at \$168,630.
- Upper Neuse River Basin Association (UNRBA) dues in the amount of \$100,329 have been moved to the Engineering budget from Nondepartmental.
- \$20,000 in funding to support an update of the 2008 Greenhouse Gas Plan, which will be jointly conducted and funded with our City partners.
- \$10,000 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.

Program Budget	FY2017-18 Approved Budget	FY2017-18 Approved FTE	FY2018-19 Department Request Budget	FY2018-19 Department Request FTE	FY2018-19 Manager Recommended Budget	FY2018-19 Manager Recommended FTE
<b>Engineering</b>						
Capital Project Development and Management	\$902,612	7.00	\$1,095,004	9.00	\$1,101,376	9.00
Erosion control	\$306,929	3.00	\$297,769	3.00	\$297,769	3.00
Open Space Preservation	\$231,510	1.50	\$368,025	2.50	\$368,025	2.50
Real Estate	\$231,511	2.50	\$214,144	1.50	\$214,144	1.50
Rougemont Community Water System	\$90,000	0.00	\$90,000	0.00	\$90,000	0.00
Stormwater Management	\$316,928	3.00	\$417,166	3.00	\$417,166	3.00
Sustainability	\$225,029	2.00	\$216,375	2.00	\$216,375	2.00
<b>Grand Total</b>	<b>\$2,304,519</b>	<b>19.00</b>	<b>\$2,698,483</b>	<b>21.00</b>	<b>\$2,704,855</b>	<b>21.00</b>

### **Capital Project Development and Management**

**Program Purpose:** The purpose of the Capital Improvement Development and Management program is to improve County facilities through the management of capital projects for functional operation for staff and the citizens of Durham County.

**Program Description:** The Capital Improvement Development and Management 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 Gold level certification and renovation projects to be LEED Certified.

### **Erosion control**

**Program Purpose:** As a state delegated local program, the purpose of the Erosion Control program is to perform plan reviews and enforce compliance for development activity throughout the County.

**Program Description:** The Erosion Control Program administers and enforces the sedimentation and erosion control sections of the Durham City-County Unified Development Ordinance. A state-delegated local program, it includes all privately funded, non-agricultural land-disturbing activities of more than 12,000 square feet in both the City of Durham and the unincorporated areas of the County. The Program conducts plan reviews, issues land disturbance permits & inspects permitted projects for compliance.

### **Open Space Preservation**

**Program Purpose:** The purpose of the Open Space Preservation Program is to protect and improve Durham's environment and quality of life by preserving environmentally significant open space and important farmlands. and by providing recreational opportunities when feasible.

**Program Description:** The Open Space Preservation Program works with landowners, non-profit agencies, public agencies and other stakeholders in the protection of identified lands, natural resources, farms, and waterways to improve the quality of life for all Durham County citizens. The Program develops public recreation areas on County-owned open space properties that include major parks, natural areas, and nature trails.

### **Real Estate**

**Program Purpose:** 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.

**Program Description:** 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.

### **Stormwater Management**

**Program Purpose:** The purpose of the Stormwater Management program is to protect water quality through implementation and compliance with the Neuse Rules, Jordan Lake Rules and Falls Lake Rules.

**Program Description:** The Stormwater Program is responsible for administering the Durham County Stormwater Ordinance, which applies to all unincorporated areas of Durham County. The Program is responsible for enforcing the Neuse River, Falls Lake, and Jordan Lake nutrient management rules through development reviews including flood control, water quantity, and water quality control measures. It is also responsible for maintaining the County's compliance with the rules through stormwater retrofit identification, illicit discharge detection and elimination, and education and outreach activities.

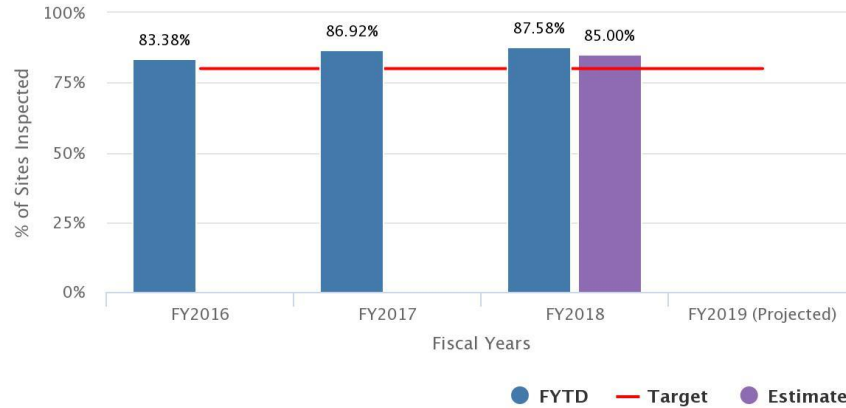
### **Sustainability**

**Program Purpose:** The purpose of the City/County Sustainability Office is to help protect and improve Durham's environment through wise use of natural resources by providing guidance and resources to city and county employees, businesses & residents.

**Program Description:** The City-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 government and the community by 2030. The Sustainability Office strives to help protect and improve Durham's environment through wise use of natural resources by providing guidance and resources to City and County employees, businesses, and citizens.

**PERFORMANCE MEASURES:**

**Measure: AVERAGE PERCENTAGE OF SITES INSPECTED MONTHLY**

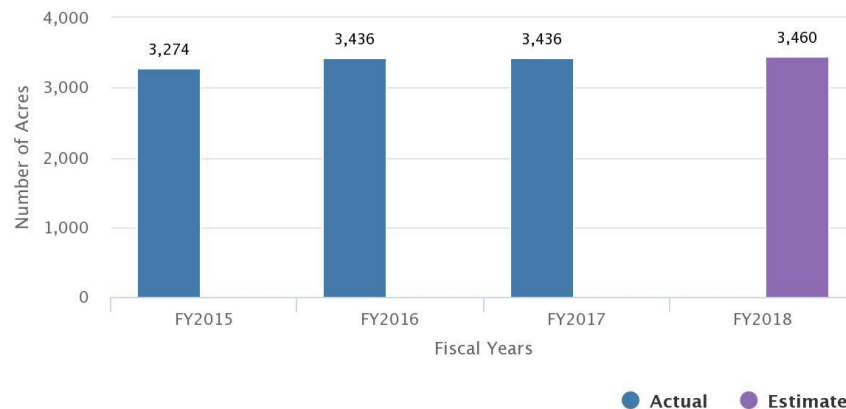


**Measure description:** This measure shows the percent of permitted sites that are inspected monthly. Monthly inspections are critical in maintaining compliance with land disturbance permits and erosion control plans. Maintaining compliance is the best way to keep sediment out of Durham County streams and rivers, thus protecting the environment and aligning with Goal 4.

**Trend explanation:** This measure has been consistently above the target since Q3-FY16. This trend is due to staff's dedication to inspections as the most important part of maintaining compliance. Readily available access to the "Uninspected Summary" in the internal erosion control database also allows staff to determine which sites need inspection.

**FY2018-19 target projection:** Most sites require a monthly inspection, but some do not. Smaller sites and those with long histories of compliance may be inspected closer to every six weeks. The target for FY19 will remain at 85%.

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



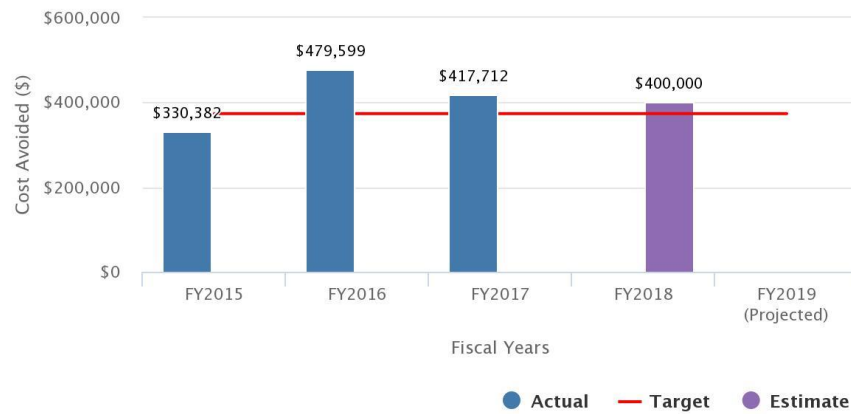
**Measure description:** Acres protected means the total acreage protected by Durham County, either through acquisition, or through other permanent means such as conservation easements. This is important because the amount of open space protected in a community helps with environmental protection, water 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. This measure directly aligns with Strategic Plan Strategy 4.1.C Open Space Preservation – Protect open space and preserve rural character.

**Trend explanation:** Conservation easements on important farmlands have been a core part of the program for over a decade. The average size of participating farms has dropped significantly, and the work to complete a farm easement is roughly the same regardless of size. So, the number of farms may be staying consistent while the total acreage protected each year is going down.

**FY2018-19 target projection:** There is no target for this measure due to the inability to project availability of land donated or for purchase.



**Measure: COST AVOIDED THROUGH SUSTAINABILITY ENERGY SAVINGS PERFORMANCE CONTRACTING**

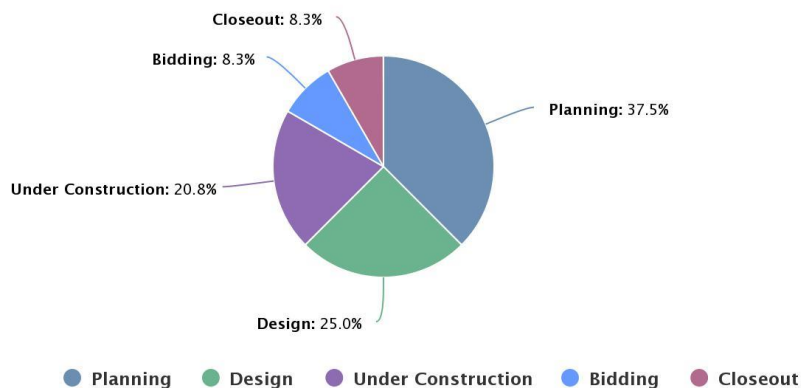


**Measure description:** This measure quantifies the amount of money saved by conserving energy and water in Durham County facilities through the Performance Contracting program. Performance Contracting is a way of implementing energy and water saving measures quickly and paying off the cost through 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. This aligns with Goal 5 as it relates to fiscal responsibility and Goal 4 as it relates to environmental stewardship. 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.

**Trend explanation:** 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. To improve this measure, staff can continue to improve the way Durham County facilities function, so they are not wasting energy and water. Staff can also continue to work with employees to improve conservation habits and practices.

**FY2018-19 target projection:** This target is the amount of savings the contractor has guaranteed Durham County would see per the Energy Savings Performance Contract (\$373,586).

**Measure: CAPITAL PROJECTS ACTIVE PROJECT PORTFOLIO: PERCENT OF TOTAL PROJECT PORTFOLIO IN EACH PHASE, DECEMBER 2017**



**Measure description:** This is a measure of the activity level of projects throughout the CIP process. This measure provides insight into staffing requirements for the division. Alignment with Goal 5 – Accountable, Efficient and Visionary Government.

**Trend explanation:** Trending for CIP projects is determined by economic forces and the County’s CIP planning process. County Management will fund projects based on these factors, and the Project Management division is tasked with managing the projects within the allocated funding.

**FY2018-19 target projection:** The number of projects undertaken is based on decisions made by County Management and are beyond the division’s control.