



# Annual Road Report

## Richland County, South Carolina

### Department of Public Works

### Fiscal Year 2022



*Pavement Preservation - New Castle*



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# Introduction and Purpose

This report is provided to inform residents of Richland County about activities required to maintain and improve the County Road Maintenance System (CRMS) each year.

The report is intended to provide a summary of activities and projects completed during Fiscal Year 2022 (FY-22), which ran from July 1, 2021, through June 30, 2022. Projects in this report were managed and/or constructed by the Richland County Department of Public Works (DPW) and the Transportation Penny Department. All of the projects included in this report have been accepted into the CRMS. This system represents the large network of roads and roadside drainage that DPW maintains, repairs and improves.

The Department of Public Works is dedicated to providing exceptional service to the residents of Richland County and to improving their quality of life today and in the future.

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Michael Maloney, PE

**Deputy Director of Public Works**  
Chris Eversmann, PE

**County Engineer**  
Shirani W. Fuller, PE

**Main Office:**  
400 Powell Road  
Columbia, SC 29203  
(803) 576-2400

**Maintenance Locations:**

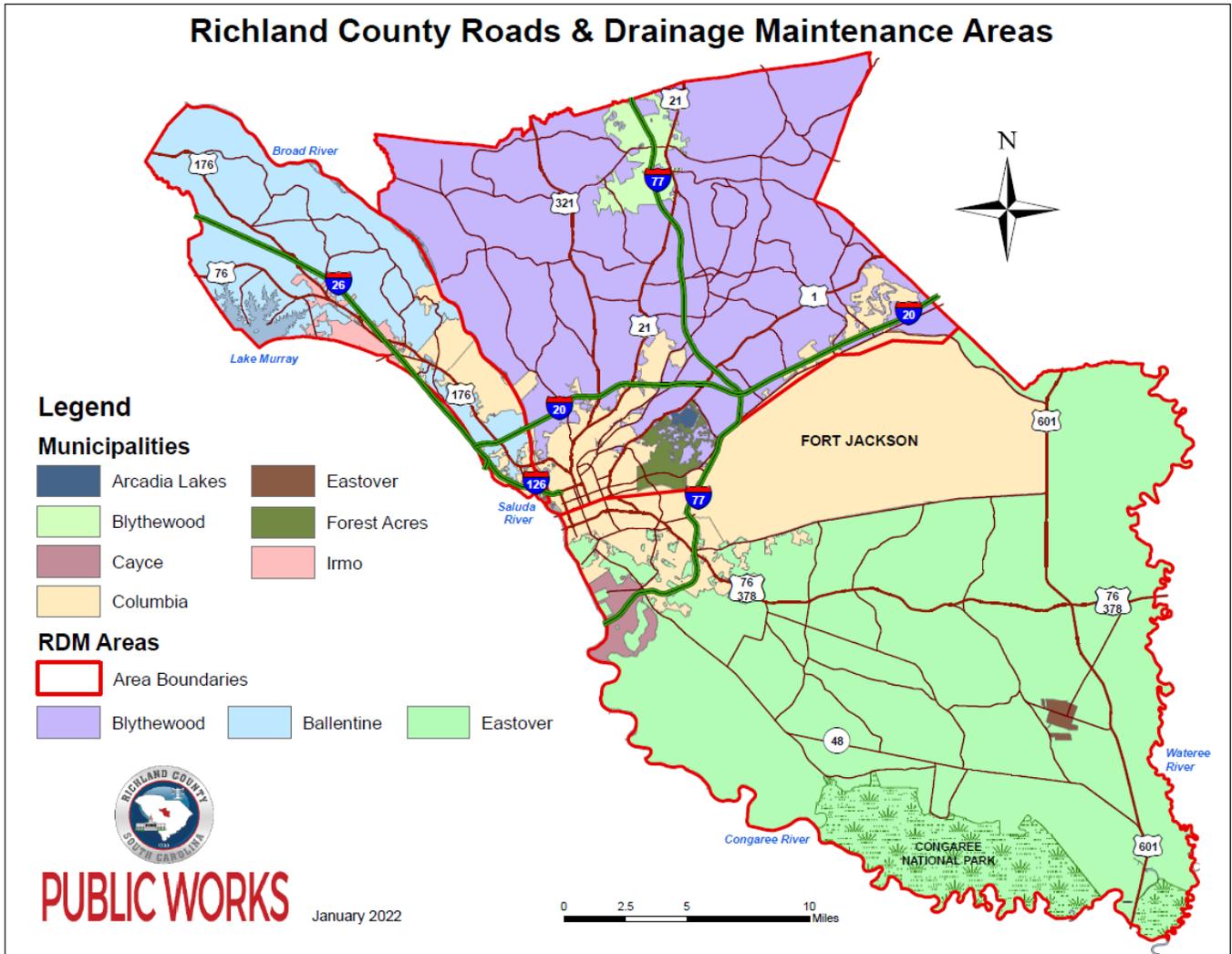
Specialty Sections  
400 Powell Road  
Columbia, SC 29203

Blythewood (North) Section  
437 Blythewood Road  
Blythewood, SC 29106

Ballentine (West) Section  
1009 Bickley Road  
Irmo, SC 29063

Eastover (South) Section  
2009 Chain Gang Road  
Eastover, SC 29044

# Richland County Roads & Drainage Maintenance Areas Map



# Comprehensive Transportation Improvement Plan (CTIP)

The Richland County Department of Public Works (DPW) maintains an extensive network of roads within the County Road Maintenance System (CRMS). Department staff currently maintain 836 miles of various types of roads.

Road Type	Mileage
Unpaved Prescriptive Easement	157
Unpaved Right-of-Way	46
Paved	633
Total	836

Most of the roads accepted into the CRMS are classified as residential. These are low-volume, low-speed, two-lane roadways. The County also maintains a small group of collector roads and industrial/commercial roads. As subdivision roads are deeded to the County by developers, the drainage system associated with those roads is also conveyed for maintenance. In order to be accepted into the CRMS, roads and drainage systems must be constructed to County standards.

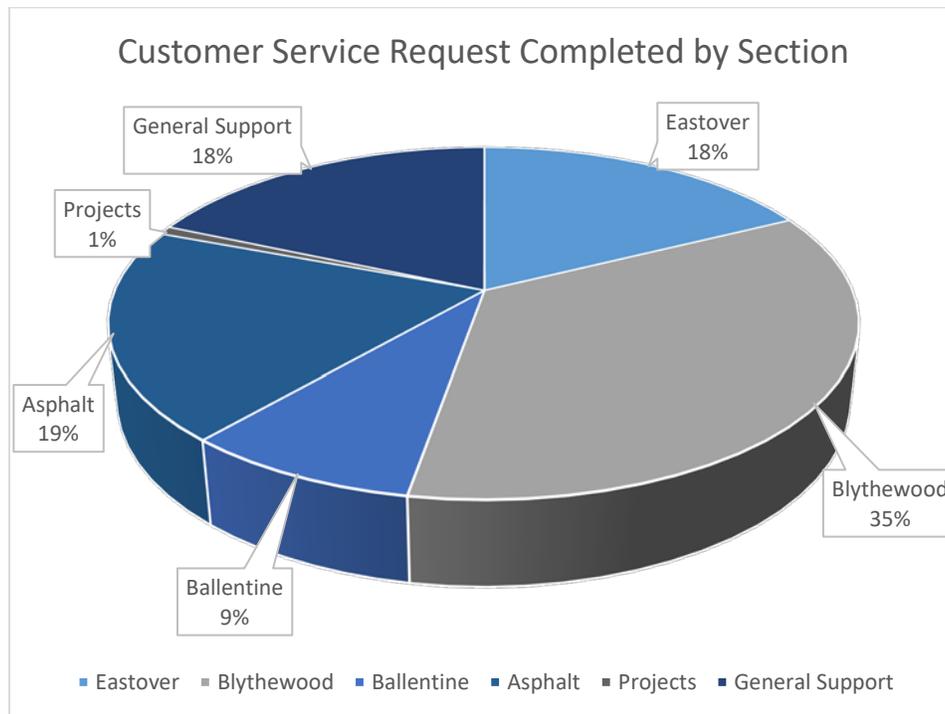
In fiscal year 2020 (FY-20), DPW released its first Comprehensive Transportation Improvement Plan (CTIP). This plan is updated annually to address the transportation projects that are intended to be started and/or completed in the coming fiscal year. Projects are chosen based on an evaluation of assets and a distribution of resources within each Council district. Once the budget is determined for the upcoming year, the Roads & Drainage Maintenance Division (RDM) and Engineering staff create the preliminary plan under the guidance of the Director of Public Works. The plan is updated and presented to County Council for approval each year.

Funding for these projects comes from two main sources: the Road Maintenance Fee and “C” Funds (County Transportation Committee grants). The Road Maintenance Fee is collected on vehicle personal property tax bills from residents of Richland County. This generates about \$6 million per year, which is applied to funding capital roadway projects, maintenance and repair of roads, sidewalk construction and repair, and drainage repair and improvement. “C” Funds are allocated on a per project basis at the CTC’s discretion to agencies whose projects meet established criteria. With the Road Maintenance Fund for capital projects being on hold, the department’s Capital Improvement Projects (CIP) in FY22 were funded strictly through grants from the CTC.

Based on Intergovernmental Agreements (IGAs) with small municipalities within Richland County, the DPW staff requests funding from the CTC on their behalf.

# Customer Service Focus

Within the Department of Public Works, the divisions of Roads & Drainage Maintenance (RDM) and Engineering are customer service-focused groups that respond directly to Citizen Service Requests (CSRs). In FY-22, these divisions completed a total of 4,432 CSRs (with RDM completing 3,663 of those).



DPW staff work with the Public Information Office (PIO) to engage the community and promote awareness of upcoming activities. The PIO uses various methods, such as news releases, social media posts, flyers and video, to communicate information to residents on multiple platforms.

Below is a breakdown of major categories for service requests assigned to the RDM and Engineering divisions during FY-22:

CSRs by Category	# Requests	Percentage
Road Maintenance/Repairs	1,378	31%
Drainage Maintenance	1,070	24%
Traffic Control/Safety Issues	707	16%
Vegetation Maintenance	589	13%
Emergency Maintenance/Road Hazards	75	2%
Other	613	14%
<b>Total</b>	<b>4,432</b>	<b>100%</b>

As part of a partnership with smaller municipalities, Richland County has IGAs for maintenance of roads and their associated drainage systems:

- Town of Blythewood
- Town of Irmo
- Town of Arcadia Lakes
- City of Forest Acres
- Town of Eastover

IGAs enable a basic level of maintenance to be efficiently provided to residents of these municipalities, while avoiding the high cost of the municipalities developing their own public works departments.

The County also enters into maintenance agreements with the South Carolina Department of Transportation (SCDOT). There are currently three such agreements in which DPW shares some of the maintenance responsibilities with SCDOT within its rights-of-way on Shared Use Paths (SUP):

- Polo Road SUP
- Clemson Road SUP
- Rabbit Run/Lower Richland Boulevard SUP



*Clemson Road SUP*

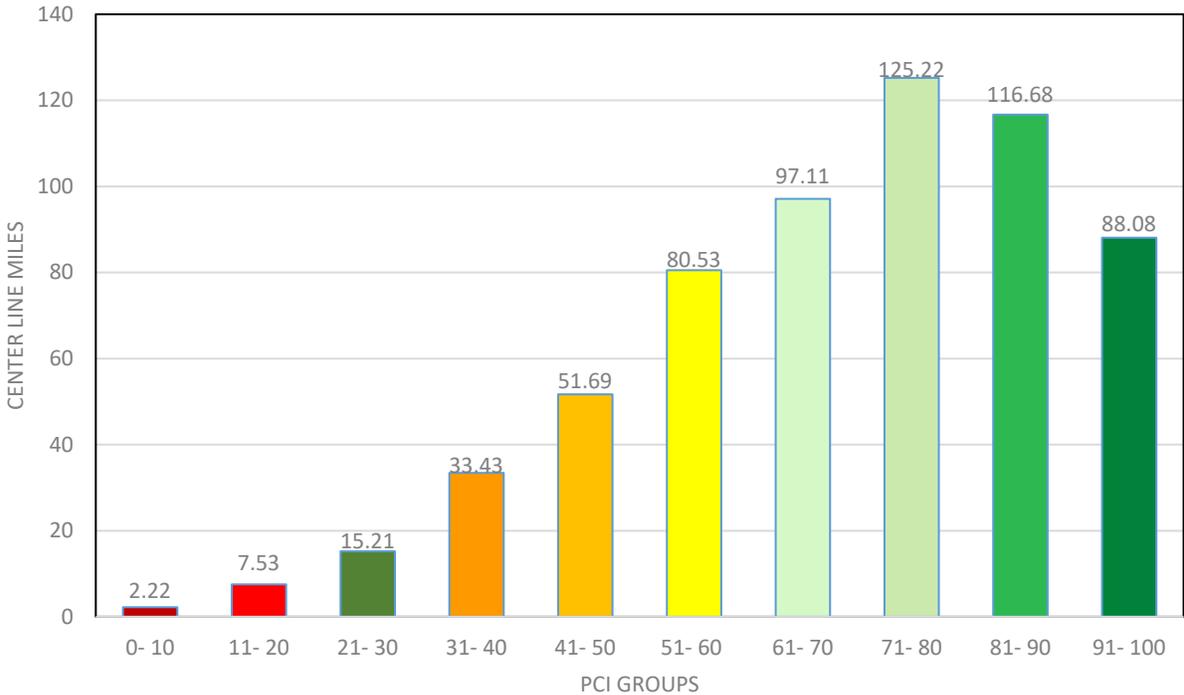
DPW also maintains an agreement with SCDOT to provide assistance in clearing the SCDOT road system in the case of a winter weather snow or ice event. County resources of labor and equipment are provided on a reimbursable basis.

# Pavement Management Study (PMS)

The County conducted its second Pavement Management Study (PMS) to assess the condition of all paved roads within the County Road Maintenance System (CRMS) in September 2021. The study generated a Pavement Condition Index (PCI) for each road based on evaluation of common distresses such as alligator, longitudinal and transverse cracking. The extent and severity of these distresses correlate to a numerical value between 0-100. Every two years, these values will be updated through inspection by Engineering staff. A new comprehensive study will be performed every six years.

The other function of the PMS is to help develop both short- and long-term plans for allocating funding into the CRMS. Various methods of pavement treatment, such as preservation, resurfacing and rehabilitation, will be employed. The plans are data-driven, based on PCI values and available funding. The County’s goal is to elevate all County roads to a standard of “good” and maintain them at that level thereafter.

PCI Data Based on 2021 PMS



# Operations Performed by Public Works

## Road Maintenance and Repair

The majority of Citizen Service Requests (CSRs) received by RDM are for road maintenance and repair. In FY-22, 1,378 CSRs were categorized as “road maintenance.” Each workday, crews perform activities such as patching potholes, installing driveway aprons, and scraping/crowning unpaved roads. Smaller paving jobs, curb and gutter repair, and sidewalk repair are also performed.

Larger scale projects are constructed by the RDM Projects section or outsourced to a contractor as part of the Capital Improvement Projects (CIP) program. RDM and Engineering staff work together to determine how best to manage and prioritize these projects.

Also in FY-22, a dust suppression compound was applied to 56 unpaved roads, equaling 31.45 miles of roadway.



*Unpaved road scrape performed by RDM crew*

# Drainage Maintenance

Drainage maintenance includes cleaning and repairing culverts, pipes, pipe inlets and outfalls, installation and extension of drainage pipes, cleaning and repairing catch basins, and cleaning and re-establishing ditches. During FY-22, 1,070 CSRs were classified as drainage related. A well-functioning drainage system is essential to the longevity of roadways and the protection of property. When a drainage system fails, it can lead to property damage and pose health and safety concerns.



*Countyline Trail bridge replacement*

DPW is working to create a comprehensive inventory of all County drainage system components as a layer within our Geographic Information System (GIS). DPW’s Stormwater Division is starting a preventative maintenance program in which all drainage systems in our network will be evaluated.

Until this program is complete, RDM will continue to rely heavily on residents to inform staff when drainage systems are not functioning properly and need maintenance.

## Traffic Control and Traffic Safety

This category of requests includes such tasks as sign installation, traffic calming, pavement marking, and traffic signal and school zone light maintenance. RDM crews perform many of these tasks; the remainder are performed by an on-call contractor.

The General Support section of RDM has a sign shop at the Powell Road compound where all signs for County-maintained roads and all street name signs for roads within Richland County (including both SCDOT and private roads) are fabricated. The General Support section is also responsible for installing all traffic control signs within the CRMS.

The Engineering Division manages requests for traffic-calming studies. Following established County policy, studies are conducted to determine whether a traffic-calming device needs to be installed on a road. Engineering performs all studies for both County- and SCDOT-maintained paved roadways. If a study meets the established criteria and qualifies for a speed hump, the Asphalt & Concrete section of RDM installs these devices at the designated location. In FY-22, 60 studies were conducted and eight roads (~13%) qualified to receive speed humps.



*Speed hump installed by RDM on Whitehurst Way*

# Vegetation Maintenance

Vegetation maintenance includes mowing rural road shoulders, tree trimming, and clearing brush that obscures roadway visibility or restricts drainage through ditches.

Joint projects between the Transportation Penny Department and SCDOT have resulted in maintenance agreements in which the County has responsibility for mowing Shared Use Paths (SUPs) on some state roads.



*Slope mower cutting County right-of-way*

Mowing operations are both seasonal and affected by rainfall amount. The County does not perform this service within subdivisions; the majority of mowing and trimming activities are performed in rural areas of the County. RDM operates five slope mowers to accomplish all of its mowing responsibilities.

Tree trimming is frequently performed in response to a citizen request in the event that school buses or trucks cannot maneuver properly because of low-hanging limbs close to the roadway. Trimming can be accomplished by RDM employees and equipment or by a tree contractor, depending on the circumstances.

# Emergency Maintenance and Road Hazards

The Roads & Drainage Maintenance Division (RDM) staff responds to calls 24 hours a day, with on-call personnel for after-hours emergencies. RDM crews work with other emergency response agencies to dispatch staff as needed.



RDM frequently responds to road hazards, such as trees or other obstacles blocking the roadway that could endanger the traveling public.

Emergency maintenance projects are constructed with the approval of the County Administrator or when a state of emergency is declared. During a state of emergency, all essential personnel in the department work rotating shifts to ensure around-the-clock response to keep roadways safe. Weather events such as snow and ice or hurricanes are the most common reasons for a state of emergency. When a hazard cannot immediately be corrected, staff has the ability to close a road until a safe route can be established.

*Sinkhole on Waterford Drive - before*

DPW staff also work with the Richland County Emergency Management Division (EMD). When EMD activates the Emergency Operations Center (EOC), the Engineering Division staffs the center to coordinate efforts and enhance communication throughout County departments.



*Waterford Drive - after*

## Roads & Drainage – Projects Section

The Department of Public Works has a Projects section to address infrastructure needs that exceed the scope of routine maintenance. Projects in this category are of a more complex nature, require a longer time to complete, and also require some level of basic engineering analysis and design.

The Projects section performs a broad range of tasks, from drainage improvement to roadway repair, replacement of curb and gutter, and occasional work at the Jim Hamilton-L.B. Owens Airport (CUB). Projects typically start with a CSR, which is investigated by Roads & Drainage Maintenance staff. If determined to be beyond the scope of routine maintenance, RDM will refer the request to the Engineering Division for evaluation. The County Engineer determines whether the request qualifies for the internal project list or should be performed by a contractor as a Capital Improvement Project (CIP).

In FY-22, the Projects section completed 20 projects, most of which were related to drainage concerns from residents.



*Morninglo ditch before maintenance*



*Morninglo ditch after maintenance*

# Capital Improvement Projects

The Department of Public Works budgets each year to complete Capital Improvement Projects through a procurement process used to select consultants and contractors.

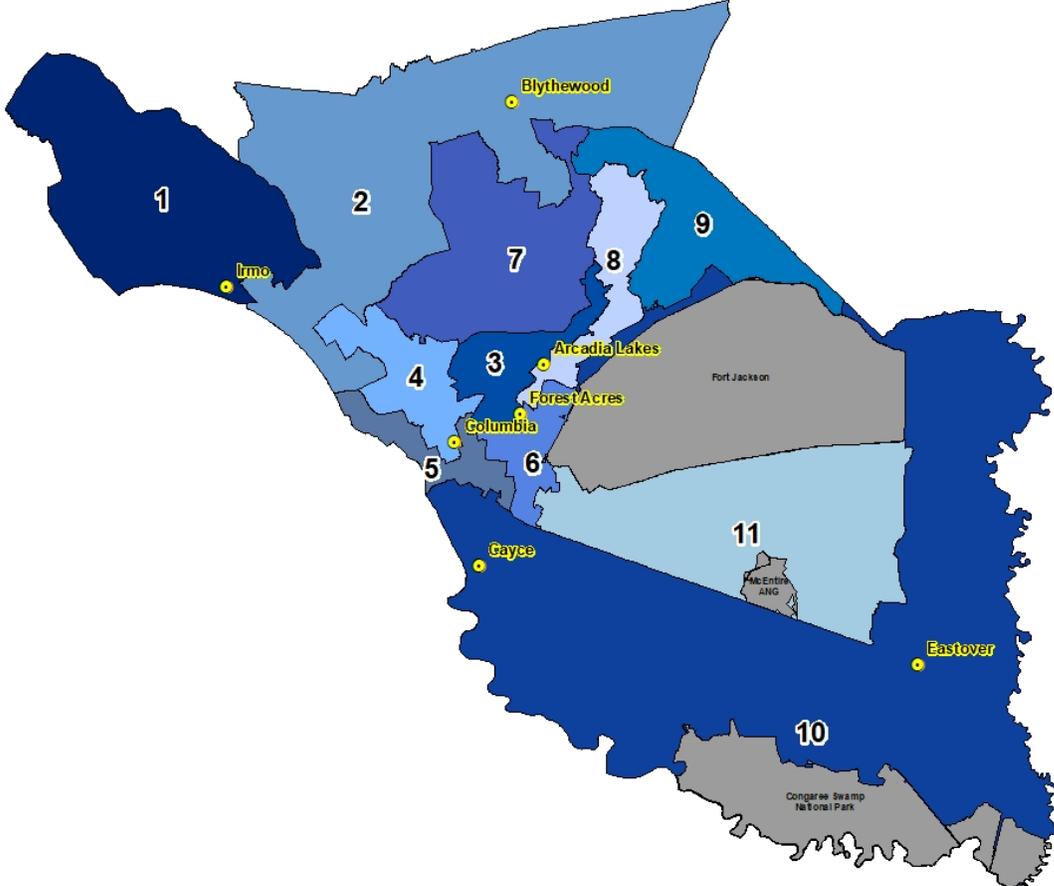


*Resurfacing Hunters Pond*

When the scope of a project is deemed too large for Public Works crews, a consultant and/or a contractor are engaged to perform the work to County-specified standards. The Engineering Division employs inspection staff to observe and inspect work as it is being performed.

The most common Capital Improvement Projects are road resurfacing and sidewalk construction. Comprehensive lists, by County Council district, of these projects (as well as dirt road paving) managed by the Department of Public Works and the Transportation Penny Department, follow hereafter.

# Council District Map



# Projects by Council District

## District 1



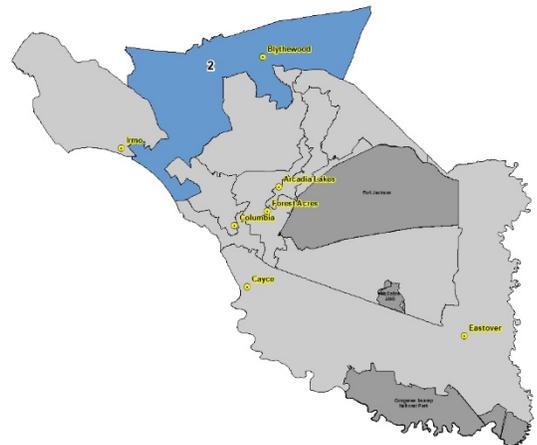
Project	Total Mileage
Resurfacing	5.56

### Resurfacing Projects:

Road Name	District	Linear Miles	Department
Averill Ln	1	0.36	Transportation
Bucktail Way	1	0.04	Transportation
Kip Ct	1	0.04	Transportation
Little Hampton Rd	1	0.19	Transportation
Osbourne Ln	1	0.25	Transportation
Ramblewood Dr	1	0.24	Transportation
Redington Way	1	0.28	Transportation
Staffwood Ct	1	0.04	Transportation
Staffwood Dr	1	0.18	Transportation
S. Royal Tower Dr	1	0.22	Transportation
Stonemede Dr	1	0.11	Transportation
W. Royal Tower Dr	1	0.74	Transportation
Wyncliff Court	1	0.05	Transportation
Steeple Ridge Rd	1	1.36	Public Works
Laurent Way	1	0.81	Public Works
Dunleith Way	1	0.37	Public Works
Dunleith Ct	1	0.10	Public Works
Laurent Ct	1	0.12	Public Works
Cotting Ct	1	0.07	Public Works

## District 2

Project	Total Mileage
Resurfacing	5.09

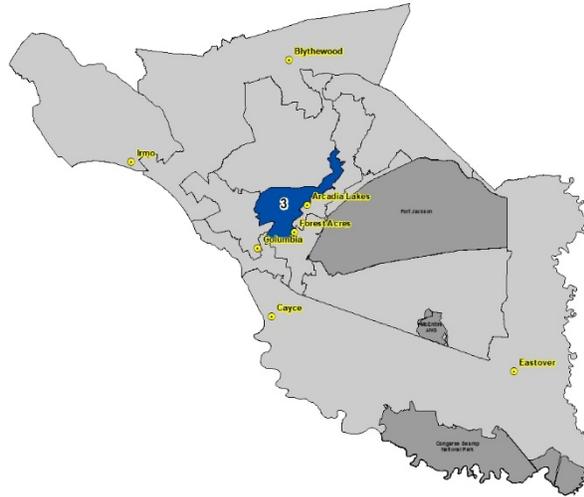


### Resurfacing Projects:

Road Name	District	Linear Miles	Department
Belk Ct	2	0.19	Transportation
Carolina Pines Dr	2	1.21	Transportation
Harper Park Rd	2	0.07	Transportation
Northpoint Blvd	2	1.23	Transportation
Oak Knoll Dr	2	0.40	Transportation
Ramsgate Dr	2	0.32	Public Works
Rolling Hills Dr	2	0.32	Public Works
Rolling Hills Cr	2	0.02	Public Works
Hunters Run Dr	2	0.23	Public Works
Bowhunter Dr	2	0.66	Public Works
Bear Rock Dr	2	0.08	Public Works
Duck Pt	2	0.03	Public Works
Grouse Ct	2	0.03	Public Works
Labrador Dr	2	0.17	Public Works
Ranger Ln	2	0.05	Public Works
Coyote Ln	2	0.07	Public Works

## District 3

<b>Project</b>	<b>Total Mileage</b>
Resurfacing	0.53

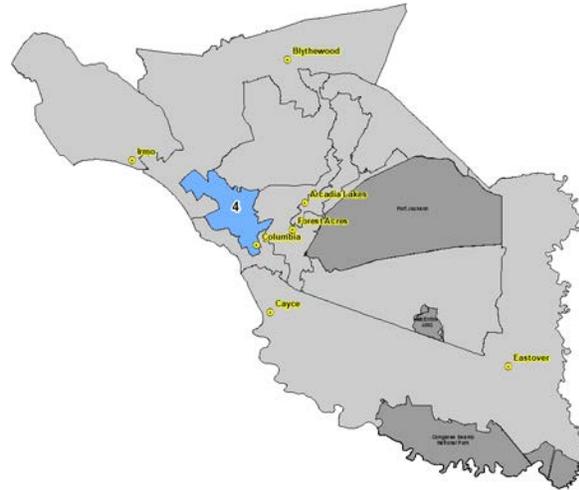


### Resurfacing Projects:

Road Name	District	Linear Miles	Department
Olde Springs Rd	3	0.53	Transportation

# District 4

Project	Total Mileage
Resurfacing	0.36

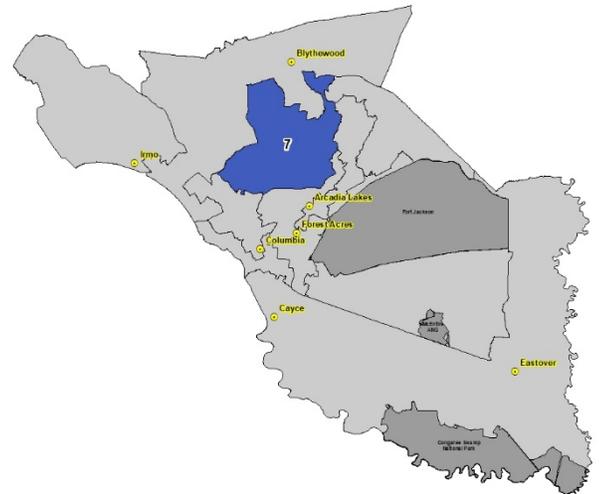


## Resurfacing Projects:

Road Name	District	Linear Miles	Department
Garner Ln	4	0.36	Transportation

# District 7

Project	Total Mileage
Resurfacing	1.65

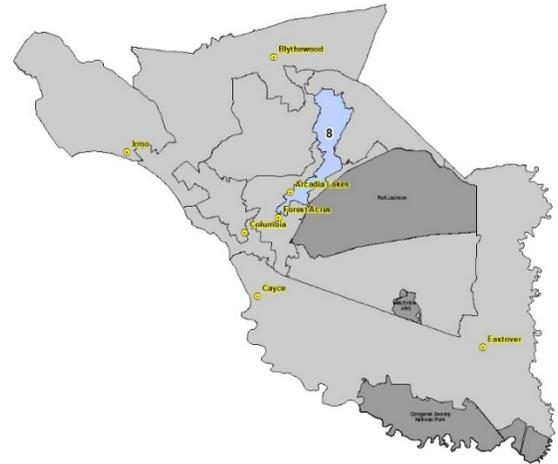


## Resurfacing Projects:

Road Name	District	Linear Miles	Department
Bent Oak Ct	7	0.03	Transportation
Longtown W Rd	7,9	0.43	Transportation
Abney Estates Dr	7	0.42	Public Works
Valley Estates Dr	7	0.51	Public Works
Winding Brook Loop	7	0.21	Public Works
Abney Wood Ct	7	0.06	Public Works

## District 8

Project	Total Mileage
Resurfacing	2.91

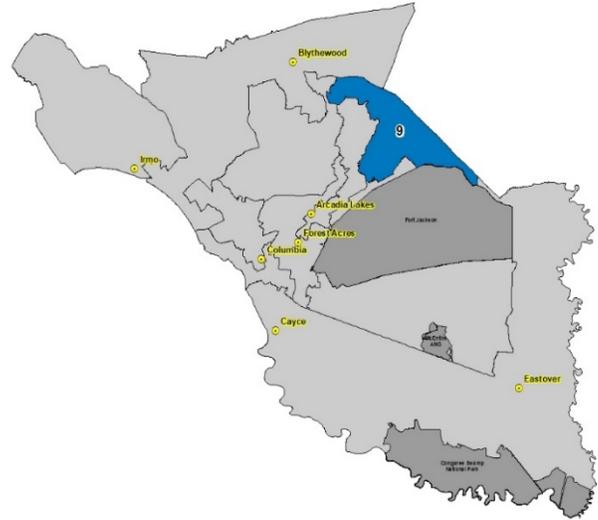


### Resurfacing Projects:

Road Name	District	Linear Miles	Department
Radcot Ct	8	0.35	Transportation
Rosewood Dr	8	0.82	Transportation
Salisbury Ln	8	0.33	Transportation
Ventura Ct	8	0.10	Transportation
Winding Creek Ln	8	0.08	Transportation
Hunters Pond Dr	8	1.24	Public Works

## District 9

Project	Total Mileage
Resurfacing	2.83

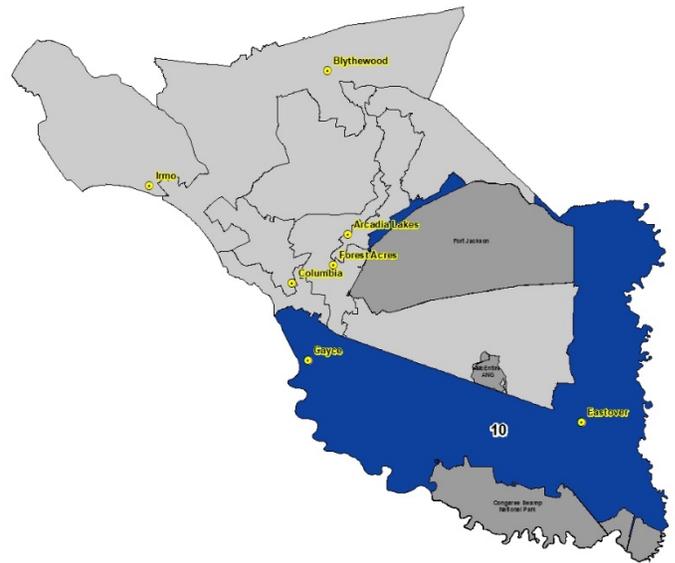


### Resurfacing Projects:

Road Name	District	Linear Miles	Department
Bombing Range Rd	9	0.95	Transportation
Columbia Club Dr E	9	0.90	Transportation
Muirfield Court W	9	0.15	Transportation
Woodlands West	9	0.40	Transportation
Longtown W Rd	7,9	0.43	Transportation

## District 10

Project	Total Mileage
Paving	0.54

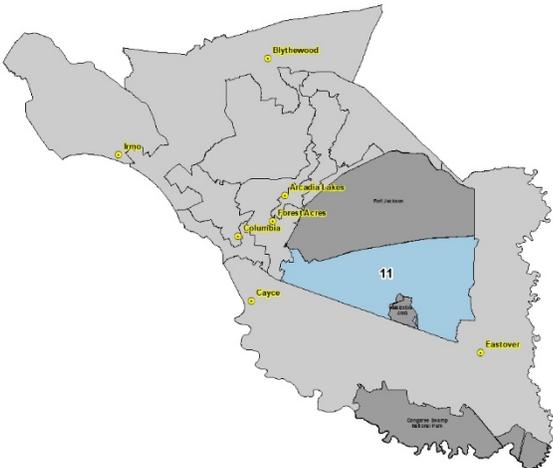


### Dirt Road Paving Projects:

Road Name	District	Linear Miles	Department
South Dr	10	0.32	Transportation
Robert James	10	0.22	Transportation

# District 11

Project	Total Mileage
Resurfacing	5.77
Paving	0.41



## Resurfacing Projects:

Road Name	District	Linear Miles	Department
Ashley Place	11	0.05	Transportation
Bedford Way	11	0.38	Transportation
Berkeley Forest Ct	11	0.04	Transportation
Berkeley Forest Dr	11	0.77	Transportation
Candlewood Dr	11	0.54	Transportation
Cardington Dr	11	0.73	Transportation
Exton Shore Dr	11	0.47	Transportation
Flowerwood Dr	11	0.18	Transportation
Greys Ct	11	0.03	Transportation
Jadetree Ct	11	0.05	Transportation
Jadetree Dr	11	0.36	Transportation
Kildare Dr	11	0.06	Transportation
Mountainbrook Dr	11	0.42	Transportation
Padgett Woods Blvd	11	0.10	Transportation
Pear Tree Cir	11	0.36	Transportation
Prince Charles Ct	11	0.19	Transportation
Ragsdale Dr	11	0.36	Transportation
Raintree Ct	11	0.42	Transportation
Raintree Ln	11	0.18	Transportation
Regents Ct	11	0.11	Transportation

## Dirt Road Paving Projects:

Road Name	District	Linear Miles	Department
Rocky Rd	11	0.17	Transportation
Barkley Rd	11	0.24	Transportation

## Conclusion

The staff of the Department of Public Works is dedicated to its mission of maintenance and improvement of the County Road Maintenance System and its component infrastructure. Our goal is to create excellent public facilities and to improve the quality of life for residents today and in the future. We strive to achieve this goal through steady improvement in the effectiveness and efficiency with which we perform daily tasks. We look forward to reporting on this progress in future annual reports.