



South Carolina Department of Transportation

Project Development Process

Mitchell Metts, P.E.
Director of PreConstruction

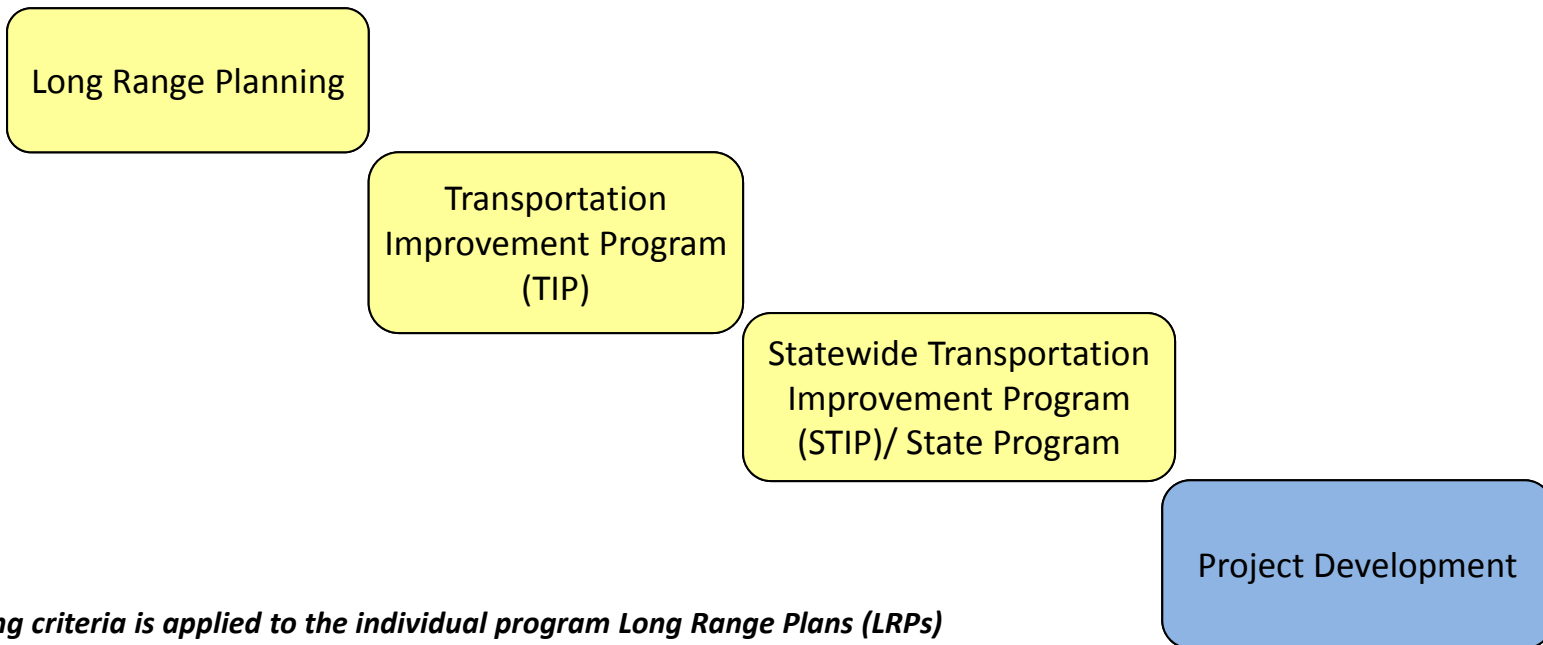
ENGINEERING DIVISION

Project Development Process

- Varies widely depending on project type
- Can be short on simple projects, longer on more complex projects
- Involves coordination
- Frequently includes public involvement
- Requirements and Regulations



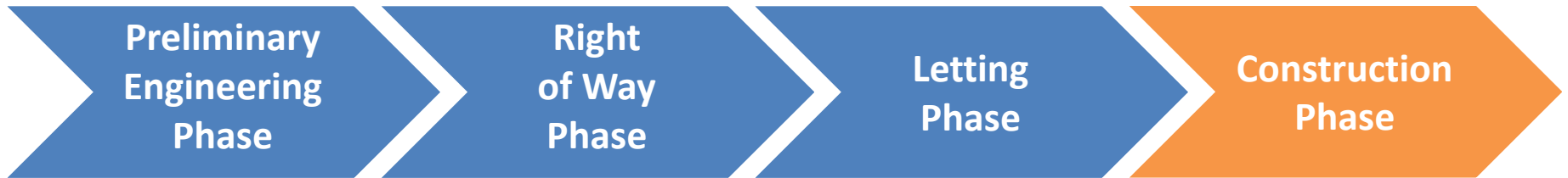
Initiation of a Project



Act 114 ranking criteria is applied to the individual program Long Range Plans (LRPs) to allow for the inclusion of projects from those LRPs into their respective TIP and then on to the STIP. Updates to the LRPs and Act 114 rankings occur as needed to allow these new projects to be added to the fiscally constrained TIPs.



Project Development Process



Project Development Process



SCDOT currently has nearly 1300 projects in the pipeline

Approximately 300 projects are under construction



Project Development Process



- Preliminary Engineering takes a project from concept to contracting suitable documents.
- Right of Way includes negotiating and securing the property needed for the footprint of the project.
- Letting is the actual bidding, review and approval of bids and execution of the contract.



Project Development Process

(Simpler Projects -- Resurfacing and CTC Projects)

**Up to
4 months**



- ❖ Resurfacing projects require minimal plan development and can proceed from Commission approved funding to contract letting in 3-4 months.



Project Development Process

(More complex projects – Widening and bridge replacements)

Up to
3 years



- ❖ As the projects become more complicated, additional time is required to develop the design, engage the public, coordinate with affected entities, modify the plans, navigate the regulatory and oversight hurdles and secure the necessary permits.
- ❖ The key to these projects is to develop a project that will be able to advance to bidding with sufficient engineering work to manage our contractual risk.
- ❖ Some bridge projects and safety projects can also advance quickly if they require no right of way, have limited impact to the environment and utilize a standard design.



Project Development Process

Up to
2 years



- Right of Way acquisition phase can vary depending on number of parcels on the project.
- “Right to enter” either through securing of acquisition or filing of condemnation should be acquired prior to bidding of project in order to ensure the contractor has the ability to go to work once a contract is awarded.
- SCDOT strives to successfully negotiate with landowners in order to avoid condemnation.



Project Development Process

Up to
6 months



- Lettings occur once a month. Project is advertised for 5 weeks prior to receiving bids.
- Rigorous process to review bids received to ensure that the bids are responsive.
- Staff reviews the bids based on criteria and either recommend approval or rejection to the Commission at their monthly meetings.



Items that may add time to project delivery

- Environmental Issues (Threatened and endangered species, hazardous materials, wetlands)
- Permits/Mitigation – Many regulatory hurdles
- Utility Impacts
- Railroad Involvement
- Public involvement
- Complexity



Accelerating Delivery of Projects

- Identify, Avoid and Minimize Impacts
- Utilizing Design-Build
- Standard Designs
- Seeking a Programmatic Approach to mitigation and partnering with Resource Agencies
- Benchmarking and Continuous Improvement



Questions?





South Carolina Department of Transportation

Road Turn Back Information

Tony Sheppard, P.E.
Director of Traffic Engineering

The background of the slide features a photograph of a surveyor in a dark jacket operating a yellow surveying instrument on a tripod. The scene is set at night or in low light, with a large orange road work truck visible in the foreground. The truck has 'ROAD WORK' written on its side in large blue letters. The overall lighting is dramatic, with a strong light source creating a lens flare effect.

ENGINEERING DIVISION

The State System

<i>Route Type</i>	<i>Centerline Miles</i>	<i>Lane Miles</i>
Interstate	851	3,796
Primary	9,472	23,869
Secondary	31,091	62,865
Total	41,414	90,530

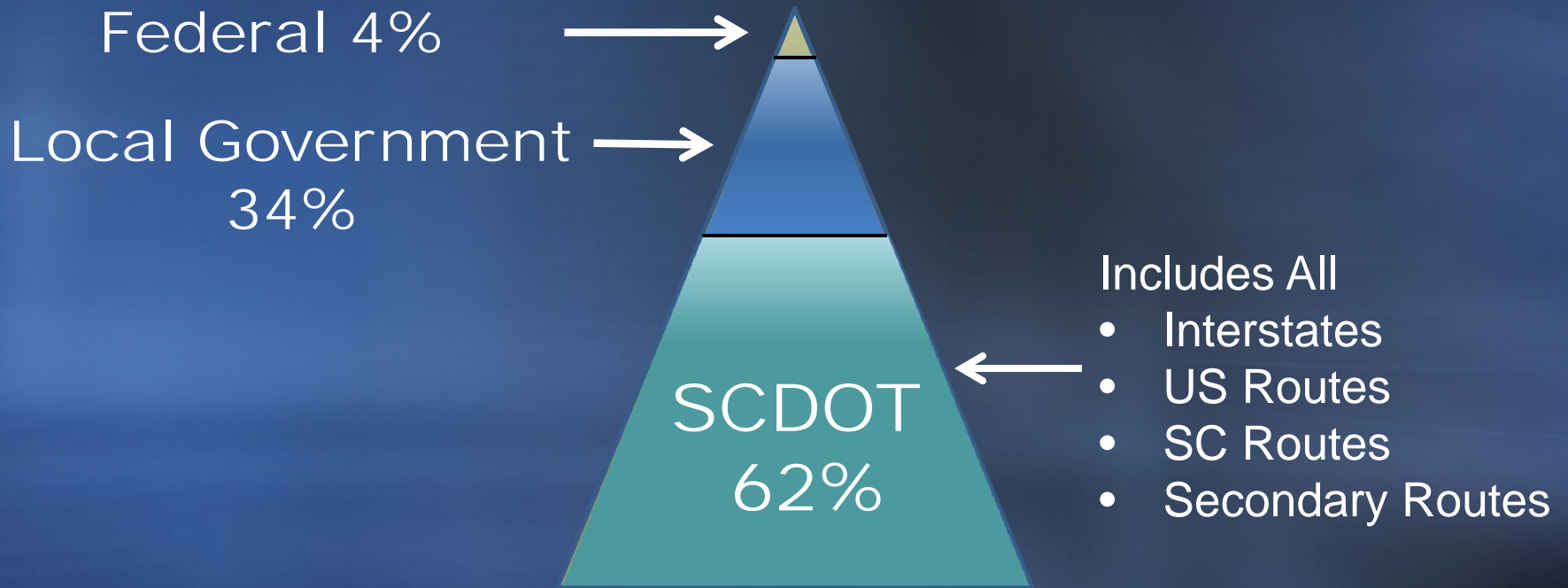


Comparison of State DOT Ownership

	State	State Owned Miles	% of Public Miles
1	Texas	80,268	26%
2	North Carolina	79,333	75%
3	Virginia	58,296	78%
4	South Carolina	41,414	62%
5	Pennsylvania	39,791	33%
6	West Virginia	34,558	89%
7	Missouri	33,884	26%
8	Kentucky	27,625	35%
9	Ohio	19,236	16%
10	Georgia	17,912	14%
11	Louisiana	16,660	27%
12	Arkansas	16,395	16%



SC Public Roads by Ownership



ENGINEERING DIVISION

Functional Classification Summary

- **Interstates and Freeways** – *The highest classification of roads and are designed and constructed with mobility and long-distance travel in mind.*
- **Arterials** - *These roadways serve major centers of metropolitan areas, provide a high degree of mobility and can also provide mobility through rural areas. Arterials typically provide service for trips of moderate or greater length.*

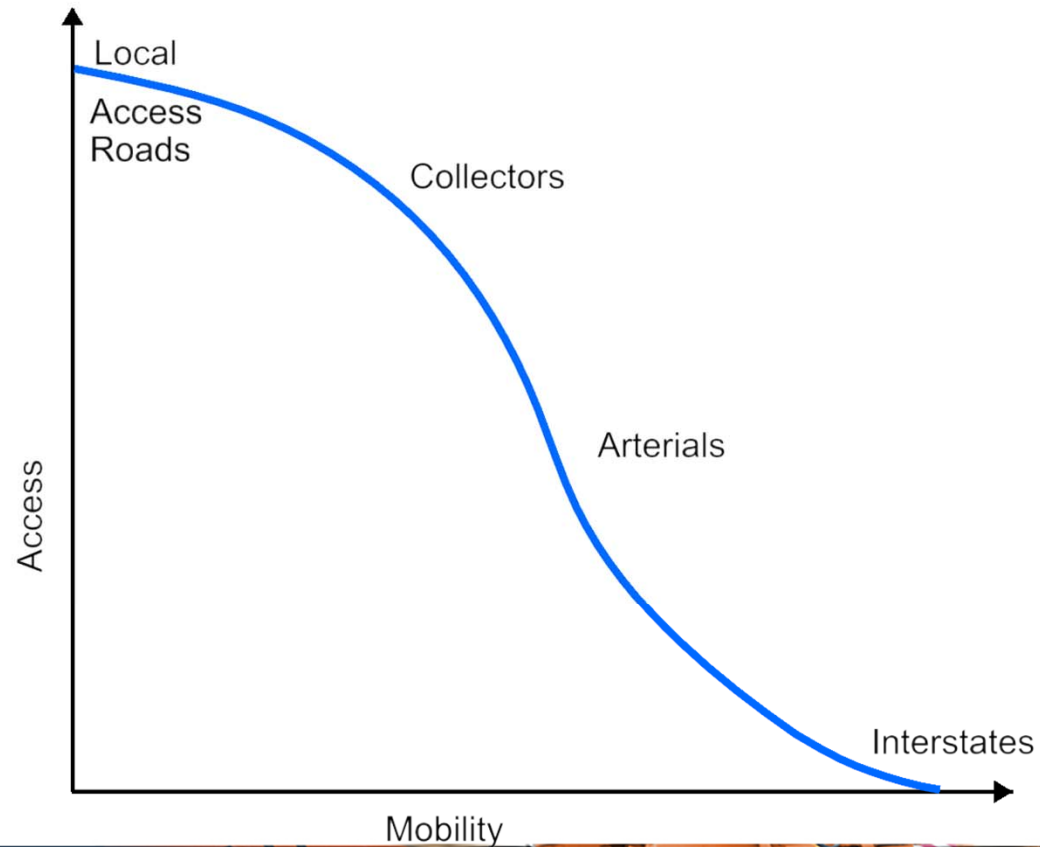


Functional Classification Summary

- **Collectors** - Collectors serve a critical role in the roadway network by gathering traffic from Local Roads and funneling them to the Arterial network.
- **Local Roads** - These roads include neighborhood streets, are typically short in length, and generally carry low volumes. Local Roads are often classified by default. In other words, once all Arterial and Collector roadways have been identified, all remaining roadways are classified as Local Roads.



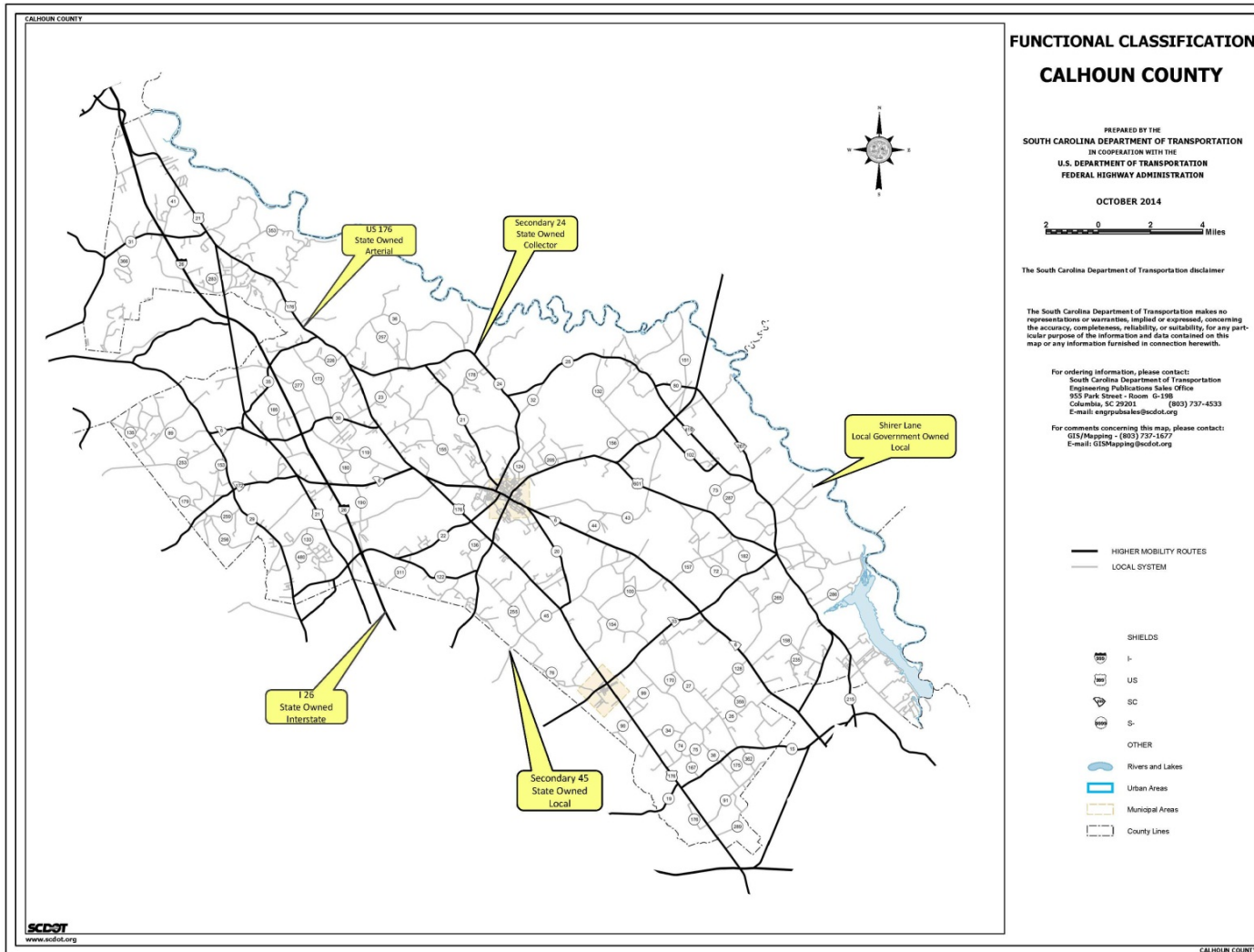
Access vs. Mobility

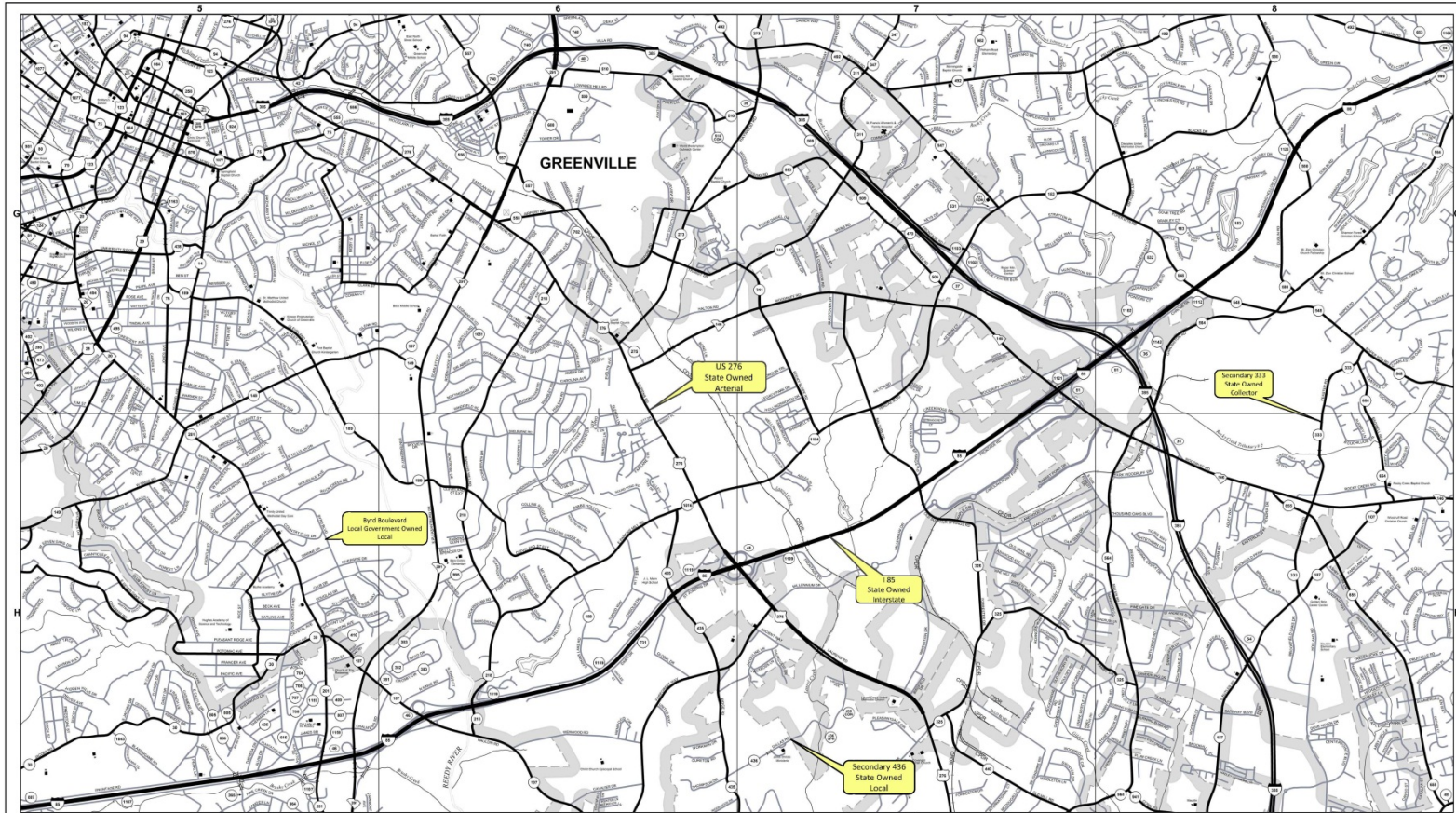


Functional Class Mileage of the State System

Functional Class	Mileage
Interstates	932
Arterials	7,108
Collectors	14,530
Local Routes	18,844
	41,414







**General Highway System
Sheet 16
Greenville - Spartanburg
Urban Area**

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

OCTOBER 2014

SCDOT
www.scdot.com

The South Carolina Department of Transportation makes no representation or warranty, implied or expressed, concerning the accuracy, completeness, reliability, or availability, for any particular purpose of the information and data contained on this map or any information furnished in connection herewith.

For online information, please contact:
South Carolina Department of Transportation
Engineering Publications Sales Office
105 Park Street - Room 6-108
Columbia, SC 29201 (803) 737-4533
E-mail: engrpubsales@scdot.org

For customer assistance, please contact:
GIS Mapping (803) 737-1677
E-mail: GISHelp@scdot.org

ROAD SYSTEM	BOUNDARY & HYDROGRAPHY	MAP FEATURES
<ul style="list-style-type: none"> INTERSTATE U.S. ROUTE S.C. ROUTE SECONDARY ROUTE EXIT NUMBER 	<ul style="list-style-type: none"> NARROW STREAM WIDE STREAM OR RIVER RAILROAD, FENCE OR LAKE WETLAND OR MARSH STATE LINE COUNTY LINE EXTENT OF LARGE SCALE MAP MILITARY INSTALLATION AND GOVERNMENT INSTITUTIONS NATIONAL AND STATE PARKS AND NATIONAL WILDLIFE REFUGES 	<ul style="list-style-type: none"> PARK AND RIDE - (P) ARMORY CHURCH COURTHOUSE ARMED CORPS OF FACILITIES SOUTH DISTRICT OFFICE MAINTENANCE SHOP HOSPITAL SCHOOLS POINT OF INTEREST CEMETERY WELCOME CENTER AND REST AREA AIRPORT LIMITED FACILITIES
<ul style="list-style-type: none"> HIGHER MOBILITY ROUTES LOCAL SYSTEM RAILROAD GENERAL HIGHWAY BRIDGE REVENUE BRIDGE BRIDGES OVER 100 FEET SPAN AT ACTUAL SCALE 		

GREENVILLE-SPARTANBURG-16-14



General Highway System
SHEET 14
COLUMBIA URBAN AREA

Prepared by the
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
 IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION

OCTOBER 2014

0.25 0.00 0.25 0.50
 Feet
 1250 0 1250

SCDOT
 www.scdot.org

The South Carolina Department of Transportation makes no representation or warranty, implied or expressed, concerning the accuracy, completeness, reliability, or suitability, for any particular purpose of the information and data contained on this map or any information furnished in connection therewith.

For ordering information, please contact:
 South Carolina Department of Transportation
 Engineering Publications Sales Office
 950 Park Street - Room G-156
 Columbia, SC 29201
 (803) 737-4533
 E-mail: engpubsales@sdot.org

For comments concerning this map, please contact:
 GIS/Mapping - (803) 737-1677
 E-mail: GISMapping@sdot.org

ROAD SYSTEM

INTERSTATE
 U.S. ROUTE
 S.C. ROUTE
 SECONDARY ROUTE
 EXIT NUMBER
 HOV-3/4 LANES
 LOCAL SYSTEM
 RAILROAD
 GENERAL HIGHWAY BRIDGE
 BRIDGE OVER AN OBSTACLE (RAIL, LAKE, ETC.)

BOUNDARY & HYDROGRAPHY

NARROW STREAM
 WIDE STREAM OR RIVER
 RESERVOIR, POND OR LAKE
 WETLAND OR MARSH
 STATE LINE
 COUNTY LINE
 EXTENT OF LARGE SCALE MAP
 MILITARY INSTALLATION AND GOVERNMENT INSTITUTIONS
 NATIONAL AND STATE PARKS, AND NATIONAL RECREATION AREAS

MAP FEATURES

PARK AND RIDE
 AIRPORT
 CHURCH
 COURT HOUSE
 JURY ROOM
 POLICE OFFICE
 FIRE STATION
 MAINTENANCE SHOP
 HOSPITAL
 SCHOOL
 POINT OF INTEREST
 CEMETERY
 PUBLIC UTILITY FACILITIES
 FACILITIES

North arrow and grid.

Access vs. Mobility

