Chapter 2. Existing Conditions

This chapter evaluates the existing land use and transportation conditions within the study area. The following sections examine current land use patterns, corridor and intersection LOS, and crash data. This chapter also summarizes recent and ongoing studies, plans, and projects relevant to the study area.

2A. Existing Land Use Assessment

Investigating and understanding the existing land use patterns is essential, because land use decisions and access management strategies need to be coordinated and comprehensive. Collaboration across multiple jurisdictions promotes a consistent approach along the corridor. The 35-mile SR 6 corridor spans across many different land uses. Beginning in Fulton County, the corridor spurs from Hartsfield-Jackson Atlanta International Airport (HJAIA), the busiest passenger airport in the world and the largest employer in the state of Georgia, with over 58,000 workers. The airport covers an area of about 4,700 acres in southwest Atlanta and includes over 30,000 public parking spaces. Access points from the airport and I-85 form the beginning of the study corridor. Located on the opposite side of I-85 from the airport is the 400,000-square-foot Georgia International Convention Center, the second largest convention center in the state. Moving northwest from the airport, land use becomes a blend of low-density residential and transportation uses, (primarily parking for the airport). Approaching the interchange with I-285, some commercial development begins to appear, and just past this interchange is the Camp Creek Marketplace, a large 30-acre development with over 100 businesses, including restaurants, retail, banking, and other services. This development covers about the first mile of SR 6 west of I-285. At this point, the land uses change to mostly undeveloped forests and low-density residential until the approach to the Fulton Industrial District, where industrial and commercial land use comprises a large portion of the land area.

As the corridor crosses into Douglas County, land uses transforms from industrial to undeveloped, until one approaches another commercial center near the interchange with I-20. For the next two miles beyond the interchange, there is a blend of commercial and industrial land uses, which then become low-density residential before the Cobb County line. SR 6 in Douglas County experiences some of the heaviest truck traffic throughout the corridor since it provides a link to I-20 between the industrial centers around Fulton Industrial Boulevard to the south and the Whitaker Intermodal Terminal to the north. This area has experienced some of the highest commercial and industrial growth in the county in the past several years.

Extending into Cobb County, the land use patterns along the corridor become less commercial and industrial, and there is a greater concentration of low and medium residential areas, as well as forests, wetlands, and other undeveloped areas. Characteristic of residential areas, there is very low employment density immediately surrounding SR 6 in Cobb County. Areas immediately adjacent to the corridor are primarily zoned residential, with the exception of some small light and heavy industrial-zoned areas. One such location is Norfolk Southern's John Whitaker Intermodal Terminal, near Clarkdale between Austell and Powder Springs, located along the eastern edge of SR 6. This terminal, the largest intermodal terminal in the United States east of the Mississippi River, is a 450-acre facility with 20,000

feet of unloading tracks, 26,000 feet of support tracks, 3,000 parking spots for 53-foot trailers, 450 container-stack spaces, and 10 inbound/outbound truck lanes.

When the corridor crosses into Paulding County, the land use adjacent to SR 6 becomes increasingly commercial, with strip malls, restaurants, and retail developments lining the corridor from the Cobb County line until Bill Carruth Parkway west of Hiram. These commercial developments are heavy trip generators. Population density along this portion of the corridor is relatively low, with values ranging from 0.6 to 2.0 persons per acre. The majority of the population is centered north of Hiram along SR 120. The employment in Paulding County, however, is centered in these commercial developments along SR 6 from the Cobb County line all the way to Dallas. Employment density ranges from 0.26 jobs per acre to above 1 job per acre. The future expectations, according to the Paulding Comprehensive Transportation Plan, are that both population and employment growth in the county will center around SR 6. Beyond Hiram, moving west toward Dallas, land use patterns become more varied, with a mix of high and low density residential, commercial, industrial, and forests and other undeveloped land until the corridor reaches the study termination point at South Main Street in Dallas.

Figure 2-1 and **Figure 2-2** show existing land use and land cover. **Figure 2-3** shows major landmarks and trip generators along the SR 6 corridor.

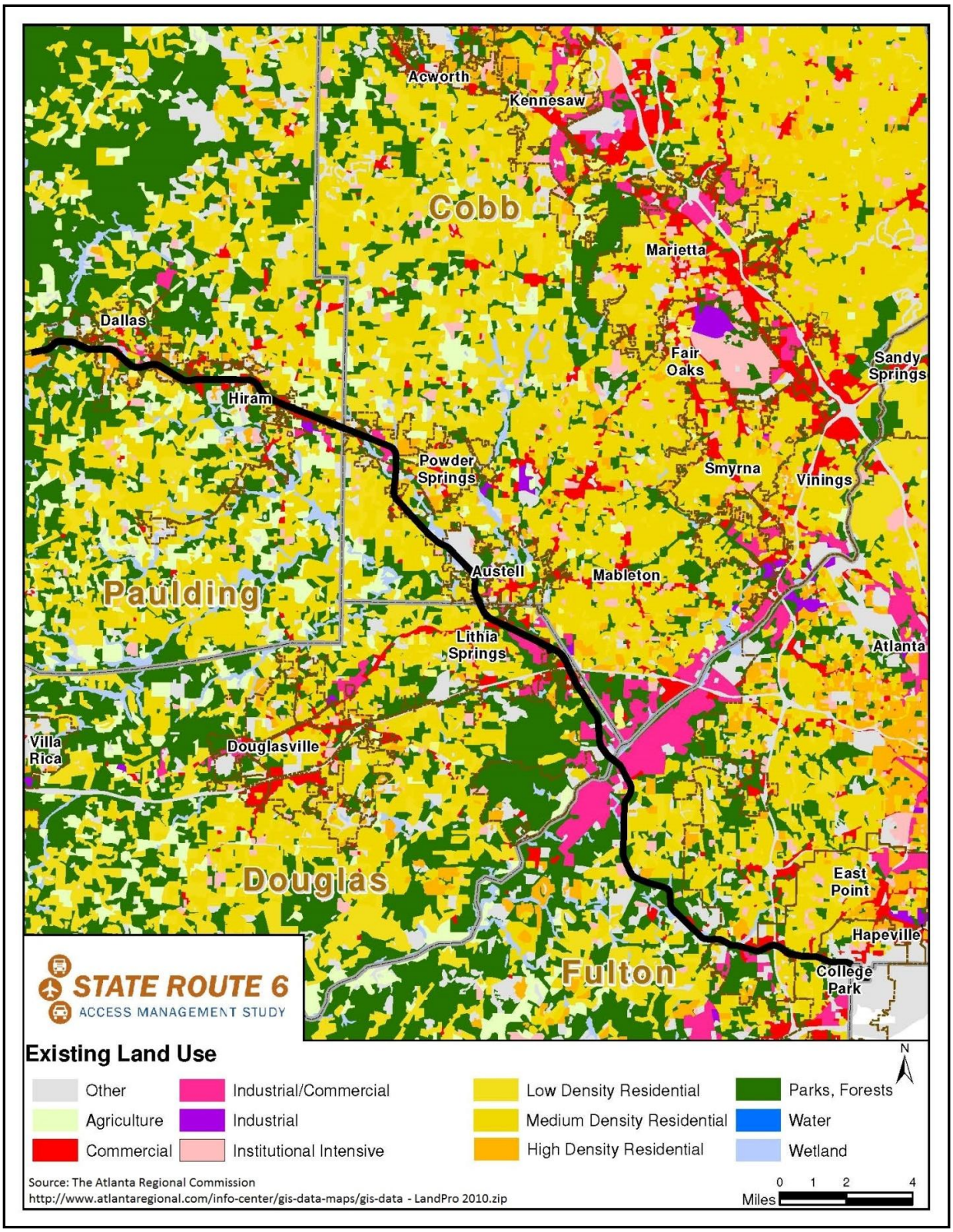


Figure 2-1: Existing Land Use Map

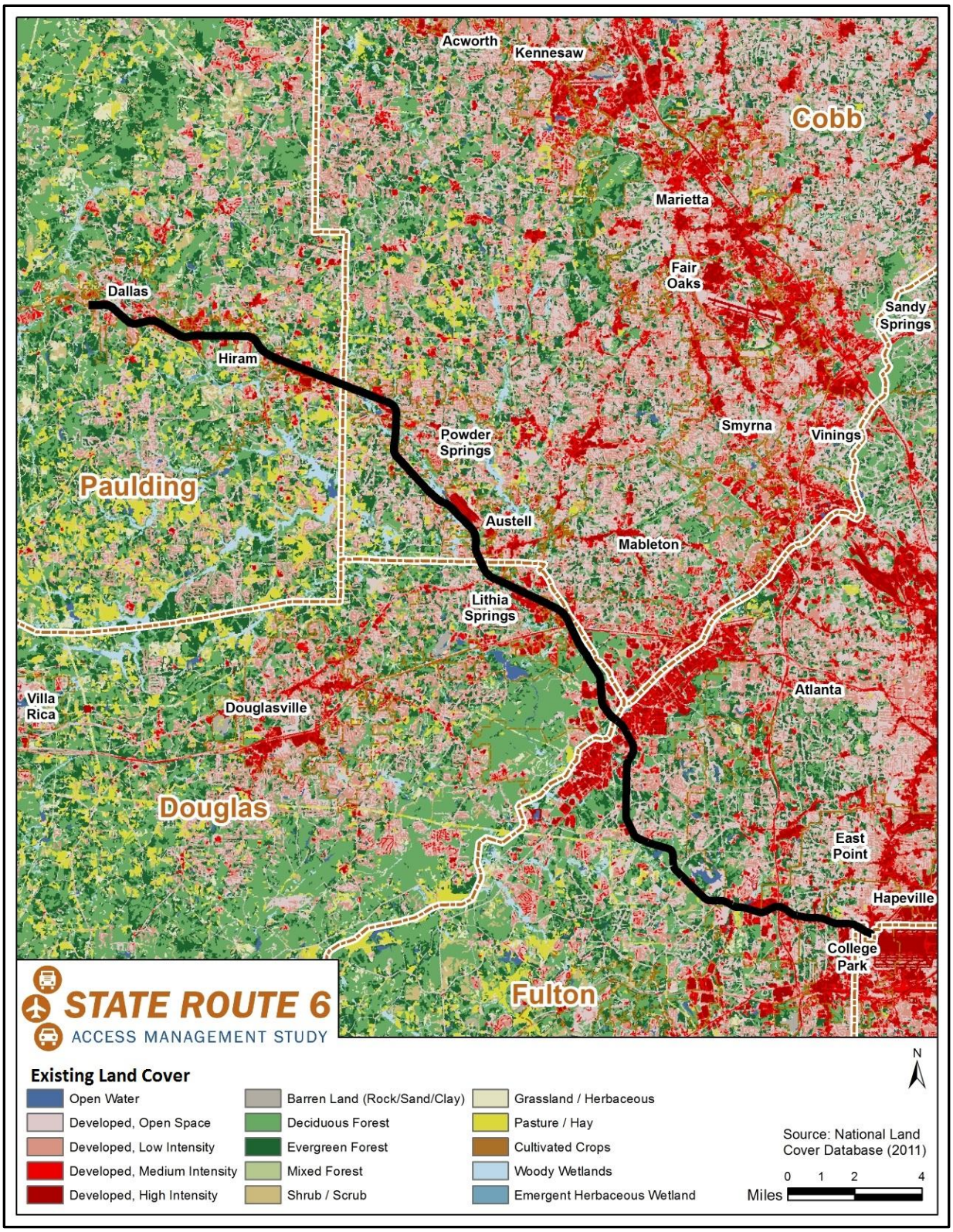


Figure 2-2: Existing Land Cover Map

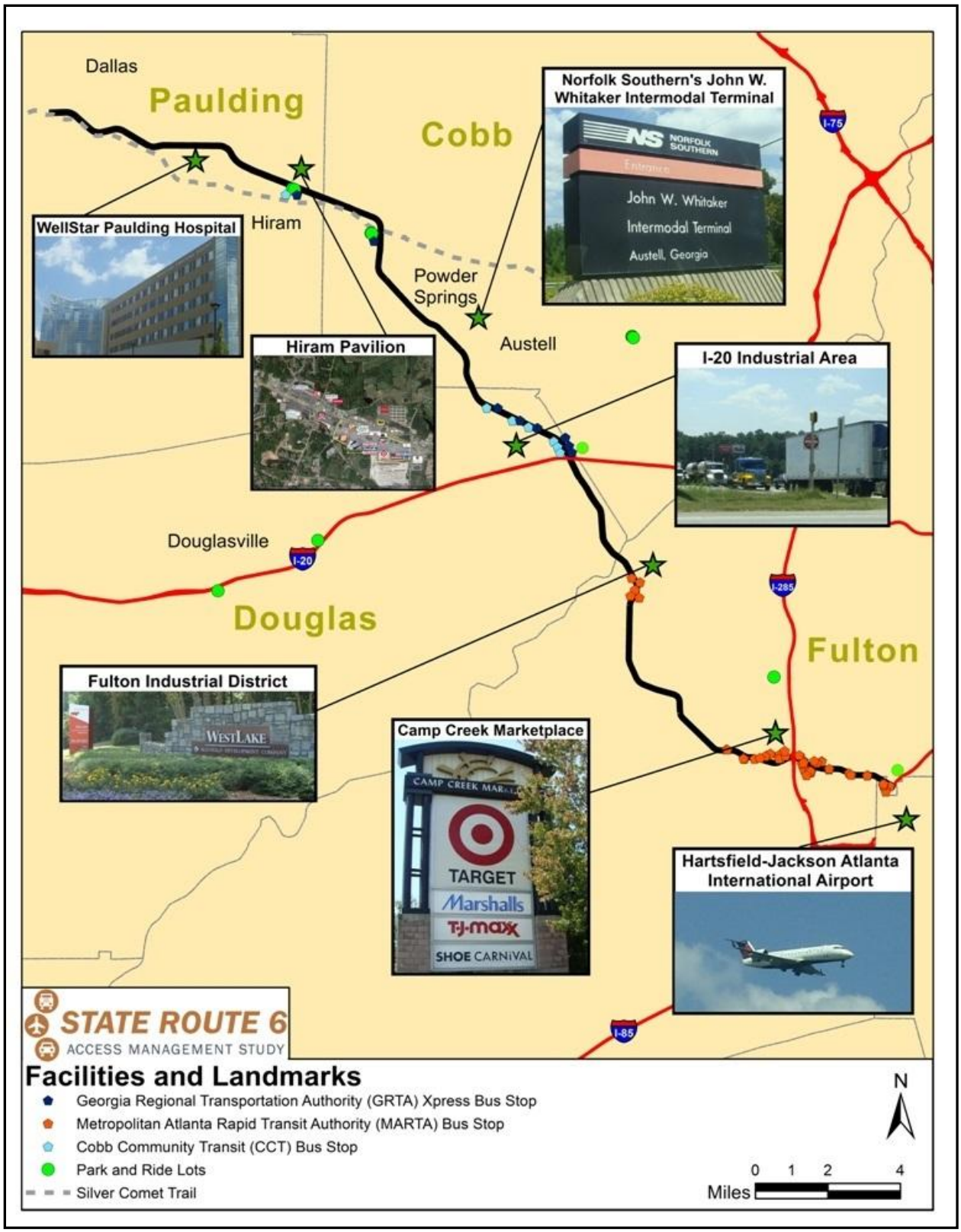


Figure 2-3: Facilities and Landmarks Map

2A.1. Existing Environmental Justice Information

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires federal agencies to address environmental justice for all actions by identifying disproportionately high and adverse effects to minority or low-income populations and communities. The potential for environmental justice (EJ) issues were examined, and efforts were made to identify minority and low-income populations that have the potential to be underserved. The US Census Bureau American Fact Finder tool and the US Environmental Protection Agency (EPA) EJ Mapper (EnviroMapper®) were used to identify minority, low-income, and limited-English-speaking populations along the study corridor. Maps depicting the percent of population for each of these EJ populations by census tract along the project corridor are included in **Figure 2-4, Figure 2-5**, and **Figure 2-6**.

Table 2-1 presents the US Census Bureau data for race (minority and Hispanic), limited English proficiency, low-income, and population over the age of 65 for each of the four counties along the SR 6 corridor, as well as the data for populations found within a half-mile of the SR 6 corridor.

Table 2-1: US Census Bureau Data (2010)

RACE	Fulton County	Douglas County	Cobb County	Paulding County	County Average	SR 6 Corridor (w/in 0.5 mile)
White	45.8%	55.3%	63.2%	79.7%	61.0%	32.0%
Black or African American	44.2%	39.5%	25.1%	17.1%	31.5%	62.0%
Asian	5.7%	1.6%	4.5%	0.8%	3.2%	1.0%
Hispanic or Latino (of any race)	7.8%	8.3%	12.2%	5.1%	8.4%	6.0%
LIMITED ENGLISH PROFICIENCY	Fulton County	Douglas County	Cobb County	Paulding County	County Average	SR 6 Corridor (w/in 0.5 mile)
Speak English less than "very well"	3.6%	3.0%	5.2%	1.2%	3.3%	4.0%
LOW INCOME/POVERTY LEVEL	Fulton County	Douglas County	Cobb County	Paulding County	County Average	SR 6 Corridor (w/in 0.5 mile)
Population for whom poverty status is determined	16.8%	13.4%	11.9%	10.3%	13.1%	12.0%
OVER THE AGE OF 65	Fulton County	Douglas County	Cobb County	Paulding County	County Average	SR 6 Corridor (w/in 0.5 mile)
Total population	9.1%	8.7%	8.9%	7.5%	8.5%	8.0%

A comparison between corridor-wide data and county average indicates that minority populations (specifically Black or African American populations) tend to be located in close proximity to the SR 6 corridor. The percentage of population that speaks English less than “very well” is slightly above county average for three of the four counties along the corridor.

This study investigates access management alternatives and potential transportation improvements along the SR 6 corridor. Projects resulting from the study’s recommendations would be unlikely to cause disproportionate adverse effects on any particular population, as all residents along and users of the corridor would experience the same benefits of the access management plan’s implementation.

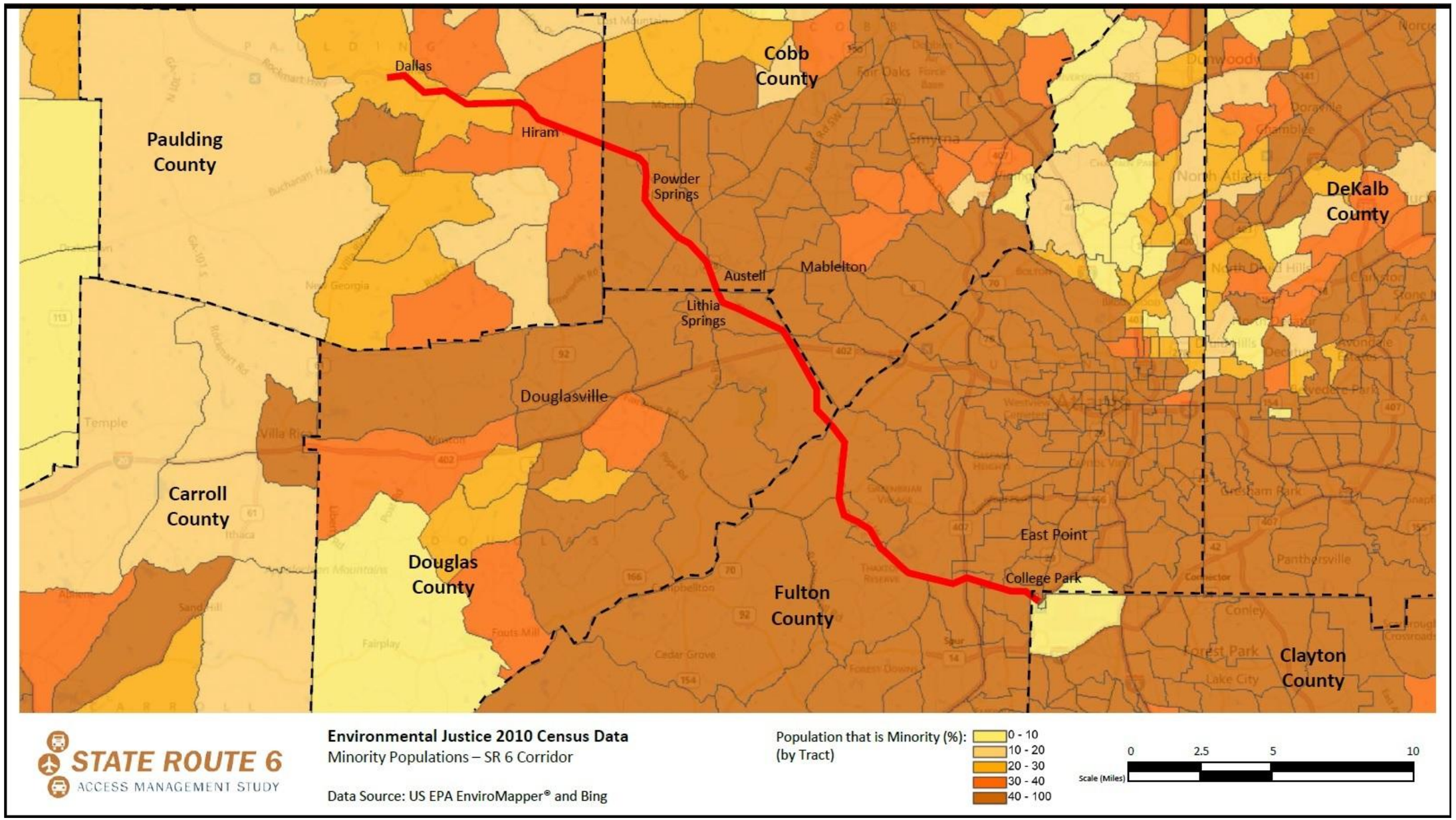


Figure 2-4: Minority Populations – EJ 2010 Census Data

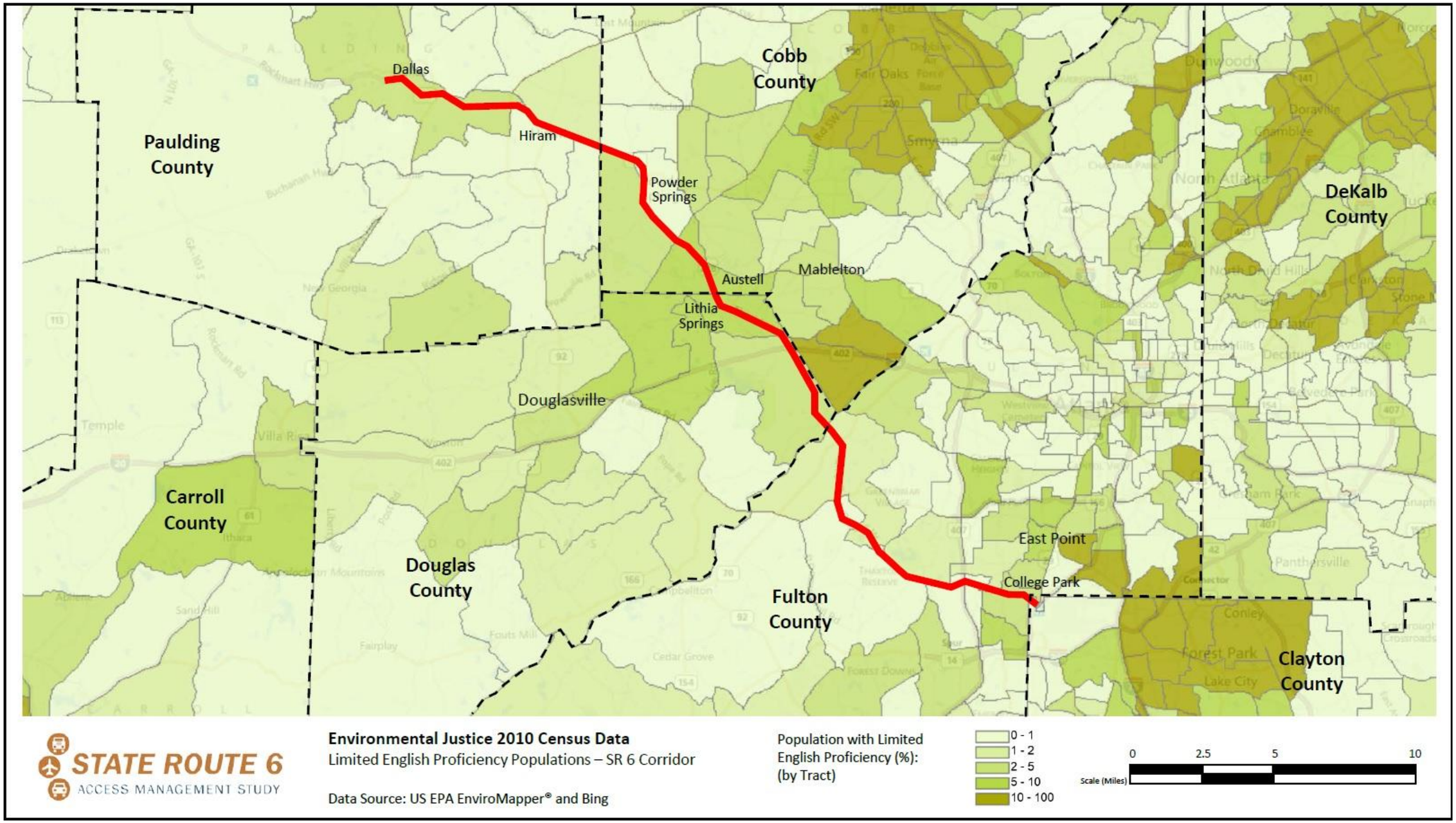


Figure 2-5: Limited English Proficiency Populations – EJ 2010 Census Data

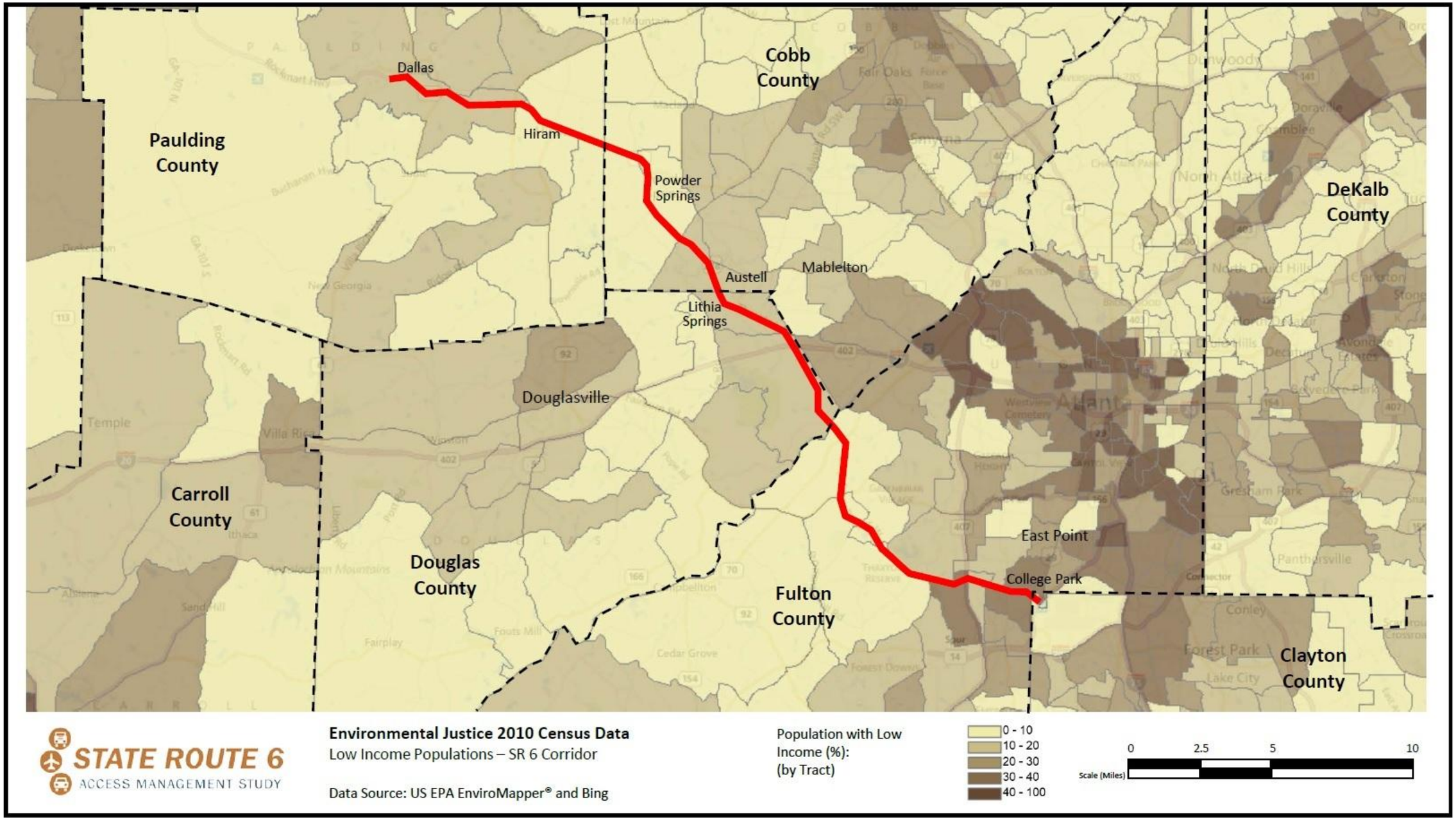


Figure 2-6: Low-Income Populations – EJ 2010 Census Data

2B. Existing Transportation Assessment

The following sections provide an overview of the existing transportation system, including the following elements:

- Roadway classifications and characteristics
- Existing traffic conditions
- Travel time
- Crash analysis
- Freight
- Public transportation
- Bicycle and pedestrian facilities
- Transportation regulations

2B.1. Roadway Classifications and Characteristics

To analyze existing travel conditions, roadway classifications and characteristics have been compiled first using GDOT's functional classification maps, and subsequently verified through site visits. Functional classifications, typical sections, and posted speeds of the SR 6 study corridor and its major crossroads are shown in **Table 2-2.** All other crossroads classified as local roads are excluded from the table. **Figure 2-7** shows existing geometry and lane assignment of the major intersections along the corridor.

The SR 6 study corridor is classified as an urban principal arterial throughout the project area. Arterials are intended to provide the highest LOS at the greatest speed for the longest uninterrupted distance, and provide some degree of access control. According to the Federal Highway Administration (FHWA), urban principal arterials are characterized as roadways that serve major centers of metropolitan areas, provide a high degree of mobility, and can provide mobility through rural areas. Abutting land uses for principal arterials can be served directly. The typical sections for the corridor include:

- A four-lane, median-divided section (with either raised median or grass median) from I-85 to Interstate West Parkway/Bob Arnold Drive (15 miles) and from Elliott Road to Buchanan Street (9 miles)
- A six-lane, median-divided section (with either raised median or grass median) from Interstate West Parkway/Bob Arnold Drive to Veterans Memorial Parkway/Bankhead Highway/US 78 (3 miles)
- A four-lane, flush-median section from Veterans Memorial Parkway/Bankhead Highway/US 78 to Elliott Road (8 miles)

Several minor roadways and driveways with varying functional classifications have access to the SR 6 study corridor. Large numbers of roadway and driveway access points can hinder optimal operations of the corridor. Ideally, local roads and driveways should not be connected to freeways or arterials directly; rather, they should be connected to collector roads. Georgia guidelines for access onto state facilities and for driveway spacing are specified in GDOT's *Regulations for Driveway and Encroachment Control (2009).*

This Access Management Study will review existing access points and existing policies in order to develop a comprehensive access management plan to guide the future development of the corridor. One component of the plan will include guidance on driveway consolidation and limiting new access points to reduce conflict points and help achieve the intended level of mobility along the corridor, keeping safety and mobility in mind.

Table 2-2: Roadway Characteristic Inventory

Facility	Functional Classification	Typical Section	Shoulders	Posted Speed (mph)
	State Route 6			
SR 6 (I-85 to Welcome All Connector)	Principal Arterial (Urban)	4 Lanes w/ Limited Turn Lanes	2' to 4' Paved	45
SR 6 (Welcome All Connector to Interstate W Pkwy/Bob Arnold Dr)	Principal Arterial (Urban)	4 Lanes w/ Limited Turn Lanes	2' to 4' Paved	55
SR 6 (Interstate W Pkwy/Bob Arnold Dr to Veterans Memorial Pkwy/Bankhead Hwy/US 78)	Principal Arterial (Urban)	6 Lanes w/ Limited Turn Lanes	2' to 4' Paved	45
SR 6 (Veterans Memorial Pkwy/Bankhead Hwy/US 78 to Elliott Rd)	Principal Arterial (Urban)	4 Lanes w/ Semi-Limited Turn Lanes	2' to 6' Paved	55
SR 6 (Elliott Rd to Hiram Pavilion/Sam's Club Driveway)	Principal Arterial (Urban)	4 Lanes w/ Limited Turn Lanes	2' to 4' Paved	55
SR 6 (Hiram Pavilion/Sam's Club Driveway to Pace Rd)	Principal Arterial (Urban)	4 Lanes w/ Limited Turn Lanes	2' to 4' Paved	45
SR 6 (Pace Rd to Buchanan St)	Principal Arterial (Urban)	4 Lanes w/ Limited Turn Lanes	2' to 4' Paved	55
	Intersecting Roads			
Herschel Rd	Major Collector (Urban)	2 Lanes w/Turn Lanes	Curb and Gutter (C/G)	35
Washington Rd	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	C/G	35
Desert Dr		2 Lanes w/Turn Lanes	2' to 4' Paved	N/A
I-285	Interstate Principal Arterial (Urban)	8 Lanes	8' to 12' Paved	55
Princeton Pkwy SW		4 Lanes w/Turn Lanes	C/G	N/A
Welcome All Conn	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	C/G	
Old Fairburn Rd	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	C/G	45
Butner Rd	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	C/G	45
Enon Rd	Major Collector (Urban)	2 Lanes w/Turn Lanes	C/G	45
Campbellton Rd	Minor Arterial (Urban)	4 Lanes w/Turn Lanes	C/G	45
Boat Rock Rd SW	Major Collector (Urban)	2 Lanes Bridge	8' to 12' Paved	N/A
Fulton Industrial Blvd SW	Minor Arterial (Urban)	6 Lanes w/ Turn Lanes	C/G	45
Riverside Pkwy	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	2' to 4' Paved	N/A
Douglas Hills Rd		2 Lanes w/Turn Lanes	1' to 2' Paved	35
Factory Shoals Rd		2 Lanes w/Turn Lanes	2' to 4' Paved	40
Interstate West Pkwy/Bob Arnold Dr	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	2' to 4' Paved	N/A
Interstate West Pkwy/Blairs Bridge Rd	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	2' to 4' Paved	N/A
I-20	Interstate Principal Arterial (Urban)	6 Lanes	8' to 12' Paved	55
Oak Ridge Rd		2 Lanes w/Turn Lanes	2' to 4' Paved	35
Maxham Rd	Minor Arterial (Urban)	4 Lanes w/Turn Lanes	C/G	35
Westfork Blvd		2 Lanes w/Turn Lanes	1' to 2' Paved	N/A

Facility	Functional Classification	Typical Section	Shoulders	Posted Speed (mph)
Westfork Dr		2 Lanes w/Turn Lanes	1' to 2' Paved	N/A
Veterans Memorial Pkwy/Bankhead Hwy/US 78	Principal Arterial (Urban - East of SR 6) Minor Arterial (Urban - West of SR 6)	4 Lanes w/Turn Lanes	C/G	N/A
Humphries Hill Rd SW		2 Lanes w/Turn Lanes	C/G & 2' to 4' Paved	35
Garrett Rd	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	4' to 8' Paved	N/A
Oglesby Rd		2 Lanes w/Turn Lanes	C/G	35
Brownsville Rd	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	C/G	35
Hill Road SW		2 Lanes w/Turn Lanes	2' to 4' Paved	35
Powder Springs-Dallas Rd/Marietta St	Minor Arterial (Urban)	2 Lanes below S.R. 6 Bridge	2' to 4' Paved	35
Richard D Sailors Pkwy	Minor Arterial (Urban)	4 Lanes w/Turn Lanes	C/G	45
Florence Rd	Major Collector (Urban)	2 Lanes w/Turn Lanes	2' to 4' Paved	35
Elliot Rd/Powder Springs Dallas Rd	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	2' to 4' Paved	35
Poplar Springs Rd/Hiram Bypass/SR 120 (Projected)	Minor Arterial (Urban – East of SR 6) Major Collector (Urban – West of SR 6)	2 Lanes w/Turn Lanes	C/G	40
Metromont Rd		2 Lanes w/Turn Lanes	C/G	35
Lake Rd		2 Lanes w/Turn Lanes	C/G	35
SR 92	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	2' to 4' Paved	45
Pace Rd		2 Lanes w/Turn Lanes	C/G	N/A
SR 6 Business (Atlanta Hwy)	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	2' to 4' Paved	55
Paulding Pkwy/SR 120/Bill Carruth Pkwy	Principal Arterial (Urban - North of SR 6) Minor Arterial (Urban - South of SR 6)	4 Lanes w/Turn Lanes	2' to 4' Paved	45
Thomas B Murphy Dr		2 Lanes w/Turn Lanes	C/G	25
SR 61/Nathan Dean Blvd	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	2' to 4' Paved	45
Seaboard Ave		2 Lanes w/Turn Lanes	2' to 4' Paved	30
Buchanan St	Minor Arterial (Urban)	2 Lanes w/Turn Lanes	2' to 4' Paved	45

*N/A – no posted speed limit signs

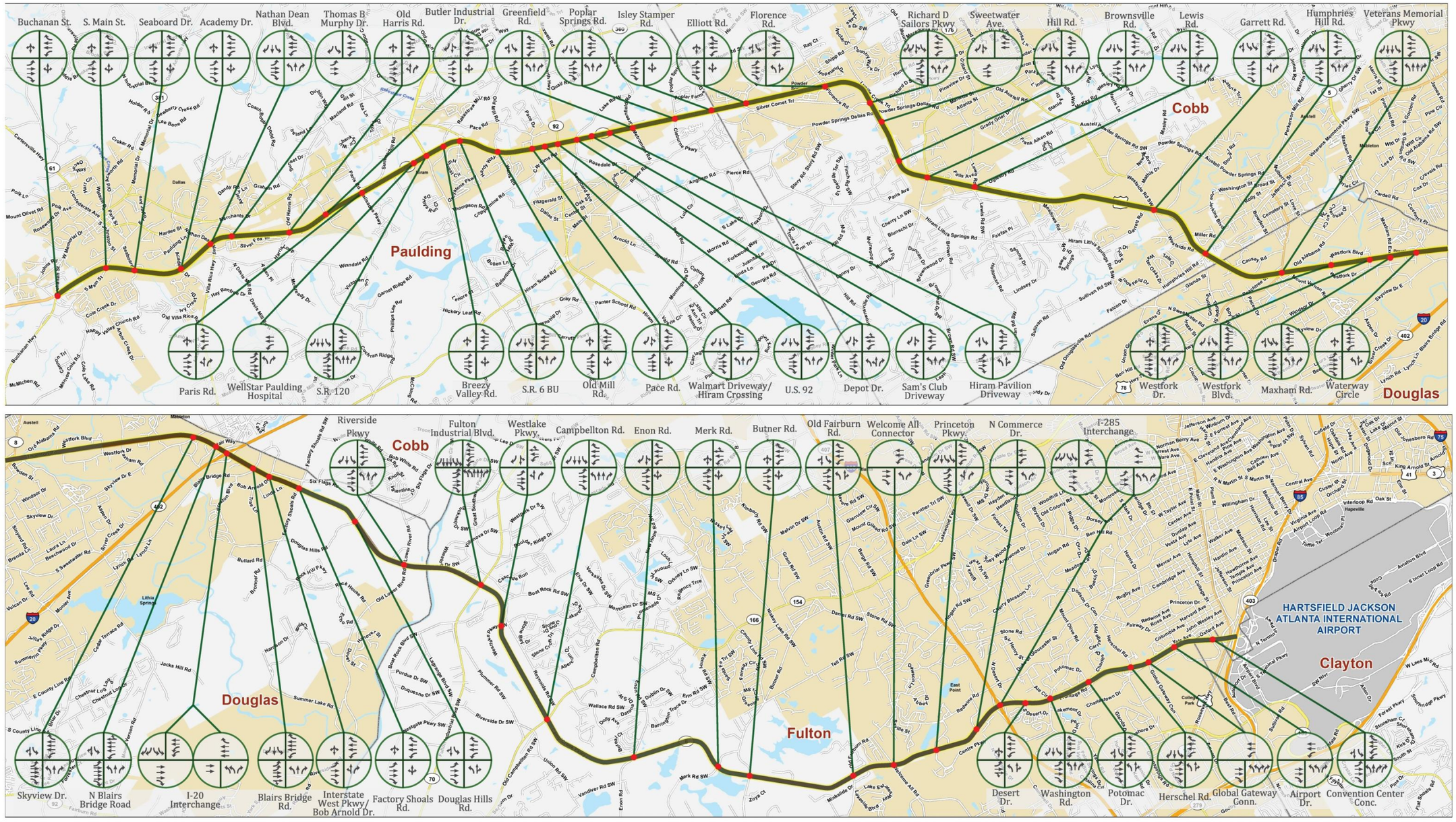


Figure 2-7: Existing Geometry of Major Intersections

2B.2. Existing Traffic Conditions

The evaluation of existing operating conditions provides a framework for analyzing the performance of the transportation system in the study area. Operational analysis was performed using current traffic volumes, lane configurations, and signal operations to identify deficiencies along the corridor. Highway Capacity Software (HCS 2010) and Synchro 8 were used for the analysis of traffic operations. The study corridor was divided into 25 segments based on the location of GDOT traffic counters for Georgia's State Traffic and Report Statistics (STARS). These segments were used for the analysis of LOS and crash data.

LOS is a qualitative measure of the operational conditions of traffic flow based on measures of effectiveness (MoE) for a particular facility. LOS is designated by letters A through F, with LOS A indicating the best operating condition and LOS F indicating the worst. Segment LOS is a function of the free-flow travel speed, which for the purpose of this study can be assumed to be the posted speed limit. A description of the different levels of service, based on the Highway Capacity Manual (HCM) 2010, is provided below.

- LOS A – Describes primarily free-flow operation. Travel speed exceeds 85 percent of the speed limit, and vehicles can maneuver within the traffic stream with no impedance. There is minimal delay at intersections.
- LOS B – Describes reasonably unimpeded operation. Travel speed is between 67 percent and 85 percent of the speed limit, and vehicles experience a slight restriction in their ability to maneuver within the traffic stream. Delay at intersections is not significant.
- LOS C – Describes stable operation. Travel speed is between 50 percent and 67 percent of the speed limit, and vehicles experience a higher delay and restriction in their ability to maneuver and change lanes within the traffic stream in comparison to LOS B. Longer queues at intersections may contribute to lower travel speeds.
- LOS D – Indicates a less stable condition, in which small increases in flow may cause substantial increases in delay and decreases in travel speed. Travel speed is between 40 percent and 50 percent of the speed limit.
- LOS E – Characterized by unstable operation and significant delay with travel speeds between 30 percent and 40 percent of the speed limit. The facility is operating at capacity, and drivers have difficulty maneuvering between travel lanes.
- LOS F – Characterized by flow at extremely low speeds with high delay and extensive queuing. Traffic flow is stagnant, as the number of vehicles in the roadway network approaches or exceeds capacity. Drivers experience frequent drops in speeds to nearly zero miles per hour. Travel speed is 30 percent or less of the speed limit.

Table 2-4 describes the locations of the 25 segments noted above, as well as the current traffic volumes and LOS. The latest 2012 average annual daily traffic (AADT) information, as shown in **Figure 2-8**, was used to calculate segment LOS along SR 6.

Figure 2-9 shows LOS for the segments and major intersections. Segment LOS is based on AADT, not peak period traffic, and intersection LOS was not taken into consideration when calculating the overall segment LOS. LOS analysis shows that segments operate between LOS A through C, with most of the corridor operating at LOS A between intersections. However, intersection LOS (as shown in **Table 2-5** and **Figure 2-9**) is based on peak-period volumes and shows about 58 percent of the intersections operating at LOS D or worse. For intersection capacity analysis, control delay per vehicle is the MoE for determining LOS. Control delay is the component of delay that results from the type of control at the intersection. It can be further explained as the difference between the travel time that would have occurred in the absence of the intersection control and the travel time that results because of the presence of the intersection control. The LOS threshold for signalized intersections is defined in the 2010 HCM and is shown in **Table 2-3**. The segment and intersection LOS results indicate that traffic is relatively smooth on uninterrupted stretches of the corridor and that most of the congestion occurs at signalized intersections with major roadways. Intersection LOS has been identified separately in **Figure 2-9**, which shows LOS for the worse peak condition (AM or PM peak period), while **Table 2-5** shows intersection LOS for existing year (2012) based on ongoing Regional Traffic Operations Program (RTOP) data and supplemental traffic count data obtained in August 2014.

The RTOP, initiated in spring 2010, is a multijurisdictional, cutting-edge signal timing program with the goal of increasing travel throughput by minimizing congestion and reducing delays and vehicle emissions along regional commuter corridors through improved signal operations. Under this program, GDOT provides additional signal timing experts focusing solely on Atlanta's busiest arterial roadways. There are currently two programs under RTOP with 10 and 7 managed corridors in RTOP 1 and RTOP 2, respectively. SR 6 is currently one of the corridors under RTOP 2. RTOP is an ongoing process that includes the upgrade of signal infrastructure (vehicle/pedestrian detection, LED signals, cameras, etc.), active traffic timing, and assisting local jurisdictions to quickly find and repair problems. It should provide remote monitoring of all corridors once complete. RTOP's Synchro models have been supplemented with truck percentages and peak-hour factor (PHF) for each approach at intersections where traffic count data is available. The data shows that most intersections operate at LOS A through D, which is considered acceptable, with a few at LOS E (unacceptable) and F (failing) in the PM peak period.

Table 2-5 shows the intersection LOS as well as the control delay per vehicle, which is defined as the additional travel time experienced by a user that can be attributed to a control device, such as a stop sign or traffic signal.

Table 2-3: LOS Criteria for Signalized Intersections

Level of Service	Control Delay Per Vehicle (sec/vehicle)
A	<=10
B	>10-20
C	>20-35
D	>35-55
E	>55-80
F	>80

Table 2-4: Segment Termini and Segment LOS along SR 6

Segment ID	From	To	County	AADT	Begin MP	End MP	Length (miles)	LOS
01	Airport Blvd.	Airport Dr.	Fulton/ Clayton	30,790	--	--	1.42	B
02	Airport Dr.	Washington Rd.	Fulton	26,460	9.68	10.69	1.01	A
03	Washington Rd.	Princeton Lakes Pkwy.	Fulton	33,240	9.03	9.68	0.65	B
04	Princeton Lakes Pkwy.	Old Fairburn Rd.	Fulton	44,960	7.12	9.03	1.91	A
05	Old Fairburn Rd.	Butner Rd.	Fulton	36,420	5.82	7.12	1.3	A
06	Butner Rd.	Enon Rd.	Fulton	29,810	4.16	5.82	1.66	A
07	Enon Rd.	Campbellton Rd.	Fulton	26,720	2.83	4.16	1.33	A
08	Campbellton Rd.	Fulton Ind Blvd.	Fulton	24,680	0.71	2.83	2.12	A
09	Fulton Ind Blvd.	Riverside Pkwy.	Fulton/ Douglas	30,420	0	0.71	0.71	A
10	Riverside Pkwy.	Douglas Hill Rd.	Douglas	30,190	6.28	6.58	0.3	C
11	Douglas Hill Rd.	Factory Shoals Rd.	Douglas	26,450	4.07	6.28	2.21	A
12	Factory Shoals Rd.	I-20	Douglas	45,010	3.5	4.07	0.57	B
13	I-20	Skyview Dr.	Douglas	59,400	3.03	3.5	0.47	B
14	Skyview Dr.	Westfork Dr.	Douglas	59,950	0.8	3.03	2.23	B
15	Westfork Dr.	Cobb/Douglas CO Line	Douglas	32,670	0	0.8	0.8	A
16	Cobb/Douglas CO line	Garrett Rd.	Cobb	33,560	6.34	7.36	1.02	A
17	Garrett Rd.	Oglesby Rd. (Lewis Rd.)	Cobb	27,470	4.08	6.33	2.25	A
18	Oglesby Rd. (Lewis Rd.)	Brownsville Rd.	Cobb	26,920	3.34	4	0.66	A
19	Brownsville Rd.	Richard D Sailors Pkwy.	Cobb	31,090	2.13	3.34	1.21	A
20	Richard D Sailors Pkwy.	Cobb/Paulding CO Line	Cobb	33,920	0	2.12	2.12	A
21	Cobb/Paulding CO Line	SR 92	Paulding	34,640	14.82	16.7	1.88	A
22	SR 92	Charles Hardy Pkwy. (SR 120)	Paulding	30,930	13.17	14.82	1.65	A
23	Charles Hardy Pkwy. (SR 120)	Old Harris Rd.	Paulding	31,300	10.42	13.17	2.75	A
24	Old Harris Rd.	S Main St.	Paulding	31,460	9.37	10.42	1.05	A
25	S Main St.	W Memorial Dr.	Paulding	19,740	8.38	9.37	0.99	A

Notes: LOS calculated using HCS 2010 with GDOT AADT STARS data (2012)
AADT – Average Annual Daily Traffic

Table 2-5: LOS of Major Intersections along SR 6

Name	Configuration	County	AM PEAK		PM PEAK	
			Delay (s/vehicle)	LOS	Delay (s/vehicle)	LOS
Conley St/Convention Center Conc.	Signalized	Fulton	25.1	C	32.2	C
Airport Dr	Signalized	Fulton	8.8	A	24.2	C
Global Gateway Connector	Signalized	Fulton	6.2	A	11.2	B
Herschel Rd	Signalized	Fulton	26.4	C	44.0	D
Potomac Dr/Hampshire Plaza	Signalized	Fulton	7.6	A	13.9	B
Washington Rd	Signalized	Fulton	56.7	E	56.4	E
Desert Dr	Signalized	Fulton	22	C	31.8	C
I-285 NB Ramp	Signalized	Fulton	58.2	E	101.5	F
I-285 SB Ramp	Signalized	Fulton	33.8	C	24.8	C
N Commerce Dr	Signalized	Fulton	45.5	D	116.0	F
Princeton Pkwy SW	Signalized	Fulton	24.5	C	61.2	E
Welcome All Rd	Signalized	Fulton	17.8	B	18.0	B
Old Fairburn Rd	Signalized	Fulton	36.5	D	28.6	C
Butner Rd	Signalized	Fulton	52.4	D	76.8	E
Merk Rd	Signalized	Fulton	9.6	A	12.4	B
Enon Rd	Signalized	Fulton	29.6	C	41.8	D
Campbellton Rd	Signalized	Fulton	58.5	E	48.7	D
Westlake Pkwy	Unsignalized	Fulton	13.4	B	7.0	A
Fulton Industrial Blvd	Signalized	Fulton	313.1	F	100.4	F
Bakers Ferry Rd	Unsignalized	Fulton	117.8	F	338.5	F
Riverside Pkwy	Signalized	Douglas	68.9	E	42.6	D
Douglas Hills Rd	Signalized	Douglas	16.2	B	33.2	C
Factory Shoals Rd	Signalized	Douglas	37.7	D	34.1	C
Bob Arnold Dr/Interstate W Pkwy	Unsignalized	Douglas	*	F	*	F
Blairs Bridge Rd/Interstate W Pkwy	Signalized	Douglas	31.8	C	56.5	E
I-20 EB Ramps	Signalized	Douglas	77.3	E	17.6	B
I-20 WB Ramps	Signalized	Douglas	11.9	B	23.5	C
Blair Way/N Blairs Bridge Rd	Signalized	Douglas	26.7	C	21.1	C
Skyview Dr/Oak Ridge Rd	Signalized	Douglas	44.5	D	80.6	F
Waterway Circle/W Corporate Ct	Signalized	Douglas	25.5	C	27.6	C
Maxham Rd	Signalized	Douglas	49	D	108.2	F
Westfork Blvd	Signalized	Douglas	12.6	B	26.7	C
Westfork Dr	Signalized	Douglas	15.6	B	24.7	C
Veterans Memorial Hwy/Bankhead Hwy	Signalized	Douglas	54.3	D	61.6	E

Name	Configuration	County	AM PEAK		PM PEAK	
			Delay (s/vehicle)	LOS	Delay (s/vehicle)	LOS
Humphries Hill Rd	Signalized	Cobb	44.6	D	44.1	D
Garrett Rd	Signalized	Cobb	114.3	F	118.3	F
Lewis Rd	Signalized	Cobb	41.1	D	23.1	C
Brownsville Rd	Signalized	Cobb	45	D	41.4	D
Hill Rd	Signalized	Cobb	40.4	D	23.9	C
Sweetwater Ave	Unsignalized	Cobb	0.2	A	0.0	A
Richard D Sailors Pkwy	Signalized	Cobb	58.9	E	93.2	F
Florence Rd	Signalized	Cobb	42.2	D	28.7	C
Elliot Rd/Powder Springs Dallas Rd	Signalized	Cobb	30	C	35.9	D
Isley Stamper	Unsignalized	Paulding	0.6	A	0.5	A
Cleburn Pkwy/Poplar Springs Rd	Signalized	Paulding	56.9	E	189.2	F
Greenfield Rd	Signalized	Paulding	11.1	B	21.5	C
Hiram Pavilion Driveway	Signalized	Paulding	8.4	A	170.5	F
Sam's Club Driveway	Signalized	Paulding	5.7	A	34.8	C
Depot Dr/Lake Rd	Signalized	Paulding	19.5	B	50.4	D
Hwy 92	Signalized	Paulding	65.1	E	97.3	F
Wal-Mart Driveway/Hiram Crossing	Signalized	Paulding	12.7	B	44.5	D
Pace Rd	Signalized	Paulding	24.8	C	18.4	B
Old Mill Rd	Unsignalized	Paulding	16.6	B	23.7	C
Highland Falls Blvd/Atlanta Hwy	Signalized	Paulding	27.1	C	33.7	C
Breezy Valley Rd/Hiram Dr	Unsignalized	Paulding	1.9	A	0.5	A
Bill Carruth Pkwy/Charles Hardy Pkwy	Signalized	Paulding	66.9	E	86.9	F
WellStar Paulding Hospital	Signalized	Paulding	6	A	9.9	A
Paris Rd	Unsignalized	Paulding	12.2	B	32.3	D
Butler Industrial Dr/Cadillac Pkwy	Signalized	Paulding	18.1	B	34.3	C
Old Harris Rd	Signalized	Paulding	23.2	C	32.4	C
Thomas B Murphy Dr	Signalized	Paulding	27.2	C	34.9	C
SR 61/Nathan Dean Blvd	Signalized	Paulding	66.7	E	53.5	D
Academy Dr	Signalized	Paulding	52.6	D	16.5	B
Seaboard Dr	Signalized	Paulding	21.1	C	20.2	C
S Main St	Unsignalized	Paulding	2.5	A	*	F
Buchanan St	Signalized	Paulding	37.7	D	48.5	D

*Software limits exceeded; Volume exceeds capacity. Source: Existing intersection LOS from Regional Traffic Operations Program (RTOP) data with supplemental August 2014 traffic count data (with truck percentage and PHF applied)

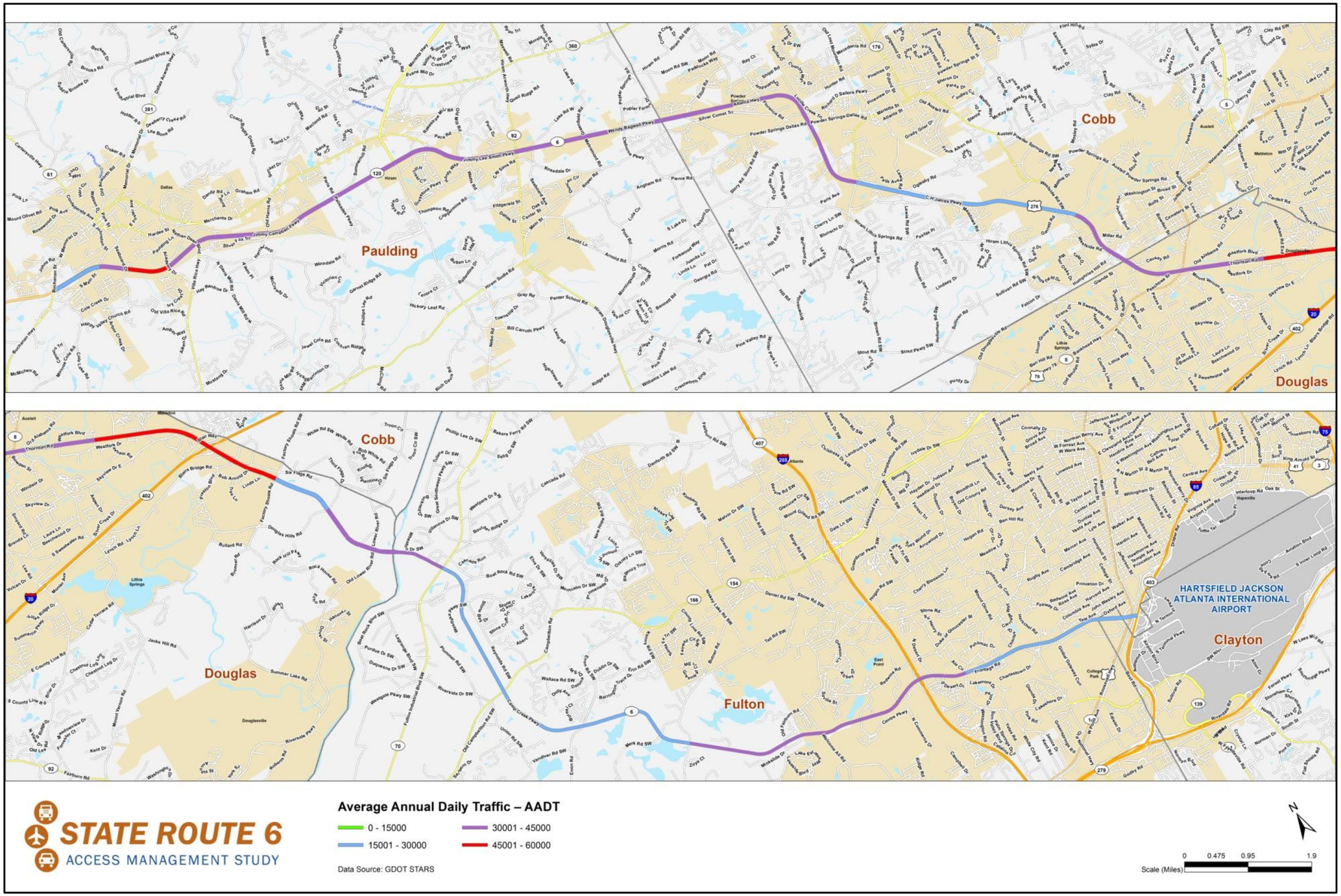


Figure 2-8: Segment Average Annual Daily Traffic (AADT)

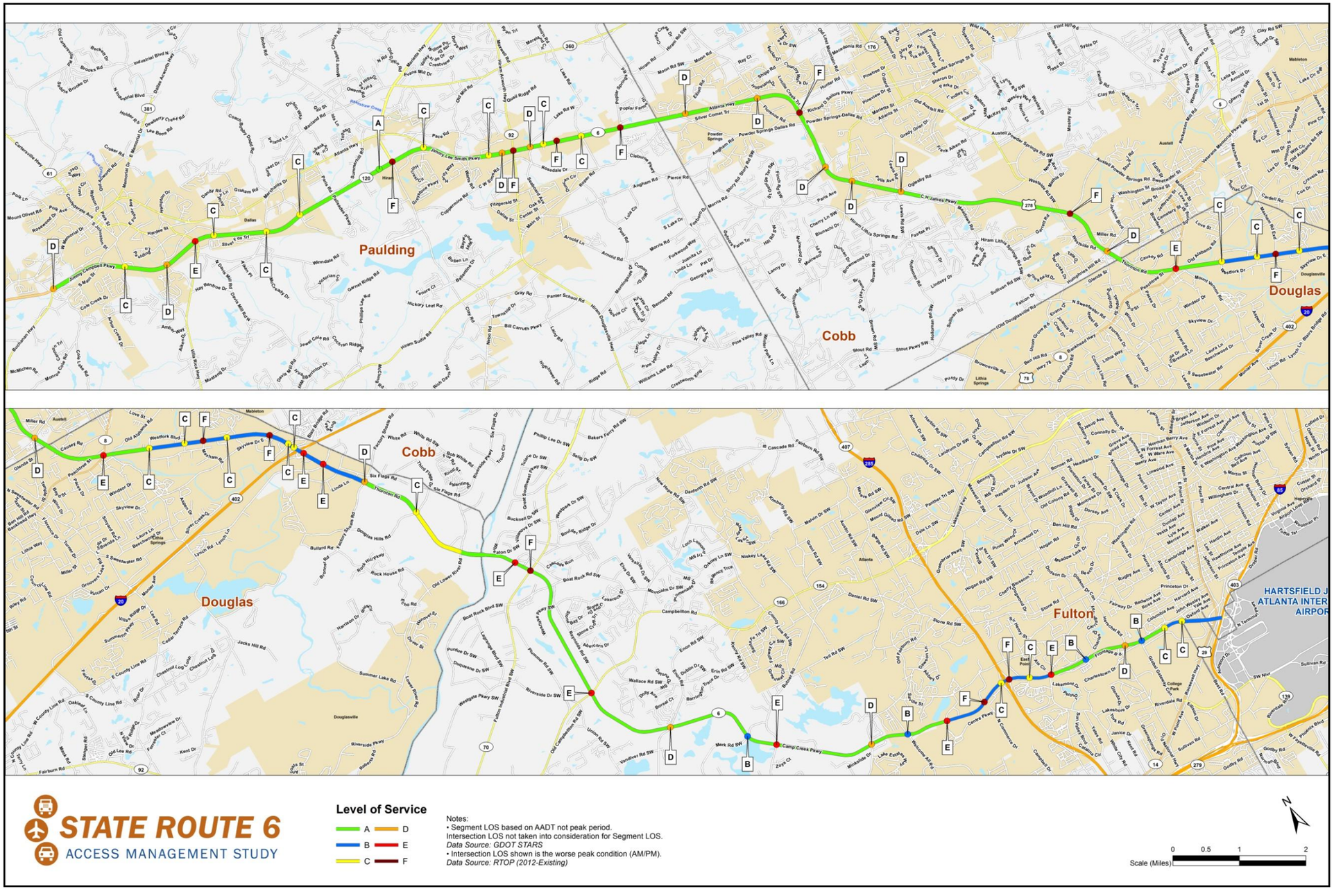


Figure 2-9: Segment and Intersection Level of Service (LOS)

2B.3. Travel Time Runs

Travel-time runs were conducted along the SR 6 corridor on Wednesday, August 27, 2014. Travel runs were conducted for both morning and evening peak hours and for both peak and off-peak directions for each time period. The runs extended from Buchanan Street in Paulding County to Conley Street/ Convention Center intersection in Fulton County. This 34.5-mile corridor includes 57 signalized intersections. The distance between each signalized intersection was measured using a Global Positioning System (GPS), and the travel time for each segment was measured using a stopwatch. Morning-peak-hour travel runs were conducted between 7:00AM and 9:00AM and evening runs were conducted between 4:00PM and 6:00PM using the floating-car method.

For the 34.5-mile corridor, travel time during the morning peak period was recorded as 49 minutes in the peak direction (eastbound) and 48 minutes in the off-peak direction (westbound). In the evening peak period, travel time was recorded as 56 minutes in the peak direction (westbound) and 53 minutes in the off-peak direction (eastbound). This information is shown in **Table 2-6.** Based on this information, the average speed over both time periods and direction of travel were calculated to be 40 miles per hour. Most of the delays during the travel-time runs were associated with stopping at signalized intersections. This is evident in the LOS tables shown in the previous section. Minimal delays and good travel time along the corridor could be related to the fact that the SR 6 corridor is a part of GDOT's RTOP program.

Travel-time data was also collected by RTOP. This data was gathered by zone, where Zone A represents most of Fulton County, Zone B represents most of Douglas County, and Zone C represents most of Cobb and Paulding counties. The AM travel times represent an average over a two-hour period, from 7:00-9:00 AM, and the PM travel time represents an average from 4:00-6:00 PM. This information is shown in **Table 2-7.**

Table 2-6: Field Travel Times along SR 6

County	AM Eastbound (minutes)	AM Westbound (minutes)	PM Eastbound (minutes)	PM Westbound (minutes)
Fulton	18.7	17.6	12.9	17.9
Douglas	11.4	8.6	13.9	13.6
Cobb	8.0	10.4	6.7	9.7
Paulding	10.9	11.0	19.8	14.3
Total	49.0	47.6	53.3	55.5

Table 2-7: RTOP Travel Times along SR 6

Zone	AM Eastbound (minutes)	AM Westbound (minutes)	PM Eastbound (minutes)	PM Westbound (minutes)	Dates Data Collected
A	13.77	13.67	14.42	16.63	May 21 & 22, 2014
B	9.04	10.96	10.58	14.29	May 15 & 20, 2014
C	14.34	15.69	17.34	15.77	May 15 & 20, 2014
Total	37.15	40.32	42.34	46.68	

Source: Regional Traffic Operations Program (2014)

This field-measured data is similar to the Synchro model output for the corridor. Existing Synchro travel times per county are shown in **Table 2-8**, below.

Table 2-8: Synchro Travel Times along SR 6

County	AM Eastbound (minutes)	AM Westbound (minutes)	PM Eastbound (minutes)	PM Westbound (minutes)
Fulton	15.0	14.0	15.0	14.0
Douglas	7.9	7.9	8.4	8.4
Cobb	8.5	8.7	8.5	8.7
Paulding	10.1	10.7	10.3	10.8
Total	41.4	41.2	42.2	41.9

2B.4. Crash Analysis

Historical crash data was obtained from GDOT's Office of Traffic Safety and Design for the most recent five years (2008 to 2012) for the SR 6 study corridor. The crash data was used to determine potential safety deficiencies along the study corridor. One measure that is used to determine potential safety deficiency is crash rate. Crash rates are expressed per 100 million vehicle miles traveled (100 MVM) and are determined by the following equation:

$$Crash\ Rate = \frac{Total\ \#\ of\ Crashes\ \times\ 10^8}{Average\ ADT\ x\ Length\ of\ Segment\ x\ 365\ x\ Number\ of\ Years}$$

Crash rates were calculated and compared with the statewide average rates for roadways with the same functional classification. The SR 6 corridor is an urban principal arterial and has been designated by the FHWA as a part of the National Highway System (NHS), so statewide average rates for urban principal arterials, non-freeway NHS were used for comparison. The roadway segments applied to this analysis are consistent with congestion analysis segments defined in Section 2B.2. This analysis identifies segments with relatively high crash rates by comparing the crash rates of the segments to statewide average crash rates, shown as **Table 2-9.**

Table 2-9: Georgia Statewide Average Crash Rates (2008 to 2012)

Statewide Averages for Urban Principal Arterial, National Highway System (NHS)					
Year	**Fatal Crashes**	**Fatalities**	**Injury Crashes**	**Injuries**	**All Crashes**
2008	1.31	1.33	108	167	430
2009	1.15	1.25	119	185	461
2010	1.16	1.23	103	160	408
2011	1.10	1.23	99	155	422
2012	1.15	1.25	119	185	461
5-Year Average	**1.17**	**1.26**	**110**	**170**	**436**

Source: GDOT

The segments and intersections along the study corridor experienced a total of 6,734 crashes with 2,187 injuries and 18 fatalities during the five-year period. **Table 2-12** indicates the crash rate by segment and crash type from 2008 to 2012: fatal crashes (defined as crashes that involve at least one fatality), total fatalities, injury crashes (defined as crashes that involve at least one injury), total injuries, and all crashes. The rates were then compared by segment to the statewide average crash rates (five-year average) from **Table 2-9**. Those segments where the rate exceeds the statewide average are highlighted in bold text in **Table 2-10**. In addition, **Table 2-11** and **Table 2-12** show the crash type, lighting conditions, and surface conditions for each segment.

Eight out of 25 segments, one third of the segments, exceed statewide averages for fatal crashes and fatalities. Six out of 25 segments, a quarter of the segments, exceed statewide averages for the remaining categories: injury crashes, injuries, and all crashes. There are four segments that exceed statewide averages for all the categories: Airport Drive to Washington Road (1.5 miles), Washington Road to Princeton Lakes Parkway (1.5 miles), I-20 to Skyview Drive (0.5 miles), and Old Harris Road to South Main Street (1.1 miles). Among these segments, the segment between Washington Road and Princeton Lakes Parkway in Fulton County and the segment between Old Harris Road and South Main Street in Paulding County show the highest crash rates. The injury crash rate, injury rate, and overall crash rate were 10 to 12 times higher than the statewide averages in the segment between Washington Road and Princeton Lakes Parkway. The fatality crash rate and fatality rate in the segment between Old Harris Road and South Main Street were 10 to 11 times higher than the statewide averages. In the same segment, the injury crash rate and overall crash rate were approximately three times higher than the statewide averages, while the injury rate was 2.5 times the statewide average.

Out of total crashes along the corridor, rear-end collisions are the most common, accounting for nearly 60 percent of crashes. The high percentage of rear-end crashes is an indication of congestion along the SR 6 corridor. Angle and same-direction sideswipe crashes account for 17 percent and 13 percent, respectively. The occurrence of angle and sideswipe crashes can be considered an indication of high turning movements at intersections, possible speeding, improper lane delineation, or poor lighting conditions. Seven percent of crashes (497) involved a collision with a non-motor vehicle, out of which 11 percent involved deer and 8 percent involved median barriers.

Roadway lighting conditions can have implications on crash rates and severity as well. The FHWA reports that although only 25 percent of vehicle miles traveled occur at night, about half of all fatal crashes occur at night. Along the SR 6 study corridor, 72 percent and 13 percent of all crashes were recorded during daylight and dark-lighted conditions, respectively, with 12 percent also occurring during dark, non-lighted conditions. Of the 25 segments, 14 (56 percent) had more crashes occurring in dark, non-lighted conditions than in the dark-lighted conditions. This suggests that corridor lighting may need to be reviewed and/or improved along these sections. These are the extents between Enon Road to Campbellton Road, Riverside Parkway to Oglesby Road, Richard D Sailors Parkway to SR 92, and Charles Hardy Parkway to West Memorial Drive. The segment between Riverside Parkway and Douglas Hill Road had the highest percentage of crashes, 32 percent, occurring in dark, non-lighted conditions.

Of all these crashes, 83 percent also occurred in dry surface conditions, indicating that pavement condition was not a significant contributing factor to the crash history along the corridor. It was not possible to provide any analysis or conclusions for crashes involving trucks, as the current GDOT crash data format does not provide truck information.

Records for bicycle and pedestrian crashes from 2008 through 2012 were examined to offer insight into safety concerns for bicyclists and pedestrians traveling within the study corridor. There were 10 reported crashes related to pedestrians and one crash related to bicycles. All pedestrian crashes occurred on dry surface conditions, with 45 percent occurring in dark, non-lighted conditions. These crashes involved eight injuries and three fatalities. All three fatal crashes were pedestrian crashes, two of which occurred in Fulton County and one in Douglas County. These fatalities occurred at the unsignalized intersection of Camp Creek Parkway and Westlake Parkway, on Camp Creek Parkway eastbound, with an approximate location of about 300 feet east of the intersection with Welcome All Road (based on crash coordinates), and on Thornton Road north of North Blairs Bridge Road. One pedestrian-involved crash also occurred at the intersection with Princeton Lakes Parkway (signalized), with one injury and no fatalities, and at Crestmark Way (driveway), with no resulting injury or fatality. One bicycle crash occurred at Thornton Way approaching Skyview Drive.

A crash analysis summary for manner of collision, lighting, and surface conditions are shown in **Figure 2-10**, **Figure 2-11**, and **Figure 2-12**, respectively. **Figure 2-13** shows the number of crashes and the severity of crashes per segment.

Table 2-10: Segment Crash Analysis (2008 to 2012) – Crash Rates

Segment ID	From	To	2008 to 2012 Average Crash Rates (100 MVM)				
			Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
01	**Airport Blvd**	**Airport Dr**	**1.3**	**1.3**	85.6	121.2	413.7
02	**Airport Dr**	**Washington Rd**	**2.1**	**2.1**	**115.0**	**178.9**	**458.0**
03	**Washington Rd**	**Princeton Lakes Pkwy**	**2.6**	**2.6**	**1093.3**	**1668.6**	**5354.6**
04	Princeton Lakes Pkwy	Old Fairburn Rd	0.7	0.7	69.3	103.9	323.7
05	**Old Fairburn Rd**	**Butner Rd**	**1.2**	**5.9**	30.5	62.1	144.1
06	Butner Rd	Enon Rd	1.0	1.0	56.6	92.6	327.1
07	**Enon Rd**	**Campbellton Rd**	**1.6**	**1.6**	35.3	75.3	128.2
08	**Campbellton Rd**	**Fulton Ind Blvd**	**2.1**	**2.1**	43.5	75.3	222.8
09	**Fulton Ind Blvd**	**Riverside Pkwy**	0.0	0.0	**116.8**	**176.6**	**839.3**
10	Riverside Pkwy	Douglas Hill Rd	0.0	0.0	40.1	57.3	177.7
11	Douglas Hill Rd	Factory Shoals Rd	0.0	0.0	4.8	4.8	14.4
12	Factory Shoals Rd	I-20	0.0	0.0	31.2	42.4	151.6
13	**I-20**	**Skyview Dr**	**1.9**	**1.9**	**216.6**	**303.6**	**775.4**
14	Skyview Dr	Westfork Dr	0.0	0.0	40.8	59.4	139.3
15	**Westfork Dr**	**Cobb/Douglas CO Line**	0.0	0.0	**246.6**	**361.5**	**988.4**
16	Cobb/Douglas CO line	Garrett Rd	0.0	0.0	70.7	96.6	151.8
17	Garrett Rd	Oglesby Rd (Lewis Rd)	0.0	0.0	3.8	4.7	16.0
18	Oglesby Rd (Lewis Rd)	Brownsville Rd	0.0	0.0	0.0	0.0	3.1
19	Brownsville Rd	Richard D Sailors Pkwy	0.0	0.0	0.0	4.5	22.4
20	Richard D Sailors Pkwy	Cobb/Paulding CO Line	0.9	0.9	13.7	21.4	47.1
21	Cobb/Paulding CO Line	SR 92	0.0	0.0	10.1	12.6	61.4
22	SR 92	Charles Hardy Pkwy (SR 120)	0.0	0.0	57.6	64.8	354.1
23	Charles Hardy Pkwy (SR 120)	Old Harris Rd	0.0	0.0	24.2	35.4	161.9
24	**Old Harris Rd**	**S Main St**	**7.6**	**7.6**	**319.0**	**407.6**	**1263.4**
25	S Main St	W Memorial Dr	0.0	0.0	20.3	40.6	81.1

**Segments where the crash rate exceeds the statewide average are highlighted in bold text.

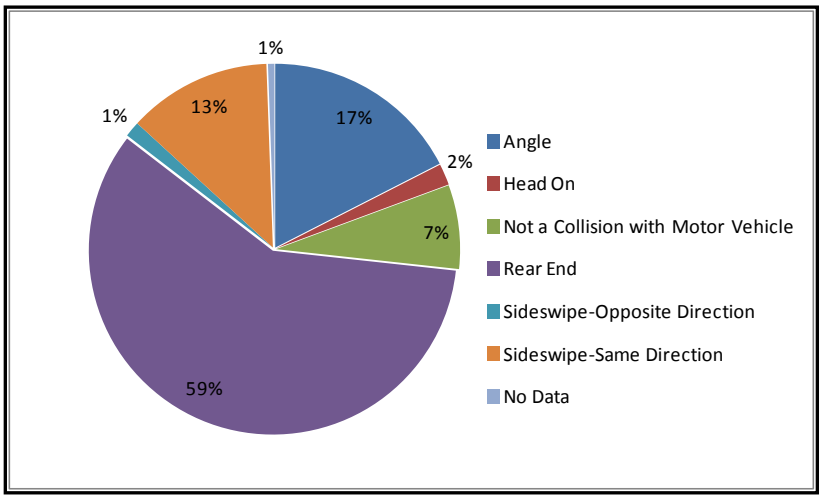


Figure 2-10: 2008 to 2012 Crashes – Manner of Collisions

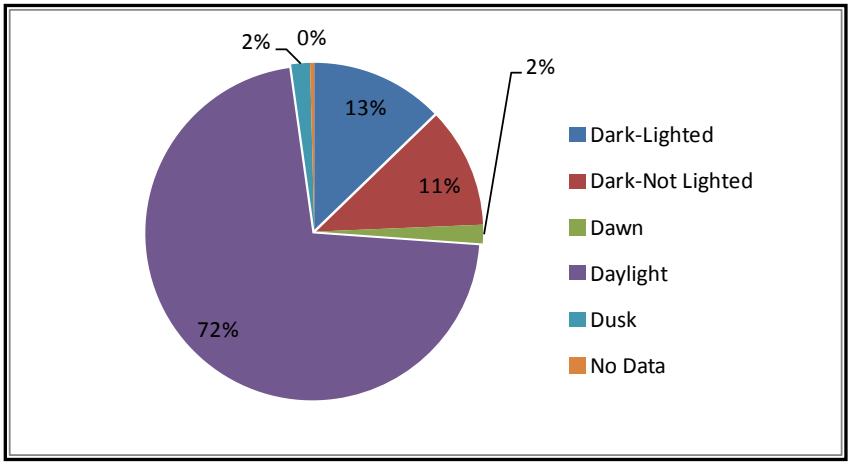


Figure 2-11: 2008 to 2012 Crashes – Lighting Conditions

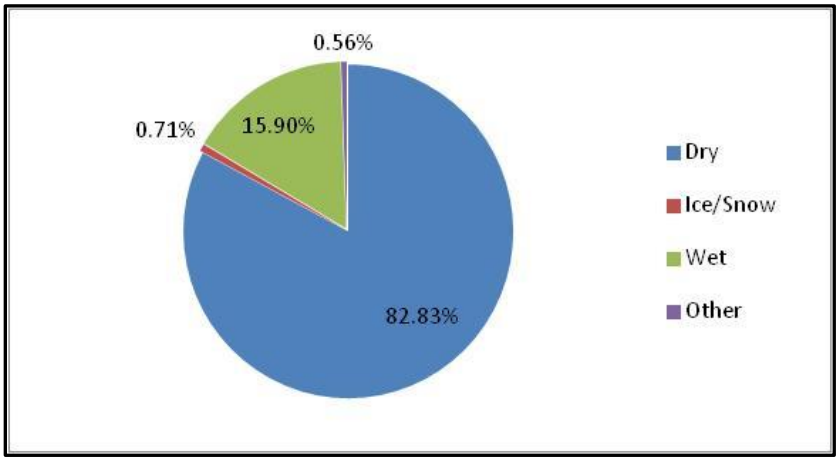


Figure 2-12: 2008 to 2012 Crashes – Surface Conditions

Table 2-11: Segment Crash Analysis (2008 to 2012) – Crash Type, Lighting, Surface Conditions

Segment ID	From	To	Crash Type								Light Conditions							Surface Conditions								
			Angle	Head-On	Not a Collision with a Motor Vehicle	Rear-End	Sideswipe – Opposite Direction	Sideswipe – Same Direction	Blank (No Data)	TOTAL	Dark-Lighted	Dark, Non-Lighted	Dawn	Daylight	Dusk	Blank (No Data)	TOTAL	Dry	Icy	Wet	Oil	Snowy	Slush	Other	Blank (No Data)	TOTAL
01	Airport Blvd	Airport Dr	45	2	41	177	1	47	1	**314**	56	33	5	212	7	1	**314**	251	4	57	1	0	0	0	1	**314**
02	Airport Dr	Washington Rd	55	7	9	120	4	19	1	**215**	50	9	0	153	1	2	**215**	176	2	35	0	0	0	0	2	**215**
03	Washington Rd	Princeton Lakes Pkwy	379	31	136	1132	41	334	4	**2057**	369	195	25	1426	39	3	**2057**	1720	11	319	0	3	1	1	2	**2057**
04	Princeton Lakes Pkwy	Old Fairburn Rd	87	9	21	292	14	30	5	**458**	57	39	4	339	13	6	**458**	386	0	66	0	2	0	0	4	**458**
05	Old Fairburn Rd	Butner Rd	45	3	12	48	1	13	1	**123**	32	16	3	69	3	0	**123**	97	1	25	0	0	0	0	0	**123**
06	Butner Rd	Enon Rd	52	9	34	195	3	25	0	**318**	37	46	9	219	7	0	**318**	265	0	51	0	0	1	0	1	**318**
07	Enon Rd	Campbellton Rd	25	7	13	30	0	5	0	**80**	12	19	2	47	0	0	**80**	65	0	14	0	0	0	1	0	**80**
08	Campbellton Rd	Fulton Ind Blvd	68	7	15	105	2	12	1	**210**	38	26	7	136	3	0	**210**	186	1	23	0	0	0	0	0	**210**
09	Fulton Ind Blvd	Riverside Pkwy	62	7	14	167	7	46	6	**309**	45	27	6	218	7	6	**309**	249	1	53	0	0	0	0	6	**309**
10	Riverside Pkwy	Douglas Hill Rd	1	0	4	21	2	3	0	**31**	2	10	0	18	1	0	**31**	27	1	3	0	0	0	0	0	**31**
11	Douglas Hill Rd	Factory Shoals Rd	1	1	5	8	0	3	0	**18**	1	4	1	11	1	0	**18**	8	2	8	0	0	0	0	0	**18**
12	Factory Shoals Rd	I-20	9	5	2	45	1	4	2	**68**	2	8	1	53	2	2	**68**	51	0	14	0	1	0	0	2	**68**
13	I-20	Skyview Dr	37	5	34	228	3	92	2	**401**	21	68	6	301	5	0	**401**	333	1	66	0	1	0	0	0	**401**
14	Skyview Dr	Westfork Dr	59	1	13	216	2	52	2	**345**	39	40	5	257	3	1	**345**	285	2	56	0	1	0	0	1	**345**
15	Westfork Dr	Cobb/Douglas CO Line	51	4	27	288	4	98	1	**473**	19	72	10	368	4	0	**473**	376	7	90	0	0	0	0	0	**473**
16	Cobb/Douglas CO line	Garrett Rd	24	5	3	50	2	3	1	**88**	8	15	3	60	1	1	**88**	76	0	10	0	0	0	0	1	**88**
17	Garrett Rd	Oglesby Rd (Lewis Rd)	1	2	4	9	0	1	1	**18**	3	5	2	7	0	1	**18**	12	0	5	0	0	0	0	1	**18**
18	Oglesby Rd (Lewis Rd)	Brownsville Rd	0	0	0	1	0	0	0	**1**	0	0	0	1	0	0	**1**	0	0	1	0	0	0	0	0	**1**
19	Brownsville Rd	Richard D Sailors Pkwy	1	0	0	10	0	1	3	**15**	1	0	0	12	0	2	**15**	10	0	3	0	0	0	0	2	**15**
20	Richard D Sailors Pkwy	Cobb/Paulding CO Line	4	1	13	33	0	4	0	**55**	2	10	0	42	1	0	**55**	40	0	14	0	0	0	1	0	**55**
21	Cobb/Paulding CO Line	SR 92	12	1	2	55	0	3	0	**73**	2	5	0	66	0	0	**73**	67	0	6	0	0	0	0	0	**73**
22	SR 92	Charles Hardy Pkwy (SR 120)	73	5	6	190	1	20	0	**295**	27	10	11	240	7	0	**295**	270	0	25	0	0	0	0	0	**295**
23	Charles Hardy Pkwy (SR 120)	Old Harris Rd	23	6	10	200	1	5	2	**247**	7	38	4	189	7	2	**247**	209	0	36	0		0	0	2	**247**
24	Old Harris Rd	S Main St	62	8	73	317	3	30	6	**499**	29	77	17	367	8	1	**499**	405	5	88	0	0	0	0	1	**499**
25	S Main St	W Memorial Dr	1	0	6	17	0	0	0	**24**	1	7	0	14	2	0	**24**	22	0	2	0	0	0	0	0	**24**
	TOTAL		**1177**	**126**	**497**	**3954**	**92**	**850**	**38**	**6734**	**860**	**779**	**121**	**4825**	**122**	**27**	**6734**	**5586**	**38**	**1072**	**1**	**8**	**2**	**4**	**23**	**6734**

Table 2-12: Segment Crash Analysis (2008 to 2012) – Crash Type, Lighting, Surface Conditions (%)

Segment ID	From	To		Crash Type								Light Conditions							Surface Conditions								
			Total Crashes	Angle	Head-On	Not a Collision with a Motor Vehicle	Rear-End	Sideswipe – Opposite Direction	Sideswipe – Same Direction	Blank	TOTAL	Dark-Lighted	Dark, Non-Lighted	Dawn	Daylight	Dusk	Blank	TOTAL	Dry	Icy	Wet	Oil	Snowy	Slush	Other	Blank	TOTAL
01	Airport Blvd	Airport Dr	**314**	14%	1%	13%	56%	0%	15%	0%	100%	18%	11%	2%	68%	2%	0%	100%	80%	1%	18%	0%	0%	0%	0%	0%	100%
02	Airport Dr	Washington Rd	**215**	26%	3%	4%	56%	2%	9%	0%	100%	23%	4%	0%	71%	0%	1%	100%	82%	1%	16%	0%	0%	0%	0%	0%	100%
03	Washington Rd	Princeton Lakes Pkwy	**2057**	18%	2%	7%	55%	2%	16%	0%	100%	18%	9%	1%	69%	2%	0%	100%	84%	1%	16%	0%	0%	0%	0%	0%	100%
04	Princeton Lakes Pkwy	Old Fairburn Rd	**458**	19%	2%	5%	64%	3%	7%	1%	100%	12%	9%	1%	74%	3%	1%	100%	84%	0%	14%	0%	0%	0%	0%	1%	100%
05	Old Fairburn Rd	Butner Rd	**123**	37%	2%	10%	39%	1%	11%	1%	100%	26%	13%	2%	56%	2%	0%	100%	79%	1%	20%	0%	0%	0%	0%	0%	100%
06	Butner Rd	Enon Rd	**318**	16%	3%	11%	61%	1%	8%	0%	100%	12%	14%	3%	69%	2%	0%	100%	83%	0%	16%	0%	0%	0%	0%	0%	100%
07	Enon Rd	Campbellton Rd	**80**	31%	9%	16%	38%	0%	6%	0%	100%	15%	24%	3%	59%	0%	0%	100%	81%	0%	18%	0%	0%	0%	1%	0%	100%
08	Campbellton Rd	Fulton Ind Blvd	**210**	32%	3%	7%	50%	1%	6%	0%	100%	18%	12%	3%	65%	1%	0%	100%	89%	0%	11%	0%	0%	0%	0%	0%	100%
09	Fulton Ind Blvd	Riverside Pkwy	**309**	20%	2%	5%	54%	2%	15%	2%	100%	15%	9%	2%	71%	2%	2%	100%	81%	0%	17%	0%	0%	0%	0%	2%	100%
10	Riverside Pkwy	Douglas Hill Rd	**31**	3%	0%	13%	68%	6%	10%	0%	100%	6%	32%	0%	58%	3%	0%	100%	87%	3%	10%	0%	0%	0%	0%	0%	100%
11	Douglas Hill Rd	Factory Shoals Rd	**18**	6%	6%	28%	44%	0%	17%	0%	100%	6%	22%	6%	61%	6%	0%	100%	44%	11%	44%	0%	0%	0%	0%	0%	100%
12	Factory Shoals Rd	I-20	**68**	13%	7%	3%	66%	1%	6%	3%	100%	3%	12%	1%	78%	3%	3%	100%	75%	0%	21%	0%	1%	0%	0%	3%	100%
13	I-20	Skyview Dr	**401**	9%	1%	8%	57%	1%	23%	0%	100%	5%	17%	1%	75%	1%	0%	100%	83%	0%	16%	0%	0%	0%	0%	0%	100%
14	Skyview Dr	Westfork Dr	**345**	17%	0%	4%	63%	1%	15%	1%	100%	11%	12%	1%	74%	1%	0%	100%	83%	1%	16%	0%	0%	0%	0%	0%	100%
15	Westfork Dr	Cobb/Douglas CO Line	**473**	11%	1%	6%	61%	1%	21%	0%	100%	4%	15%	2%	78%	1%	0%	100%	79%	1%	19%	0%	0%	0%	0%	0%	100%
16	Cobb/Douglas CO line	Garrett Rd	**88**	28%	6%	3%	57%	2%	3%	1%	100%	9%	17%	3%	69%	1%	1%	100%	87%	0%	11%	0%	0%	0%	1%	1%	100%
17	Garrett Rd	Oglesby Rd (Lewis Rd)	**17**	6%	12%	24%	53%	0%	6%	0%	100%	18%	29%	12%	41%	0%	0%	100%	71%	0%	29%	0%	0%	0%	0%	0%	100%
18	Oglesby Rd (Lewis Rd)	Brownsville Rd	**1**	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	100%
19	Brownsville Rd	Richard D Sailors Pkwy	**15**	7%	0%	0%	67%	0%	7%	20%	100%	7%	0%	0%	80%	0%	13%	100%	67%	0%	20%	0%	0%	0%	0%	13%	100%
20	Richard D Sailors Pkwy	Cobb/Paulding CO Line	**55**	7%	2%	24%	60%	0%	7%	0%	100%	4%	18%	0%	76%	2%	0%	100%	73%	0%	25%	0%	0%	0%	2%	0%	100%
21	Cobb/Paulding CO Line	SR 92	**73**	16%	1%	3%	75%	0%	4%	0%	100%	3%	7%	0%	90%	0%	0%	100%	92%	0%	8%	0%	0%	0%	0%	0%	100%
22	SR 92	Charles Hardy Pkwy (SR 120)	**295**	25%	2%	2%	64%	0%	7%	0%	100%	9%	3%	4%	81%	2%	0%	100%	92%	0%	8%	0%	0%	0%	0%	0%	100%
23	Charles Hardy Pkwy (SR 120)	Old Harris Rd	**247**	9%	2%	4%	81%	0%	2%	1%	100%	3%	15%	2%	77%	3%	1%	100%	85%	0%	15%	0%	0%	0%	0%	1%	100%
24	Old Harris Rd	S Main St	**499**	12%	2%	15%	64%	1%	6%	1%	100%	6%	15%	3%	74%	2%	0%	100%	81%	1%	18%	0%	0%	0%	0%	0%	100%
25	S Main St	W Memorial Dr	**24**	4%	0%	25%	71%	0%	0%	0%	100%	4%	29%	0%	58%	8%	0%	100%	92%	0%	8%	0%	0%	0%	0%	0%	100%
	TOTAL		**6734**	**17%**	**2%**	**7%**	**59%**	**1%**	**13%**	**1%**	**100%**	**13%**	**12%**	**2%**	**72%**	**2%**	**0%**	**100%**	**83%**	**1%**	**16%**	**0%**	**0%**	**0%**	**0%**	**0%**	**100%**

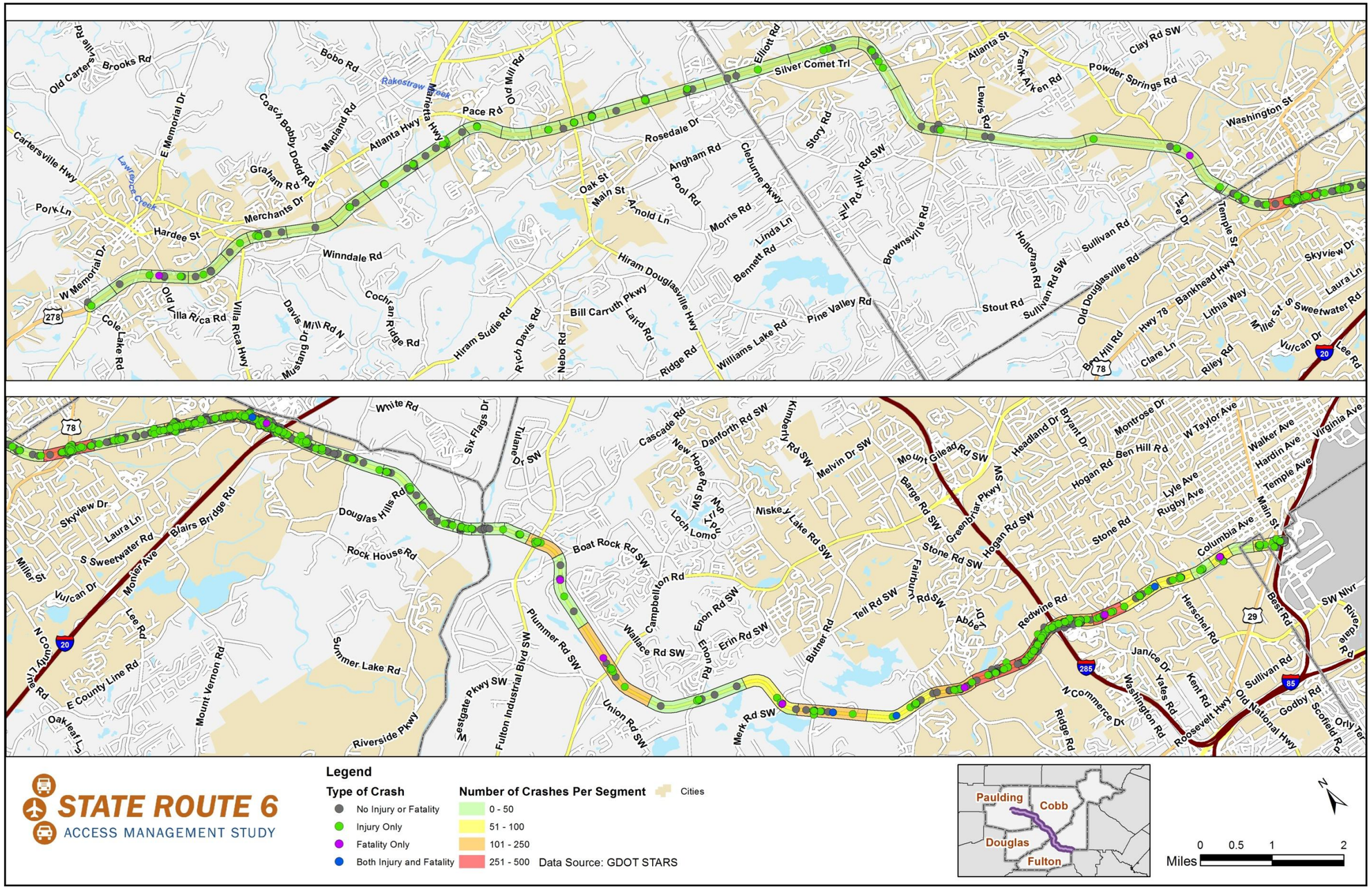


Figure 2-13: Segment Crash Map

2B.5. Freight

The Atlanta Regional Commission's 2008 Atlanta Regional Freight Mobility Plan describes Atlanta as one of the strongest and fastest-growing logistics clusters in the nation, and also one of the three largest inland distribution centers. SR 6 is a designated truck route for oversize trucks that handles a large amount of truck traffic through and within the metropolitan Atlanta region (**Figure 2-14**). GDOT's 2013 Georgia Statewide Freight and Logistics Truck Plan (Truck Modal Profile) identified SR 6 (Thornton Road) between Butner Road and Enon Road in Fulton County as having the ninth highest truck volumes of all non-interstate locations in Georgia. Additionally, a 1-mile section of SR 70 (Fulton Industrial Boulevard) adjacent to its intersection with SR 6 was identified as having the second highest truck counts for non-interstate locations in Georgia (GDOT Classification Data, 2009). SR 6 is currently considered a part of the following freight networks:

- Georgia Statewide Designated Freight Corridor – GDOT 2012 (**Figure 2-14**)
- Atlanta Strategic Truck Route Master Plan (AstroMAP) – Atlanta Regional Commission (ARC)

Both Norfolk Southern and CSX use the Atlanta area as a major hub for intermodal shipping. New terminals for both companies have opened in the region to handle the volume of freight shipped into and out of Atlanta, which has become one of America's greatest inland ports. Norfolk Southern currently operates trains between its Austell hub and six other cities, namely, Charleston, South Carolina; Chicago, Illinois; Cincinnati, Ohio; Kansas City, Missouri; New Orleans, Louisiana; and Savannah, Georgia.

Table 2-13 shows segment AADT, truck percentage, and truck AADT. The segments highlighted in bold font denote the segments with the highest truck volumes along the corridor. GDOT's recent freight study, Georgia Statewide Freight and Logistics Plan 2010 to 2050, included truck-friendly lanes on SR 6 between the Whitaker Intermodal Terminal in Austell and I-20 as one of its priority freight projects. This project is also listed in Atlanta Regional Commission's Long-Range Transportation Plan and is considered the "last-mile" connection from I-20 to the intermodal terminal. Other operational improvements recommended for this roadway as part of the truck friendly lanes project include:

- Improve signal timing to improve truck-travel-time reliability
- Separate truck and automobile traffic
- Reduce truck stops and eliminate "dilemma zones"
- Reduce truck rollovers at intermodal center access
- Improve visibility of traffic control and guidance for automobiles

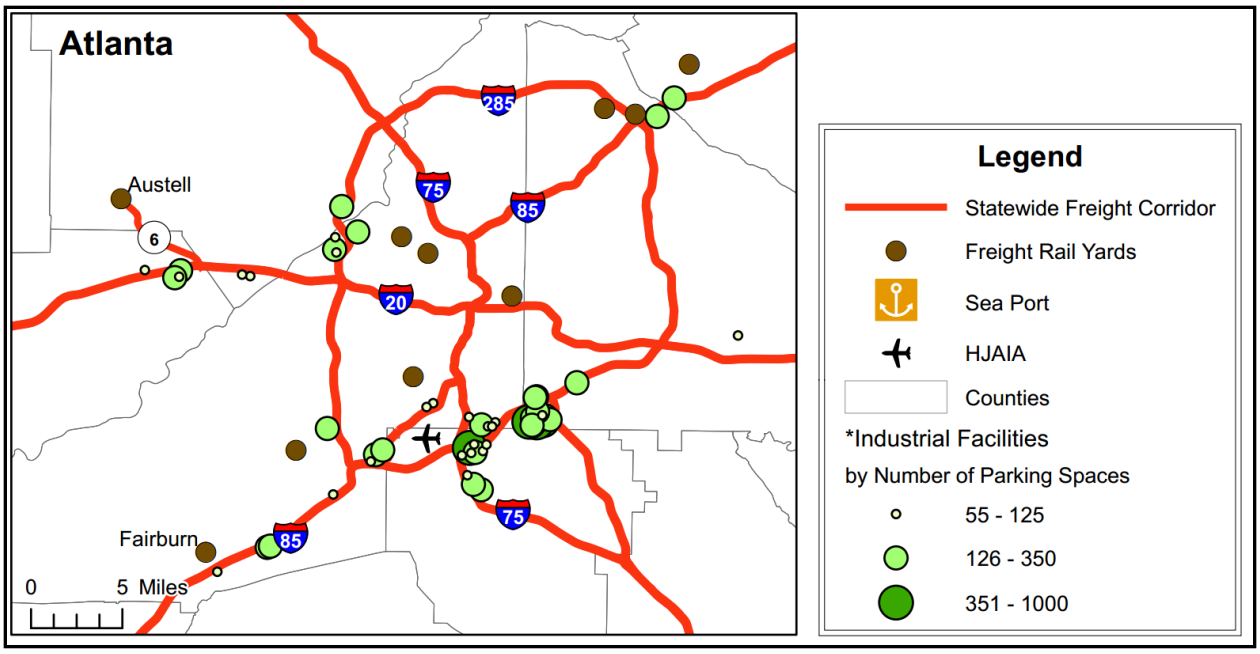
Because SR 6 is a major regional travel corridor that runs southeast to northwest, this route has high volumes of both truck and automobile traffic, as it also serves Atlanta-area commuters. The presence of industrial developments and distribution centers along the corridor contribute to the significant freight traffic along the corridor. Furthermore, the SR 6 study area is included in the Atlanta Regional Commission's Regional Thoroughfare Network (RTN), which identifies the region's most critical surface

roads. Roadways on the RTN are intended to receive priority consideration for investment due to their functions in serving multiple modes of travel and connecting people and goods to important locations.

Table 2-13: Segment Truck Percentage and Truck AADT (2012)

Segment ID	From	To	County	2012 AADT	2012 Truck %	Truck AADT
01	Airport Blvd	Airport Dr	Fulton/ Clayton	30,790	12	3,695
02	Airport Dr	Washington Rd	Fulton	26,460	6	1,768
03	Washington Rd	Princeton Lakes Pkwy	Fulton	33,240	3	997
04	**Princeton Lakes Pkwy**	**Old Fairburn Rd**	**Fulton**	**44,960**	**9**	**4,046**
05	**Old Fairburn Rd**	**Butner Rd**	**Fulton**	**36,420**	**11**	**4,006**
06	**Butner Rd**	**Enon Rd**	**Fulton**	**29,810**	**13**	**3,875**
07	Enon Rd	Campbellton Rd	Fulton	26,720	12	3,474
08	Campbellton Rd	Fulton Ind Blvd	Fulton	24,680	13	3,208
09	Fulton Ind Blvd	Riverside Pkwy	Fulton/ Douglas	30,420	11	3,346
10	Riverside Pkwy	Douglas Hill Rd	Douglas	30,190	12	3,623
11	Douglas Hill Rd	Factory Shoals Rd	Douglas	26,450	12	3,174
12	Factory Shoals Rd	I-20	Douglas	45,010	N/A	N/A
13	I-20	Skyview Dr	Douglas	59,400	N/A	N/A
14	Skyview Dr	Westfork Dr	Douglas	59,950	N/A	N/A
15	Westfork Dr	Cobb/Douglas CO Line	Douglas	32,670	10	3,267
16	Cobb/Douglas CO line	Garrett Rd	Cobb	33,560	8	2,685
17	Garrett Rd	Oglesby Rd (Lewis Rd)	Cobb	27,470	6	1,648
18	Oglesby Rd (Lewis Rd)	Brownsville Rd	Cobb	26,920	7	1,884
19	Brownsville Rd	Richard D Sailors Pkwy	Cobb	31,090	5	2,487
20	Richard D Sailors Pkwy	Cobb/Paulding CO Line	Cobb	33,920	8	2,714
21	Cobb/Paulding CO Line	SR 92	Paulding	34,640	6	2,078
22	SR 92	Charles Hardy Pkwy (SR 120)	Paulding	30,930	6	1,856
23	Charles Hardy Pkwy (SR 120)	Old Harris Rd	Paulding	31,300	N/A	N/A
24	Old Harris Rd	S Main St	Paulding	31,460	9	2,831
25	S Main St	W Memorial Dr	Paulding	19,740	8	1,579

Note: Truck AADT calculated using AADT and truck percentage from GDOT STARS data
N/A – No information available
Segments highlighted in bold font denote the segments with the highest truck volumes along the corridor



*Source: GDOT

Figure 2-14: Georgia Statewide Designated Freight Network – Atlanta

2B.6. Public Transportation

The Metropolitan Atlanta Rapid Transit Authority (MARTA) provides both heavy rail and bus service near the study area. The MARTA South Rail Line has two stations within the study area: Airport and College Park. The College Park station includes a park-and-ride lot for travelers continuing north into Atlanta. Two MARTA local bus routes provide service along SR 6 in the study area:

Route 82 (Camp Creek/Welcome All which connects the College Park MARTA station (red/gold rail lines) to the intersection of Camp Creek Parkway and Welcome All Road, providing service along the SR 6 corridor, including the Camp Creek Market Place. The route then turns south, operating along Welcome All Road to Roosevelt Highway, then operates along Roosevelt Highway and terminates at the South Fulton Service Center. Route 82 operates weekdays from 5:40 AM to 1:00 AM with 20-minute headways during peak hours and at 45-minute headways during non-peak hours.

Route 84 (East Point/Camp Creek), which runs from the East Point MARTA station (red/gold rail lines) along Washington Road, Desert Drive, Redwine Rd, Princeton Lakes Pkwy, SR 6/Camp Creek Pkwy, and Old Fairburn Road. This route also provides access to the Camp Creek Market Place.

Two other routes operate near the SR 6 corridor, including:

Route 73 (Fulton Industrial), which does not operate on SR 6 directly but runs from the Hamilton E. Holmes MARTA station (blue rail line), along MLK Jr. Drive and SR 70/Fulton Industrial Boulevard, crossing SR 6 at Fulton Industrial Boulevard, which is a large employment center.

Route 183 (Barge Rd/Lakewood), which does not operate on SR 6 directly but runs from the Lakewood/Fort McPherson MARTA station (red/gold rail lines) to Butner Rd about a mile north of SR 6 and stops at the Barge Road park and ride lot.

Also, the Georgia Regional Transportation Authority (GRTA) and Cobb Community Transit (CCT) collaborate to provide two weekday commuter bus routes from Hiram and Powder Springs to downtown and midtown Atlanta, routes 470 and 477. These routes run along SR 6 to I-20, and then continue eastward to Atlanta. Travelers wishing to utilize these routes can only do so by boarding at one of the two provided park-and-ride lots. Route 470 operates four morning trips and four afternoon trips, plus one "reverse commute" afternoon trip to Atlanta. Route 477 operates six morning and afternoon trips, plus a reverse trip in the morning (from Atlanta) and a reverse trip in the afternoon (to Atlanta). A 2010 study by Cobb County measured average daily ridership levels for these routes around 330 riders per day for Route 470 and around 240 riders per day for Route 477.

The two park-and-ride lots GRTA provides for these routes are located in Hiram and Powder Springs. The Hiram park-and-ride lot is within the Hiram Pavilion development, just one block from the intersection of SR 6 and Metromont Road. In 2011, this lot had 159 parking spaces and usage was 20 percent. The Powder Springs park-and-ride lot is located just off the intersection of SR 6 and Richard D. Sailors Parkway. In 2011, this lot had 271 parking spaces and usage was 50 percent. There are two other park-and-rides lots in close proximity to SR 6 along the study corridor operated by other agencies. The southernmost is the MARTA lot at the College Park station, which had 2,219 spaces in 2011 and a usage percentage of 91 percent. The second, at the northeast quadrant of the I-20 interchange at SR 6, is Douglas County's Thornton Road park-and-ride lot, with 116 parking spaces. This lot is for users of the county's rideshare program, which has both carpooling and vanpooling options available.

Major destinations in the corridor that are not served by existing transit service include the Whitaker Intermodal Terminal, other distribution facilities, and the Sandtown Community. On the western end of the corridor, some commercial and residential areas and the City of Dallas are not served by transit. Transit stops on SR 6 are shown on **Figure 2-3**, under Section 2A.

2B.7. Bicycle and Pedestrian Facilities

Currently, there are neither dedicated bike facilities nor major sidewalks on or immediately adjacent to the corridor at the surveyed intersections. Although no contiguous sidewalks were identified, some disjointed sidewalk locations exist, as listed below:

- Near I-285: Along the westbound leg of SR 6, just past Camp Creek Marketplace and terminating about 1,000 feet downstream of the intersection with Princeton Parkway
- Along SR 6 eastbound between Crestmark Way and North Blairs Bridge Road
- Along a few driveway approaches near Oak Ridge Road/Skyview Road
- Along SR 6 westbound between Waterford Club Drive and Waterway Circle

The sample picture shown in **Figure 2-15** exemplifies the fragmented sidewalk conditions along the corridor.

Source: Google Street View (2013)

Figure 2-15: Sample Disjointed Sidewalk Locations

Additionally, according to the Atlanta Regional Commission's Connect 6 Study (2008), which inventoried almost 50 locations (intersections and driveways along the corridor), six "footpaths that show pedestrian activity" were identified near the following four interchanges/intersections. Sample pictures are shown in **Figure 2-16**.

- I-20 (eastbound and westbound)
- I-285 (southbound and northbound)
- South Blairs Bridge Road
- Washington Road

Source : Connect 6 Study (ARC, 2008)

Source : Connect 6 Study (ARC, 2008)

Figure 2-16: Sample "Footpath" Locations

Although no sidewalks are provided for a significant portion of the corridor, about 55 percent of the intersections have crosswalks provided on at least three legs, and 36 percent have crosswalks provided on all legs.

The Silver Comet Trail is a non-motorized, paved trail for pedestrians and bicyclists that runs parallel to the SR 6 study corridor in Cobb and Paulding counties (**Figure 2-17**). This 60-mile trail, converted from an abandoned portion of the CSX railroad bed, begins in Smyrna, Georgia, and extends to the west through Paulding and Polk counties to connect to Alabama's Chief Ladiga Trail, while providing a major cross-regional connection within the Atlanta region. New residential areas are being constructed near the Silver Comet Trail, and a few have direct pedestrian and bicycle connections to the trail.

Figure 2-17: Silver Comet Trail

According to bicycle suitability maps from the ARC Bicycle Transportation and Pedestrian Walkways Plan (2007), which show a qualitative assessment of bicycling conditions along a roadway, from less favorable to more favorable, SR 6 rates extremely low in bicycle road conditions and is considered to be difficult for cyclists to traverse. The overall conditions for the SR 6 corridor are considered inadequate for serving even the most experienced cyclists. Several bicycle- and pedestrian-related recommendations were made in the previously completed Connect 6 study. These recommendations include:

- Connect the Silver Comet Trail and Sweetwater Creek State Park with pedestrian and bicycle infrastructure
- Provide pedestrian infrastructure in conjunction with new development and redevelopment
- Provide pedestrian facilities, bicycle lanes, or route connections to Silver Comet trailheads and crossings as appropriate

2B.8. Transportation Regulations

GDOT currently manages access along its state highway systems through its *Regulations for Driveway and Encroachment Control (RDEC 2009)*. This document defines the process for driveway permits and other encroachments into state highway rights-of-way.

Tables 3-1, 3-2, and 3-3 from the RDEC specify minimum driveway, median crossover, and signalized intersection spacing criteria, respectively.

Table 2-14 shows the RDEC driveway spacing criteria and maximum number of driveways per mile. **Table 2-15** and **Table 2-16** show similar information for median crossovers and signalized intersections. Rural or urban roadway sections refer to characteristics such as typical section, speed limit, density of street and highway networks, nature of travel patterns, shoulder treatment, and land use. Urban conditions typically refer to roadways that have curb and gutter, sidewalks, posted speed limits of 45 miles per hour or below and higher land use density. The SR 6 corridor has speed limits of 45 miles per hour and 55 miles per hour along various sections and is primarily considered urban based on its existing features and functional classification.

Table 2-14: GDOT Driveway Spacing Criteria and Maximum Number of Driveways per Mile

Posted Speed (MPH)	Driveway Spacing Minimum (ft) (No RT lane)	Number of driveways/mile (No RT lane)	Driveway Spacing Minimum (ft) (With RT lane)	Number of driveways/mile (With RT lane)
25	125	42	125	42
30	125	42	219	24
35	150	35	244	22
40	185	29	294	18
45	**230**	**23**	**369**	**14**
50	275	19	419	13
55	**350**	**15**	**444**	**12**
60	450	12	494	11
65	550	10	550	10

Source: GDOT Regulations for Driveway and Encroachment Control (2009)

Bold items apply specifically to the SR 6 study corridor since posted speeds are 45 miles per hour and 55 miles per hour. An excessive number of driveways along a corridor can directly affect the roadway speeds and crash rates for motorists as they attempt to turn into or turn out of a driveway. The density of driveways significantly varies throughout the study corridor. The highest density of driveways occurs on SR 6 northbound between I-20 and Maxham Road in Douglas County, with a concentration of 19 driveways per mile. The posted speed of this section is 45 miles per hour, and some of the driveways are spaced less than the minimum required distance of 230 feet. The next highest density of driveways occurs on SR 6 northbound between Poplar Springs Road/Cleburne Parkway and SR 92 in Paulding County, with a concentration of 10 driveways per mile. The posted speed of this section is 55 miles per hour, and some of the driveways are spaced less than the minimum required distance of 350 feet. Both

directions of SR 6 between SR 92 and Bill Carruth Parkway in Paulding County also have closely spaced driveways. The density of driveways in this section ranges from 6 to 12 per mile. This section has posted speed limits of 45 miles per hour and 55 miles per hour, and some of the driveways are spaced less than the minimum required distance of 230 feet or 350 feet, respectively.

There are 57 signalized intersections along the study limits of the SR 6 corridor, with 18, 13, 8, and 18 signals in Fulton, Douglas, Cobb, and Paulding counties, respectively. Along the corridor, the intersection spacing meets the minimum spacing of both 1,320 feet (rural) and 1,000 feet (urban), except at three locations in Paulding County. These are between Hiram Pavilion (Sam's Club) and Lake Road/Depot Drive, between SR 92 and Hiram Crossing (Walmart), and between Hiram Crossing (Walmart) and Pace Road. The I-285 and I-20 signalized ramp intersections currently spaced at 590 feet and 780 feet, respectively, are considered exempt from GDOT RDEC requirements because they are part of a signalized diamond interchange, which has operational and design characteristics that differ from traditional intersections. However, these signals are included in the total count for each county. Within each county, the maximum number of signalized intersections per mile is not exceeded. There are 1.6 signalized intersections per mile in Fulton County, 2 signalized intersections per mile in Douglas County, 1 signalized intersection per mile in Cobb County, and 2 signalized intersections per mile for Fulton County.

Median crossovers are paved breaks in the roadway median that allow U-turns and/or driveway access to and from both directions of the road. Too many median crossovers can lead to traffic disturbances and safety conflicts. Too few median crossovers can reduce the mobility of the roadway. Along the SR 6 corridor, there are 14 median crossovers. The GDOT RDEC provides guidance for the spacing between two median crossovers, but this requirement does not specifically apply to the spacing between median crossovers and signalized intersections. On the SR 6 corridor, only three pairs of median openings do not have a signalized intersection separating them. Of these pairs, none is spaced at the preferred urban spacing of 2,000 feet. However, they all meet the minimum spacing of 1,000 feet. The consecutive crossover pairs are located, one each, in Fulton, Douglas, and Paulding counties as follows:

- Fulton County: Between two driveway access locations west of Old Fairburn Road. One driveway provides access to the Piedmont Driving Club, and the other is a residential access road.
- Douglas County: Between the driveway access for Dawn Food Products and the next driveway to the south (located between the Dawns Food Products driveway and Riverside Parkway).
- Cobb County: No unsignalized median crossover pairs.
- Paulding County: Between Old Mill Road and a driveway. This is a unique section, which also has an intermediate median crossover, allowing only northbound to turn left to the cemetery (**Figure 2-18)**. Other businesses located within this section include a gas station and funeral home. This crossover is not included in the overall count.

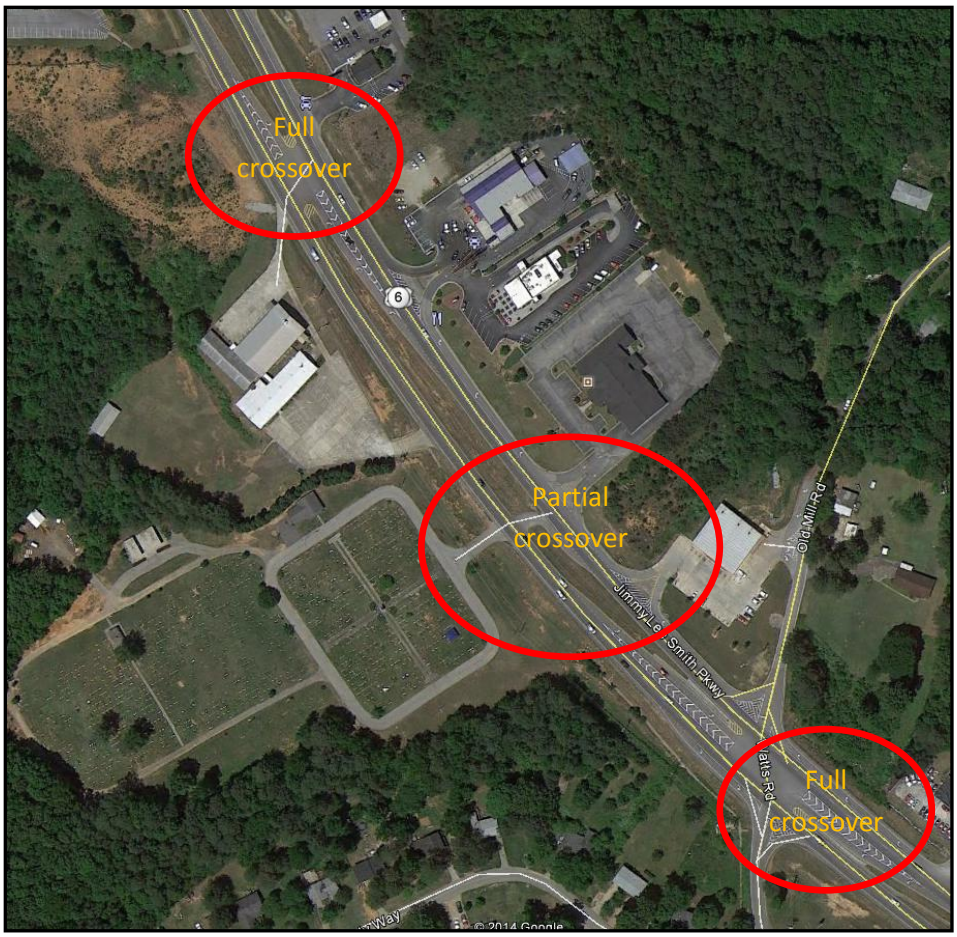
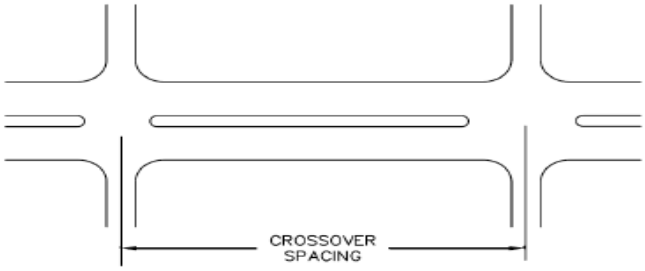


Figure 2-18: Partial Median Crossover (Paulding County)

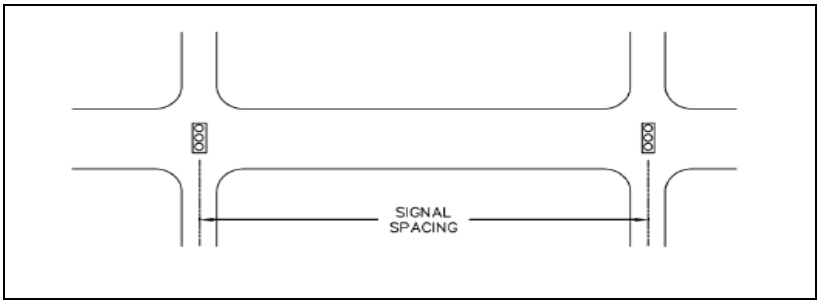
Table 2-15: GDOT Intersection Spacing Criteria and Maximum Number of Crossovers per Mile



Roadway Type	Crossover Spacing (ft)			
	Preferred		Minimum	
	Distance	# per mile	Distance	# per mile
Rural	2640	2	1320	4
Urban	2000	3	1000	5

Source: GDOT Regulations for Driveway and Encroachment Control (2009)

Table 2-16: GDOT Signalized Intersection Spacing Criteria – SR 6 Corridor



Roadway Type	Minimum Intersection Spacing (ft)	
	Distance	# per mile
Rural	1320	4
Urban	1000	5

Source: GDOT Regulations for Driveway and Encroachment Control (2009)

In addition to the GDOT RDEC, the following access management guidelines applicable to the corridor have been identified. Applicable access management techniques and/or provisions highlighted for the counties are summarized in **Table 2-17.**

- Fulton County Driveway Manual – Fulton County adopted this driveway manual in May 2005, and it is a modified version of sections three through five of the GDOT Driveway and Encroachment Manual. It is intended to govern the provision of legal access on county roads in unincorporated Fulton County.
- Douglas County – Douglas County's unified development code includes access management elements. The Douglas County Comprehensive Transportation Plan does not include specific access management strategies, but it lists several treatments that could be appropriate.
- Cobb County – In addition to its comprehensive transportation plan, Cobb County also maintains standards which provide regulations to control features of development (Section 400 Technical Standards, July 2006 revision). This publication provides information to control access in Section 402. Existing access management policies are also discussed in Technical Report C1 of the 2030 Comprehensive Transportation Plan.
- Paulding County – The Paulding County Comprehensive Transportation Plan describes an Access Management Toolkit. This toolkit, while not defining a specific policy, covers the goals and objectives of access management and provides specific techniques with applicable calculation charts. It is noted that the transportation plan is currently undergoing updates. The toolkit, included in Appendix E of the comprehensive plan, provides potential access management techniques to be applied to the prioritized roadways within the county.

Table 2-17: Comparison of Access Management Techniques

Description of Techniques	Access Management Plans Reviewed				
	GDOT	Fulton County	Cobb County	Paulding County	Douglas County
Driveway spacing	√	√		√	
Driveway alignment	√	√			
Non-traversable medians with left turn lanes	√		√	√	√
Spacing of median crossovers	√	√	√	√	
Spacing of signalized intersections	√	√	√	√	
Driveway width	√	√		√	
Design for trucks	√	√			
Driveway consolidation			√	√	√
Minimum corner radii	√	√		√	
Minimum sight distance	√	√		√	
Auxiliary turn lanes	√	√	√	√	√
Raised island	√	√			√
Right-in-right-out (RIRO)	√	√			
Minimum road width	√				
Minimum corner clearance			√	√	
Parcel to parcel access among commercial properties					
Construct parallel access roads				√	
Reverse frontage roads				√	
Adjoined parking areas					√

2C. Previous Studies and Plans

Various agencies and organizations have studied portions of the SR 6 corridor study area. These studies, listed in **Table 2-18**, include ARC's corridor study for SR 6, GDOT's road safety audit, county/community comprehensive transportation plans, and other related studies, as of 2014. Study findings and recommendations applicable to SR 6 are also included in the table.

Table 2-18: Previous Studies and Plans in the Study Area

Agency/Organization	Title (Year)	Findings/Recommendations Applicable to SR 6

Atlanta Regional Commission (ARC)	Georgia State Route 6 Transportation Corridor Study (Connect 6) (2008)	**Recommendations**
		Multiple specific roadway capacity and operational improvements were recommended. Corridor-wide recommendations included:
		• Develop truck-friendly lanes with weigh-in-motion and signal priority vehicle control technology.
		• Conduct a corridor-wide traffic operations assessment.
		• Develop a Share the Road program.
		• **Develop an access management plan for the corridor.**
		• Widen SR 6 to six lanes from I-285 to I-85.
		• Extend Lee, Sweetwater, and Hiram-Lithia Springs roads as a parkway from I-20 to a direct SR 6 connection in the vicinity of Old Dallas Highway east of Hiram.
		• Utilize rain gardens in medians or shoulders where conditions are appropriate.
		• Provide operational improvements near the intersection of SR 6 at:
		  ○ SR 61/Nathan Dean Boulevard
		  ○ US 78/278
		  ○ Maxham Road
		  ○ Oak Ridge Road/Skyview Drive
		  ○ I-20
		  ○ Fulton Industrial Boulevard/SR 70
		  ○ I-285
		  ○ SR 92
		• Install changeable message signs regarding parking/other conditions at HJAIA.
		• Develop a subarea plan at Camp Creek Marketplace, which includes the intersection of SR 6 at I-285.
		• Initiate new local bus route from Sandtown to the Lakewood/Fort McPherson MARTA station.
		• Implement planned transit services.
		• Provide transit pedestrian connections, where applicable.
		• Connect the Silver Comet Trail and Sweetwater Creek State Park with pedestrian and bicycle infrastructure.
		• Provide pedestrian infrastructure in conjunction with new development and redevelopment.
		• Provide pedestrian facilities, bicycle lanes, or route connections to the Silver Comet trailheads and crossings within the study area, as appropriate.
		• Coordinate travel demand management (TDM) programs.
		
		Some specific access-related operational improvements were:

Agency/Organization	Title (Year)	Findings/Recommendations Applicable to SR 6
		• Prohibit left turns from the Norfolk Southern Whitaker Intermodal Terminal to Westside Drive. • Provide access improvements at Powder Springs; specific location details provided (ref pp. 3-26 to 3-27). • Combine access management strategies within traffic operational improvements along SR 6 within Hiram. • Develop a subarea plan/comprehensive traffic impact study at Camp Creek Marketplace. • Form a multijurisdictional alliance to advocate for land use/access management/funding for transportation improvements and for freight operations. • Coordinate with local jurisdictions and Trust for Public Land to provide access to the Chattahoochee River from SR 6 in Douglas or Fulton counties. Example amenities to support river access include parking area, development of connecting paths, and a boat landing area.
Cobb County	Austell Road Access Management Study (2007)	While there are no recommendations for SR 6, the study recommends alternative access roads, new roadway locations, changes to medians, driveway closures, and pedestrian projects within the Austell Road corridor study.
Cobb County	Comprehensive Transportation Plan (2008)	General recommendation for the county to fund and complete specific corridor access management plans. Plan highlights access management recommendations for some corridors/intersections, but none for the SR 6 segment within the county.
Douglas County	Comprehensive Transportation Plan (2008)	**Recommendations** • Signalize intersection and add dual turn lanes for eastbound and westbound traffic at Riverside Parkway. • Add signage at Douglas Hill Road for left turn truck traffic. • Add westbound turn lane at Oak Ridge Road and at North Blairs Bridge Road. • Add bicycle/pedestrian facilities to connect Riverside Parkway and I-20 interchange. • Operational Improvements to the I-20 interchange at SR 6.
Georgia Department of Transportation (GDOT) District 7	State Route 6/Camp Creek Parkway (Fulton County) Corridor Road Safety Audit (2013)	**Recommendations** Major universal corridor recommendations (between SR 70/Fulton Industrial Boulevard and HJAIA): • Restripe road markings (lane lines, add/replace crosswalk and stop lines). • Replace/upgrade guardrail to current standards. • Provide positive median barriers. • Update signal display and provide backplates for east–west signals as appropriate. • Update road signs (add street name to signal ahead sign, provide WRONG WAY signs). • Repair streetlights. • Widen throat of entrance ramp to I-285 northbound to allow turns from both eastbound and westbound to merge more smoothly. • Add sidewalks.

Agency/Organization	Title (Year)	Findings/Recommendations Applicable to SR 6
		• Add overhead directional and lane assignment signing appropriate for multilane approaches to a major freeway interchange. • Remove trees, restore clear zone.
Georgia Department of Transportation (GDOT)	Operational Planning Study (OPS) (2014)	Recommended diverging diamond interchange at I-285 and SR 6/Camp Creek Parkway.
Fulton Industrial Boulevard CID	Master Plan (2013)	Operational improvements include: • Improve wayfinding and transportation mobility at the intersection of Fulton Industrial and SR 6 through geometric and operational improvements. Short- to mid-term improvements include: • Fulton Industrial Boulevard (FIB)/Camp Creek Parkway Intersection Modifications – addition of acceleration lane for right turns onto Camp Creek Parkway, turn radii, and median modifications. • Sidewalk installation on Fulton Industrial from Camp Creek Parkway to Cascade Road. • Pedestrian crosswalks and signals at Fulton Industrial and Camp Creek Parkway. Long Term Improvements include: • Widen Fulton Industrial from Mendel Road to Camp Creek Parkway and from Camp Creek Parkway to Campbellton Road.
Paulding County	Comprehensive Transportation Plan (2008 with update currently underway)	**Recommendations** • SR 6 truck lanes from Bill Carruth Parkway to Cobb County line. • Safety/operational improvements at SR 6 and SR 120 (Buchanan Street) intersection. • Safety/operational improvements at SR 6 and Butler Industrial Drive intersection. • Safety/operational improvements at SR 6 and Cleburne Parkway intersection. • Safety/operational improvements at SR 6 and Charles Hardy Parkway intersection. • Safety/operational improvements at SR 6 and Bill Carruth Parkway intersection. • Safety/operational improvements at SR 6 and Bill Carruth Parkway intersection. • Signalization of Old Harris Drive at SR 6. • SR 6 signal optimization from SR 61 to SR 120.
South Fulton	Comprehensive Transportation Plan (2013)	**Recommendations** • Camp Creek Parkway from I-285 to Old Fairburn Road – Regular signal timing and maintenance program. • Camp Creek Parkway Safety Improvements – Install safety barriers at high crash locations between Fulton Industrial Boulevard and Old Fairburn Road. • Diverging diamond interchange for Camp Creek at I-285. • Widen Camp Creek Parkway from four to six lanes between I-285 and I-85.

Agency/Organization	Title (Year)	Findings/Recommendations Applicable to SR 6
		• Add turn lanes and traffic signal for Camp Creek at Airport Drive. • Intersection improvements at Fulton Industrial Boulevard. • 8'- to 10'-wide Wolf Creek greenway and off-road trails for Camp Creek Parkway and Butner Road, Merk Road, Enon Road. • Pedestrian bridge over Camp Creek Parkway to provide Georgia International Convention Center (GICC) pedestrian access. • Intersection improvements for Camp Creek Parkway at Butner Road intersection. • Intelligent transportation systems improvements (cameras, changeable message signs (CMS, truck sensors) between I-285 and Old Fairburn Road. • Multi-city connector (MARTA Route 180) Roosevelt Highway at Campbellton Street to Camp Creek Parkway (PT-3). • Camp Creek to East Point MARTA station (MARTA Route 84) Camp Creek Parkway at Princeton Parkway.
Georgia Department of Transportation (GDOT)	Georgia Statewide Freight and Logistics Plan 2010-2050 (2012)	**Recommendations** Improve "last-mile" connectors (including SR 6)

Agency/Organization	Title (Year)	Findings/Recommendations Applicable to SR 6

Atlanta Regional Commission (ARC)	Freight Mobility Plan (2008)	**Findings**
		• Thornton Road at Whitaker Intermodal Terminal – Excessive truck/passenger vehicle interactions as a result of commercial activity growth.
		• Fulton Industrial Boulevard – Traffic volumes leading to prolonged travel times.
		Recommendations
		• Establish Freight Corridor Signalization Improvement program – Entire SR corridor and also Thornton Road at Maxham Road.
		• I-20/I-285 interchange reconstruction to improve safety by improving geometric standards for truck movements.
		• Implement recommendations from SR 6 corridor study, including:
		  ○ Truck-friendly lanes from West Hiram Parkway in Paulding to US 29 in Fulton.
		  ○ Widen Sweetwater/Hiram Lithia Springs Road from two to four lanes from US 278/78 to Pearson Road.
		  ○ New four-lane corridor extending Hiram-Lithia Springs Road from Pearson Road to SR 6.
		  ○ Widen Lee and Sweetwater Road from four to six lanes from I-20 to US 278/78.
		• Develop truck-friendly lanes on intermodal connectors for key freight generators throughout region – Applicable to SR 6 to Whitaker Intermodal Terminal.
		• Improve/modernize signalization equipment and software from SR 61 to I-20.
		• Improve/modernize signalization equipment and software from SR 6 and Maxham Road intersection.

Agency/Organization	Title (Year)	Findings/Recommendations Applicable to SR 6
Douglas County	Urban Redevelopment Plan – Thornton Road and Bankhead Highway (2012) – Amendment to Thornton Road plan (2013)	**Findings** General boundaries for the Thornton Road Urban Redevelopment Area begin at the intersection of Thornton Road and Interstate 20 West. The boundaries include both the east and west sides of Thornton Road, along portions of Skyview Drive and Mt. Vernon Road and Maxham Road and Old Alabama Road, generally north to just south of the intersection of Thornton Road and Bankhead Highway. **Negative conditions within the redevelopment area include:** • Difficulty in business retention. • Difficulty in business attraction. • Predominance of blighted commercial and industrial parcels. • Streets that need to be upgraded or improved. • General property distress. **Goals include:** • Promote smart growth and efficient use of land resources. • Work with State to improve community infrastructure with the addition of truck lanes as well as environmental stability. • Encourage private enterprise and work with the Development Authority on financing mechanisms to redevelop neglected, abandoned, distressed, and blighted properties.