

# Augusta Regional Transportation Study

## CONGESTION MANAGEMENT PROCESS

### 2013 REPORT

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Augusta Planning and Development Department

In Cooperation With:

Aiken County Planning & Development Department

Federal Highway Administration

Georgia Department of Transportation

South Carolina Department of Transportation

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## **INTRODUCTION**

The Augusta Regional Transportation Study (ARTS) Congestion Management Process (CMP) report is completed annually in accordance with federal regulations. This report summarizes the results of travel time surveys conducted on major roads in the ARTS area during the year 2013, identifies the strategies and projects that are being implemented to alleviate traffic congestion on these roads and includes appendices with more detailed information on the travel time survey results in 2013 and previous years.

The ARTS area includes all of the Augusta-Richmond County, GA-SC urbanized area, as defined by the 2010 Census, plus additional areas expected to become urbanized within the next 20 years. The study area thus includes all of Richmond County, Georgia and parts of Columbia County, Georgia and Edgefield and Aiken Counties in South Carolina (see Figure 1). Regional transportation is coordinated by the Augusta Planning and Development Department coordinates the work of the metropolitan planning organization (MPO) for the ARTS area. A metropolitan planning organization is a transportation policy-making organization made up of representatives from local government and transportation authorities. MPOs were created in order to insure that existing and future expenditures for transportation projects and programs were based on a comprehensive, cooperative, and continuing planning process. Federal funding for transportation projects and programs is channeled through this planning process.

The ARTS area is a transportation management area (TMA). Any urban area with population over 200,000 is automatically a Transportation Management Area, which subjects it to additional planning requirements under federal law, but also entitles it to funds earmarked for large urbanized areas under the Surface Transportation Program. Areas may be designated TMA's if the governor and the MPO or affected local officials request designation. Such designation would entitles them to greater local project selection authority through their MPOs and to STP funds earmarked for large urban areas. TMAs must also prepare the Congestion Management Process. The CMP requires that all reasonable alternatives be identified and evaluated for their ability to alleviate congestion and enhance mobility. Furthermore, when the addition of general purpose traffic lanes is determined to be the appropriate solution for a particular corridor, the

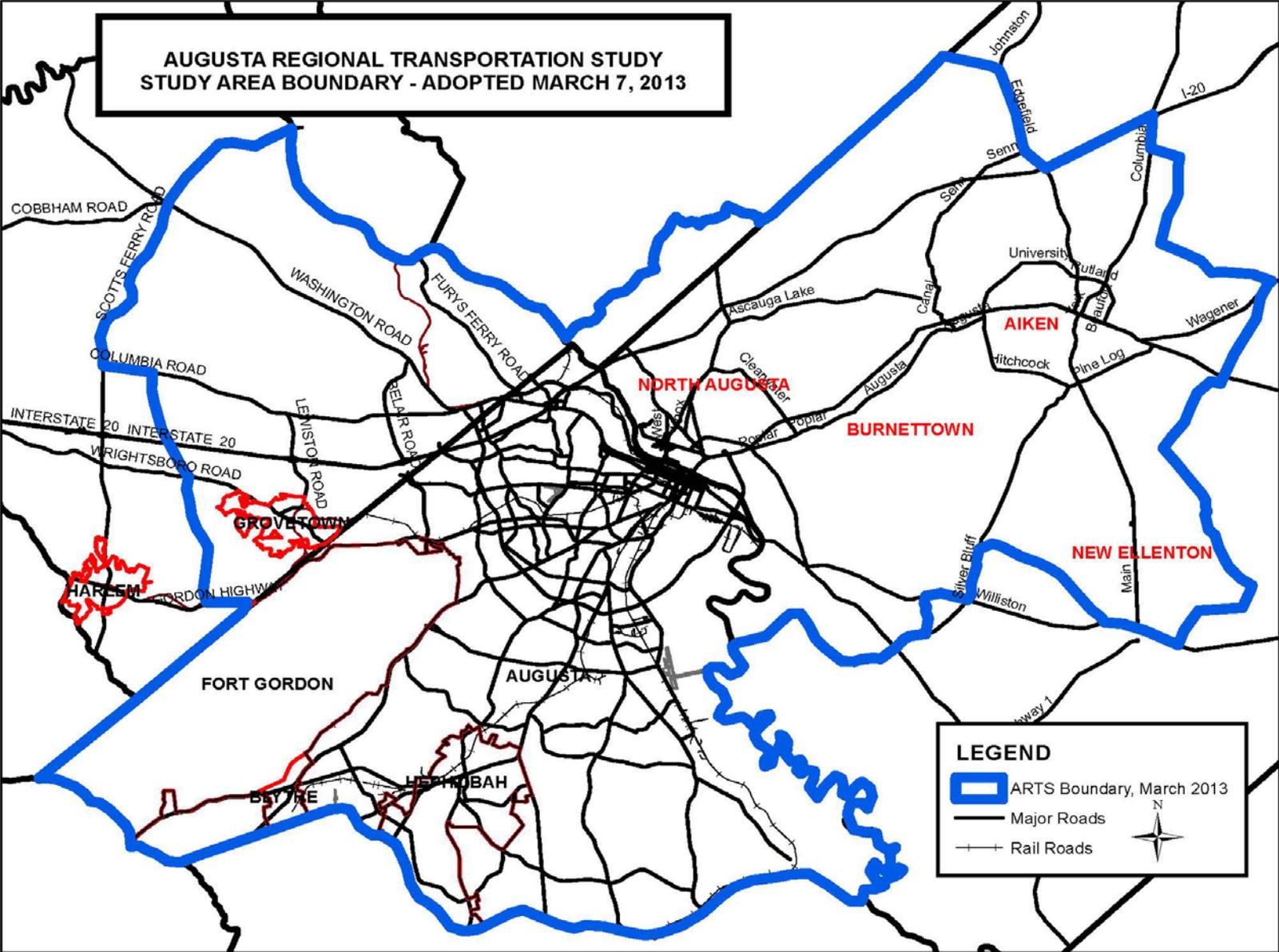
CMP requires that appropriate demand and operational management strategies also be implemented to increase the efficiency of the corridor and extend the life of the improvement.

## **CMP WORK PLAN AND DATA COLLECTION**

The ARTS CMP work plan was completed in August 1994 in cooperation with the Georgia Department of Transportation (GDOT) and the South Carolina Department of Transportation (SC DOT). Since then the work plan has served as the basis for the area's annual CMP report and ongoing CMP process. The CMP work plan is tailored to meet regional needs and is evaluated and adjusted periodically to meet changing needs and priorities. The Augusta Planning and Development Department coordinates the CMP process and the work on the annual CMP report. Appendix A contains the history and details of the CMP work plan.

There are 52 corridors in the ARTS area subject to travel time surveys. Of these, sixteen (16) are located in Aiken County, eight (8) in Columbia County and twenty-two (22) in Richmond County. Another six (6) corridors connect Richmond and Columbia counties: Bobby Jones Expressway, SR 223 / Robinson Avenue, Belair Road / Jimmie Dyess Parkway, Wrightsboro Road, Fury's Ferry Road, and Davis Road/Walton Way Extension/Jackson Road.

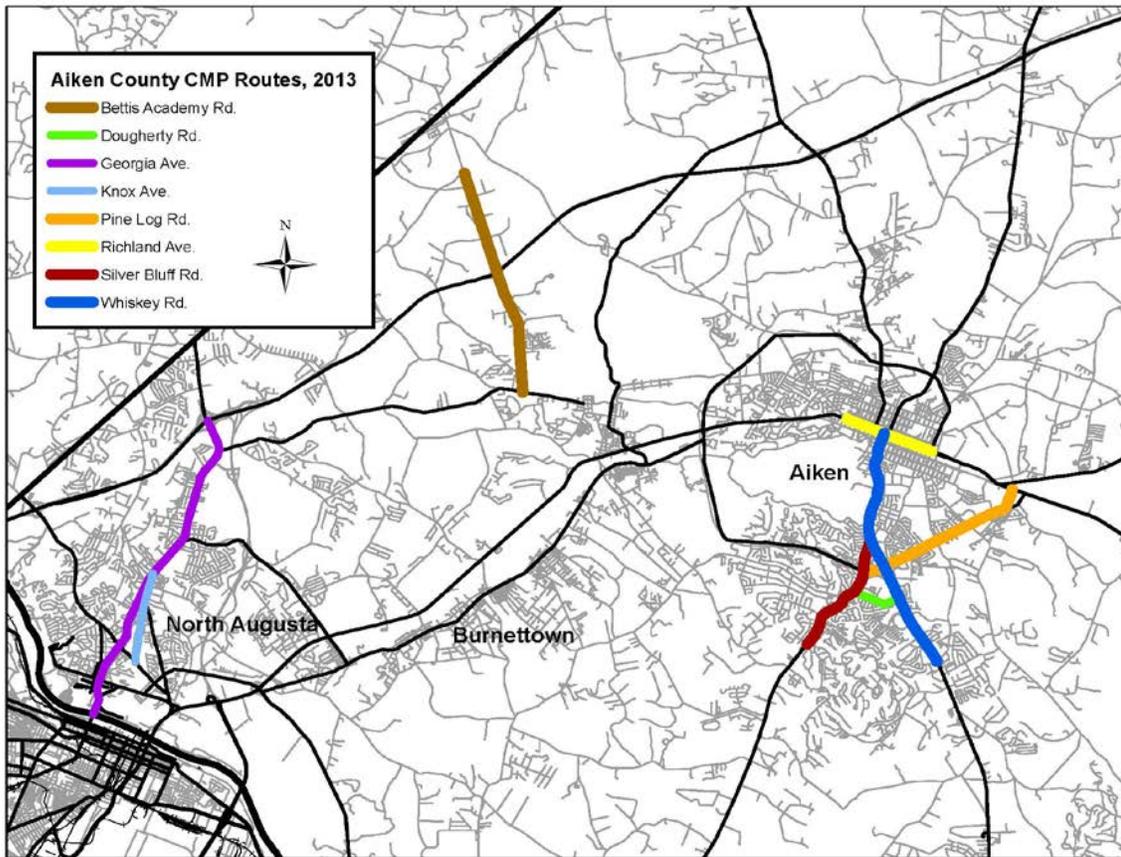
In accordance with the CMP work plan, each corridor is divided into links, which corresponds with signalized intersections. The corridors are traveled in both directions during AM peak hour and PM peak hour on three separate weekdays (2 runs per day x 3 days = 6 total runs). Some corridors are timed during noon, school release and on Saturday peak shopping times. A Global Positioning System (GPS) recording unit is activated at the start of the trip and the driver travels the length of the corridor while keeping pace with the traffic. The files from each trip are then exported to Excel format where each link of the route is timed and recorded. The average speed on each link and corridor is calculated and the deviation from the posted speed limit determines the relative level of congestion on each route (see Table 1). The causes of congestion are noted by the driver and documented in the text of the CMP document. Appendix B contains the corridor segment sheets.



<b>Table 1</b>	
<b>Performance Measures</b>	
<b>ARTS Congestion Management Process</b>	
<b>Category</b>	<b>Average Speed</b>
Not Presently Congested (NPC)	$\geq$ Posted speed limit.
At Risk of Congestion (ARC)	1% - 15% below the posted speed limit
Borderline Congested (BC)	15% - 25% below the posted speed limit
Marginally Congested (MC)	25% - 30 % below the posted speed limit
Seriously Congested (SC)	$>$ 30% below the posted speed limit

### **RESULTS OF 2013 TRAVEL TIME SURVEY**

Twenty-one (21) routes were surveyed for the 2013 CMP; eight (8) in Aiken County, four (4) in Columbia County and nine (9) in Richmond County. Travel time data was collected using GPS units during AM and PM peak periods during the months of March, April and May. The following paragraphs summarize the results of the survey.



**AIKEN COUNTY ROUTES SURVEYED**

1. **Bettis Academy** was determined to be at risk of congestion during all run times. Despite the increased number of travelers who use this corridor to go to work due to the re-startup and/or expansion of at least two nearby factories in recent years, congestion is almost non-existent. However, widened off-ramps at the I-20 interchange (Exit 11) and traffic signal upgrades were recently constructed to help improve safety due to the increased number of workers (commuters) who use this interchange to go to work at those plants.
2. **Dougherty Road** was determined to be marginally congested during the westbound AM and PM runs and seriously congested during the eastbound AM and PM runs. Theoretically, the seriously congested result is due to the many commuters who work at the Savannah River Site taking this corridor as a short cut to connect more quickly to Whiskey Road as opposed to taking East Pine Log Road. The Dougherty Road Corridor

Study was completed this summer, and one of the recommendations includes widening it to a three-lane section. Also, an intersection improvement at the intersection of Whiskey Road and Dougherty Road is planned for 2014. Dougherty Road was found to be marginally congested in both directions during the 3:00 PM end-of-school-day timeframe.

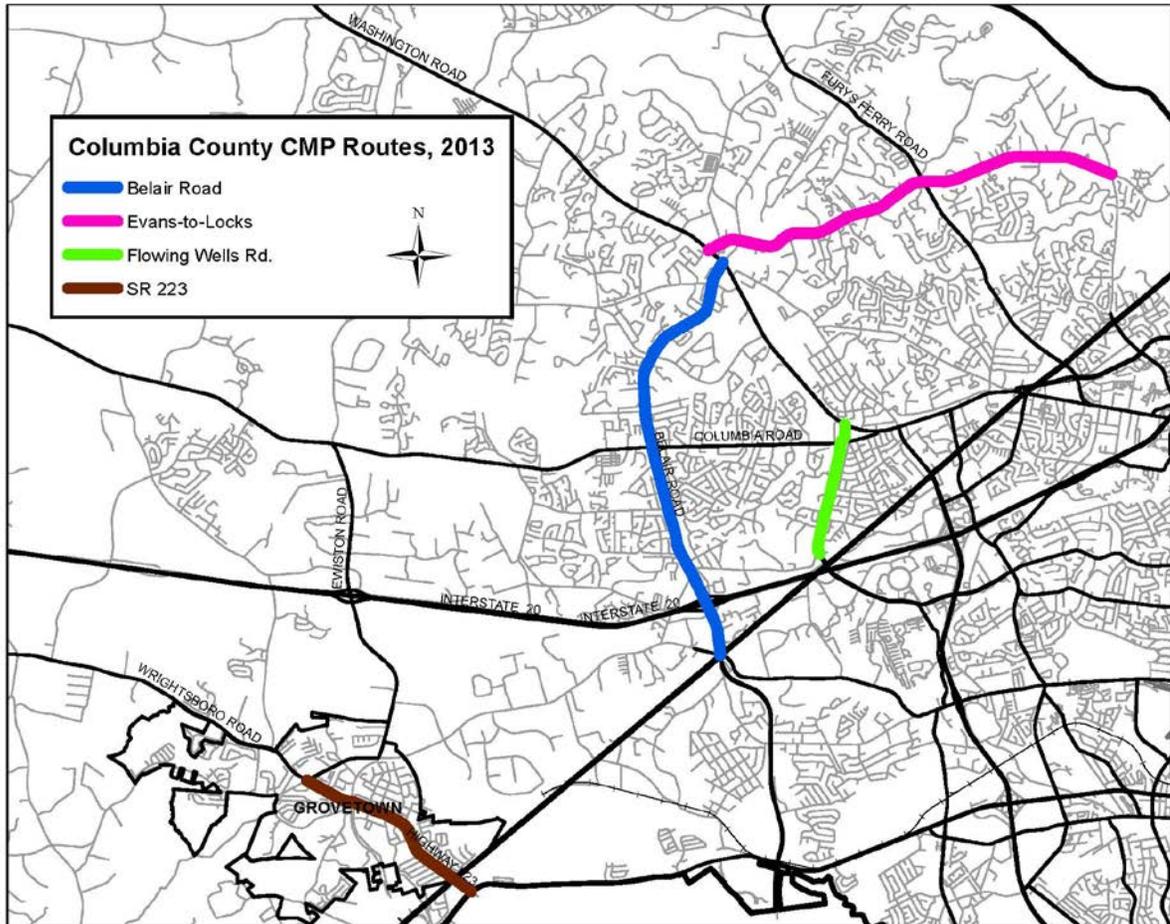
3. **(East) Pine Log Road** was determined to be borderline congested during the westbound and eastbound AM runs, but marginally congested in both directions during the end-of-school-day timeframe. As shown in the 2013 ARTS ATMS Update, this is a proposed adaptive traffic signal corridor with proposed CCTV and proposed fiber (new aerial).
4. **Georgia Avenue** in North Augusta was determined to be at risk of congestion during the southbound AM run, borderline congested during the northbound AM and southbound PM runs, and marginally congested during the northbound PM run. As part of the 2013 ARTS ATMS update, a consideration has been made for traffic signal communications to be at the Georgia Avenue/Old Edgefield Road/US 25 corridor and US 1 corridor. Since it may take several years to fund these projects, it may be worthwhile to install GPS units at the traffic signal cabinets to maintain accurate clock time as an interim measure.
5. **Knox Avenue** in North Augusta was determined to be borderline congested during the northbound AM run and marginally congested during the southbound AM & PM runs and northbound PM run. As shown in the 2013 ARTS ATMS Update, a portion of this corridor in the North Augusta city limits has proposed CCTV and proposed fiber (new aerial).
6. **Richland Avenue** was determined to be seriously congested in both the eastbound and westbound directions during the 12 noon hour. As shown in the 2013 ARTS ATMS Update, this is a proposed adaptive traffic signal corridor; however, the two proposed segments are outside the Vacluse Road to Beaufort Street study limits in the CMP. In addition, a portion of this corridor does have proposed CCTV and proposed fiber (new aerial) within the CMP study limits.

7. **Silver Bluff Road** is an urban-minor arterial road that was found to be seriously congested at all times in the both northbound and southbound directions at all times. A portion of this corridor is in the current Transportation Improvement Program (TIP) as a corridor improvements project, and the preliminary engineering phase by SCDOT is 100% complete. The design includes three widened lanes, operational improvements, signal improvements, etc., between Indian Creek Trail and Richardson Lake Road in order to alleviate congestion and improve safety. R-O-W acquisition is anticipated to begin winter 2014. Construction is anticipated to begin fall 2014.
  
8. **Whiskey Road** was determined to be borderline congested during the northbound AM run, marginally congested for the southbound AM run, and seriously congested for the southbound and northbound PM runs. In 2011, this corridor received an adaptive signal system at 17 intersections between South Boundary Avenue and Powderhouse Road, inclusively. Since then, travel times on this corridor have improved, to an extent. Whiskey Road will receive access management improvements via the projects planned on the proposed Whiskey Road / Powderhouse Road Connector. Also, an intersection improvement at Whiskey Road and Dougherty Road is planned for 2014.

Table 2 summarizes the results for the eight (8) Aiken County corridors.

**TABLE 2**  
**2013 AIKEN COUNTY TRAVEL TIME SURVEY RESULTS**

Aiken County CMP Routes			Posted Speed	Average Speed (MPH)			
				% Deviation from Posted Speed Limit			
			MPH	SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM
Bettis Academy	From To	Ascauga Lake Road Fields Cemetery <b>Category</b>	45/55	43 -14.00% <b>ARC</b>	46 -8.00% <b>ARC</b>	44 -12.00% <b>ARC</b>	45 -10.00% <b>ARC</b>
Dougherty Road	From To	Whiskey Road Silver Bluff Road <b>Category</b>	35	25 -28.57% <b>MC</b>	19 -45.71% <b>SC</b>	25 -28.57% <b>MC</b>	20 -42.86% <b>SC</b>
Dougherty Road (3:00 PM)	From To	Whiskey Road Silver Bluff Road <b>Category</b>	35			26 -25.71% <b>MC</b>	25 -28.57% <b>MC</b>
(East) Pine Log Road	From To	US 78 Silver Bluff Road (Eastern End) <b>Category</b>	35/45	31 -22.50% <b>BC</b>	34 -15.00% <b>BC</b>		
(East) Pine Log Road (3:15 PM)	From To	US 78 Silver Bluff Road (Eastern End) <b>Category</b>	35/45			30 -25.00% <b>MC</b>	29 -27.50% <b>MC</b>
Georgia Avenue	From To	Savannah River I-20 <b>Category</b>	30/45	33 -12.00% <b>ARC</b>	30 -20.00% <b>BC</b>	29 -22.67% <b>BC</b>	27 -28.00% <b>MC</b>
Knox Avenue	From To	Martintown Road Georgia Avenue <b>Category</b>	35/40	28 -25.33% <b>MC</b>	29 -22.67% <b>BC</b>	28 -25.33% <b>MC</b>	25 -28.57% <b>MC</b>
Richland Avenue (12 Noon)	From To	Vaulcluse Road Beaufort Street <b>Category</b>	25/35			18 -40.00% <b>SC</b>	19 -36.67% <b>SC</b>
Silver Bluff Road	From To	Whiskey Road Savannah Drive <b>Category</b>	35	23 -34.29% <b>SC</b>	19 -45.71% <b>SC</b>	23 -34.29% <b>SC</b>	19 -45.71% <b>SC</b>
Whiskey Road	From To	Richland Avenue Powderhouse Road <b>Category</b>	30/45	28 -25.33% <b>MC</b>	29 -22.67% <b>BC</b>	22 -41.33% <b>SC</b>	24 -36.00% <b>SC</b>
<b>Key to Abbreviations:</b>							
NPC = Not Presently Congested							
ARC = At Risk of Congestion							
BC = Borderline Congested							
MC = Marginally Congested							
SC = Seriously Congested							



**COLUMBIA COUNTY ROUTES SURVEYED**

1. **Belair Road (SR 383)** is a corridor that connects the Evans area to the north with Jimmie Dyess Parkway and Fort Gordon’s Gate #1 on the south. Belair Road (SR 383) is a four-lane urban principal arterial, with a flush median turn lane. Left and right turn lanes are located at major signalized intersections. Land uses along the corridor include a mix of suburban residences, professional offices and health care institutions and commercial establishments. Commercial uses are most concentrated at the major intersections, especially around the I-20 interchange. Based on the 2013 travel time survey, Belair Road was determined to be seriously congested during three of four time periods: southbound AM (toward Fort Gordon Gate #1) and southbound and northbound in the PM. Factors contributing to the congestion include high traffic volumes,

especially at signalized intersections and the I-20 interchange and the presence of many commercial establishments.

2. **SR 223 / Robinson Avenue** is a two-lane road connecting Grovetown and points west with Gordon Highway and the Gate #2 entrance to Fort Gordon. This is the main street passing through the center of Grovetown. Adjoining land uses include a mix of residential, commercial and institutional land uses. Newer residential subdivisions are located nearest the Gordon Highway end of the road. Based on the 2013 travel time survey, Robinson Avenue was determined to be seriously congested during three of four time periods: eastbound AM (toward Gate #2) and eastbound and westbound in the PM. It was rated marginally congested during the westbound AM run. In addition to the fort traffic, factors contributing to congestion include left turn movements at several locations, delays at an active railroad crossing and the presence of a school zone on the route.
  
3. **Flowing Wells Road** is an urban minor arterial that extends from its intersection with Washington Road to its intersection with Wheeler Road near the Richmond County line. It is one of several major commuter routes and provides access to schools, commercial establishments, professional and institutional uses in the general vicinity. Flowing Wells is a four-lane road between Washington Road and Columbia Road intersections. It narrows to two travel lanes just west of the Columbia Road intersection. Based on the 2013 travel time survey, Flowing Wells Road was determined to be seriously congested in all four time periods. Factors contributing to the congestion include the presence of two school zones, left turn movement from travel lanes and heavy traffic volume at signalized intersections.
  
4. **Evans-to-Locks Road** is a two-lane urban collector street that extends from the Augusta Canal Headgates / Savannah Rapids Pavilion on the east to the intersection of Washington Road (in Evans) on the west. Rural shoulders border much of the roadway and a multi-use trail is located along the south right-of-way from the Savannah Rapids Pavilion westward to near the Blue Ridge Drive intersection. Low-density residential development predominates along the part of the corridor from the Pavilion to the intersection of Fury's Ferry Road (SR 28). West of Fury's Ferry Road land use along the corridor gradually shifts from low-density residential to a mix of commercial, industrial and institutional uses. Commercial uses dominate at the Fury's Ferry Road intersection and at the Evans end of the corridor.

The section of Evans-to-Locks Road surveyed extends from the intersection of Stevens Creek Road on the east to the Washington Road intersection on the west. Based on the 2013 travel time survey, Evans-to-Locks Road was determined to be seriously congested during three of four time periods: eastbound AM and eastbound and westbound in the PM. It was rated borderline congested during the westbound AM run. High traffic volumes, especially at the Evans end of the corridor, the presence of two school zones and periodic left-turn movements are some of the factors contributing to congestion on the corridor.

Table 3 summarizes the results for the four (4) Columbia County corridors.

**TABLE 3  
2013 COLUMBIA COUNTY TRAVEL TIME SURVEY RESULTS**

Columbia County CMP Routes			Posted Speed MPH	Average Speed (MPH)			
				% Deviation from Posted Speed Limit			
				SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM
<b>Belair Road</b>	From	Washington Road	45	28	35	30	28
	To	Wrightsboro Road		-37.78%	-22.22%	-33.33%	-37.78%
				<b>SC</b>	<b>BC</b>	<b>SC</b>	<b>SC</b>
<b>Flowing Wells Road</b>	From	Wheeler Road	45	17	18	27	20
	To	Washington Road		-62.22%	-60.00%	-40.00%	-55.56%
				<b>SC</b>	<b>SC</b>	<b>SC</b>	<b>SC</b>
<b>Evans-to-Locks Road</b>	From	Stevens Creek Road	45	31	34	31	30
	To	Washington Road		-31.11%	-24.44%	-31.11%	-33.33%
				<b>SC</b>	<b>BC</b>	<b>SC</b>	<b>SC</b>
<b>SR 223 / Robinson Ave.</b>	From	Wrightsboro Road	35/45	29	25	19	17
	To	Gordon Highway		-27.50%	-37.50%	-52.50%	-57.50%
				<b>MC</b>	<b>SC</b>	<b>SC</b>	<b>SC</b>

**Note:** school zone speed limits in effect during the AM Peak on parts of the following routes: Belar Rd., Flowing Wells Rd., Evans-to-Locks Rd. and SR 223

**Note:** Driver delayed by train on Thursday PM run on SR 223

**Key to Abbreviations:**

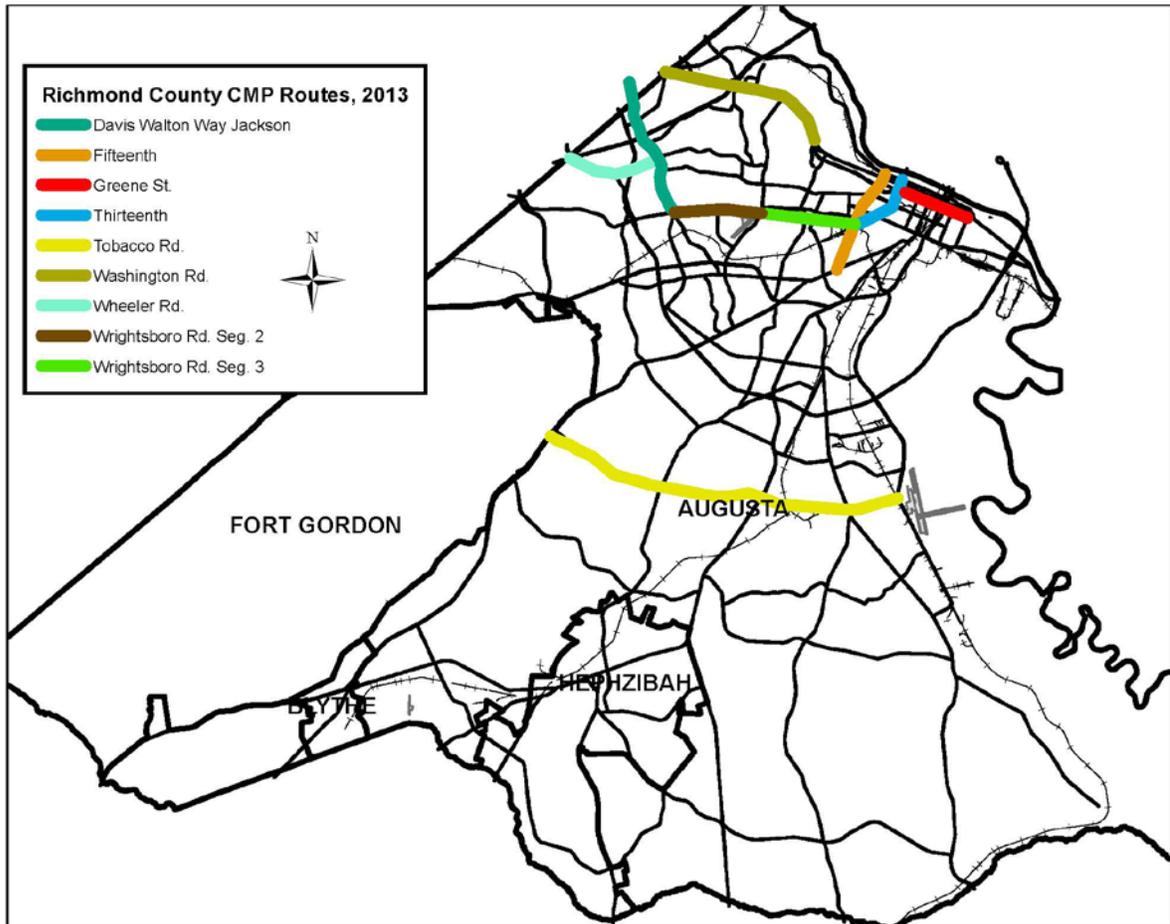
NPC = Not Presently Congested

ARC = At Risk of Congestion

BC = Borderline Congested

MC = Marginally Congested

SC = Seriously Congested



## RICHMOND COUNTY ROUTES SURVEYED

1. **Thirteenth Street / R. A. Dent Boulevard** is a four-lane arterial urban principal / urban minor arterial that connects downtown Augusta and the mid-town medical complex with points to the north and south. Thirteenth Street is a principal route for commuters going to and from North Augusta, South Carolina. Predominant land uses along the corridor include commercial, industrial and institutional land uses.

Based on the 2013 travel time survey, 13<sup>th</sup> Street / R. A. Dent Boulevard was determined to be severely congested in all four time periods. High peak hour traffic volumes, left turn movements, the presence of an at-grade railroad crossing and delays at signalized intersection are some of the factors contributing to the congestion along the corridor.

2. **Fifteenth Street**, part of which was recently renamed **Ruth B. Crawford Hwy.**, is an urban principal / urban minor arterial extending from Reynolds Street on the north to Martin Luther King, Jr. Blvd. on the south. Fifteenth Street carries Georgia State Route #4 between Walton Way and MLK, Jr. Blvd. Fifteenth Street is a principal route for workers and visitors going to and from downtown Augusta, the mid-town medical district, Paine College and Georgia Regents University (GRU). Residential and institutional land uses predominate along the two-lane part of the corridor from Government Street to MLK, Jr. Blvd. Fifteenth Street has four travel lanes and a flush median turn lane from the Rosa T. Beard bridge north to the Butt Memorial Bridge. Commercial and institutional (hospitals, GRU, Paine College) land uses characterize this part of the corridor. Fifteenth Street has four travel lanes from the Butt Bridge to Reynolds Street. Predominant land uses along the corridor include commercial, industrial and institutional land uses.

Based on the 2013 travel time survey, Fifteenth Street / Ruth B. Crawford Hwy. was determined to be severely congested during the northbound and southbound AM runs, and marginally congested during both of the PM runs. Heavy traffic volumes at peak hours, left turn movements, the presence of an at-grade railroad crossing and delays at signalized intersections are some of the factors contributing to the congestion.

3. **Washington Road** is an urban principal arterial and serves as a major east-west corridor connecting Columbia and Richmond counties. Washington Road carries Georgia State Route #28 from Fury's Ferry Road to the Calhoun Expressway. The basic road profile is four travel lanes with a flush median turn lane, curb, gutter and some sidewalks. Turn lanes are present at major intersections and at the Interstate 20 interchange.

The Richmond County segment of Washington Road extends from Pleasant Home Road on the west to the Calhoun Expressway on the east. Highway-oriented land uses, such as shopping centers, motels, restaurants and car dealerships, predominate along this part of the corridor. The Augusta National Golf Club also borders Washington Road.

The Richmond County segment of Washington Road was determined to be seriously congested during the westbound AM and PM runs, at risk of congestion during the eastbound AM run and borderline congested during the eastbound PM run. High peak hour traffic volumes, numerous

cub cuts and the presence of many traffic generators are among the factors that contribute to congestion on the corridor.

- 4. Wheeler Road** is an urban minor arterial with four travel lanes separated by a landscaped median. It is a major east-west connector between Columbia and Richmond counties and thus attracts heavy commuter traffic volumes. Several major traffic generators are located along the Wheeler Road corridor, including Doctor's Hospital, Augusta Exchange Shopping Center, the Wilson Family YMCA and Regal Cinemas. Numerous other commercial establishments, professional offices and residential developments also are located along and near the corridor. Wheeler Road has several high-volume signalized intersections, including interchanges with both Interstate 20 and Interstate 520.

Based on the 2013 travel time survey, Wheeler Road was determined to be seriously congested during all four runs. This matches the level of congestion on this corridor last year. The level of congestion reflects the combination of heavy commuter traffic and the presence of many traffic generators along and near this corridor.

- 5. Greene Street** is an urban principal / urban minor arterial that is a major route for workers and visitors going to and from downtown from points in east and west Augusta. Greene Street carries Georgia State Route #28 between the Calhoun Expressway and Fifth Street. Greene Street has four travel lanes separated by a landscaped median. Between the Calhoun Expressway and the Gordon Highway overpass, Greene Street is characterized by a mix of commercial, residential, institutional and professional office land uses. Residential land uses predominate in the area from the overpass to East Boundary.

As a result of the 2013 travel time survey, Greene Street was seriously congested during the westbound AM run, and marginally congested in the remaining time periods. Delay was most evident at signalized intersections.

- 6. Jackson Road / Walton Way Ext. / Davis Road** - These three urban minor arterials form a corridor stretching from Washington Road on the north to Wrightsboro Road on the south. Jackson Road has two-travel lanes and a flush median turn lane. Walton Way Ext. and Davis Road have four travel lanes and a flush median turn lane, though raised concrete medians are

located on the section of Walton Way Ext. between Skinner Mill Road and Toucan Road. Left turn lanes are located at all major intersections along the corridor. Land uses range from predominantly residential along Jackson Road to a mix of commercial and professional office uses along Walton Way Ext. and Davis Road. Walton Way Ext. and Davis Road were the focus of a recent widening project. In addition, a half-diamond interchange was completed in early 2008 where Walton Way Ext. crosses Interstate 20.

Jackson Road/Walton Way Ext. /Davis Road were determined to be seriously congested during both the northbound and southbound AM runs, as well as during the northbound PM run. The route was marginally congested during the northbound AM run, seriously congested during the southbound PM run, and marginally congested during the southbound PM run. Factors contributing to the congestion include the presence of the Augusta Exchange shopping center adjacent to the corridor, high traffic volumes at major intersections, and delays at the Washington Road and Wrightsboro Road intersections.

7. **Tobacco Road** is a four-lane urban principal arterial, with a flush median turn lane, which extends from Augusta Regional Airport on the east to Fort Gordon's Gate #5 on the west. Land uses along the corridor include a mix of low-density residential subdivisions, apartment complexes, manufactured home parks, commercial establishments, industrial uses and institutional uses. Commercial uses are most concentrated at the intersections with Mike Padgett Highway (SR 56), Peach Orchard Road (US 25 / SR 121), Windsor Spring Road, Morgan Road and Deans Bridge Road (US 1 / SR 4). Residential uses are most concentrated in the area between Windsor Spring Road and Deans Bridge Road. Turn lanes are located at major intersections.

Tobacco Road was determined to be borderline congested in three of the four runs: eastbound AM, eastbound PM and westbound PM. It was at risk of congestion during the westbound AM run. These results are similar to the ones recorded in 2011, the last time the route was surveyed. Factors contributing to the congestion include shoppers and commuters going to and from Fort Gordon and other businesses and institutions along the corridor.

8. **Wrightsboro Road (Segment #2)** – Wrightsboro is an urban principal arterial and serves as a major east-west corridor connecting Columbia and Richmond counties. The segment of Wrightsboro Road between Highland Avenue and Jackson Road includes four travel lanes and a

flush median turn lane. Turn lanes are present at the Highland Avenue and Jackson Road signalized intersections.

Commercial land uses predominate along this segment of Wrightsboro Road, though residential subdivisions, apartment complexes and the Georgia Regents University athletic complex also adjoin the corridor. Based on the 2013 travel time survey, Wrightsboro Road Segment #2 was determined to be at risk for congestion during the westbound AM run and the eastbound PM run, and borderline congested during the eastbound AM and westbound PM run. High traffic volumes, especially at the two major intersections, is a factor contributing to the congestion. In addition, Wrightsboro Road narrows to two travel lanes east of the Highland Avenue intersection.

9. **Wrightsboro Road (Segment #3)** is an urban principal arterial and serves as a major east-west corridor connecting Columbia and Richmond counties. Wrightsboro Road Segment #3 includes the part of the corridor between the 15<sup>th</sup> Street Overpass (Rosa T. Beard Bridge) on the east and Highland Avenue on the west. This segment of the road includes two travel lanes bordered by curb, gutter and sidewalks. Left turn lanes are present at signalized intersections. The corridor is characterized by a mix of residential, commercial, professional office and institutional land uses. Trinity Hospital and the Uptown Division of the Charlie Norwood VA Hospital are the two largest institutions on the corridor.

Based on the 2013 travel time survey, Wrightsboro Road Segment #3 was determined to be seriously congested during the eastbound and westbound AM runs, borderline congested during the westbound PM run and marginally congested during the eastbound PM run. The fact that this segment of Wrightsboro Road has only one travel lane in each direction, serves as a commuter route and the presence of Trinity Hospital and related professional offices are some of the factors contributing to congestion. A school zone is also located along this segment of Wrightsboro Road.

Table 4 summarizes the results for the nine (9) Richmond County corridors.

**TABLE 4  
2013 RICHMOND COUNTY TRAVEL TIME SURVEY RESULTS**

Richmond County CMP Routes			Posted Speed MPH	Average Speed (MPH)			
				% Deviation from Posted Speed Limit			
				SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM
Thirteen Street/RA Dent Boulevard	From	Reynolds Street	35	22	24	23	24
	To	Wrightsboro Road		-37.14%	-31.43%	-34.29%	-31.43%
				<b>SC</b>	<b>SC</b>	<b>SC</b>	<b>SC</b>
Fifteenth Street	From	Reynolds Street	35	23	24	26	25
	To	MLK Jr. Blvd.		-34.29%	-31.43%	-25.71%	-28.57%
				<b>SC</b>	<b>SC</b>	<b>MC</b>	<b>MC</b>
Davis Rd. / Walton Way Ext. / Jackson Rd.	From	Washington Road	40	28	28	30	25
	To	Wrightsboro Road		-30.00%	-30.00%	-25.00%	-37.50%
				<b>SC</b>	<b>SC</b>	<b>MC</b>	<b>SC</b>
Tobacco Road	From	Deans Bridge Road	45	39	35	37	38
	To	Doug Barnard Parkway		-13.33%	-22.22%	-17.78%	-15.56%
				<b>ARC</b>	<b>BC</b>	<b>BC</b>	<b>BC</b>
Greene Street	From	East Boundary	35	24	25	26	25
	To	Twelfth Street		-31.43%	-28.57%	-25.71%	-28.57%
				<b>SC</b>	<b>MC</b>	<b>MC</b>	<b>MC</b>

**TABLE 4  
2013 RICHMOND COUNTY TRAVEL TIME SURVEY RESULTS**

Richmond County CMP Routes			Posted Speed MPH	Average Speed (MPH)			
				% Deviation from Posted Speed Limit			
				SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM
Washington Road (SR 28)	From	Pleasant Home Road	45	31	42	29	34
	To	John C. Calhoun Expressway		-31.11%	-6.67%	-35.56%	-24.44%
				<b>SC</b>	<b>ARC</b>	<b>SC</b>	<b>BC</b>
Wheeler Road	From	Walton Way Extension	45	26	24	20	20
	To	Flowing Wells Road		-42.22%	-46.67%	-55.56%	-55.56%
				<b>SC</b>	<b>SC</b>	<b>SC</b>	<b>SC</b>
Wrightsboro Road Segment 2	From	Jackson Road	35	32	29	28	31
	To	Highland Avenue		-8.57%	-17.14%	-20.00%	-11.43%
				<b>ARC</b>	<b>BC</b>	<b>BC</b>	<b>ARC</b>
Wrightsboro Road Segment 3	From	Highland Avenue	35	19	20	28	25
	To	Fifteenth Street		-45.71%	-42.86%	-20.00%	-28.57%
				<b>SC</b>	<b>SC</b>	<b>BC</b>	<b>MC</b>

Note: school zone speed limits in effect during the AM Peak on parts of the following routes: 15th St., Jackson Rd., Tobacco Rd. and Wrightsboro Rd. Segment 3

**Key to Abbreviations:**  
 NPC = Not Presently Congested  
 ARC = At Risk of Congestion  
 BC = Borderline Congested  
 MC = Marginally Congested  
 SC = Seriously Congested

## CONGESTION MITIGATION STRATEGIES, 1995-2013

The congestion mitigation strategies included in the CMP work plan are listed in Table 5. As corridors or parts of corridors are identified as being seriously congested, a matrix is used to identify which strategies are most appropriate for each corridor. Table 6 applies these strategies to the seriously congested corridors in the study area.

The roadway congestion documented by the CMP has resulted in a number of special studies being completed in recent years. These studies have outlined a wide variety of measures to mitigate congestion and / or encourage the use of alternative modes of transportation by improving safety and operations. Some of the studies completed recently, or underway, include the following:

- **Medical Center Traffic Operations Study (July 2000)** – This study examined congestion along Thirteenth and Fifteenth streets in the vicinity of the medical center in downtown Augusta. The report recommended a number of improvements such as signalization, signage, parking, roadway improvements, intersection improvements, pedestrian and bike access, and transit improvements for this congested area. The improvements were recommended on a short, mid, and long-range basis. Pedestrian crosswalks, signals and signage were added at major intersections in the medical center area in 2003, and the recently completed St. Sebastian Way / Greene Street Extension project includes both bicycle and pedestrian facilities.
- **Fifteenth Street /Walton Way (SR 4) Traffic Operations Study (2008)** – Jacobs, Inc. completed a Traffic Operations and Safety Analysis for the SR 4 corridor from Central Avenue to St. Sebastian Way in Augusta. The study was completed for the Georgia Department of Transportation and the purpose was to identify pedestrian safety improvements for the corridor. The study evaluated such factors as existing traffic control measures and devices, vehicle volume and speeds, collision history, pedestrian facilities and parking. The study recommended a number of both short-and long-range improvements to benefit pedestrians, such as additional raised median islands, ADA ramps, audible traffic signals and signs, repainted crosswalks and signage.
- **Fifteenth Street (SR 4) Pedestrian Improvement Project (2011-Present)** – URS is completing the first three phases (Concept Development, Database Preparation and Public Involvement) of a design services contract on the Fifteenth Street Pedestrian Improvement project. The general concept for the project involves installation of crosswalks, landscaped medians and related pedestrian improvements

from the John C. Calhoun Expressway on the north to the Rosa T. Beard Memorial Bridge on the south. Context Sensitive design principles and water sensitive urban design features are integral to the project.

- **ARTS Regional Freight Study (January 2009)** – This study profiles freight movement in the region, assesses freight needs and deficiencies and identify projects to improve freight movement in and through the area. The final report highlights several projects to improve the safe, efficient movement of freight traffic and reduce associated congestion. The report recommends projects to improve intercity connectors between the Aiken-Augusta area and Macon, Savannah, Charleston and Greenville, enhance safety and warning devices at high-volume at-grade rail-highway crossings, enhance safety on roads that have a high number of accidents involving trucks, and to plan for increasing air cargo volumes as passenger service grows at Augusta Regional Airport.
- **Regional Bicycle and Pedestrian Plan (June 2012)** – This study replaces the regional bicycle and pedestrian plan completed in 2003. The plan is designed to improve the region’s bicycle and pedestrian environment, increase bicycle and pedestrian travel, reduce traffic congestion and vehicle emissions and improve the quality of life. Among other things, the plan sets region-wide goals and benchmarks for improving biking and walking, investigates safety issues, future demand and potential benefits of increasing bicycle and pedestrian use, recommends programs, policies and partner organizations to help support and grow walking and biking and presents the region-wide plan for a comprehensive bicycling and walking transportation network. A strategy for implementation is also part of the plan.
- **Northside Transportation Study (July 2012)** – This study involved as assessment of the major thoroughfare recommendations in Aiken’s Northside Comprehensive Plan. The study assessed roadway needs, safety issues and operational needs in an area located north of the city of Aiken and bisected by US 1 and SC 19. The study recommends both policy enhancements and project improvements (road widening, new roadway connections, intersection improvements and geometric and operational improvements) to improve safety, connectivity and livability and to reduce congestion and crashes. The study was completed for the city of Aiken, South Carolina by the firm CDM Smith in association with Fuss and O’Neill.
- **Augusta Regional Advanced Transportation Management System (ATMS) Master Plan (December 2013)** - This study outlines a phased plan for implementing an ITS network in the ARTS

area. The text of the plan includes an executive summary, an inventory of existing traffic signal systems, ITS devices and communications equipment, an assessment of needs identified by stakeholders and an implementation plan. The implementation plan includes a group of ITS projects as prioritized by stakeholders from throughout the study area. High priority projects include ITS master plan implementation and emergency vehicle and transit signal priority system projects in Augusta, the build-out of ITS devices on major arterials in Columbia County, the expansion of ITS components in and around the cities of North Augusta and Aiken and installing dynamic message signs on Interstate 20 in Georgia and South Carolina.

- **U.S. 1 / U.S. 78 Corridor Study (Aiken County)** - This study covered a 12-mile segment of the U.S. 1 / U.S. 78 corridor between Aiken and Augusta. The purpose of the study is to address projected congestion along portions of the corridor, improve mobility options, improve safety & efficiency, and improve public transit, pedestrian, and bicycle access to destinations within and connections outside the study area, all done within an environmentally sensitive manner. The study recommends land use changes and major interventions at three catalyst sites. The need for studying the corridor is based on a combination of factors including route importance, existing and projected travel demand, intersection congestion, inconsistent access management and safety, lack of modal options, socio-economic demands and inconsistent land use.

**TABLE 5**  
**CONGESTION MITIGATION STRATEGIES**

The following congestion mitigation strategies are part of the ARTS CMP work plan. A matrix is used to identify which strategies are most appropriate for each congested corridor. Note that the strategies in **bold print** are felt to have either limited or no applicability in the ARTS area at this time.

1. Transportation demand management measures such as, carpooling, van pooling, alternative work hours, telecommuting, and parking management;
2. Traffic operation improvements such as, intersection and roadway widening, alternate route development, channelization, traffic surveillance and control systems, motorist information systems, ramp metering, traffic control centers, and computerized signal systems;
3. Measures to encourage high occupancy vehicle (HOV) use such as, HOV lanes, HOV by-pass lanes, guaranteed ride home programs, and employer trip reduction ordinances;
4. Public transit capital improvements such as exclusive rights of way, bus by-pass ramps, park and ride and mode change facilities, and Para transit services;
5. Public transit operational improvements such as, service enhancement or expansion, traffic signal preemption, fare reductions, and transit information systems;
6. Measures to encourage the use of nontraditional modes such as bicycle facilities, pedestrian facilities, and ferry systems;
- 7. Congestion pricing;**<sup>A</sup> This concept, also known as value pricing or peak-period pricing, involves charging relatively higher prices for travel during peak periods. Fees are typically assessed electronically to eliminate delays associated with manual toll collection facilities.
8. Growth management and activity center strategies;
9. Access management techniques; Access Management is the proactive management of vehicular access points to land parcels adjacent to all manner of roadways. Good access management promotes safe and efficient use of the transportation network. Access Management encompasses a set of techniques that state and local governments can use to control access to highways, major arterials, and other roadways.
- 10. Incident management;**<sup>B</sup> Traffic Incident Management is a planned and coordinated process to detect, respond to, and remove traffic incidents and restore traffic capacity as safely and quickly as possible. This coordinated process involves a number of public and private sector partners, including: Law Enforcement, Fire and Rescue, Emergency Medical Services, Transportation, Public Safety Communications, Emergency Management, Towing and Recovery, Hazardous Materials Contractors, and Traffic Information Media.
- 11. Intelligent vehicle transportation system technologies;**<sup>B</sup> and
12. The addition of general purpose lanes (also covered by road widening in Strategy #2).

<sup>A</sup>. Congestion Pricing is not applicable to the ARTS area in the foreseeable future.

<sup>B</sup>. Incident Management and Intelligent Vehicle Transportation System Technologies will be available at the time an Intelligent Transportation System (ITS) is established in the ARTS area.

**TABLE 6**

**2013 STRATEGY MATRIX**

For each road, the appropriateness of using a specific strategy is indicated by "Y" for Yes, "N" for No, or "U" for Undecided / Do Not Know. Description of strategies are on the congestion mitigation strategy sheet. The roads that are shaded in grey have been identified in the current year's analysis as severely congested in **two or more time periods**.

ROAD	TERMINI	STRATEGY											
		#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12
<b>AIKEN COUNTY</b>													
Atomic Road	E Buena Vista Ave to Silver Bluff Road	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
Bettis Academy	Ascauga Lake Road to Field Cemetery	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
Buena Vista Avenue	Martintown Road to Georgia Avenue	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
Belvedere-Clearwater Road	US 25 to US 1 / US 78	Y	Y	N	N	Y	Y	N	Y	T	N	N	Y
Dougherty Road	Whiskey Road to Silver Bluff Road	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
Georgia Avenue	Savannah River to I-20	Y	Y	N	Y	Y	Y	N	Y	Y	N	N	Y
Knox Avenue	Martintown Road to Georgia Ave	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
Laurens Street / SC 19	South Boundary to I-20	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
Martintown Road	US 1 / US 78 to I-20	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
Pine Log Road	US 78 to Silver Bluff Road	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
Richland Avenue (Noontime Only)	Vauluse Road to Beaufort Street	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
SC 118	US 78 to Silver Bluff Road	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
US 1	York Street to I-20	Y	Y	N	Y	Y	Y	N	Y	Y	N	N	Y
Silver Bluff Road	Whiskey Road to Savannah Drive	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
US 1/York Street	Park Avenue to I-20	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
US 1 / US 78	Martintown Road to E Pine Log Road	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
Whiskey Road	Richland Avenue to Powderhouse Road	Y	Y	N	N	Y	Y	N	Y	Y	N	N	Y
<b>OTHER</b>													
Park & Ride Facility	(Exits 5 and 22 @ I-20)	Y	N	Y	Y	Y	U	N	U	U	N	N	N
<b>COLUMBIA COUNTY</b>													
Baston Road	Fury's Ferry Road to Washington Road	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
Belair Road	Washington Road to Wrightsboro Road	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
Bobby Jones Expressway	Washington Road to I-20	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
Columbia Road	Washington Road to Hereford Farm Road	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
Evans-to-Locks Road	Stevens Creek Road to Washington Road	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
Flowing Wells Road	Wheeler Road to Washington Road	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
Furys Ferry Road	Savannah River to Washington Road	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
Old Evans Road	Bobby Jones Exprway to Washington Road	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
Old Petersburg Road	Riverwatch Parkway to Old Evans Road	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
SR 223 / Robinson Avenue	Wrightsboro Road to Gordon Highway	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
Washington Road	William Few Parkway to Pleasant Home Road	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y
Wrightsboro Road	Barton Chapel Road to Robinson Avenue	Y	Y	N	N	N	Y	N	Y	Y	N	N	Y

**TABLE 6**  
**2013 STRATEGY MATRIX**

For each road, the appropriateness of using a specific strategy is indicated by "Y" for Yes, "N" for No, or "U" for Undecided / Do Not Know. Description of strategies are on the congestion mitigation strategy sheet. The roads that are shaded in grey have been identified in the current year's analysis as severely congested in **two or more time periods**.

ROAD	TERMINI	STRATEGY											
		#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12
<b>RICHMOND COUNTY</b>													
Deans Bridge Road	MLK Boulevard/Willis Foreman	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Doug Barnard Pkwy.	Gordon Highway to Tobacco Road	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Fifteenth St. / Ruth B. Crawford Hwy.	Reynolds Street to MLK Boulevard	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Greene Street	East Boudnary Street to 12th Street	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Gordon Highway	Savannah River to SR 223	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
I-520	Laney Walker/I-20	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Jackson Rd. / Walton Way Ext. / Davis Rd.	Washington Road/Wrightsboro Road	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
John C. Calhoun Expressway	Washington Road to 12th Street	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	N
Peach Orchard Rd.	Tubman Home to SR 88	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Riverwatch Parkway	Pleasant Home Road to Fifteenth Street	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
SR 56/Mike Padgett	Lumpkin Road to SR 56 Loop	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Thirteenth Street / R. A. Dent Boulevard	Reynolds Street/Wrightsboro Road	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Tobacco Road	Deans Bridge Road to Doug Barnard Parkway	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Walton Way Segment 1	Gordon Highway to Milledge Road	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Walton Way Segment 2	Millege Road to Bransford Road	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Walton Way Extension	Bransford Road to Jackson Road	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Washington Road	Pleasant Home Road to John C. Calhoun Exwy.	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	N
Wheeler Rd.	Flowing Wells to Walton Way Extension	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Windsor Spring Rd.	Peach Orchard to SR 88	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Wrightsboro Road Segment 1	Barton Chapel Rd. to Jackson Rd.	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Wrightsboro Road Segment 2	Jackson Road to Hightland Avenue	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
Wrightsboro Road Segment 3	Highland Avenue/Fifteenth Street	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y

## **CONGESTION MITIGATION PROJECTS, 2013**

Congestion mitigation projects are the basis for improving the flow of vehicular traffic, enhancing the safety and security of the transportation network, accommodating all transportation modes and making the most efficient use of transportation facilities. Some congestion mitigation projects are identified and programmed for implementation as part of the ARTS transportation planning process. Others are carried out directly by a state or local government.

Using the strategy matrix in Table 6 as a guide, congestion mitigation projects were identified for each corridor surveyed this year. In the case of some corridors the project was brand new; while in others the existing project was updated or modified based on changing conditions. Tables 7, 8 and 9 summarize the congestion mitigation projects by county. The information presented for each project includes the name of the affected road, the type of mitigation strategy, the project name and description, the agency or community responsible for the project and the current status of the project.

Table 7  
Aiken County  
2013 Congestion Mitigation Projects

ROAD NAME	STRATEGY TYPE	PROJECT NAME	DESCRIPTION	RESPONSIBILITY	STATUS
* BETTIS ACADEMY (Ascauga Lake Rd to Fields Cemetery)	# 2 Operation Improvements	Traffic Signal improvements at I-20 interchange (Exit 11) near Graniteville	Traffic signal improvements and widening of off ramps (WB & EB) at I-20 interchange (Exit 11) due to traffic impacts from the Sage Mill Industrial Park (Project Hercules).	SCDOT, LSCOG, Economic Development Partnership	Majority of work is complete as of Fall 2013.
* DOUGHERTY ROAD (Whiskey Rd to Silver Bluff Rd)	# 2 Operation / Corridor Improvements	Dougherty Road Corridor Improvements	An intersection improvement at Whiskey Road and Dougherty Road is planned for 2014. Also, as part of the Dougherty Road Corridor Study, recommendations include: 1) widen to a 3 lane section between Silver Bluff Road and Whiskey Road 2) extend Hamilton Drive from its current intersection with Neilson Street to connect to Whiskey Road via Owens Street 3) extend Christee Place northward from Dougherty Road to Pawnee Drive 4) extend Christee Place southward from Murrah Avenue to East Gate Drive 5) Improvements at Dougherty Road intersections with Whiskey Road, Neilson Street, and Spaulding Drive; and 6) a series of complementary improvements including enhancements to the Pawnee-Neilson Connector, promotion of the corridor as a destination, water and sewer improvements, and storm drainage improvements.	SCDOT, City of Aiken, Aiken County	Study was completed in Summer 2013 and was presented to City Council on Sept. 9, 2013.
(EAST) PINE LOG ROAD (US 78 to Silver Bluff Road (Eastern End))	# 2 Operation Improvements	East Pine Log traffic signal upgrades	NO PROJECTS SCHEDULED WITHIN FY 2014 - FY 2017 (Note: As shown in the 2013 ARTS ATMS Update, this is a proposed adaptive traffic signal corridor with proposed CCTV and proposed fiber (new aerial).)	SCDOT	Study is still in progress. Anticipated completion is Fall 2013.
GEORGIA AVENUE (Savannah River to I-20)	# 2 Operation Improvements	Georgia Avenue traffic signal upgrades	NO PROJECTS SCHEDULED WITHIN FY 2014 - FY 2017 (Note: As shown in the 2013 ARTS ATMS Update, a portion of this corridor in the North Augusta city limits has proposed CCTV and proposed fiber (new aerial).)	SCDOT	Study is still in progress. Anticipated completion is Fall 2013.

Roads shaded in grey have been identified in the current year's analysis to be severely congested in two or more time periods.

**Table 7  
Aiken County  
2013 Congestion Mitigation Projects**

<b>KNOX AVENUE</b> (Martintown Road to Georgia Ave)	# 2 Operation Improvements	Knox Avenue traffic signal upgrades	NO PROJECTS SCHEDULED WITHIN FY 2014 - FY 2017 (Note: As shown in the 2013 ARTS ATMS Update, a portion of this corridor in the North Augusta city limits has proposed CCTV and proposed fiber (new aerial).)	SCDOT	Study is still in progress. Anticipated completion is Fall 2013.
<b>RICHLAND AVENUE</b> (Vaucluse Road to Beaufort Street)	# 2 Operation Improvements	Richland Avenue traffic signal upgrades	NO PROJECTS SCHEDULED WITHIN FY 2014 - FY 2017 (Note: As shown in the 2013 ARTS ATMS Update, this is a proposed adaptive traffic signal corridor; however, the two proposed segments are outside the Vaucluse Road to Beaufort Street study limits in the CMP. In addition, a portion of this corridor does have proposed CCTV and proposed fiber (new aerial) within the CMP study limits.)	SCDOT	Study is still in progress. Anticipated completion is Fall 2013.
* <b>SILVER BLUFF ROAD</b> (Whiskey Rd to Savannah Drive)	# 2 Operation / Corridor Improvements	Silver Bluff Road Corridor Improvements	Operational improvements and third lane to be added for turn lanes, center lane, and median, as well as signal improvements from Indian Creek Trail to Richardson Lake Rd.	SCDOT	R-O-W acquisition anticipated to begin Winter 2014. Construction anticipated to begin Fall 2014.
<b>WHISKEY ROAD</b> (Richland Ave to Powderhouse Rd)	#2 Operation Improvements	Traffic Signal and Street Light Upgrades	NO PROJECTS SCHEDULED WITHIN FY 2014 - FY 2017 (Note: As shown in the 2013 ARTS ATMS Update, a portion of this corridor has proposed CCTV. Also, Whiskey Road will receive access management improvements via the projects planned on the proposed Whiskey Road / Powderhouse Road Connector.)	SCDOT	Study is still in progress. Anticipated completion is Fall 2013.

Roads shaded in grey have been identified in the current year's analysis to be severely congested in two or more time periods.

**Table 8  
Columbia County  
2013 Congestion Mitigation Projects**

ROAD NAME	STRATEGY TYPE	PROJECT NAME	DESCRIPTION	RESPONSIBILITY	STATUS
<b>BOBBY JONES EXPRESSWAY</b> (Washington Road to I-20)	NO PROJECTS SCHEDULED IN CURRENT ARTS TIP				
<b>SR 232 / COLUMBIA ROAD</b> (Washington Road to Hereford Farm Road)	#2 Operation Improvement	SR 232 from CR 221 (Old Belair Rd.) to SR 383 (Belair Rd.)	Road Widening	GDOT	Construction contract awarded to Beams Contracting, Inc. Completion date is 10/31/14
<b>SR 232 / COLUMBIA ROAD</b> (Washington Road to Hereford Farm Road)	#2 Operation Improvement	SR 232 @ Walton Branch	Reconstruct and Rehabilitate Bridge	GDOT	To be let for bids on 12/13/13. Construction programmed for FY 2014.
<b>OLD EVANS ROAD</b> (Bobby Jones to Washington Road)	#2 Operation Improvement	Old Petersburg Rd. / Old Evans Rd.	Widening and extension of Old Evans and Old Petersburg Rd. from Baston Rd. To Washington Rd.	GDOT / Columbia County	Project programmed for Band #1 of the TIA (FY 2013-15)
<b>SR 223 / ROBINSON AVE.</b> (Wrightsboro Road to Gordon Highway)	#2 Operation Improvement	Robinson Ave. / SR 223 from SR 388 to SR 10	Road Widening	GDOT / Columbia County	Project programmed for Band #1 of the TIA (FY 2013-15)
<b>WASHINGTON ROAD</b> (William Few Pkwy. to Pleasant Home Road)	#2 Operation Improvement	Washington Road from CR 99 (Gibbs Rd.) to CR 1427 (William Few Pkwy.)	Road Widening	Columbia County	As of July 2013, right-of-way is at 95% and target let date is as early as November 2013. Project to be financed with SPLOST funds.
<b>WRIGHTSBORO ROAD</b> (Barton Chapel Road to Robinson Avenue)	#2 Operation Improvement	Improvements from SR 388 / Lewiston Rd. to SR 223 / Robinson Ave. in Grovetown	Road widening, access management and bicycle and pedestrian facilities	Columbia County	Project programmed for Band #1 of the TIA (FY 2013-15)

Roads shaded in gray have been identified in the current year's analysis to be severely congested in two or more time periods.

**Table 8  
Columbia County  
2013 Congestion Mitigation Projects**

ROAD NAME	STRATEGY TYPE	PROJECT NAME	DESCRIPTION	RESPONSIBILITY	STATUS
BASTON ROAD (Fury's Ferry Road to Washington Road)					NO PROJECTS SCHEDULED IN CURRENT ARTS TIP
BELAIR ROAD (Washington Road to Wrightsboro Road)					NO PROJECTS SCHEDULED IN CURRENT ARTS TIP
EVANS-TO-LOCKS ROAD (Stevens Creek Rd. to Washington Rd.)					NO PROJECTS SCHEDULED IN CURRENT ARTS TIP
FLOWING WELLS ROAD / SR 1017 (Wheeler Road to Washington Road)	#2 Operation Improvement	Flowing Wells Road	Widen to three lanes with turn lanes as needed from Washington Road to I-20	Columbia County (Design and ROW) GDOT (Construction)	Right-of-way programmed for FY 2015. Remainder programmed for Band 2 of TIA (FY2016-19)
FURY'S FERRY ROAD (Savannah River to Washington Road)	#2 Operation Improvement	SR 28 / Fury's Ferry Rd.	Widen to four lanes with turn lanes as needed from the Savannah River to Blackstone Camp Road	GDOT / Columbia County	Project programmed for Band 2 of TIA (FY 2016-19)
I-20 (Euclaw Creek to Columbia / Richmond County Line)	#2 Operation Improvement	I-20	Widen to six lanes from McDuffie County Line to SR 383 (Belair Road)	GDOT	Scoping programmed for FY 2014
OLD PETERSBURG ROAD (Riverwatch Parkway to Old Evans Road)	#2 Operation Improvement	Old Petersburg Rd. / Old Evans Rd.	Road Widening	GDOT / Columbia County	Construction bids received on 10/18/13. GDOT to announce award on 11/1/13.

Roads shaded in gray have been identified in the current year's analysis to be severely congested in two or more time periods.

Table 9  
Richmond County  
2013 Congestion Mitigation Projects

ROAD NAME	STRATEGY TYPE	PROJECT NAME	DESCRIPTION	RESPONSIBILITY	STATUS
THIRTEENTH STREET/RA DENT BOULEVARD (Reynolds Street to Wrightsboro Road)	#2 Operation Improvement	Thirteenth Street Resurfacing	Milling, resurfacing and restriping of Thirteenth Street from Reynolds Street to R.A. Dent Blvd.	Augusta-Richmond County	Project programmed for TIA Band 3, FY 2020-22
FIFTEENTH STREET / RUTH B. CRAWFORD HWY. (Reynolds Street to MLK Boulevard)	#2 Operation Improvement	Fifteenth Street (SR 4) Widening Project	Widen to four and six lanes from Milledgeville Road to Government Street (PI# 220680)	GDOT/Augusta-Richmond County	Right-of-Way acquisition programmed for FY 2016 and construction in FY 2017. Partial Funding in TIA Band 2
FIFTEENTH STREET / RUTH B. CRAWFORD HWY. (Reynolds Street to MLK Boulevard)	#6 Measures to encourage the use of nontraditional transportation modes	Fifteenth Street Pedestrian Improvement Project	Provide safety improvements for pedestrians and implement a complete streets concept from the Calhoun Expressway to Central Avenue	Augusta-Richmond County	Concept phase is almost complete. Construction funding in TIA Band 2
DAVIS RD. / WALTON WAY EXT. / JACKSON RD. (Washington Rd. to Wrightsboro Rd.)	#2 Operation Improvement	Walton Way Ext. and Jackson Rd. Resurfacing	Milling, resurfacing and restriping of Walton Way Ext. from Robert C. Daniel Pkwy. to Walton Way, and Jackson Rd. from Walton Way to Wrightsboro Rd.	Augusta-Richmond County	Both projects in TIA Band 1. Both scheduled to be let for bids in fall 2013.
TOBACCO ROAD (Deans Bridge Rd. to Doug Barnard Pkwy.)	#2 Operation Improvement	Traffic Signal Upgrade	Installation of new traffic signals, including Intersection Video Detection System at the intersection with Gracewood Rd. (Myrtle Blvd.)	GDOT	Under construction. Scheduled for completion by December 31, 2013

Roads shaded in gray have been identified in the current year's analysis to be severely congested in two or more time periods.

Table 9  
Richmond County  
2013 Congestion Mitigation Projects

ROAD NAME	STRATEGY TYPE	PROJECT NAME	DESCRIPTION	RESPONSIBILITY	STATUS
WHEELER ROAD (Walton Way Extension to Flowing Wells Road)	# 2 Operation Improvement	Wheeler Road @ Robert C. Daniel, Jr. Parkway - Intersection Improvements	Add Turn Lanes	Augusta-Richmond County	Programmed in FY 2014-17 ARTS TIP; Preliminary engineering in 2014 and construction in 2016
WHEELER ROAD (Walton Way Extension to Flowing Wells Road)	# 2 Operation Improvement	Wheeler Road from I-20 EB ramp to Augusta West Parkway	Intersection Improvements and Traffic Signal Upgrades	Augusta-Richmond County	Programmed in FY 2014-17 ARTS TIP; Preliminary engineering in 2014 and construction in 2016
WRIGHTSBORO ROAD SEGMENT 2 (Jackson Road to Highland Avenue)	# 2 Operation Improvement	North Leg Road Improvements	Operational and safety improvements from Sibley Road to Wrighsboro Road, including intersection improvements.	Augusta-Richmond County	Project programmed for TIA Band 1, FY 2013-15
WRIGHTSBORO ROAD SEGMENT 3 (Highland Avenue to Fifteenth Street)	NO PROJECTS SCHEDULED IN CURRENT ARTS TIP				
WINDSOR SPRING ROAD (Tobacco Rd. to Willis Foreman Rd.)	# 2 Operation Improvement	Windsor Spring Road Phase IV	Widen to four lanes from Willis Foreman Road to Tobacco Road, including the bridge over Spirit Creek.	GDOT/Augusta- Richmond County	Right-of-Way acquisition authorized and underway. Current let date is May 16, 2014. Partial funding in TIA Band 1
WINDSOR SPRING ROAD (Peach Orchard Road to SR 88)	# 2 Operation Improvement	Windsor Spring Road Phase V	Widen to four lanes from Willis Foreman Road to SR 88, including the bridge over the NS Railroad.	GDOT/Augusta- Richmond County	Right-of-Way acquisition authorized and underway. Current let date is May 16, 2014. Partial funding in TIA Band 1
WRIGHTSBORO ROAD SEGMENT 1 (Barton Chapel to Jackson Road)	# 2 Operation Improvement	Wrightsboro Road between I-520 and Jimmie Dyess Parkway and Wrighsboro Road Adaptive Traffic Control System	Widen to four lanes with left-turn lanes where needed. Project also includes realigning Barton Chapel Road to intersect Augusta West Parkway.	GDOT, Augusta- Richmond County	Under construction; Completion date is April 30, 2015. PI # 250510.

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**Table 9**  
**Richmond County**  
**2013 Congestion Mitigation Projects**

ROAD NAME	STRATEGY TYPE	PROJECT NAME	DESCRIPTION	RESPONSIBILITY	STATUS
JOHN C. CALHOUN EXPRESSWAY (Washington Road to 12th Street)	#2 Operation Improvement	Calhoun Expressway Repair and Reconstruction	Milling, resurfacing and restriping of the roadway	Augusta-Richmond County	Programmed in TIA Band 1, FY 2013-15
PEACH ORCHARD ROAD (Tubman Home Rd. to SR 88)	#2 Operation Improvement	SR 121 / US 25 - Peach Orchard Road	Widen to four and six lanes from Tobacco Rd. to Brown Rd. (PI# 0008355)	GDOT	Preliminary engineering programmed for FY 2015 and Right-of-Way in 2017
PEACH ORCHARD ROAD (Tubman Home Rd. to SR 88)	#2 Operation Improvement	Traffic Signal Upgrade	Installation of new traffic signals, including Intersection Video Detection System at the following intersections: Rosier Rd., Phinizy Rd., Pepperidge Dr. & Tobacco Rd.	GDOT	Under construction. Scheduled for completion by December 31, 2013
DEANS BRIDGE ROAD (MLK Blvd. to Willis Foreman Rd.)	#2 Operation Improvement	SR 4 / Fifteenth Street Widening	Widen to four and six lanes from Milledgeville Road to Government Street (PI# 220680)	GDOT	Right-of-Way acquisition programmed for FY 2016 and construction in FY 2017. Partial Funding in TIA Band 2
GORDON HIGHWAY (Savannah River to SR 223)	#2 Operation Improvement	Gordon Hwy. / Deans Bridge Rd. Intersection Improvement Project	Design and install features to improve safety for drivers and pedestrians at this intersection.	Augusta-Richmond County	Programmed in TIA Band 1, FY 2013-15
I-520 (I-20 to Laney Walker)	#2 Operation Improvement	(I-520) Bobby Jones Expressway	Widen from Deans Bridge Road (US 1/SR4) to Gordon Highway. Widen from four to six lanes.	GDOT	Construction contract award to Pittman Construction Co. on September 30, 2011. Completion date is May 31, 2014

Roads shaded in gray have been identified in the current year's analysis to be severely congested in two or more time periods.

Table 9  
Richmond County  
2013 Congestion Mitigation Projects

ROAD NAME	STRATEGY TYPE	PROJECT NAME	DESCRIPTION	RESPONSIBILITY	STATUS
RIVERWATCH PARKWAY (Pleasant Home Road to Fifteenth Street)	#2 Operation Improvement	Riverwatch Parkway @ I 20	Operational improvements along Riverwatch Parkway from Quarry Road to River Shoals Parkway	GDOT/Augusta-Richmond County	Preliminary engineering in progress. Partial funding in TIA Band 1, FY 2013-15
RIVERWATCH PARKWAY (Pleasant Home Road to Fifteenth Street)	#2 Operation Improvement	Riverwatch Parkway Adaptive Traffic Signal System	Adaptive Traffic Signal system to be installed from 15th St. to Pleasant Home Rd. Also includes intersection improvements.	Augusta-Richmond County	Projects programmed for Band #1 of the TIA, FY 2013-15
SR56/MIKE PADGETT HIGHWAY (Lumpkin Road to SR 56 Loop)	#2 Operation Improvement	SR56/Mike Padgett Highway	Widen from Old Waynesboro Road to Bennock Mill Road (Includes bridges)	GDOT	Construction contract awarded to Reeves Construction Co. on 8/8/13. Completion date is 6/30/16
WALTON WAY SEGMENT 1 (Gordon Hwy. to Milledge Rd.)	#2 Operation Improvement	Traffic Signal Modification, Phase III	Upgrade traffic signals, install fiberoptic interconnectivity and install adaptive signal technology between Druid Park Ave. and Heard Ave.	Augusta-Richmond County	Project programmed for Band #1 of the TIA, FY 2013-15
WALTON WAY SEGMENT 2 (Milledge Rd. to Bransford Rd.)	#2 Operation Improvement	Traffic Signal Modification, Phase III	Upgrade traffic signals, install fiberoptic interconnectivity and install adaptive signal technology between Bransford and Milledge Rd.	Augusta-Richmond County	Project programmed for Band #1 of the TIA, FY 2013-15

Roads shaded in gray have been identified in the current year's analysis to be severely congested in two or more time periods.

**Table 9  
Richmond County  
2013 Congestion Mitigation Projects**

ROAD NAME	STRATEGY TYPE	PROJECT NAME	DESCRIPTION	RESPONSIBILITY	STATUS
GREENE ST. (East Boundary to Twelfth St.)	#2 Operation Improvement	Greene Street Improvements	Resurface and reconstruct the existing curb, gutter, sidewalks and storm sewer system from 13th Street to East Boundary Street	Augusta-Richmond County	Project programmed for TIA Band 3, FY 2020-22
DEANS BRIDGE ROAD (MLK Blvd. to Willis Foreman Rd.)	#2 Operation Improvement	SR 4 / US 1 Widening	Widen from CR 1503 / Tobacco Road to CR 95 / Meadowbrook Drive	GDOT	Preliminary engineering programmed for FY 2015
WALTON WAY EXTENSION (Bransford Rd. to Jackson Rd.)	NO PROJECTS SCHEDULED IN CURRENT ARTS TIP				
WASHINGTON ROAD (Pleasant Home Road to John C. Calhoun Expressway)	NO PROJECTS SCHEDULED IN CURRENT ARTS TIP				
DOUG BARNARD PARKWAY (Gordon Highway to Tobacco Road)	NO PROJECTS SCHEDULED IN CURRENT ARTS TIP				

Roads shaded in gray have been identified in the current year's analysis to be severely congested in two or more time periods.

## **SUMMARY OF RESULTS AND FUTURE SCHEDULE**

The ARTS Congestion Management Process has been in use since 1995. Congestion mitigation strategies have been developed and implemented in accordance with the CMP. The process has changed or been modified based on experience. For example, two Saturday routes were added in order to monitor congestion on busy weekend corridors. In Augusta, Wrightsboro Road was divided into three segments to address the differences in roadway type and traffic generators along the corridor. Walton Way was also divided into multiple segments to address different land uses and traffic generators along the corridor. In 1999, Aiken County expanded the CMP data collection corridors to study congestion during school release periods along Pine Log Road and Dougherty Road. That same year, Richland Avenue was added to measure congestion during the noon hour. In 2004, the western terminus of the Old Evans Road corridor was changed from Belair Road to Washington Road.

County engineers and law enforcement personnel have also gained experience with congestion mitigation measures. For example, since 1998 components of Georgia's Mobile Intelligent Transportation System (ITS) have been used during the Masters Golf Tournaments. Components used include fixed and mobile cameras, changeable message signs and Highway Emergency Response Operators (HERO). Together these components make it possible to observe traffic conditions in real time, convey information to drivers and manage any traffic incidents during the tournament. Local traffic engineers are installing adaptive traffic signal systems on major corridors and at key intersections throughout the study area. Intersection improvement projects are also helping alleviate congestion and improve safety for motorists and pedestrians. Documents such as the Intersection Accident Analysis and the Congestion Management Process are readily available to assist county officials and engineers in developing management strategies.

A summary of the recent performance of each of the corridors studied is found in Tables 11-13. Performance is measured and classified based on the deviation of the travel time runs from the posted speed limit (see Table 10). The level of congestion varies with the time of day and direction, so most routes have more than one classification. For example, in 2013 Aiken's

Whiskey Road was designated as MC-SBAM, BC-NBAM, SC-SBPM, and SC-NBPM. Using Table 10 as a guide, this means that Whiskey Road was “Marginally Congested” traveling southbound in the morning. It was “Borderline Congested” going northbound in the morning and “Severely Congested” in both directions in the evening. It is important to make this distinction because improvements may only be needed on one side of the road or to accommodate more traffic at a particular time of the day. The relative level of congestion on a route also determines how frequently it is surveyed. The higher the congestion, the more frequently a route is surveyed (see Table 10).

**Table 10**  
**ARTS CMP PERFORMANCE MEASURES AND RUN SCHEDULE**

<b>Performance Classification</b>	<b>Measure of Congestion</b>	<b>Run Schedule</b>
Not Presently Congested (NPC)	> = Posted Speed Limit.	Every 5 Years
At Risk of Congestion (ARC)	1% - 15% below the Posted Speed Limit.	Every 4 Years
Borderline Congested (BC)	15% to 25% below the Posted Speed Limit.	Every 3 Years
Marginally Congested (MC)	25% to 30% below the Posted Speed Limit.	Every 2 Years
Seriously Congested (SC)	> 30% below the Posted Speed Limit.	Every Year

Performance measures have changed slightly over the years. In 2001, the Borderline Congested (BC) category was added and the Not Presently Congested (NPC) category was redefined. Under the new definition, Not Presently Congested applied to corridors whose average speed is equal to or above the posted speed limit. Previously, these roads would have been classified in the same category as roads with speeds up to 15% slower than the posted speed limit. Roads that are not presently congested are surveyed every five years.

The schedule for surveying corridors was altered in the same year. Seriously congested (SC) roads will continue to be studied every year, marginally congested (MC) roads every two years, borderline congested (BC) roads every three years, roads at risk of congestion (ARC) every four years, and roads not presently congested (NPC) will be studied every five years. No routes have been deleted from the CMP since its inception.

It is important to note these changes when comparing 2001 road designations to those studied in previous years. For example, roads designated ARC in 2001 have different speed limits deviation criteria than in 2000 or earlier. Roads with split category classifications will follow the schedule with the more congested designation. For example, a road with 2 ARC periods and 2 MC periods would follow the MC schedule and be run every other year. In the event that a corridor has three or four designations, the ARTS staff and area engineers will determine how often it will be surveyed.

**Table 11**  
**ARTS Congestion Management Process Classifications and Future Schedule**  
**Aiken County**

Aiken County CMP Routes			2010	2011	2012	2013	Next Due Date
Bettis Academy	<b>From</b> <b>To</b>	Ascagua Lake Road Fields Cemetery				ARC at all times	2017
Dougherty Road	<b>From</b> <b>To</b>	Whiskey Road Silver Bluff Road	ARC-WBAM SC-EBAM MC-WBPM SC-EBPM			MC-WBAM SC-EBAM MC-WBPM SC-EBPM	2014
Dougherty Road 3:00 PM	<b>From</b> <b>To</b>	Whiskey Road Silver Bluff Road				MC at all times	2015
Laurens Street / SC 19	<b>From</b> <b>To</b>	South Boundary I-20			ARC - SB AM NPC - NB AM ARC - SB PM ARC - NB PM		2016
(East) Pine Log Road	<b>From</b> <b>To</b>	US 78 Silver Bluff Road (Eastern End)	BC-WBAM BC-EBAM			BC at all times	2016
(East) Pine Log Road 3:15 PM	<b>From</b> <b>To</b>	US 78 Silver Bluff Road (Eastern End)	MC-EBPM BC-WBPM			MC at all times	2015
Richland Avenue 12:00 PM	<b>From</b> <b>To</b>	Vaucluse Road Beaufort Street	SC at all times			SC at all times	2014
SC 118	<b>From</b> <b>To</b>	US 78 Silver Bluff Road			BC - WB AM ARC - EB AM ARC - WB PM ARC - EB PM		2015
Silver Bluff Road	<b>From</b> <b>To</b>	Whiskey Road Savannah Drive	ARC-SBAM SC-NBAM SC-WBPM SC-NBPM	ARC-SBAM SC-NBAM SC-SBPM SC-NBPM	ARC - SB AM SC - NB AM SC - SB PM SC - NB PM	SC at all times	2014
US1	<b>From</b> <b>To</b>	York Street I-20		ARC-SBAM NPC-NBAM ARC-SBPM NPC-NBPM			2015
US 1 / US 78	<b>From</b> <b>To</b>	Martintown Road Pine Log Road		ARC-WBAM ARC-EBAM ARC-WBPM ARC-EBPM			2015
Whiskey Road	<b>From</b> <b>To</b>	Richland Avenue Powderhouse Road	MC-SBAM BC-NBAM SC-SBPM SC-NBPM	BC-SBAM ARC-NBAM SC-SBPM MC-NBPM	MC - SB AM BC - NB AM SC - SB PM SC - NB PM	MC-SBAM BC-NBAM SC-SBPM SC-NBPM	2014

Key to Abbreviations:  
 WBAM – Westbound AM Peak  
 WBPM – Westbound PM Peak

SBAM – Southbound AM Peak  
 SBPM – Southbound PM Peak

**Table 11**  
**ARTS Congestion Management Process Classifications and Future Schedule**  
**Aiken County**

North Augusta CMP Routes			2010	2011	2012	2013	Next Due Date
Atomic Road	<b>From</b>  <b>To</b>	Buena Vista Avenue Silver Bluff Road		NPC-WBAM NPC-EBAM NPC-WBPM NPC-EBPM			2016
Buena Vista Avenue	<b>From</b> <b>To</b>	Martintown Road Georgia Avenue			ARC - WB AM ARC - EB AM ARC - WB PM BC - EB PM		2016
Belvedere-Clearwater Road	<b>From</b>  <b>To</b>	US 25 US 1		NPC-SBAM ARC-SBAM NPC-SBPM ARC-EBPM			2015
Georgia Avenue	<b>From</b> <b>To</b>	Savannah River I-20	ARC-SBAM BC-NBAM BC-SBPM MC-NBPM			ARC-SBAM BC-NBAM BC-SBPM MC-NBPM	2015
Knox Avenue	<b>From</b> <b>To</b>	Martintown Road Georgia Avenue		MC-SBAM BC-NBAM BC-SBPM MC-NBPM		MC-SBAM BC-NBAM MC-SBPM MC-NBPM	2015
Martintown Road	<b>From</b> <b>To</b>	Jeff Davis/US 1 I-20		BC-WBAM BC-EBAM MC-WBPM BC-EBPM			2014

Key to Abbreviations:

WBAM – Westbound AM Peak

WBPM – Westbound PM Peak

SBAM – Southbound AM Peak

SBPM – Southbound PM Peak

NPC = Not Presently Congested

ARC = At Risk of Congestion

BC = Borderline Congested

MC = Marginally Congested

SC = Seriously Congested

**Table 12**  
**ARTS Congestion Management Process Classifications and Future Schedule**  
**Columbia County**

Columbia County CMP Routes			2010	2011	2012	2013	Next Due Date
I-20	<b>From To</b>	Euchee Creek Columbia/Richmond County Line		NPC at all times			2016
SR 223	<b>From To</b>	Wrightsboro Road Gordon Highway	MC-WBAM SC-EBAM MC-WBPM SC-EBPM		MC-WBAM SC-EBAM SC-WBPM SC-EBPM	MC-WBAM SC-EBAM SC-WBPM SC-EBPM	2014
Baston Road	<b>From To</b>	Fury's Ferry Road Washington Road	SC-SBAM SC-NBAM SC-SBPM ARC-NBPM				2015
Belair Road	<b>From To</b>	Washington Road Wrightsboro Road	SC-SBAM MC-NBAM SC-SBPM SC-NBPM	SC all times		SC-SBAM BC-NBAM SC-SBPM SC-NBPM	2014
Bobby Jones Expressway	<b>From To</b>	Washington Road I-20	NPC-WBAM NPC-EBAM SC-WBPM ARC-EBPM		ARC-WBAM ARC-EBAM MC-WBPM ARC-EBPM		2016
Columbia Road	<b>From To</b>	Washington Road Hereford Farm Road			BC-WBAM MC-EBAM ARC-WBPM MC-EBPM		2014
Evans-to-Locks Road	<b>From To</b>	Stevens Creek Road Washington Road				SC-WBAM BC-EBAM SC-WBPM SC-EBPM	2014

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 WBPM – Westbound PM Peak

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 SBPM – Southbound PM Peak

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**Table 12**  
**ARTS Congestion Management Process Classifications and Future Schedule**  
**Columbia County**

Columbia County CMP Routes			2010	2011	2012	2013	Next Due Date
Flowing Wells Road	<b>From</b> <b>To</b>	Wheeler Road Washington Road	SC at all times	SC at all times		SC at all times	2014
Fury's Ferry Road	<b>From</b> <b>To</b>	Savannah River Washington Road	MC-SBAM ARC-NBAM BC-SBPM ARC-NBPM				2014
Old Evans Road	<b>From</b> <b>To</b>	Bobby Jones Washington Road	SC-WBAM SC-EBAM SC-WBPM MC-EBPM		MC-WBAM MC-EBAM SC-WBPM BC-EBPM		2014
Old Petersburg Road	<b>From</b> <b>To</b>	Riverwatch Parkway Old Evans Road		NPC-WBAM BC-EBAM MC-WBPM SC-EBPM			2014
Washington Road	<b>From</b> <b>To</b>	Hardy McManus Road Pleasant Home Road		BC-WBAM BC-EBAM SC-WBPM SC-EBPM	ARC-WBAM BC-EBAM BC-WBPM BC-EBPM		2015
Wrightsboro Road	<b>From</b> <b>To</b>	Barton Chapel Road Robinson Avenue			BC-WBAM BC-EBAM MC-WBPM MC-EBPM		2014

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 WBPM – Westbound PM Peak

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 SBPM – Southbound PM Peak

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**Table 13**  
**ARTS Congestion Management Process Classifications and Future Schedule**  
**Richmond County**

Richmond County CMP Routes			2010	2011	2012	2013	Next Due Date
I-20	<b>From</b> <b>To</b>	Richmond Co. Line River Watch Pkwy		NPC at all times			2016
I-520	<b>From</b> <b>To</b>	I-20 Laney Walker Blvd.	NPC at all times				2015
13th Street/ RA Dent Boulevard	<b>From</b> <b>To</b>	Reynolds Street Wrightsboro Road	SC at all times	SC-SBAM SC-NBAM ARC-SBPM SC-NBPM	SC-SBAM MC-NBAM SC-SBPM SC-NBPM	SC at all times	2014
15th Street Ruth B. Crawford Hwy.	<b>From</b> <b>To</b>	Reynolds Street MLK Boulevard			BC-SBAM SC-NBAM MC-SBPM MC-NBPM	SC-SBAM SC-NBAM MC-SBPM MC-NBPM	2014
SR 56/ Mike Padgett Hwy	<b>From</b> <b>To</b>	Lumpkin Road SR 56 Loop		NPC-SBAM NPC-NBAM NPC-SBPM ARC-NBPM			2016
Deans Bridge Road	<b>From</b> <b>To</b>	MLK Boulevard Willis Foreman Rd	NPC-SBAM ARC-NBAM ARC-SBPM ARC-NBPM				2014
Doug Barnard Pkwy/ New Savannah Rd	<b>From</b> <b>To</b>	Gordon Highway Tobacco Road			NPC at all times		2017
Greene Street	<b>From</b> <b>To</b>	E. Boundary Street 12th Street				SC-SBAM MC-NBAM MC-SBPM MC-NBPM	2015

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 WBPM – Westbound PM Peak

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 EBPM – Eastbound PM Peak

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**Table 13**  
**ARTS Congestion Management Process Classifications and Future Schedule**  
**Richmond County**

Richmond County CMP Routes			2010	2011	2012	2013	Next Due Date
Gordon Highway	<b>From</b> <b>To</b>	Savannah River SR 223		ARC-SBAM ARC-NBAM ARC-SBPM NPC-NBPM			2015
Jackson Road/ Walton Way Ext. Davis Road	<b>From</b> <b>To</b>	Washington Road Wrightsboro Road	MC-SBAM BC-NBAM MC-SBPM SC-NBPM			SC-SBAM SC-NBAM MC-SBPM SC-NBPM	2014
John C. Calhoun Expressway	<b>From</b> <b>To</b>	Washington Road 12th Street		ARC-WBAM ARC-EBAM NPC-WBPM NPC-EBPM			2014
Peach Orchard Road	<b>From</b> <b>To</b>	Tubman Home Road SR 88			NPC-WBAM NPC-EBAM ARC-WBPM ARC-EBPM		2015
River Watch Pkwy	<b>From</b> <b>To</b>	Pleasant Home Rd Fifteenth Street		NPC at all times			2015
Tobacco Road	<b>From</b> <b>To</b>	Deans Bridge Road Doug Barnard Pkwy		BC-SBAM BC-NBAM ARC-SBPM BC-NBPM		ARC-SBAM BC-NBAM BC-SBPM BC-NBPM	2016
Walton Way Segment #1	<b>From</b> <b>To</b>	Gordon Highway Milledge Road	MC-WBAM MC-EBAM SC-WBPM SC-EBPM		ARC-WBAM BC-EBAM SC-WBPM BC-EBPM		2015
Walton Way Segment #2	<b>From</b> <b>To</b>	Milledge Road Bransford Road	MC-WBAM SC-EBAM SC-WBPM SC-EBPM		MC-WBAM MC-EBAM MC-WBPM BC-EBPM		2014

WBAM – Westbound AM Peak  
 WBPM – Westbound PM Peak

SBAM – Southbound AM Peak  
 SBPM – Southbound PM Peak

EBAM – Eastbound AM Peak  
 EBPM – Eastbound PM Peak

NBAM – Northbound AM Peak  
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**Table 13**  
**ARTS Congestion Management Process Classifications and Future Schedule**  
**Richmond County**

Richmond County CMP Routes			2010	2011	2012	2013	Next Due Date
Walton Way Ext.	<b>From</b> <b>To</b>	Bransford Road Jackson Road			ARC-WBAM ARC-EBAM ARC-WBPM ARC-EBPM		2016
Washington Road	<b>From</b> <b>To</b>	Pleasant Home Rd John C. Calhoun Expressway	SC-WBAM MC-EBAM SC-WBPM BC-EBPM		SC-WBAM BC-EBAM SC-WBPM ARC-EBPM	SC-WBAM ARC-EBAM SC-WBPM BC-EBPM	2014
Wheeler Road	<b>From</b> <b>To</b>	Flowing Wells Road Walton Way Ext.	SC at all times	MC-WBAM MC-EBAM BC-WBPM SC-EBPM	SC at all times	SC at all times	2014
Windsor Spring Rd	<b>From</b>    <b>To</b>	Peach Orchard Rd SR 88			BC-WBAM BC-EBAM BC-WBPM ARC-EBPM		2015
Wrightsboro Road Segment 1	<b>From</b> <b>To</b>	Barton Chapel Road Jackson Road	BC-WBAM SC-EBAM SC-WBPM SC-EBPM	BC-WBAM SC-EBAM SC-WBPM SC-EBPM	BC-WBAM SC-EBAM SC-WBPM SC-EBPM		2014
Wrightsboro Road Segment 2	<b>From</b> <b>To</b>	Jackson Road Highland Avenue				ARC-WBAM BC-EBAM BC-WBPM ARC-EBPM	2016
Wrightsboro Road Segment 3	<b>From</b> <b>To</b>	Highland Avenue Fifteenth Street	SC-WBAM MC-EBAM SC-WBPM MC-EBPM	SC-WBAM MC-EBAM SC-WBPM SC-EBPM		SC-WBAM SC-EBAM BC-WBPM MC-EBPM	2015
Wrightsboro Road * Segment 1 (Saturday)	<b>From</b> <b>To</b>	Barton Chapel Road Jackson Road	MC-WBPM SC-EBPM				2014

WBAM – Westbound AM Peak  
 WBPM – Westbound PM Peak

SBAM – Southbound AM Peak EBAM – Eastbound AM Peak  
 SBPM – Southbound PM Peak EBPM- Eastbound PM Peak

NBAM – Northbound AM Peak  
 NBPM – Northbound PM Peak

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**MC = Marginally Congested**  
**SC = Seriously Congested**

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## **APPENDIX A**

### **CMP WORK PLAN HISTORY**

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## APPENDIX A

### CONGESTION MANAGEMENT PLAN WORK PLAN HISTORY

The ARTS CMP work plan was designed to focus on major travel corridors in the urbanized area. The work plan is divided into four sections. Each of the four sections detailed the tasks and sub-tasks required in order to have a fully implemented CMP. These tasks are:

Role of the CMP

CMP development tasks

Implementation Schedule

Organizational Responsibilities

#### **Task 1: Identify CMP Boundaries and Corridors for the ARTS Area**

The Augusta Regional Transportation Study (ARTS) Congestion Management Process (CMP) work plan was completed in 1995 (base year). The ARTS area was adopted as the physical boundary of the CMP. Travel corridors considered for the CMP were selected based on existing traffic counts, past travel time surveys, socioeconomic data and input from ARTS committees. All the interstates, freeways and principal arterials were selected for inclusion, along with any minor arterials and collectors that demonstrated a potential for congestion. All of the CMP corridors were included in the base year 1995 time travel study.

#### **Task 2: Define CMP Performance Measures**

The ARTS CMP sub-committee developed the CMP performance measures after analyzing the results of the base year 1995 travel time survey. The performance measures rated roads based on the difference between driving speed and the posted speed limit. The measures were designed to make the data collection process systematic and effective without making them too difficult or expensive to implement (see Table A-1). The performance measures were amended in 2001 to include the Borderline Congested (BC) category.

<b>Table A-1 Performance Measures ARTS Congestion Management Process</b>	
<b>Category</b>	<b>Average Speed</b>
Not Presently Congested (NPC)	>= Posted speed limit.
At Risk of Congestion (ARC)	1% - 15% below the posted speed limit
Borderline Congested (BC)	15% - 25% below the posted speed limit
Marginally Congested (MC)	25% - 30 % below the posted speed limit
Seriously Congested (SC)	> 30% below the posted speed limit

### **Task 3: Develop Data Collection Process**

The CMP subcommittee developed data collection guidelines designed to capture travel time data in the AM and PM peak periods on weekdays. While the technology used to capture the data has changed, the basic collection guidelines have remained constant over the years. Table A-2 summarizes the data collection schedule of roadways based on their designation. Between 1995 and 2007 travel time data was collected manually, except that in 2003 data was collected using a Global Positioning System unit. In 2008 and in subsequent years, travel time data collection was again collected using the GPS equipment.

**TABLE A-2  
ARTS CMP DATA COLLECTION SCHEDULE**

Not Presently Congested (in 3 or more periods)	Every 5 Years
At Risk of Congestion (in 3 or more periods)	Every 4 Years
Borderline Congested (in 3 or more periods)	Every 3 Years
Marginally Congested (in 3 or more periods)	Every 2 Years
Seriously Congested (in 2 or more periods)	Every Year

\*Roads with split designation will follow the schedule with the more congested designation. Example: a road with 2 ARC periods and 2 MC periods would follow the MC schedule and be run every other year.

**Task 4: Develop Analytical Framework for Evaluating CMP Strategies**

The goal of this task was to develop appropriate congestion reduction strategies that could be integrated into the ARTS area transportation planning process. A secondary goal was to analyze and evaluate selected CMP strategies to improve system performance. Since 1996, supplemental data on seriously congested corridors was also collected. This data was evaluated in a matrix against congestion mitigation strategies. The results from this matrix are presented to the ARTS committees. The 1996 CMP Report contains a full description of the work on this task.

**Task 5: Implement the CMP**

Under this task the collected data is utilized to identify system deficiencies and develop response strategies on a continuing basis. This ensures that the CMP is integrated into the continuous ARTS transportation planning process.

**Task 6: Develop Process to Evaluate CMP**

The staff developed a standard CMP evaluation process that has been used over time to assess effectiveness and improve performance. This evaluation is incorporated into the yearly reports through a summary of current conditions and change in conditions due to improvements. An example of CMP process improvement is the addition of two Saturday routes to study congestion on busy commercial corridors during the weekend.

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**APPENDIX B**

**2013 SEGMENT SPEED WORKSHEETS**

**AIKEN COUNTY 2013 SEGMENT SPEED WORKSHEETS**

**COLUMBIA COUNTY 2013 SEGMENT SPEED WORKSHEETS**

**RICHMOND COUNTY 2013 SEGMENT SPEED WORKSHEETS**

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**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**BETTIS ACADEMY ROAD**

NORTHBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS) x 3600	TOTAL AVERAGE MPH*			
Bettis Academy	Ascauga Lake												
	I-20	199	203	194	596	199	2.4	0.0121	43	24	45	-3	
	Springdale	52	55	52	159	53	0.7	0.0132	48	8	50	-5	
	Mt. Zion Rd.	86	86	84	256	85	1.2	0.0141	51	14	55	-8	
							4.3			46			

NORTHBOUND PM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS) x 3600	TOTAL AVERAGE MPH*			
Bettis Academy	Ascauga Lake												
	I-20	210	192	199	601	200	2.4	0.0120	43	24	45	-4	
	Springdale	55	55	56	166	55	0.7	0.0127	46	7	50	-9	
	Mt. Zion Rd.	93	93	88	274	91	1.2	0.0131	47	13	55	-14	
							4.3			45			

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**BETTIS ACADEMY ROAD**

SOUTHBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)										POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Bettis Academy													
	Mt. Zion Rd.												
	Springdale	114	93	85	292	97	1.2	0.0123	44	12	55	-19.30	
	I-20	52	57	55	164	55	0.7	0.0128	46	8	50	-7.80	
	Ascauga Lake	211	216	187	614	205	2.4	0.0117	42	24	45	-6.19	
							4.3			43			

SOUTHBOUND PM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)										POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Bettis Academy													
	Mt. Zion Rd.												
	Springdale	92	83	84	259	86	1.2	0.0139	50	14	55	-9.02	
	I-20	54	53	55	162	54	0.7	0.0130	47	8	50	-6.67	
	Ascauga Lake	201	240	206	647	216	2.4	0.0111	40	22	45	-10.97	
							4.3			44			

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013  
DOUGHERTY ROAD**

EASTBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Dougherty Rd.	Silver Bluff												
	Whiskey Rd.	160	166	167	493	164	0.89	0.0054	19	19	35	-44.29	
							0.89			19			

EASTBOUND PM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*		
Dougherty	Silver Bluff											
	Whiskey Rd.	155	139	188	482	161	0.89	0.0055	20	20	35	-43.02
							0.89			20		

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013  
DOUGHERTY ROAD**

WESTBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Dougherty Rd.	Whiskey Rd.												
	Silver Bluff Rd	132	126	119	377	126	0.89	0.0071	25	25	35	-27.15	
							0.89			25			

WESTBOUND PM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*		
Dougherty	Whiskey Rd.											
	Silver Bluff	133	125	119	377	126	0.89	0.0071	25	25	35	-27.15
							0.89			25		

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**DOUGHERTY ROAD - 3:00 PM (SCHOOL)**

EASTBOUND 3:00 PM (SCHOOL)

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Dougherty													
	Silver Bluff												
	Whiskey Rd.	132	119	139	390	130	0.89	0.0068	25	25	35	-29.58	
							0.89			25			

WESTBOUND 3:00 PM (SCHOOL)

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Dougherty													
	Whiskey Rd.												
	Silver Bluff	119	119	127	365	122	0.89	0.0073	26	26	35	-24.76	
							0.89			26			

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**EAST PINE LOG ROAD**

EASTBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGS SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
East Pine Log Rd.	Silver Bluff Rd.												
	Whiskey Rd.	111	175	128	414	138	0.41	0.0030	11	1	35	-69.44	
	Powderhouse Rd.	132	105	115	352	117	1.10	0.0094	34	11	45	-25.00	
	Banks Mill Rd.	86	64	58	208	69	0.68	0.0098	35	7	45	-21.54	
	US 78	126	108	106	340	113	1.26	0.0111	40	15	45	-11.06	
							3.45			34			

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**EAST PINE LOG ROAD - 3:15 PM (SCHOOL)**

EASTBOUND 3:15 PM (SCHOOL)

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
East Pine Log Rd.	Silver Bluff Rd.												
	Whiskey Rd.	176	125	143	444	148	0.41	0.0028	10	1	35	-71.51	
	Powderhouse Rd.	125	142	139	406	135	1.10	0.0081	29	9	45	-34.98	
	Banks Mill Rd.	98	81	69	248	83	0.68	0.0082	30	6	45	-34.19	
	US 78	179	109	115	403	134	1.26	0.0094	34	12	45	-24.96	
							3.45			29			

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**EAST PINE LOG ROAD**

WESTBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGS SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
East Pine Log Rd.	US 78												
	Banks Mill Rd.	133	98	106	337	112	1.26	0.0112	40	15	45	-10.27	
	Powderhouse Rd.	89	56	61	206	69	0.68	0.0099	36	7	45	-20.78	
	Whiskey Rd.	189	180	153	522	174	1.10	0.0063	23	7	45	-49.43	
	Silver Bluff Rd.	59	48	119	226	75	0.41	0.0054	20	2	35	-44.02	
							3.45			31			

WESTBOUND 3:15 PM (SCHOOL)

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*		
East Pine Log Rd.	US 78											
	Banks Mill Rd.	123	130	138	391	130	1.26	0.0097	35	13	45	-22.66
	Powderhouse Rd.	73	72	74	219	73	0.68	0.0093	34	7	45	-25.48
	Whiskey Rd.	179	115	139	433	144	1.10	0.0076	27	9	45	-39.03
	Silver Bluff Rd.	68	115	63	246	82	0.41	0.0050	18	2	35	-48.57
							3.45			30		

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**GEORGIA AVENUE**

NORTHBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Georgia Avenue	Buena Vista												
	Carolina Ave	52	41	44	137	46	0.32	0.0070	25	1	30	-15.91	
	Martintown	59	65	73	197	66	0.45	0.0069	25	2	35	-29.51	
	Knox Ave	177	177	206	560	187	1.56	0.0084	30	8	35	-14.04	
	Clearwater	110	121	111	342	114	0.85	0.0075	27	4	40	-32.89	
	Ascauga Lake Rd	155	184	211	550	183	1.90	0.0104	37	13	40	-6.73	
	I-20	78	106	96	280	93	0.50	0.0054	19	2	45	-57.14	
							5.58			30			

NORTHBOUND PM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Georgia Avenue	Buena Vista												
	Carolina Ave	105	43	53	201	67	0.32	0.0048	17	1	30	-42.69	
	Martintown	133	134	135	402	134	0.45	0.0034	12	1	35	-65.46	
	Knox Ave	233	221	165	619	206	1.56	0.0076	27	8	35	-22.23	
	Clearwater	121	123	115	359	120	0.85	0.0071	26	4	40	-36.07	
	Ascauga Lake Rd	197	282	147	626	209	1.90	0.0091	33	11	40	-18.05	
	I-20	56	118	57	231	77	0.50	0.0065	23	2	45	-48.05	
							5.58			27			

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**GEORGIA AVENUE**

SOUTHBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGE SPEED (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Georgia Avenue	I-20												
	Ascauga Lake Rd	55	65	65	185	62	0.50	0.0081	29	3	30	-2.70	
	Clearwater	195	167	186	548	183	1.90	0.0104	37	13	35	6.99	
	Knox Ave	99	99	102	300	100	0.85	0.0085	31	5	35	-12.57	
	Martintown	143	170	201	514	171	1.56	0.0091	33	9	40	-18.05	
	Carolina Ave	47	47	53	147	49	0.45	0.0092	33	3	40	-17.35	
	Buena Vista	43	44	64	151	50	0.32	0.0064	23	1	45	-49.14	
							5.58			33			

SOUTHBOUND PM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Georgia Avenue	I-20												
	Ascauga Lake Rd	75	63	55	193	64	0.50	0.0078	28	3	45	-37.82	
	Clearwater	248	255	147	650	217	1.90	0.0088	32	11	40	-21.08	
	Knox Ave	147	119	99	365	122	0.85	0.0070	25	4	40	-37.12	
	Martintown	180	207	167	554	185	1.56	0.0084	30	9	35	-13.11	
	Carolina Ave	64	53	48	165	55	0.45	0.0082	29	2	30	-1.82	
	Buena Vista	105	46	64	215	72	0.32	0.0045	16	1	45	-64.28	
							5.58			29			

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**KNOX AVENUE**

NORTHBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Knox Ave.													
	Martintown Rd.												
	Old Edgefield Rd.	139	145	129	413	138	1.24	0.0090	32	22	35	-7.35	
	Georgia Ave.	93	119	58	270	90	0.58	0.0064	23	7	40	-42.00	
							1.82			29			

NORTHBOUND PM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Knox Ave.													
	Martintown Rd												
	Old Edgefield Rd.	158	129	200	487	162	1.24	0.0076	27	19	35	-21.43	
	Georgia Ave.	104	93	128	325	108	0.58	0.0054	19	6	40	-51.82	
							1.82			25			

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**KNOX AVENUE**

SOUTHBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Knox Ave.													
	Georgia Ave.												
	Old Edgefield Rd.	63	47	98	208	69	0.58	0.0084	30	10	40	-24.71	
	Martintown Rd.	136	187	119	442	167	1.24	0.0074	27	18	35	-23.63	
							1.82			28			

SOUTHBOUND PM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Knox Ave.													
	Georgia Ave.												
	Old Edgefield Rd.	48	48	83	179	60	0.58	0.0097	35	11	40	-12.51	
	Martintown Rd.	222	186	120	528	176	1.24	0.0070	25	17	35	-27.53	
							1.82			28			

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**RICHLAND AVENUE (NOON)**

EASTBOUND NOON

STREET	CONTROL POINT	OVERALL AVERAGS SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Richland Ave.	Vaucluse Rd.												
	Greenville St.	55	58	45	158	53	0.36	0.0068	25	4	35	-29.69	
	Laurens St.	43	23	35	101	34	0.17	0.0050	18	1	25	-27.29	
	Chesterfield St.	47	34	41	122	41	0.20	0.0049	18	2	25	-29.18	
	York St.	11	14	14	39	13	0.09	0.0069	25	1	30	-16.92	
	Williamsburg St.	73	79	67	219	73	0.59	0.0081	29	8	35	-16.87	
	Beaufort St.	64	33	31	128	43	0.25	0.0059	21	3	35	-39.73	
							1.66			19			

WESTBOUND NOON

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Richland Ave.	Beaufort St.												
	Williamsburg St.	45	69	32	146	49	0.25	0.0051	18	2	35	-47.16	
	York St.	79	74	109	262	87	0.59	0.0068	24	7	35	-30.51	
	Chesterfield St.	15	16	14	45	15	0.09	0.0060	22	1	30	-28.00	
	Laurens St.	32	93	38	163	54	0.20	0.0037	13	1	25	-46.99	
	Greenville St.	26	27	24	77	26	0.17	0.0066	24	2	25	-4.62	
	Vaucluse St.	45	45	40	130	43	0.36	0.0083	30	5	35	-14.55	
							1.66			18			

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**SILVER BLUFF ROAD**

SOUTHBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Silver Bluff Rd.	Whiskey Rd.												
	Hitchcock Pkwy.	121	119	186	426	142	0.62	0.0044	16	3	35	-55.09	
	Dougherty Rd.	48	44	42	134	45	0.42	0.0094	34	5	35	-3.28	
	Pine Log Rd.	24	23	32	79	26	0.16	0.0061	22	1	35	-37.50	
	Savannah Dr.	129	138	134	401	134	1.24	0.0093	33	14	35	-4.58	
							2.44			23			

SOUTHBOUND PM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*		
Silver Bluff Rd.	Whiskey Rd.											
	Hitchcock Pkwy.	93	38	197	328	109	0.62	0.0057	20	4	35	-41.67
	Dougherty Rd.	52	48	45	145	48	0.42	0.0087	31	4	35	-10.62
	Pine Log Rd.	19	16	14	49	16	0.16	0.0098	35	2	35	0.76
	Savannah Dr.	145	140	140	425	142	1.24	0.0088	32	13	35	-9.97
							2.44			23		

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013**  
**SILVER BLUFF ROAD**

NORTHBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT	
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Silverbluff Rd.	Savannah Dr.												
	Pine Log Rd.	152	141	157	450	150	1.24	0.0083	30	12	35	-14.97	
	Dougherty Rd.	25	94	64	183	61	0.16	0.0026	9	0	35	-73.02	
	Hitchcock Pkwy.	116	48	52	216	72	0.42	0.0058	21	3	35	-40.00	
	Whiskey Rd.	128	86	147	361	120.3	0.62	0.0052	19	4	35	-47.00	
							2.44			19			

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)									POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*		
Silverbluff Rd.	Savannah Dr.											
	Pine Log Rd.	187	153	134	474	158	1.24	0.0078	28	11	35	-19.28
	Dougherty Rd.	86	29	134	249	83	0.16	0.0019	7	0	35	-80.17
	Hitchcock Pkwy.	79	68	119	266	89	0.42	0.0047	17	2	35	-51.28
	Whiskey Rd.	84	83	95	262	87	0.62	0.0071	26	5	35	-26.98
							2.44			19		

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)



**AIKEN COUNTY - SEGMENT SPEED CALCULATION WORKSHEET - 2013  
WHISKEY ROAD**

NORTHBOUND AM

STREET	CONTROL POINT	OVERALL AVERAGS SPEEDS (M.P.H.)										POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Whiskey Rd.	Powderhouse Rd.												
	Brookhaven Dr.	62	54	48	164	55	0.58	0.0106	38	5	45	-15.12	
	East Gate Dr.	64	65	62	191	64	0.58	0.0091	33	4	40	-18.01	
	Pine Log Rd.	99	136	143	378	126	0.94	0.0075	27	5	35	-23.27	
	South Boundary	287	242	262	791	264	2.26	0.0086	31	15	35	-11.84	
	Richland Ave.	174	148	120	442	147	0.44	0.0030	11	1	30	-64.16	
							4.8			29			

NORTHBOUND PM

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)										POSTED SPEED LIMIT	PERCENTAGE ABOVE/ BELOW POSTED SPEED LIMIT
		RUN #1 IN SECONDS	RUN #2 IN SECONDS	RUN #3 IN SECONDS	TOTAL IN SECONDS	TOTAL SECONDS /3	SEGMENT DISTANCE (MI)	SEG. DIST. /AVERAGE SECONDS	MPH (DIST. IN SECONDS x 3600)	TOTAL AVERAGE MPH*			
Whiskey Rd.	Powderhouse Rd.												
	Brookhaven Dr.	44	57	48	149	50	0.58	0.0117	42	5	45	-6.58	
	East Gate Dr.	101	86	104	291	97	0.58	0.0060	22	3	40	-46.19	
	Pine Log Rd.	283	267	283	833	278	0.94	0.0034	12	2	35	-65.18	
	South Boundary	285	383	257	925	308	2.26	0.0073	26	12	35	-24.61	
	Richland Ave.	98	119	95	312	104	0.44	0.0042	15	1	30	-49.23	
							4.8			24			

\*TOTAL AVERAGE MPH=MPH\*(SEGMENT DISTANCE/TOTAL DISTANCE)

**COLUMBIA COUNTY - BELAIR ROAD: SOUTHBOUND  
SEGMENT SPEED CALCULATION WORK SHEET - 2013**

**SOUTHBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Belair Road</b>	Washington Road									
	Peachtree Road	18	21	27	66	22	0.15	0.01	0	0.7
	Hereford Farm Road	15	12	15	42	14	0.15	0.01	0	1.2
	Cox Road/ Owens Road	99	126	120	345	115	1.20	0.01	38	9.0
	Columbia Road	88	147	120	355	118	1.00	0.01	30	6.1
	Oakley Pirkle Road	78	66	87	231	77	0.70	0.01	33	4.6
	Wheeler Road	228	113	193	534	178	0.80	0.00	16	2.6
	I-20 WB	114	36	75	225	75	0.35	0.00	17	1.2
	I-20 EB	12	12	15	39	13	0.03	0.00	8	0.0
	Park West Drive	78	21	63	162	54	0.12	0.00	8	0.2
	Wrightsboro Road	69	69	48	186	62	0.50	0.01	29	2.9
							5.00			28

**SOUTHBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Belair Road</b>	Washington Road									
	Peachtree Road	15	36	18	69	23	0.15	0.01	23	0.7
	Hereford Farm Road	15	81	12	108	36	0.15	0.00	15	0.5
	Cox Road/ Owens Road	96	96	93	285	95	1.20	0.01	45	10.9
	Columbia Road	186	225	156	567	189	1.00	0.01	19	3.8
	Oakley Pirkle Road	87	60	78	225	75	0.70	0.01	34	4.7
	Wheeler Road	123	108	69	300	100	0.80	0.01	29	4.6
	I-20 WB	138	150	24	312	104	0.35	0.00	12	0.8
	I-20 EB	15	18	15	48	16	0.03	0.00	7	0.0
	Park West Drive	6	9	36	51	17	0.12	0.01	25	0.6
	Wrightsboro Road	45	39	72	156	52	0.50	0.01	35	3.5
							5.00			30

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**COLUMBIA COUNTY - BELAIR ROAD: NORTHBOUND  
SEGMENT SPEED CALCULATION WORK SHEET - 2013**

**NORTHBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Belair Road</b>	Wrightsboro Road									
	Park West Drive	54	45	45	144	48	0.50	0.01	38	3.8
	I-20 EB	54	39	45	138	46	0.12	0.00	9	0.2
	I-20 WB	15	12	15	42	14	0.03	0.00	8	0.0
	Wheeler Road	30	27	45	102	34	0.35	0.01	37	2.6
	Oakley Pirkle Road	66	84	66	216	72	0.80	0.01	40	6.4
	Columbia Road	87	111	78	276	92	0.70	0.01	27	3.8
	Cox Road/ Owens Road	111	84	114	309	103	1.00	0.01	35	7.0
	Hereford Farm Road	117	102	114	333	111	1.20	0.01	39	9.3
	Peachtree Road	15	15	15	45	15	0.15	0.01	36	1.1
	Washington Road	18	39	18	75	25	0.15	0.01	22	0.6
							5.00			35

**NORTHBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Belair Road</b>	Wrightsboro Road									
	Park West Drive	351	445	69	865	288	0.50	0.00	6	0.6
	I-20 EB	9	9	9	27	9	0.12	0.01	48	1.2
	I-20 WB	12	15	12	39	13	0.03	0.00	8	0.0
	Wheeler Road	27	30	111	168	56	0.35	0.01	23	1.6
	Oakley Pirkle Road	90	63	75	228	76	0.80	0.01	38	6.1
	Columbia Road	165	117	84	366	122	0.70	0.01	21	2.9
	Cox Road/ Owens Road	150	114	102	366	122	1.00	0.01	30	5.9
	Hereford Farm Road	108	93	165	366	122	1.20	0.01	35	8.5
	Peachtree Road	18	15	18	51	17	0.15	0.01	32	1.0
	Washington Road	24	156	129	309	103	0.15	0.00	5	0.2
							5.00			28

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**COLUMBIA COUNTY - EVANS-TO-LOCKS: EASTBOUND  
SEGMENT SPEED CALCULATION WORK SHEET - 2013**

**EASTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>EVANS-TO-LOCKS RD</b>	Washington Rd									
	Evans Town Center Blvd	30	21	27	78	26	0.14	0.0054	19	0.6
	N. Belair Rd	173	126	63	362	121	0.22	0.0018	7	0.3
	Columbia Industrial Blvd	51	45	99	195	65	0.60	0.0092	33	4.2
	Blue Ridge Dr	45	37	51	133	44	0.54	0.0122	44	5.0
	Fury's Ferry Rd	207	144	102	453	151	1.09	0.0072	26	6.0
	Stevens Creek Rd	183	208	198	589	196	2.16	0.0110	40	18.0
							4.75			34

**EASTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>EVANS-TO-LOCKS RD</b>	Washington Rd									
	Evans Town Center Blvd	21	24	33	78	26	0.14	0.0054	19.38	0.6
	N. Belair Rd	105	69	81	255	85	0.22	0.0026	9.32	0.4
	Columbia Industrial Blvd	156	60	162	378	126	0.60	0.0048	17.14	2.2
	Blue Ridge Dr	48	51	60	159	53	0.54	0.0102	36.68	4.2
	Fury's Ferry Rd	219	219	222	660	220	1.09	0.0050	17.84	4.1
	Stevens Creek Rd	198	180	192	570	190	2.16	0.0114	40.93	18.6
							4.75			30

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**COLUMBIA COUNTY - EVANS-TO-LOCKS: WESTBOUND  
SEGMENT SPEED CALCULATION WORK SHEET - 2013**

**WESTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
EVANS-TO-LOCKS RD	Stevens Creek Rd									
	Fury's Ferry Rd	186	294	270	750	250	2.16	0.0086	31	14.1
	Blue Ridge Dr	108	90	90	288	96	1.09	0.0114	41	9.4
	Columbia Industrial Blvc	51	57	48	156	52	0.54	0.0104	37	4.3
	North Belair	147	63	114	324	108	0.60	0.0056	20	2.5
	Evans Town Ctr. Blvd.	48	42	63	153	51	0.22	0.0043	16	0.7
	Washington Rd	33	51	153	237	79	0.14	0.0018	6	0.2
							4.75			31

**WESTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
EVANS-TO-LOCKS RD	Stevens Creek Rd									
	Fury's Ferry Rd	189	270	183	642	214	2.16	0.0101	36	16.5
	Blue Ridge Dr	108	123	111	342	114	1.09	0.0096	34	7.9
	Columbia Industrial Blvc	48	60	60	168	56	0.54	0.0096	35	3.9
	N. Belair Rd	302	139	227	668	223	0.60	0.0027	10	1.2
	Evans Town Center Blvd	36	69	87	192	64	0.22	0.0034	12	0.6
	Washington Rd	81	21	24	126	42	0.14	0.0033	12	0.4
							4.75			31

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**COLUMBIA COUNTY - FLOWING WELLS ROAD: SOUTHBOUND  
SEGMENT SPEED CALCULATION WORK SHEET - 2013**

**SOUTHBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)					WEIGHTED			
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE TIME CALCULATION	AVERAGE SPEED MPH	AVERAGE ROUTE SPEED
Flowing Wells Road	Washington Road									
	Columbia Road	222	135	285	642	214	0.20	0.0009	3	0.5
	Bussey Ln / Old Trail Road West	138	93	198	429	143	0.60	0.0042	15	6.5
	Wheeler Road / Mason McKnight, Jr. Pkwy.	117	81	72	270	90	0.60	0.0067	24	10.3
							1.40			17

**SOUTHBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)					WEIGHTED			
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE TIME CALCULATION	AVERAGE SPEED MPH	AVERAGE ROUTE SPEED
Flowing Wells Road	Washington Road									
	Columbia Road	246	126	135	507	169	0.20	0.0012	4	0.6
	Bussey Ln / Old Trail Road West	54	78	66	198	66	0.60	0.0091	33	14.0
	Wheeler Road / Mason McKnight, Jr. Pkwy.	72	63	87	222	74	0.60	0.0081	29	12.5
							1.40			27

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**COLUMBIA COUNTY - FLOWING WELLS ROAD: NORTHBOUND  
SEGMENT SPEED CALCULATION WORK SHEET - 2013**

**NORTHBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
Flowing Wells Road	Wheeler Road / Mason McKnight, Jr. Pkwy.									
	Bussey Ln / Old Trail Road West	69	93	120	282	94	0.60	0.0064	23	9.8
	Columbia Road	111	132	132	375	125	0.60	0.0048	17	7.4
	Washington Road	63	96	102	261	87	0.20	0.0023	8	1.2
							1.40			18

**NORTHBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
Flowing Wells Road	Wheeler Road / Mason McKnight, Jr. Pkwy.									
	Bussey Ln / Old Trail Road West	93	108	69	270	90	0.60	0.0067	24	10.3
	Columbia Road	126	84	126	336	112	0.60	0.0054	19	8.3
	Washington Road	159	36	33	228	76	0.20	0.0026	9	1.4
							1.40			20

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**COLUMBIA COUNTY**  
**SR 223: WESTBOUND**  
**SEGMENT SPEED CALCULATION WORK SHEET - 2013**

**WESTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
SR 223	Gordon Highway									
	Newmantown Road	182	255	205	642	214	1.80	0.0084	30	24
	Wrightsboro Road	96	51	60	207	69	0.50	0.0072	26	6
							2.30			29

**WESTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
SR 223	Gordon Highway									
	Newmantown Road	247	309	663	1219	406	1.80	0.0044	16	12
	Wrightsboro Road	48	69	69	186	62	0.50	0.0081	29	6
							2.30			19

Driver delayed by train.

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**COLUMBIA COUNTY  
SR 223: EASTBOUND  
SEGMENT SPEED CALCULATION WORK SHEET - 2013**

**EASTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
SR 223	Wrightsboro Road									
	Newmantown Road	84	72	51	207	69	0.50	0.0072	26	6
	Gordon Highway	339	275	186	800	267	1.80	0.0068	24	19
							2.30			25

**EASTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
SR 223	Wrightsboro Road									
	Newmantown Road	114	165	72	351	117	0.50	0.0043	15	3
	Gordon Highway	318	190	644	1152	384	1.80	0.0047	17	13
							2.30			17

Driver delayed by train.

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY**  
**THIRTEENTH STREET: SOUTHBOUND**  
**SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**SOUTHBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>13th Street / RA Dent Blvd</b>	Reynolds Street									
	Jones Street	24	9	12	45	15	0.05	0.0033	12	0
	Broad Street	12	9	12	33	11	0.06	0.0055	20	1
	Greene Street	18	12	15	45	15	0.14	0.0093	34	3
	Telfair Street	6	30	9	45	15	0.06	0.0040	14	1
	Walton Way	114	39	81	234	78	0.30	0.0038	14	3
	University Hospital	42	42	69	153	51	0.23	0.0045	16	2
	Laney Walker Boulevard	18	57	21	96	32	0.28	0.0088	32	6
	John Wesley Gilbert Dr.	39	42	63	144	48	0.34	0.0071	26	5
	Wrightsboro Road (no signal)	21	21	24	66	22	0.12	0.0055	20	1
							1.58			22

**SOUTHBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>13th Street / RA Dent Blvd</b>	Reynolds Street									
	Jones Street	51	45	33	129	43	0.05	0.0012	4	0
	Broad Street	9	12	15	36	12	0.06	0.0050	18	1
	Greene Street	18	12	18	48	16	0.14	0.0088	32	3
	Telfair Street	24	33	27	84	28	0.06	0.0021	8	0
	Walton Way	135	84	45	264	88	0.30	0.0034	12	2
	University Hospital	60	42	42	144	48	0.23	0.0048	17	3
	Laney Walker Boulevard	15	63	18	96	32	0.28	0.0088	32	6
	John Wesley Gilbert Dr.	36	39	42	117	39	0.34	0.0087	31	7
	Wrightsboro Road (no signal)	21	21	21	63	21	0.12	0.0057	21	2
							1.58			23

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY**  
**THIRTEENTH STREET: NORTHBOUND**  
**SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**NORTHBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>13th Street / RA Dent Blvd</b>	Wrightsboro Road (no signal)									
	John Wesley Gilbert Dr.	24	24	30	78	26	0.12	0.0046	17	1
	Laney Walker Boulevard	93	48	39	180	60	0.34	0.0057	20	4
	University Hospital	18	21	18	57	19	0.28	0.0147	53	9
	Walton Way	90	72	48	210	70	0.23	0.0033	12	2
	Telfair Street	42	42	39	123	41	0.30	0.0073	26	5
	Greene Street	9	9	6	24	8	0.06	0.0075	27	1
	Broad Street	18	42	18	78	26	0.14	0.0054	19	2
	Jones Street	9	18	45	72	24	0.06	0.0025	9	0
	Reynolds Street	15	15	15	45	15	0.05	0.0033	12	0
							1.58			24

**NORTHBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>13th Street / RA Dent Blvd</b>	Wrightsboro Road (no signal)									
	John Wesley Gilbert Dr.	21	27	24	72	24	0.12	0.0050	18	1
	Laney Walker Boulevard	96	96	87	279	93	0.34	0.0037	13	3
	University Hospital	15	18	18	51	17	0.28	0.0165	59	11
	Walton Way	51	39	120	210	70	0.23	0.0033	12	2
	Telfair Street	36	39	39	114	38	0.30	0.0079	28	5
	Greene Street	9	9	9	27	9	0.06	0.0067	24	1
	Broad Street	18	57	51	126	42	0.14	0.0033	12	1
	Jones Street	9	15	9	33	11	0.06	0.0055	20	1
	Reynolds Street	12	15	6	33	11	0.05	0.0045	16	1
							1.58			24

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY**  
**FIFTEENTH STREET : SOUTHBOUND**  
**SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**SOUTHBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Fifteenth St</b>	Reynolds Street									
	Jones Street	15	39	117	171	57	0.08	0.0014	5	0
	Broad Street	6	9	9	24	8	0.08	0.0100	36	1
	Greene Street	21	18	18	57	19	0.14	0.0074	27	1
	John C. Calhoun Expressway	30	42	45	117	39	0.14	0.0036	13	1
	Walton Way	48	63	45	156	52	0.24	0.0046	17	2
	Harper Street / Pope Avenue	84	39	60	183	61	0.23	0.0038	14	1
	Laney Walker Boulevard	24	24	24	72	24	0.20	0.0083	30	2
	Central Avenue	24	24	24	72	24	0.20	0.0083	30	2
	Wrightsboro Road (middle of overpass)	12	24	24	60	20	0.17	0.0085	31	2
	Carver Street / Government Street	42	27	24	93	31	0.20	0.0065	23	2
	Castleberry Lane	15	21	18	54	18	0.20	0.0111	40	3
	Essie McIntyre / Sunset Avenue	45	57	42	144	48	0.30	0.0063	23	3
	Martin Luther King Boulevard	126	60	72	258	86	0.43	0.0050	18	3
							2.61			23

**SOUTHBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Fifteenth St</b>	Reynolds Street									
	Jones Street	108	108	42	258	86	0.08	0.0009	3	0
	Broad Street	9	9	9	27	9	0.08	0.0089	32	1
	Greene Street	12	18	15	45	15	0.14	0.0093	34	2
	John C. Calhoun Expressway	7	24	24	55	18	0.14	0.0076	27	1
	Walton Way	54	24	66	144	48	0.24	0.0050	18	2
	Harper Street / Pope Avenue	27	27	24	78	26	0.23	0.0088	32	3
	Laney Walker Boulevard	102	24	27	153	51	0.20	0.0039	14	1
	Central Avenue	24	60	24	108	36	0.20	0.0056	20	2
	Wrightsboro Road (middle of overpass)	18	24	24	66	22	0.17	0.0077	28	2
	Carver Street / Government Street	21	21	18	60	20	0.20	0.0100	36	3
	Castleberry Lane	9	27	18	54	18	0.20	0.0111	40	3
	Essie McIntyre / Sunset Avenue	48	54	39	141	47	0.30	0.0064	23	3
	Martin Luther King Boulevard	51	60	60	171	57	0.43	0.0075	27	4
							2.61			26

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY**  
**FIFTEENTH STREET : NORTHBOUND**  
**SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**NORTHBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Fifteenth St.</b>	Martin Luther King Boulevard									
	Essie McIntyre / Sunset Avenue	93	144	105	342	114	0.43	0.0038	14	2
	Castleberry Lane	39	33	36	108	36	0.30	0.0083	30	3
	Carver Street / Government Street	12	18	18	48	16	0.20	0.0125	45	3
	Wrightsboro Road (middle of overpass)	27	18	21	66	22	0.20	0.0091	33	3
	Central Avenue	15	24	51	90	30	0.17	0.0057	20	1
	Laney Walker Boulevard	69	21	27	117	39	0.20	0.0051	18	1
	Harper Street / Pope Avenue	21	21	24	66	22	0.20	0.0091	33	3
	Walton Way	24	30	90	144	48	0.23	0.0048	17	2
	John C. Calhoun Expressway	18	24	54	96	32	0.24	0.0075	27	2
	Greene Street	66	15	18	99	33	0.14	0.0042	15	1
	Broad Street	18	18	21	57	19	0.14	0.0074	27	1
	Jones Street	6	9	9	24	8	0.08	0.0100	36	1
	Reynolds Street	6	6	105	117	39	0.08	0.0021	7	0
							2.61			24

**NORTHBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Fifteenth St.</b>	Martin Luther King Boulevard									
	Essie McIntyre / Sunset Avenue	54	81	66	201	67	0.43	0.0064	23	4
	Castleberry Lane	36	33	36	105	35	0.30	0.0086	31	4
	Carver Street / Government Street	15	42	18	75	25	0.20	0.0080	29	2
	Wrightsboro Road (middle of overpass)	18	18	21	57	19	0.20	0.0105	38	3
	Central Avenue	24	27	21	72	24	0.17	0.0071	26	2
	Laney Walker Boulevard	54	24	24	102	34	0.20	0.0059	21	2
	Harper Street / Pope Avenue	21	54	21	96	32	0.20	0.0063	23	2
	Walton Way	27	63	27	117	39	0.23	0.0059	21	2
	John C. Calhoun Expressway	21	27	27	75	25	0.24	0.0096	35	3
	Greene Street	75	18	51	144	48	0.14	0.0029	11	1
	Broad Street	102	87	99	288	96	0.14	0.0015	5	0
	Jones Street	6	8	9	23	8	0.08	0.0104	38	1
	Reynolds Street	114	109	105	328	109	0.08	0.0007	3	0
							2.61			25

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY - GREENE STREET: WESTBOUND  
SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**WESTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Greene Street</b>	East Boundary Street									
	Fourth Street	69	72	72	213	71	0.52	0.0073	26	9
	Fifth Street	21	42	21	84	28	0.19	0.0068	24	3
	Sixth Street	51	21	36	108	36	0.17	0.0047	17	2
	Seventh Street	48	24	51	123	41	0.10	0.0024	9	1
	Eighth Street	18	15	18	51	17	0.12	0.0071	25	2
	James Brown Blvd.	15	18	18	51	17	0.13	0.0076	28	2
	Tenth Street	21	18	18	57	19	0.13	0.0068	25	2
	Eleventh Street	12	12	12	36	12	0.09	0.0075	27	2
	Twelfth Street	15	12	15	42	14	0.10	0.0071	26	2
							1.55			24

**WESTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Greene Street</b>	East Boundary Street									
	Fourth Street	66	69	55	190	63	0.52	0.0082	30	10
	Fifth Street	21	24	24	69	23	0.19	0.0083	30	4
	Sixth Street	21	27	21	69	23	0.17	0.0074	27	3
	Seventh Street	12	15	15	42	14	0.10	0.0071	26	2
	Eighth Street	12	18	18	48	16	0.12	0.0075	27	2
	James Brown Blvd.	15	54	18	87	29	0.13	0.0045	16	1
	Tenth Street	18	45	18	81	27	0.13	0.0048	17	1
	Eleventh Street	45	12	9	66	22	0.09	0.0041	15	1
	Twelfth Street	15	12	15	42	14	0.10	0.0071	26	2
							1.55			26

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY - GREENE STREET: EASTBOUND  
SEGMENT SPEED CALCULATION WORKSHEET**

**EASTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Greene Street</b>	Twelfth Street									
	Eleventh Street	30	30	18	78	26	0.10	0.0038	14	1
	Tenth Street	9	12	12	33	11	0.09	0.0082	29	2
	James Brown Blvd.	27	27	30	84	28	0.13	0.0046	17	1
	Eighth Street	21	18	21	60	20	0.13	0.0065	23	2
	Seventh Street	15	15	15	45	15	0.12	0.0080	29	2
	Sixth Street	15	18	15	48	16	0.10	0.0063	23	1
	Fifth Street	24	24	24	72	24	0.17	0.0071	26	3
	Fourth Street	21	24	21	66	22	0.19	0.0086	31	4
	East Boundary Stree	78	72	69	219	73	0.52	0.0071	26	9
							1.55			25

**EASTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Greene Street</b>	Twelfth Street									
	Eleventh Street	54	27	45	126	42	0.10	0.0024	9	1
	Tenth Street	9	12	15	36	12	0.09	0.0075	27	2
	James Brown Blvd.	30	30	18	78	26	0.13	0.0050	18	2
	Eighth Street	18	18	15	51	17	0.13	0.0076	28	2
	Seventh Street	15	18	48	81	27	0.12	0.0044	16	1
	Sixth Street	12	48	15	75	25	0.10	0.0040	14	1
	Fifth Street	21	48	33	102	34	0.17	0.0050	18	2
	Fourth Street	21	24	21	66	22	0.19	0.0086	31	4
	East Boundary Street	57	57	63	177	59	0.52	0.0088	32	11
							1.55			25

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY - JACKSON ROAD/WALTON WAY EXTENSION/DAVIS ROAD : SOUTHBOUND  
SEGMENT SPEED CALCULATION WORKSHEET -2013**

**SOUTHBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME ALCULATIO	AVERAGE SPEED MPH	
Jackson Rd.	Washington Road									
Walton Way Ext.	Oak Drive	39	42	25	106	35	0.38	0.0108	39	4.3
Davis Rd.	Camilla Avenue/Toucan Drive	36	21	24	81	27	0.26	0.0096	35	2.6
	Pleasant Home Road	33	75	105	213	71	0.36	0.0051	18	1.9
	I-20 (off ramp)	33	55	33	121	40	0.38	0.0094	34	3.7
	I-20 (on ramp)	12	9	9	30	10	0.02	0.0020	7	0.0
	Robert C. Daniel	12	15	15	42	14	0.20	0.0143	51	3.0
	Skinner Mill Road	12	9	9	30	10	0.10	0.0100	36	1.0
	Wheeler Road	93	63	84	240	80	0.35	0.0044	16	1.6
	Walton Way	30	24	27	81	27	0.25	0.0093	33	2.4
	Wrightsboro Road	198	174	165	537	179	1.15	0.0064	23	7.7
							3.45			28

**SOUTHBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME ALCULATIO	AVERAGE SPEED MPH	
Jackson Rd.	Washington Road									
Walton Way Ext.	Oak Drive	39	162	36	237	79	0.38	0.0048	17	2
Davis Rd.	Camilla Avenue/Toucan Drive	24	48	24	96	32	0.26	0.0081	29	2
	Pleasant Home Road	51	54	33	138	46	0.36	0.0078	28	3
	I-20 (off ramp)	33	35	36	104	35	0.38	0.0110	39	4
	I-20 (on ramp)	9	9	12	30	10	0.02	0.0020	7	0
	Robert C. Daniel	18	10	18	46	15	0.20	0.0130	47	3
	Skinner Mill Road	12	12	9	33	11	0.10	0.0091	33	1
	Wheeler Road	108	90	96	294	98	0.35	0.0036	13	1
	Walton Way	39	24	27	90	30	0.25	0.0083	30	2
	Wrightsboro Road	141	114	121	376	125	1.15	0.0092	33	11
							3.45			30

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY - JACKSON ROAD/WALTON WAY EXTENSION/DAVIS ROAD : NORTHBOUND  
SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**NORTHBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Jackson Rd.</b>	Wrightsboro Road									
<b>Walton Way Ext.</b>	Walton Way	141	216	153	510	170	1.15	0.0068	24	8.1
<b>Davis Rd.</b>	Wheeler Road	72	66	27	165	55	0.25	0.0045	16	1.2
	Skinner Mill Road	33	30	33	96	32	0.35	0.0109	39	4.0
	Robert C. Daniel	27	9	12	48	16	0.10	0.0063	23	0.7
	I-20 (on ramp)	15	12	12	39	13	0.20	0.0154	55	3.2
	I-20 (off ramp)	9	6	9	24	8	0.02	0.0025	9	0.1
	Pleasant Home Road	54	54	60	168	56	0.38	0.0068	24	2.7
	Camilla Avenue/Toucan Drive	33	69	35	137	46	0.36	0.0079	28	3.0
	Oak Drive	24	9	30	63	21	0.26	0.0124	45	3.4
	Washington Road	135	66	69	270	90	0.38	0.0042	15	1.7
							3.45			28

**NORTHBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Jackson Rd.</b>	Wrightsboro Road									
<b>Walton Way Ext.</b>	Walton Way	171	225	135	531	177	1.15	0.0065	23	7.8
<b>Davis Rd.</b>	Wheeler Road	27	24	51	102	34	0.25	0.0074	26	1.9
	Skinner Mill Road	30	33	36	99	33	0.35	0.0106	38	3.9
	Robert C. Daniel	9	15	9	33	11	0.10	0.0091	33	0.9
	I-20 (on ramp)	15	15	12	42	14	0.20	0.0143	51	3.0
	I-20 (off ramp)	6	9	9	24	8	0.02	0.0025	9	0.1
	Pleasant Home Road	99	75	27	201	67	0.38	0.0057	20	2.2
	Camilla Avenue/Toucan Drive	58	45	48	151	50	0.36	0.0072	26	2.7
	Oak Drive	45	24	48	117	39	0.26	0.0067	24	1.8
	Washington Road	129	192	264	585	195	0.38	0.0019	7	0.8
							3.45			25

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY - TOBACCO ROAD : WESTBOUND  
SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**WESTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Tobacco Road</b>	Doug Barnard Parkway									
	Highway 56/Old Savannah Road	123	117	123	363	121	1.20	0.0099	36	5.0
	Myrtle Blvd. (Gracewood)	130	153	156	439	146	1.86	0.0127	46	10.0
	US 25/Peach Orchard Road	102	144	114	360	120	0.21	0.0018	6	0.2
	Windsor Spring Road	195	228	193	616	205	2.38	0.0116	42	11.6
	Morgan Road	189	195	174	558	186	1.85	0.0099	36	7.7
	Deans Bridge Road	105	81	111	297	99	1.05	0.0106	38	4.7
							8.55			39

**WESTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Tobacco Road</b>	Doug Barnard Parkway									
	Highway 56/Old Savannah Road	175	105	145	425	142	1.20	0.0085	30	4.3
	Myrtle Blvd. (Gracewood)	144	141	135	420	140	1.86	0.0133	48	10.4
	US 25/Peach Orchard Road	117	96	45	258	86	0.21	0.0024	9	0.2
	Windsor Spring Road	231	271	282	784	261	2.38	0.0091	33	9.1
	Morgan Road	168	159	183	510	170	1.85	0.0109	39	8.5
	Deans Bridge Road	96	93	93	282	94	1.05	0.0112	40	4.9
							8.55			37

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY - TOBACCO ROAD: EASTBOUND  
SEGMENT SPEED CALCULATION WORKSHEET**

**EASTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Tobacco Road</b>	Deans Bridge Road									
	Morgan Road	117	91	96	304	101	1.05	0.0104	37	4.6
	Windsor Spring Road	177	249	185	611	204	1.85	0.0091	33	7.1
	US 25/Peach Orchard Road	252	315	261	828	276	2.38	0.0086	31	8.6
	Myrtle Blvd. (Gracewood)	36	39	75	150	50	0.21	0.0042	15	0.4
	Highway 56/Old Savannah Road	195	153	168	516	172	1.86	0.0108	39	8.5
	Doug Barnard Parkway	120	102	87	309	103	1.20	0.0117	42	5.9
							8.55			35

**EASTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Tobacco Road</b>	Deans Bridge Road									
	Morgan Road	108	102	114	324	108	1.05	0.0097	35	4.3
	Windsor Spring Road	180	185	192	557	186	1.85	0.0100	36	7.8
	US 25/Peach Orchard Road	183	291	276	750	250	2.38	0.0095	34	9.5
	Myrtle Blvd. (Gracewood)	27	30	45	102	34	0.21	0.0062	22	0.5
	Highway 56/Old Savannah Road	207	138	156	501	167	1.86	0.0111	40	8.7
	Doug Barnard Parkway	87	90	96	273	91	1.20	0.0132	47	6.7
							8.55			38

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY**  
**WASHINGTON ROAD: WESTBOUND**  
**SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**WESTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
Washington Road	John C.Calhoun Expressway (no signal)									
	E. Vineland Road / Woodbine Road	60	46	60	166	55	0.62	0.0112	40	6
	Eisenhower Drive	42	39	48	129	43	0.45	0.0105	38	4
	Azalea Drive	15	15	18	48	16	0.18	0.0113	41	2
	Berckmans Road	30	27	51	108	36	0.23	0.0064	23	1
	Alexander Drive /Stanley Drive	33	30	33	96	32	0.35	0.0109	39	3
	Bertram Road	27	24	39	90	30	0.33	0.0110	40	3
	Boy Scout Road	57	45	27	129	43	0.25	0.0058	21	1
	I-20 EB	18	42	21	81	27	0.28	0.0104	37	2
	I-20 WB	15	18	15	48	16	0.17	0.0106	38	2
	Stevens Creek Road	6	12	9	27	9	0.03	0.0033	12	0
	Patriots Way	24	24	21	69	23	0.27	0.0117	42	3
	Warren Road	16	27	27	70	23	0.32	0.0137	49	4
	Fury's Ferry Road	15	15	15	45	15	0.17	0.0113	41	2
	Pleasant Home Road	78	78	90	246	82	0.66	0.0080	29	4
							4.31			31

**WESTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
Washington Road	John C.Calhoun Expressway (no signal)									
	E. Vineland Road / Woodbine Road	42	48	60	150	50	0.62	0.0124	44.6	6
	Eisenhower Drive	42	84	107	233	78	0.45	0.0058	20.8	2
	Azalea Drive	57	12	57	126	42	0.18	0.0043	15.4	1
	Berckmans Road	96	42	72	210	70	0.23	0.0033	11.8	1
	Alexander Drive /Stanley Drive	78	51	90	219	73	0.35	0.0048	17.2	1
	Bertram Road	36	45	93	174	58	0.33	0.0057	20.5	2
	Boy Scout Road	27	27	42	96	32	0.25	0.0078	28.1	2
	I-20 EB	81	18	33	132	44	0.28	0.0064	22.9	1
	I-20 WB	18	15	33	66	22	0.17	0.0077	27.8	1
	Stevens Creek Road	12	81	9	102	34	0.03	0.0009	3.2	0
	Patriots Way	24	24	33	81	27	0.27	0.0100	36	2
	Warren Road	27	39	33	99	33	0.32	0.0097	34.9	3
	Fury's Ferry Road	15	18	15	48	16	0.17	0.0106	38.3	2
	Pleasant Home Road	81	46	87	214	71	0.66	0.0093	33.3	5
							4.31			29

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY**  
**WASHINGTON ROAD : EASTBOUND**  
**SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**EASTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED	
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH		
Washington Road	Pleasant Home Road										
	Fury's Ferry Road	120	90	90	300	100	0.66	0.0066	24	4	
	Warren Road	12	15	12	39	13	0.17	0.0131	47	2	
	Patriots Way	24	27	27	78	26	0.32	0.0123	44	3	
	Stevens Creek Road	33	21	21	75	25	0.27	0.0108	39	2	
	I-20 WB	9	6	9	24	8	0.03	0.0038	14	0	
	I-20 EB	15	15	15	45	15	0.17	0.0113	41	2	
	Boy Scout Road	81	87	78	246	82	0.28	0.0034	12	1	
	Bertram Road	24	27	27	78	26	0.25	0.0096	35	2	
	Alexander Drive /Stanley Drive	33	36	42	111	37	0.33	0.0089	32	2	
	Berckmans Road	39	51	36	126	42	0.35	0.0083	30	2	
	Azalea Drive	21	21	21	63	21	0.23	0.0110	39	2	
	Eisenhower Drive	15	15	18	48	16	0.18	0.0113	41	2	
	E. Vineland Road / Woodbine Road	33	39	33	105	35	0.45	0.0129	46	5	
	John C.Calhoun Expressway (no signal)	36		42	78	26	0.62	0.0239	86	12	
							4.31			42	

**EASTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
Washington Road	Pleasant Home Road									
	Fury's Ferry Road	66	123	144	333	111	0.66	0.0060	21	3
	Warren Road	15	15	33	63	21	0.17	0.0081	29	1
	Patriots Way	30	48	33	111	37	0.32	0.0087	31	2
	Stevens Creek Road	33	36	81	150	50	0.27	0.0054	19	1
	I-20 WB	9	9	12	30	10	0.03	0.0030	11	0
	I-20 EB	18	15	18	51	17	0.17	0.0100	36	1
	Boy Scout Road	18	18	21	57	19	0.28	0.0147	53	3
	Bertram Road	21	21	81	123	41	0.25	0.0061	22	1
	Alexander Drive /Stanley Drive	69	60	30	159	53	0.33	0.0062	22	2
	Berckmans Road	33	39	132	204	68	0.35	0.0052	19	2
	Azalea Drive	21	21	21	63	21	0.23	0.0110	39	2
	Eisenhower Drive	15	63	18	96	32	0.18	0.0056	20	1
	E. Vineland Road / Woodbine Road	39	39	33	111	37	0.45	0.0122	44	5
	John C.Calhoun Expressway (no signal)	36	36	36	108	36	0.62	0.0172	62	9
							4.31			34

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY  
WHEELER ROAD : WESTBOUND  
SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**WESTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Wheeler Road</b>	Walton Way Ext									
	Agerton Ln	108	27	33	168	56	0.26	0.0046	17	2
	Robert C. Daniel/Marks Church	33	28	87	148	49	0.26	0.0053	19	2
	I-520 EB ramp	57	42	33	132	44	0.31	0.0070	25	3
	George C. Wilson Dr	15	15	21	51	17	0.12	0.0071	25	1
	Augusta West Pkwy	72	69	18	159	53	0.15	0.0028	10	1
	West Wheeler Parkway	33	36	30	99	33	0.35	0.0106	38	6
	Interstate Pkwy	42	60	42	144	48	0.33	0.0069	25	3
	I-20 EB	27	48	27	102	34	0.30	0.0088	32	4
	I-20 WB	15	21	18	54	18	0.19	0.0106	38	3
	Wheeler / Mason McKnight	42	36	33	111	37	0.12	0.0032	12	1
							2.39			26

**WESTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/TIME CALCULATION	AVERAGE SPEED MPH	
<b>Wheeler Road</b>	Walton Way Ext									
	Agerton Ln	25	108	117	250	83	0.26	0.0031	11	1
	Robert C. Daniel/Marks Church	18	124	27	169	56	0.26	0.0046	17	2
	I-520 EB ramp	90	21	36	147	49	0.31	0.0063	23	3
	George C. Wilson Dr	18	66	63	147	49	0.12	0.0024	9	0
	Augusta West Pkwy	21	30	28	79	26	0.15	0.0057	21	1
	West Wheeler Parkway	36	36	36	108	36	0.35	0.0097	35	5
	Interstate Pkwy	96	96	60	252	84	0.33	0.0039	14	2
	I-20 EB	27	48	45	120	40	0.30	0.0075	27	3
	I-20 WB	18	75	21	114	38	0.19	0.0050	18	1
	Wheeler / Mason McKnight	9	63	12	84	28	0.12	0.0043	15	1
							2.39			20

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY  
WHEELER ROAD : EASTBOUND  
SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**EASTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Wheeler Road</b>	Wheeler / Mason McKnight									
	I-20 WB	21	22	12	55	18	0.12	0.0065	24	1
	I-20 EB	21	18	33	72	24	0.19	0.0079	29	2
	Interstate Pkwy	54	90	27	171	57	0.30	0.0053	19	2
	West Wheeler Parkway	30	33	54	117	39	0.33	0.0085	30	4
	Augusta West Pkwy	45	33	102	180	60	0.35	0.0058	21	3
	George C. Wilson Dr	12	18	15	45	15	0.15	0.0100	36	2
	I-520 EB ramp	9	63	9	81	27	0.12	0.0044	16	1
	Robert C. Daniel /Marks Church	48	66	42	156	52	0.31	0.0060	21	3
	Agerton Ln	24	24	45	93	31	0.26	0.0084	30	3
	Walton Way Extension	78	54	30	162	54	0.26	0.0048	17	2
							2.39			24

**EASTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Wheeler Road</b>	Wheeler / Mason McKnight									
	I-20 WB	15	12	15	42	14	0.12	0.0086	31	2
	I-20 EB	15	30	18	63	21	0.19	0.0090	33	3
	Interstate Pkwy	135	102	24	261	87	0.30	0.0034	12	2
	West Wheeler Parkway	36	33	72	141	47	0.33	0.0070	25	3
	Augusta West Pkwy	81	114	78	273	91	0.35	0.0038	14	2
	George C. Wilson Dr	18	96	84	198	66	0.15	0.0023	8	1
	I-520 EB ramp	12	12	12	36	12	0.12	0.0100	36	2
	Robert C. Daniel /Marks Church	27	75	78	180	60	0.31	0.0052	19	2
	Agerton Ln	27	72	27	126	42	0.26	0.0062	22	2
	Walton Way Extension	69	30	45	144	48	0.26	0.0054	20	2
							2.39			20

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY - WRIGHTSBORO ROAD SEGMENT #2 : WESTBOUND  
SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**WESTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
Wrightsboro Road	Highland Avenue									
Segment #2	Daniel Village Road	27	27	27	81	27	0.20	0.0074	27	3
	Pine Needle Drive	18	18	18	54	18	0.20	0.0111	40	4
	Damascus Road	54	51	54	159	53	0.60	0.0113	41	12
	Valley Park East/Vanover Dr	87	45	48	180	60	0.50	0.0083	30	7
	Jackson Road/North Leg	84	60	108	252	84	0.60	0.0071	26	7
							2.10			32

**WESTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
Wrightsboro Road	Highland Avenue									
Segment #2	Daniel Village Raod	27	33	33	93	31	0.20	0.0065	23	2
	Pine Needle Drive	18	21	18	57	19	0.20	0.0105	38	4
	Damascus Road	57	84	60	201	67	0.60	0.0090	32	9
	Valley Park East/Vanover Dr	45	51	48	144	48	0.50	0.0104	38	9
	Jackson Road/North Leg	105	165	138	408	136	0.60	0.0044	16	5
							2.10			28

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY - WRIGHTSBORO ROAD SEGMENT #2 : EASTBOUND  
SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**EASTBOUND AM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Wrightsboro Road</b>	Jackson Road/North Leg									
<b>Segment #2</b>	Valley Park East/Vanover Dr	63	60	84	207	69	0.60	0.0087	31	9
	Damascus Road	57	75	75	207	69	0.50	0.0072	26	6
	Pine Needle Drive	57	72	63	192	64	0.60	0.0094	34	10
	Daniel Village Road	15	21	42	78	26	0.20	0.0077	28	3
	Highland Avenue	81	30	30	141	47	0.20	0.0043	15	1
							2.10			29

**EASTBOUND PM**

STREET	CONTROL POINT	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Wrightsboro Road</b>	Jackson Road/North Leg									
<b>Segment #2</b>	Valley Park East/Vanover Dr	132	60	75	267	89	0.60	0.0067	24	7
	Damascus Road	69	48	51	168	56	0.50	0.0089	32	8
	Pine Needle Drive	57	60	57	174	58	0.60	0.0103	37	11
	Daniel Village Road	12	18	15	45	15	0.20	0.0133	48	5
	Highland Avenue	60	57	45	162	54	0.20	0.0037	13	1
							2.10			31

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY - WRIGHTSBORO ROAD SEGMENT #3 : WESTBOUND  
SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**WESTBOUND AM**

Street	Control Point	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Wrightsboro Road Segment #3</b>	Fifteenth Street (no signal)									
	Druid Park Avenue	18	21	27	66	22	0.15	0.0068	25	1.7
	Jordan Street/ Wilson Street	48	42	57	147	49	0.39	0.0080	29	5.1
	Heard Avenue	114	75	69	258	86	0.42	0.0049	18	3.4
	Troupe Street	30	48	75	153	51	0.23	0.0045	16	1.7
	Winter Street	24	30	27	81	27	0.20	0.0074	27	2.4
	Johns Road	15	21	18	54	18	0.13	0.0072	26	1.6
	Schley Street/ Freedom Way	36	66	39	141	47	0.28	0.0060	21	2.8
	Monte Sano Avenue	33	24	51	108	36	0.18	0.0050	18	1.5
	Highland Avenue	90	39	90	219	73	0.20	0.0027	10	0.9
							2.18			19

**WESTBOUND PM**

Street	Control Point	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Wrightsboro Road Segment #3</b>	Fifteenth Street (no signal)									
	Druid Park Avenue	21	18	24	63	21	0.15	0.0071	26	1.8
	Jordan Street/ Wilson Street	54	39	48	141	47	0.39	0.0083	30	5.3
	Heard Avenue	63	51	60	174	58	0.42	0.0072	26	5.0
	Troupe Street	42	57	48	147	49	0.23	0.0047	17	1.8
	Winter Street	27	27	27	81	27	0.20	0.0074	27	2.4
	Johns Road	18	33	18	69	23	0.13	0.0057	20	1.2
	Schley Street/ Freedom Way	30	27	12	69	23	0.28	0.0122	44	5.6
	Monte Sano Avenue	21	45		66	22	0.18	0.0082	29	2.4
	Highland Avenue	24	27		51	17	0.20	0.0118	42	3.9
							2.18			28

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

**RICHMOND COUNTY - WRIGHTSBORO ROAD SEGMENT #3 : EASTBOUND  
SEGMENT SPEED CALCULATION WORKSHEET - 2013**

**EASTBOUND AM**

Street	Control Point	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Wrightsboro Road Segment #3</b>	Highland Avenue									
	Monte Sano Avenue	99	36	30	165	55	0.20	0.0036	13	1.2
	Schley Street/ Freedom Way	60	75	27	162	54	0.18	0.0033	12	1.0
	Johns Road	63	60	45	168	56	0.28	0.0050	18	2.3
	Winter Street	27	21	18	66	22	0.13	0.0059	21	1.3
	Troupe Street	27	42	48	117	39	0.20	0.0051	18	1.7
	Heard Avenue	39	51	60	150	50	0.23	0.0046	17	1.7
	Jordan Street/ Wilson Street	54	57	63	174	58	0.42	0.0072	26	5.0
	Druid Park Avenue	69	57	45	171	57	0.39	0.0068	25	4.4
	Fifteenth Street (no signal)	21	21	21	63	21	0.15	0.0071	26	1.8
							2.18			20

**EASTBOUND PM**

Street	Control Point	OVERALL AVERAGE SPEEDS (M.P.H.)								WEIGHTED AVERAGE ROUTE SPEED
		TUES RUN IN SECONDS	WED RUN IN SECONDS	THURS RUN IN SECONDS	TOTAL IN SECONDS	AVERAGE TOTAL/3	SEGMENT DISTANCE (MI)	DISTANCE/ TIME CALCULATION	AVERAGE SPEED MPH	
<b>Wrightsboro Road Segment #3</b>	Highland Avenue									
	Monte Sano Avenue	27	33	48	108	36	0.20	0.0056	20	1.8
	Schley Street/ Freedom Way	21	24	63	108	36	0.18	0.0050	18	1.5
	Johns Road	30	42	60	132	44	0.28	0.0064	23	2.9
	Winter Street	27	24	18	69	23	0.13	0.0057	20	1.2
	Troupe Street	54	33	48	135	45	0.20	0.0044	16	1.5
	Heard Avenue	51	51	30	132	44	0.23	0.0052	19	2.0
	Jordan Street/ Wilson Street	51	51	45	147	49	0.42	0.0086	31	5.9
	Druid Park Avenue	42	45	42	129	43	0.39	0.0091	33	5.8
	Fifteenth Street (no signal)	18	18	18	54	18	0.15	0.0083	30	2.1
							2.18			25

\* TOTAL AVERAGE MPH = MPH \* (SEGMENT DISTANCE/TOTAL DISTANCE)

## **APPENDIX C**

### **CONGESTION MITIGATION PROJECTS**

**TABLE C-1 - AIKEN COUNTY, 1998 – 2009**

**TABLE C-2 - COLUMBIA COUNTY, 1997 – 2008**

**TABLE C-3 - RICHMOND COUNTY, 1998 – 2012**

**Table C-1**  
**AIKEN COUNTY**  
**CONGESTION MITIGATION PROJECTS 1998-2009**

LOCATION	PROJECT	DESCRIPTION	STATUS
Richland Ave - Florence St. to York Street	Signal Installation	New signals installed along corridor	Completed 1998
Park Avenue - Laurens to Chesterfield Street	Signal Installation	New signals installed along corridor	Completed 1998
Laurens Street - Richland to Rutland	Signal Improvement	Signal improvements	Completed 2000
Whiskey Road - Richland to Powderhouse Road	Signal Improvement	Computerized signals	Completed 2001
	Transit Stop	Added Transit stop	Completed 2001
Pine Log Road - US 78 to Silver Bluff Road	Signal Improvement	Computerized signals	Completed 2001
Richland Avenue - Vaucluse Road to Beaufort Street	Signal Installation	Computerized signals	Completed 2001
Laurens Street - Richland to Rutland	Road Improvement	Resurfaced and added a 3 foot paved shoulder	Completed 2002
Pine Log Road (SC 302)	Widening	Widened from two to five lanes	Completed 2004
Knox Avenue (US 25)	Widening	Widened to five lanes	Completed 2004
Pine Log Road	Signal Improvement	Signal Improvements and Widening	Completed 2005
	Widening		
SC 19 / Laurens Street	Signal Improvement	Signal Improvements	Completed 2006
Knox Avenue (US 25)	Signal Improvement	Three (3) New signals installed along corridor	Completed 2006
SC 118	Intersection Improvement	New turn lane installed	Completed 2006
Georgia Avenue	Access Improvements	Georgia Ave. extended to Savannah River.	Completed 2008
Georgia Avenue	New intesection	The construction of the Municipal Building resulted in the installation of a new signalized intersection at Center Street.	Completed 2009
I-520 (Palmetto Parkway)	Construction of new section of interstate	Phase II of Palmetto Parkway from Jefferson Davis Highway to I-20	Completed 2009

**Table C-2**  
**COLUMBIA COUNTY**  
**CONGESTION MITIGATION PROJECTS 1997-2008**

LOCATION	PROJECT	DESCRIPTION	STATUS
North Belair Road @ SR 28 Fury's Ferry Road	Signal Installation Intersection Improvement	New signals installed New right turn lane added	Completed 1997
William Few Parkway @ SR 104 Washington Road	Signal Installation Intersection Improvement	New signals installed New right turn lane added	Completed 1997
Wrightsboro Road @ Horizon South Parkway	Signal Installation	New signals installed	Completed 1997
Old Evans Road @ Martinez Industrial Drive	Intersection Improvement	Improved radius at intersection	Completed 1997
Flowing Wells Road and Old Trail/Augusta Prep driveway	Intersection Improvement and Signal Installation	New left turn lanes added New signals installed	Completed 1998
Fury's Ferry Road @ The Pass Inverness Way/Park Lane	Intersection Improvement and Signal Installation	New left turn lanes added New signals installed	Completed 1998
Baston Road - Fury's Ferry Road to Washington Road	Intersection Improvement	Intersection realigned at Fury's Ferry and Vaughn Rd	Completed 1998
Old Evans Road - Washington to Martinez Blvd	Widen to 4 lanes with turn lanes as required	Widened the road 2 feet on either side	Completed 2000
Baston Road	Road Widening from 2 to 4 lanes w/ turn lanes Intersection Improvement	Central Median with cuts New signals installed	Completed 2002
Evans to Locks Road Columbia Industrial Blvd.	Signal Installation Intersection relocation	New signals installed New right turn lane added	Completed 2004
Washington Road @ Halali Farm Rd.	Intersection Improvement	Additional lane separation for WB traffic between the thru lane and right turn lane at the intersection.	Completed 2006
Columbia Road @ Crawford Creek	Bridge Improvement/Intersection Improvement	Reconstruction of approaches and installation of a new bridge crossing on Columbia Road @ Crawford Creek. Project include turn lanes for Maple Creek Drive and Shepherd Way.	Completed 2007
Washington Road @ Gibbs Rd.	Signal installation/Intersection Improvement	Addition of a stop and go signal, to include left turn lane for WB and right turn lane for EB Washington Road.	Completed 2007
Washington Road @ Old Evans Road	Signal installation/Intersection Improvement	Addition of a stop and go signal, to include left turn lane for EB Washington Road traffic.	Completed 2007
Fury's Ferry Road - Riverwatch Pkwy to Blackstone Camp Road	Widening and Intersection Improvements	Widen the road to 4 lanes from Riverwatch Pkwy to Blackstone Camp Road.	Completed 2007
Washington Road	Signal Timing and Coordination Improvement	Upgrade 11 signalized intersections along the Washington Road corridor.	Completed 2007
Belair Rd.	Signal Equipment Upgrade	Replaced or upgraded signal equipment at eight intersections along the SR383 corridor.	Completed 2008

**Table C-3  
RICHMOND COUNTY  
CONGESTION MITIGATION PROJECTS 1998-2012**

LOCATION	PROJECT	DESCRIPTION	STATUS
Wheeler Rd - I-20 to Medical Center Drive	Road Widening	Widen from 2 to 4 lanes with turn lanes as needed.	Completed 1998
Thirteenth Street - Savannah River to Wrightsboro Road	Signal Coordination Improvements	Signal coordination at Greene and Telfair Streets	Completed 1999
Wrightsboro Road - Barton Chapel Road to Jackson Road	Ramp Improvements	Added 300 foot deceleration lane at I-520 WB on ramp.	Completed 1999
Bobby Jones Expressway - I-20 to Washington Road	Road Widening	Widen to 3 lanes each direction between I-20 and Old Trail with intersection improvements at Scott Nixon Memorial Blvd. to improve safety.	Completed 1999
Wheeler Rd-Walton Way Ext.to I-20	Intersection Improvements	Left turn lane lengthened - Wheeler Rd SB/EB I-520 on/off ramp.	Completed 2000
15th Street - Reynolds Street to MLK Boulevard	Intersection Improvements	Added pedestrian crossing at Harper Street, Walton Way and Laney Walker Blvd.	Completed 2003
Fifteenth Street	Crosswalk Project	Pedestrian Crossings with ped buttons and crosswalks installed at Walton Way, Harper Street and	Completed 2003
Fifteenth Street	ATMS	Traffic Surveillance cameras at JC Calhoun Expressway	Completed 2003
Fifteenth Street	Intersection Improvements	Add turn lanes and traffic signals at Central Ave.	Completed 2010
Tobacco Road @ Deans Bridge	Intersection Improvement	Intersection Improvement project at Deans Bridge Road	Completed 2003
Tobacco Road @ Mike Padgett	Traffic Signal Upgrade	East and west bound turn phasing were constructed at Mike Padgett Highway	Completed 2003
Thirteenth Street	Traffic Signal Upgrade	Employ ITS strategies at RR crossing. Implement Medical Center Study suggestions. Signal Upgrade at five intersections between Walton Way & Reynolds	Completed 2004
Wrightsboro Road @ Druid Park	Traffic Signal Upgrade	New traffic Signal Installed. Previously had stop sign for traffic on Druid Park Ave.	Completed 2006
Deans Bridge Road	Intersection Improvement	A second southbound left-turn lane and a single northbound right-turn lane was added.	Completed 2006
Gordon Highway @ North Leg Road	Intersection Improvement	Increased storage has been added for the eastbound left-turn movement. A right-turn lane was added for the SB North Leg Road.	Completed 2007
Peach Orchard Road	Intersection Improvements	Improved Windsor Spring approach to Peach Orchard and brought both approaches of Windsor Spring into alignment with each other.	Completed 2009
I-520	Interchange project	Interstate interchange reconstruction with the addition of collector-distributor lane along eastbound and westbound I-520	Completed 2009
Washington Road - Boy Scout to Center West Parkway	Intersection Improvements	Lanes added to intersection of Boy Scout Road and Center West Parkway. Traffic signal upgrades at each intersection from Columbia County to Woodbine Dr./East Vineland Road.	Completed 2010-11
Fifteenth Street	Intersection improvement and Traffic Signal Upgrades	Turn lanes and signal improvements and Fifteenth Street and Central Avenue.	Completed 2010
Gordon Highway - Savannah River to SR 223	Traffic Signal Upgrades	Adaptive Traffic Control System installed at intersections with Fort Gordon Gates 1 and 2.	Completed 2011
Wrightsboro Road Segment 1 - Barton Chapel Rd. to Jackson Rd.	Traffic Signal Upgrades	Adaptive Traffic Control System installed at signalized intersections.	Completed 2011
Washington Road - Pleasant Home Rd. to Calhoun Expressway	Traffic Signal Upgrades	Adaptive Traffic Control System installed at signalized intersections.	Completed 2011
Alexander Drive - Washington Road to Riverwatch Parkway	Road widening and intersection improvements	Widen to four lanes with raised, landscaped median, sidewalks and bike lanes. Includes intersection realignment at Riverwatch Parkway	Completed 2012
St. Sebastian / Greene St. Extension	Road extensions and new intersections	Extension of St. Sebastian Way and Greene St. to create additional connections to Riverwatch Parkway. Includes new bridges and intersections	Completed in 2012

**APPENDIX D-1**

**AIKEN COUNTY**

**TRAVEL TIME SURVEY SUMMARIES**

**1995 – 2013**

**Table D-1  
1995-2013 AIKEN COUNTY TRAVEL TIME SURVEY RESULTS**

Aiken County CMP Routes				Posted Speed MPH	Actual Speed (MPH)			
					% Deviation from Posted Speed Limit			
				SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM	
<b>Atomic Road</b>	<b>From To</b>	<b>Buena Vista Avenue Silver Bluff Road</b>	2011 Average	35/55	50 11.11%	51 13.33%	50 11.11%	50 11.11%
			2001 Average	45	53 17.78%	53 17.78%	56 24.44%	52 15.56%
			1998 Average		46 2.22%	46 2.22%	46 2.22%	48 6.67%
			1995 Average		50 11.11%	49 8.89%	49 8.89%	51 13.33%
			2013 Average	45/55	43 -14.00%	46 -8.00%	44 -12.00%	45 -10.00%
<b>Bettis Academy Road</b>	<b>From To</b>	<b>Ascagua Lake Fields Cemetery</b>	2009 Average	45/55	44 -12.00%	46 -8.22%	44 -12.00%	45 -10.00%
			2005 Average	45	39 -29.09%	43 -21.82%	41 -25.45%	21 -61.82%
			2001 Average	55	47 -14.55%	48 -12.73%	49 -10.91%	45 -18.18%
			1999 Average		45 -18.18%	45 -18.18%	45 -18.18%	46 -16.36%
			1998 Average		46 -16.36%	47 -14.55%	38 -30.91%	49 -10.91%
<b>Buena Vista Avenue</b>	<b>From To</b>	<b>Martintown Road Georgia Avenue</b>	2012 Average	35/40	34 -9.33%	37 -1.33%	33 -12.00%	30 -20.00%
			2009 Average		30 -20.00%	30 -37.33%	31 -17.33%	29 -22.67%
			2006 Average	40	37 -7.50%	30 -25.00%	34 -15.00%	33 -17.50%
			2003 Average	35	31 -11.43%	38 8.57%	26 -25.71%	26 -25.71%
			2000 Average		37 5.71%	36 2.86%	31 -11.43%	35 0.00%
			1997 Average		38 8.57%	37 5.71%	38 8.57%	32 -8.57%
<b>Belvedere -Clearwater Road</b>	<b>From To</b>	<b>US 25 US 1</b>	2011 Average	45	44 10.00%	39 -2.50%	43 7.50%	38 -5.00%
			2009 Average			Due/Construction		
			2008 Average			Due/Construction		
			2005 Average		36 -20.00%	38 -15.56%	35 -22.22%	36 -20.00%
			2001 Average		41 -8.89%	39 -13.33%	44 -2.22%	43 -4.44%
			1998 Average		43 -4.44%	39 -13.33%	45 0.00%	43 -4.44%
<b>Dougherty Road</b>	<b>From To</b>	<b>Whiskey Road Silver Bluff Road</b>	2013 Average	35	25 -28.57%	19 -45.71%	25 -28.57%	20 -42.86%
			2010 Average		31 -11.43%	19 -45.71%	26 -25.71%	20 -42.86%
			2007 Average		29 -17.14%	36 2.86%	18 -48.57%	23 -34.29%
			2006 Average		27 -22.86%	30 -14.29%	25 -28.57%	17 -51.43%
			2005 Average		18 -48.57%	22 -37.14%	25 -28.57%	32 -8.57%
			2002 Average		31 -11.43%	33 -5.71%	30 -14.29%	31 -11.43%
			1999 Average		34 -2.86%	33 -5.71%	22 -37.14%	32 -8.57%
			1998 Average		32 -8.57%	32 -8.57%	32 -8.57%	27 -22.86%

Aiken County CMP Routes			Posted Speed MPH	Actual Speed (MPH)			
	From To			% Deviation from Posted Speed Limit			
				SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM
<b>Dougherty Road</b> 3:00 PM	<b>From Whiskey Road</b> <b>To Silver Bluff Road</b>	2013 Average	35	N/A	N/A	26 -25.71%	25 -28.57%
		2009 Average		N/A	N/A	25 -28.57%	30 -14.29%
		2004 Average		N/A	N/A	29 -17.14%	26 -25.71%
		2003 Average		N/A	N/A	29 -17.14%	26 -25.71%
		2002 Average		N/A	N/A	23 -34.29%	29 -17.14%
		2013 Average	35/45	33 -12.00%	30 -20.00%	29 -22.67%	27 -28.00%
<b>Georgia Avenue</b>	<b>From Savannah River</b> <b>To I-20</b>	2010 Average		33 -12.00%	31 -17.33%	29 -22.67%	27 -28.00%
		2007 Average		32 -20.00%	30 -25.00%	35 -12.50%	32 -20.00%
		2003 Average		32 -8.57%	34 -2.86%	32 -8.57%	31 -11.43%
		2000 Average		37 -7.50%	35 -12.50%	37 -7.50%	21 -47.50%
		1997 Average	35	33 -5.71%	32 -8.57%	33 -5.71%	26 -25.71%
		2013 Average	35/40	28 -25.33%	29 -22.67%	28 -25.33%	25 -28.57%
<b>Knox Avenue</b>	<b>From Martintown Road</b> <b>To Georgia Avenue</b>	2011 Average		27 -28.00%	30 -20.00%	29 -22.67%	27 -28.00%
		2009 Average	40	27 -28.00%	30 -20.00%	29 -22.67%	24 -36.00%
		2008 Average		24 -31.43%	29 -17.14%	26 -25.71%	22 -37.14%
		2005 Average		30 -25.00%	30 -25.00%	30 -25.00%	32 -20.00%
		2001 Average		39 -2.50%	38 -5.00%	36 -10.00%	41 2.50%
		1998 Average		40 0.00%	37 -7.50%	36 -10.00%	37 -7.50%
		2011 Average	40/45	36 -15.29%	35 -17.65%	31 -27.06%	33 -22.35%
		2007 Average	40	36 -10.00%	36 -10.00%	32 -20.00%	33 -17.50%
<b>Martintown Road</b>	<b>From Jeff Davis Hwy/US 1</b> <b>To I-20</b>	2004 Average		35 -12.50%	34 -15.00%	34 -15.00%	32 -20.00%
		2001 Average		31 -22.50%	35 -12.50%	32 -20.00%	33 -17.50%
		1999 Average		34 -15.00%	32 -20.00%	33 -17.50%	34 -15.00%
		1997 Average		35 -12.50%	32 -20.00%	29 -27.50%	32 -20.00%

Aiken County CMP Routes			Posted Speed MPH	Actual Speed (MPH)				
				% Deviation from Posted Speed Limit				
	From To			SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM	
Pine Log Road	From To	US 78 Silver Bluff Road	2013 Average	35/45	31 -22.50%	34 -15.00%	N/A	N/A
			2010 Average		32 -20.00%	34 -15.00%	N/A	N/A
			2006 Average		34 -2.86%	32 -8.57%	31 -11.43%	29 -17.14%
			2002 Average		31 -11.43%	35 0.00%	31 -11.43%	32 -8.57%
			1999 Average		28 -20.00%	30 -14.29%	26 -25.71%	26 -25.71%
			1998 Average		28 -20.00%	25 -28.57%	26 -25.71%	27 -22.86%
			1997 Average		30 -14.29%	23 -34.29%	31 -11.43%	24 -31.43%
			1996 Average		31 -11.43%	34 -2.86%	32 -8.57%	36 2.86%
			Pine Log Road 3:15 PM	From To	US 78 Silver Bluff Road	2013 Average	35/45	N/A
2010 Average		N/A				N/A	29 -27.50%	31 -22.50%
2009 Average		N/A				N/A	25 -40.00%	30 -37.78%
2002 Average		N/A				N/A	27 -22.86%	33 -5.71%
1999 Average		N/A				N/A	27 -22.86%	29 -17.14%
Richland Ave 12:00 PM	From To	Vaucluse Road Beaufort Street				2013 Average	25/35	N/A
			2010 Average		N/A	N/A	20 -33.33%	19 -36.67%
			2009 Average		N/A	N/A	17 -43.33%	17 -43.33%
			2008 Average		N/A	N/A	20 -33.33%	22 -26.67%
			2004 Average		N/A	N/A	36 2.86%	31 -11.43%
			2003 Average		N/A	N/A	36 2.86%	31 -11.43%
Laurens St./SC 19	From To	South Boundary I-20	2012 Average	25/55	38 -5.00%	40 0.00%	37 -7.50%	38 -5.00%
Laurens St./SC 19	From To	Richland Avenue Rutland Avenue	2007 Average	30/45	38 -5.00%	40 0.00%	37 -7.50%	38 -5.00%
			2006 Average		19 -52.50%	15 -62.50%	19 -52.50%	30 -25.00%
			2003 Average		26 -25.71%	15 -57.14%	29 -17.14%	32 -8.57%
			2000 Average		31 -22.50%	28 -30.00%	31 -22.50%	30 -25.00%
			1998 Average	25/45	30 -14.29%	30 -14.29%	28 -20.00%	29 -17.14%
			1997 Average		30 -14.29%	31 -11.43%	25 -28.57%	33 -5.71%

Aiken County CMP Routes				Posted Speed MPH	Actual Speed (MPH)			
					% Deviation from Posted Speed Limit			
	From To			SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM	
SC 118	From US 78 To Silver Bluff Road	2012 Average	40/55	40 -15.79%	43 -9.47%	42 -11.58%	42 -11.58%	
		2008 Average		41 -8.89%	44 -2.22%	43 -4.44%	43 -4.44%	
		2005 Average	55	33 -40.00%	32 -41.82%	33 -40.00%	33 -40.00%	
		2003 Average	45/55	40 -20.00%	41 -18.00%	43 -14.00%	40 -20.00%	
		2002 Average		40 -20.00%	41 -18.00%	43 -14.00%	40 -20.00%	
		2000 Average		39 -22.00%	39 -22.00%	39 -22.00%	39 -22.00%	
		1997 Average	45	38 -15.56%	41 -8.89%	38 -15.56%	43 -4.44%	
Silver Bluff Road	From Whiskey Road To Savannah Drive	2013 Average	35	23 -34.29%	19 -45.71%	23 -34.29%	19 -45.71%	
		2012 Average		32 -8.57%	19 -45.71%	24 -31.43%	19 -45.71%	
		2011 Average		32 -8.57%	19 -45.71%	24 -31.43%	19 -45.71%	
		2010 Average		33 -5.71%	19 -45.71%	23.00% -34.29%	19 -45.71%	
		2009 Average		23 -34.29%	19 -45.71%	21 -40.00%	20 -42.86%	
		2008 Average		23 -34.29%	22 -37.14%	20 -42.86%	18 -48.57%	
		2007 Average	35/45	36 -10.00%	22 -45.00%	24 -40.00%	20 -50.00%	
		2006 Average		29 -27.50%	16 -60.00%	25 -37.50%	21 -47.50%	
		2001 Average		43 7.50%	38 -5.00%	40 0.00%	42 5.00%	
		1998 Average	25/45	35 -12.50%	35 -12.50%	38 -5.00%	32 -20.00%	
US 1/York Street	From Park Avenue To I-20	2011 Average	30/55	41 -3.53%	44 3.53%	39 -8.24%	43 1.18%	
US 1	From York Street To I-20	2001 Average	40	45 12.50%	45 12.50%	49 22.50%	49 22.50%	
		1998 Average		38 -5.00%	38 -5.00%	47 17.50%	46 15.00%	
US 1/US 78	From Martintown Road To Pine Log Road	2011 Average	35/50	39 -8.24%	37 -12.94%	38 -10.59%	37 -12.94%	
		2009 Average		39 -8.24%	37 -12.94%	36 -15.29%	37 -12.94%	
		2008 Average	45/50	28 -37.78%	30 -33.33%	28 -37.78%	29 -35.56%	
	From Martintown Road To Pine Log Road	2004 Average	30/55	43 -4.44%	41 -8.89%	44 -2.22%	35 -22.22%	
		2003 Average		27 -40.00%	24 -46.67%	24 -46.67%	24 -46.67%	
		2000 Average		42 -11.58%	42 -11.58%	46 -3.16%	42 -11.58%	
		1997 Average	45	42 -6.67%	41 -8.89%	40 -11.11%	39 -13.33%	

Aiken County CMP Routes			Posted Speed MPH	Actual Speed (MPH)			
				% Deviation from Posted Speed Limit			
From	To			SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM
Whiskey Road	Richland Avenue Powderhouse Road	2013 Average	30/45	28 -25.33%	29 -22.67%	22 -41.33%	24 -36.00%
		2012 Average		28 -25.33%	30 -20.00%	23 -38.67%	24 -31.43%
		2011 Average		30 20.00%	32 -14.67%	26 -30.67%	27 -28.00%
		2010 Average		28 -25.33%	30 -20.00%	23 -38.67%	24 -36.00%
		2009 Average		28 -20.00%	27 -22.86%	19 -45.71%	24 -31.43%
		2007 Average	35	27 -22.86%	29 -17.14%	23 -34.29%	25 -28.57%
		2006 Average		27 -22.86%	19 -45.71%	22 -37.14%	17 -51.43%
		2005 Average		25 -28.57%	16 -54.29%	30 -14.29%	28 -20.00%
		2004 Average	25/45	28 -20.00%	20 -42.86%	16 -54.29%	26 -25.71%
		2002 Average		26 -25.71%	30 -14.29%	26 -25.71%	25 -28.57%
		2001 Average		0 -100.00%	30 -14.29%	26 -25.71%	25 -28.57%
		2000 Average		34 -2.86%	33 -5.71%	28 -20.00%	28 -20.00%
		1998 Average		26 -25.71%	25 -28.57%	26 -25.71%	24 -31.43%
		1997 Average		24 -31.43%	28 -20.00%	23 -34.29%	24 -31.43%
		1996 Average		28 -20.00%	28 -20.00%	24 -31.43%	24 -31.43%

**APPENDIX D-2**

**COLUMBIA COUNTY**

**TRAVEL TIME SURVEY SUMMARIES**

**2000 – 2013**

TABLE D-2

COLUMBIA COUNTY TRAVEL TIME SURVEY RESULTS, 2000-2013								
Columbia County CMP Routes				Posted Speed MPH	Actual Speed (MPH)			
					% Deviation from Posted Speed Limit			
	From To				SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM
Bastion Rd		Fury's Ferry Rd Washington Rd	2010 Average	45	29 -35.55	27 -40.00	31 -31.11	39 -13.33%
			2009 Average		26 -42.22	24 -46.66	31 -31.11	35 -22.22%
			2008 Average		34 -24.44%	28 -37.77	32 -28.89	24 -46.66%
			2005 Average		29 -35.56%	28 -37.78%	31 -31.11%	25 -44.44%
			2004 Average		28 -37.78%	28 -37.78%	40 -11.11%	25 -44.44%
			2003 Average		21 -53.33%	25 -44.44%	26 -42.22%	30 -33.33%
			2001 Average					
Belair Road		Washington Road Wrightsboro Road	2013 Average	45	28 -37.78%	35 -22.22%	30 -33.33%	28 -37.78%
			2011 Average		31 -31.11%	31 -31.11%	26 -42.22%	25 -44.44%
			2010 Average		27 -40.00%	32 -28.88%	29 -35.55%	26 -42.22%
			2009 Average		29 -35.55%	32 -28.88%	31 -31.11%	31 -31.11%
			2008 Average		28 -37.77%	30 -33.33%	27 -40.00%	26 -42.22%
			2004 Average	40/45	37 -17.78%	36 -20.00%	41 -8.89%	49 8.89%
			2003 Average		32 -28.89%	28 -37.78%	35 -22.22%	32 -28.89%
			2001 Average		32 -28.89%	36 -20.00%	39 -13.33%	36 -20.00%
			2000 Average					
Bobby Jones Expressway		Washington Road I-20	2012 Average	45	40 -11.11%	41 -8.89%	32 -28.89%	43 -4.44%
			2010 Average		48 6.66%	54 20.00%	28 -37.77%	26 -13.33%
			2007 Average		27 -40.00%	34 -24.44%	16 -64.44%	14 -68.89%
			2005 Average		35 -22.22%	27 -40.00%	24 -46.67%	23 -48.89%
			2004 Average		54 -28.89%	43 -40.00%	19 -60.00%	31 -62.22%
			2003 Average		27 -40.00%	37 -17.78%	14 -68.89%	20 -55.56%
			2001 Average		32 -28.89%	27 -40.00%	18 -60.00%	17 -62.22%
2000 Average								
Columbia Road		Washington Road Hereford Farm Road	2012 Average	45/55	41 -18.00%	37 -26.00%	44 -12.00%	35 -30.00%
			2008 Average		43 -21.18%	52 -5.45%	38 -30.09%	51 -7.27%
			2005 Average		46 15.00%	56 40.00%	45 12.50%	43 7.50%
			2001 Average		50 0.00%	47 -6.00%	46 -8.00%	44 -12.00%

Columbia County CMP Routes				Posted Speed MPH	Actual Speed (MPH)			
	From To				% Deviation from Posted Speed Limit			
					SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM
<b>Evans-to-Locks Road</b>	<b>From To</b>	<b>Stevens Creek Road Washington Road</b>	2013 Average	<b>45</b>	28 -37.78%	35 -22.22%	30 -33.33%	28 -37.78%
			2009 Average		42 -6.67%	37 -17.78%	42 -6.67%	49 8.89%
			2007 Average		31 -31.11%	30 -33.33%	32 -28.89%	35 -22.22%
			2004 Average		39 -13.33%	36 -20.00%	32 -28.89%	35 -22.22%
			2003 Average		32 -28.89%	29 -35.56%	33 -26.67%	37 -17.78%
			2002 Average		34 -24.44%	30 -33.33%	36 -20.00%	37 -17.78%
			2000 Average		36 -20.00%	32 -28.89%	36 -20.00%	39 -13.33%
			<b>Flowing Wells Road</b>	<b>From To</b>	<b>Wheeler Road Washington Road</b>	2013 Average	<b>45</b>	17 -62.22%
2011 Average		19 -57.77%				20 -55.55%	26 -42.22%	19 -57.77%
2010 Average		19 -57.77%				23 -48.88%	28 -37.77%	26 -42.22%
2009 Average		21 -53.33%				23 -48.88%	28 -37.77%	22 -51.11%
2008 Average		18 -60.00%				25 -44.44%	25 -44.44%	15 -66.67%
2007 Average		19 -57.78%				23 -48.89%	25 -44.44%	20 -55.56%
2005 Average		20 -55.56%				30 -33.33%	26 -42.22%	17 -62.22%
2004 Average		17 -62.22%				23 -48.89%	22 -51.11%	19 -57.78%
2003 Average		25 -44.44%				29 -35.56%	30 -33.33%	23 -48.89%
2002 Average		16 -64.44%				21 -53.33%	25 -44.44%	22 -51.11%
<b>Fury's Ferry Road</b>	<b>From To</b>	<b>Savannah River Washington Road</b>	2010 Average	<b>45</b>	33 -26.66%	39 -13.33%	35 -22.22%	39 -13.33%
			2007 Average		31 -31.11%	37 -17.78%	36 -20.00%	38 -15.56%
			2002 Average	<b>45/55</b>	38 -24.00%	40 -20.00%	38 -24.00%	38 -24.00%
			1999 Average		40 -20.00%	43 -14.00%	41 -18.00%	43 -14.00%
<b>I-20</b>	<b>From To</b>	<b>Euchee Creek Columbia / Richmond</b>	2011 Average	<b>55/65</b>	77 28.33%	74 23.33%	70 16.66%	73 21.66%
			2006 Average		69 15.00%	71 18.33%	73 21.67%	69 15.00%
			2001 Average		72 20.00%	74 23.33%	71 18.33%	73 21.67%

Columbia County CMP Routes				Posted Speed MPH	Actual Speed (MPH)								
	From To				% Deviation from Posted Speed Limit								
					SB/WB	AMNB/EB	AMSB/WB	PMNB/EB	PM				
Old Evans Road	From Bobby Jones Expressway To Washington Road	2012 Average	35/45	29	30	26	33	-27.50%	-25.00%	-35.00%	-17.50%		
		2011 Average	45	31	27	30	33	-15.55%	-20.00%	-33.33%	-53.33%		
		2010 Average		28	27	26	32	-37.77%	-40.00%	-42.22%	-28.88%		
		2009 Average		27	29	27	30	-40.00%	-35.55%	-40.00%	-33.33%		
		2008 Average		28	30	24	29	-37.78%	-33.33%	-46.67%	-35.55%		
		2005 Average		26	21	31	31	-42.22%	-53.33%	-31.11%	-31.11%		
		2004 Average		28	28	29	30	-37.78%	-37.78%	-35.56%	-33.33%		
		2003 Average		24	25	25	21	-52.00%	-50.00%	-50.00%	-58.00%		
		2001 Average		34	27	31	33	-24.44%	-40.00%	-31.11%	-26.67%		
		Old Petersburg Road	From Riverwatch Parkway To Old Evans Road	2011 Average	45	45	37	33	30	0.00%	-17.77%	-26.66%	-33.33%
2009 Average				35	32	33	32	-2.22%	-28.88%	-26.66%	-28.88%		
2007 Average				31	30	33	33	-31.11%	-33.33%	-26.67%	-26.67%		
2005 Average				37	33	36	30	-17.78%	-26.67%	-20.00%	-33.33%		
2004 Average				19	19	21	18	-62.00%	-62.00%	-58.00%	-64.00%		
2003 Average				32	32	40	35	-36.00%	-36.00%	-20.00%	-30.00%		
2000 Average				16	18	16	17	-64.44%	-60.00%	-64.44%	-62.22%		
SR 223	From Wrightsboro Road To Gordon Highway	2013 Average	35/45	29	25	19	17	-27.50%	-37.50%	-52.50%	-57.50%		
		2012 Average		29	21	22	24	-27.50%	-47.50%	-45.00%	-40.00%		
		2010 Average	45	33	30	33	29	-26.66%	-33.33%	-26.66%	-35.55%		
		2009 Average		28	17	24	27	-37.77%	-62.22%	-46.66%	-40.00%		
		2008 Average		32	15	30	31	-28.89%	-66.67%	-33.33%	-31.11%		
		2005 Average		36	22	31	35	-20.00%	-51.11%	-31.11%	-22.22%		
		2001 Average	30/45	33	32	35	33	-12.00%	-14.67%	-6.67%	-12.00%		
		Washington Road	From William Few Parkway* To Pleasant Home Road	2012 Average	45	40	37	34	38	-11.11%	-17.78%	-24.44%	-15.56%
				2011 Average		38	36	30	21	-15.55%	-20.00%	-33.33%	-53.33%
				2009 Average		40	43	29	33	-11.11%	-4.44%	-35.55%	-26.60%
2007 Average				36	32	29	32	-20.00%	-28.89%	-35.56%	-28.89%		
2006 Average				33	40	33	38	-26.67%	-11.11%	-26.67%	-15.56%		
2002 Average				45	42	41	44	0.00%	-6.67%	-8.89%	-2.22%		
Wrightsboro Road	From Barton Chapel Road To Robinson Ave.			2012 Average	45/55	40	38	36	37	-20.00%	-24.00%	-28.00%	-26.00%
				2009 Average		38	36	39	40	-24.00%	-28.00%	-22.00%	-20.00%
		2002 Average		38	36	39	42	-24.00%	-28.00%	-22.00%	-16.00%		

\* Previously from Hardy McManus to Pleasant Home Rd.

**APPENDIX D-2**

**RICHMOND COUNTY**

**TRAVEL TIME SURVEY SUMMARIES**

**2000 – 2013**

**Table D-3  
2000-2013 RICHMOND COUNTY TRAVEL TIME SURVEY RESULTS**

Richmond County CMP Routes				Posted Speed MPH	Actual Speed (MPH)			
					% Deviation from Posted Speed Limit			
From	To			SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM	
John C. Calhoun Expressway		Washington Road 12th St.	2011 Average	40/50	49 -8.88%	47 -4.44%	55 22.22%	47 4.44%
			2006 Average		53 17.78%	55 22.22%	51 13.33%	59 31.11%
			2001 Average		51 13.33%	50 11.11%	53 17.78%	53 17.78%
Davis Rd/ Walton Way /Jackson Rd		Washington Rd Wrightsboro Rd	2013 Average	40	28 -30.00%	28 -30.00%	30 -25.00%	25 -37.50%
			2010 Average		29 -27.50%	31 -22.50%	28 -30.00%	27 -32.50%
			2008 Average		32 -20.00%	28 -30.00%	24 -40.00%	29 -27.00%
			2005 Average		26 -42.22%	25 -44.44%	20 -55.56%	19 -57.78%
			2004 Average		26 -42.22%	26 -42.22%	24 -46.67%	27 -40.00%
			2001 Average		34 -15.00%	32 -20.00%	26 -35.00%	32 -20.00%
			2000 Average					
Deans Bridge Road	From To	Milledgeville Road Willis Foreman Rd	2010 Average	45/55	50 0.00%	48 -4.00%	47 -6.00%	47 -6.00%
			2006 Average		47 -6.00%	46 -8.00%	41 -18.00%	40 -20.00%
			2002 Average		46 -8.00%	46 -8.00%	44 -12.00%	46 -8.00%
Doug Barnard Pkwy	From To	Gordon Hwy Tobacco Rd	2012 Average	45	52 15.56%	52 15.56%	50 11.11%	50 11.11%
			2007 Average		53 17.78%	56 24.44%	50 11.11%	55 22.22%
			2006 Average		50 11.11%	45 0.00%	49 8.89%	50 11.11%
			2001 Average		52	53	54	53
Fifteenth Street / Ruth B. Crawford Hwy	From To	Reynolds Street MLK Boulevard	2013 Average	35	23 -34.29%	24 -31.43%	26 -25.71%	25 -28.57%
			2012 Average		29 -17.14%	23 -34.29%	25 -28.57%	26 -25.71%
			2009 Average		26 -25.71%	24 -31.42%	27 -22.85%	25 -28.57%
			2008 Average		24 -31.43%	22 -37.14%	21 -40.00%	23 -34.29%
			2007 Average		24 -31.43%	23 -34.29%	21 -40.00%	25 -28.57%
			2005 Average		26 -25.71%	23 -34.29%	26 -25.71%	26 -25.71%
			2004 Average		24 -31.43%	21 -40.00%	22 -37.14%	26 -25.71%
			2003 Average		27 -22.86%	24 -31.43%	24 -31.43%	24 -31.43%
			2001 Average		30 -14.29%	25 -28.57%	29 -17.14%	25 -28.57%
			2000 Average		27 -22.86%	22 -37.14%	21 -40.00%	24 -31.43%

Richmond County CMP Routes				Posted Speed MPH	Actual Speed (MPH) % Deviation from Posted Speed Limit				
					SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM	
Gordon Highway	From To	Savannah River SR 223	2011 Average	45/55	48 -4.00%	46 -8.00%	48 -2.00%	50 0.00%	
			2006 Average		60 20.00%	48 -4.00%	64 28.00%	46 -8.00%	
			2002 Average		49 -2.00%	48 -4.00%	40 -20.00%	43 -14.00%	
Greene Street	From To	E. Boundary Street 12th Street	2013 Average	35	24 -31.43%	25 -28.57%	26 -25.71%	25 -28.57%	
			2008 Average		24 -31.43%	30 -14.29%	27 -22.86%	31 -11.43%	
			2005 Average		32 -8.57%	28 -20.00%	29 -17.14%	24 -31.43%	
			2002 Average		27 -22.86%	29 -17.14%	27 -22.86%	26 -25.71%	
			2000 Average		25 -28.57%	29 -17.14%	29 -17.14%	29 -17.14%	
I-20	From To	Richmond Co. Line Riverwatch Pkwy	2011 Average	55	66 20.00%	68 23.63%	60 9.00%	62 12.72%	
			2006 Average		69 25.45%	71 29.09%	73 32.73%	69 25.45%	
			2001 Average		62 12.73%	60 9.09%	59 7.27%	61 10.91%	
I-520	From To	I-20 Laney Walker Blvd.	2010 Average	55	63 14.45%	63 14.45%	61 10.90%	61 10.90%	
			2001 Average		59 7.27%	60 9.09%	61 10.91%	60 9.09%	
Peach Orchard Road	From To	Tubman Home Road SR 88	2012 Average	45	45 0.00%	45 0.00%	44 -2.22%	44 -2.22%	
			2007 Average		30/45	46 15.00%	46 15.00%	42 5.00%	40 0.00%
			2006 Average		45/55	44 -12.00%	46 -8.00%	33 -34.00%	40 -20.00%
			2003 Average			50 0.00%	46 -8.00%	50 0.00%	46 -8.00%
			2002 Average			50 0.00%	46 -8.00%	50 0.00%	46 -8.00%
Riverwatch Pkwy	From To	Pleasant Home Rd Fifteenth St	2011 Average	35/45/55	54 20.00%	54 20.00%	45 0.00%	53 17.11%	
			2006 Average		48 6.67%	51 13.33%	44 -2.22%	49 8.89%	
			2001 Average		51 13.33%	49 8.89%	51 13.33%	47 4.44%	
SR 56/ Mike Padgett Hwy	From To	Lumpkin Rd SR 56 Loop	2011 Average	35/45/55	46 2.22%	47 4.44%	47 4.44%	42 -6.66%	
			2006 Average		46 -8.00%	50 0.00%	55 10.00%	49 -2.00%	
			2001 Average		51 2.00%	50 0.00%	46 -8.00%	52 4.00%	

Richmond County CMP Routes			Posted Speed MPH	Actual Speed (MPH)						
				% Deviation from Posted Speed Limit						
			SB/WB	AMNB/EB	AMSB/WB	PMNB/EB	PM			
<b>Thirteenth Street</b>	<b>From</b>	<b>Reynolds Street</b>	<b>35</b>	22	24	23	24			
				<b>R. A. Dent Blvd.</b>	<b>To</b>	<b>Wrightsboro Road</b>	-37.14%	-31.43%	-34.29%	-31.43%
				2013 Average						
				2012 Average						
				2011 Average						
				2010 Average						
				2009 Average						
				2008 Average						
				2004 Average						
				2003 Average						
				2002 Average						
				2001 Average						
				2000 Average						
<b>Tobacco Rd</b>	<b>From</b>	<b>Deans Bridge Rd</b>	<b>45</b>	39	35	37	38			
				<b>To</b>	<b>Doug Barnard Pkwy</b>	-13.33%	-22.22%	-17.78%	-15.56%	
				2013 Average						
				2011 Average						
				2008 Average						
2003 Average										
2000 Average										
<b>Walton Way Segment 1</b>	<b>From</b>	<b>Gordon Hwy</b>	<b>35</b>	38	37	38	39			
				<b>To</b>	<b>Milledge Rd</b>	-15.56%	-17.78%	-15.56%	-13.33%	
				2012 Average						
				2010 Average						
				2008 Average						
2004 Average										
2001 Average										
<b>Walton Way Segment 2</b>	<b>From</b>	<b>Milledge Rd</b>	<b>35</b>	30	27	24	27			
				<b>To</b>	<b>Bransford Rd</b>	-14.29%	-22.86%	-31.43%	-22.86%	
				2012 Average						
				2010 Average						
				2008 Average						
2004 Average										
2001 Average										

Richmond County CMP Routes				Posted Speed MPH	Actual Speed (MPH)			
	From To				% Deviation from Posted Speed Limit			
				SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM	
Walton Way Ext.		Bransford Rd Jackson Rd	2012 Average	35	31 -11.43%	30 -14.29%	32 -8.57%	33 -5.71%
			2007 Average		33 -5.71%	37 5.71%	37 5.71%	35 0.00%
			2004 Average		39 11.43%	39 11.43%	40 14.29%	42 20.00%
			2001 Average		39 11.43%	35 0.00%	40 14.29%	40 14.29%
Washington Rd	From To	Pleasant Home Rd John C. Calhoun Expwy	2013 Average	45	31 -31.11%	42 -6.67%	29 -35.56%	34 -24.44%
			2012 Average		29 -35.56%	35 -22.22%	31 -31.11%	43 -4.44%
			2010 Average		30 -33.33%	33 -26.66%	25 -44.44%	34 -24.44%
			2008 Average		40 -11.11%	35 -22.22%	26 -42.22%	37 -17.77%
			2007 Average		30 -33.33%	28 -37.78%	28 -37.78%	33 -26.67%
			2004 Average		40 -11.11%	45 0.00%	31 -31.11%	42 -6.67%
			2001 Average		36 -20.00%	47 4.44%	29 -35.56%	38 -15.56%
			2000 Average		36 -20.00%	40 -11.11%	26 -42.22%	35 -22.22%
Wheeler Road	From To	Flowing Wells Rd Walton Way Ext.	2013 Average	45	26 -42.22%	24 -46.67%	20 -55.56%	20 -55.56%
			2012 Average	45	27 -40.00%	28 -37.78%	21 -53.33%	27 -40.00%
			2011 Average		33 -26.66%	33 -26.66%	34 -24.44%	30 -33.33%
			2010 Average		30 -33.33%	29 -35.55%	26 -42.22%	26 -42.22%
			2008 Average		33 -26.67%	30 -33.33%	26 -42.22%	24 -17.77%
			2007 Average		25 -44.44%	27 -40.00%	20 -55.56%	28 -37.78%
			2005 Average		34 -24.44%	37 -17.78%	32 -28.89%	31 -31.11%
			2004 Average		40 -11.11%	30 -33.33%	39 -13.33%	33 -26.67%
			2001 Average		44 -2.22%	34 -24.44%	39 -13.33%	38 -15.56%
			2000 Average		36 -20.00%	30 -33.33%	27 -40.00%	36 -20.00%
			Windsor Spring Rd	From To	Peach Orchard Rd SR 88	2012 Average	45	35 -22.22%
2006 Average		46 2.22%				60 33.33%	53 17.78%	61 35.56%
2001 Average		52 15.56%				56 24.44%	55 22.22%	58 28.89%
1998 Average	40/45	39 -3.70%				37 -8.64%	38 -6.17%	42 3.70%

Richmond County CMP Routes				Posted Speed MPH	Actual Speed (MPH)			
					% Deviation from Posted Speed Limit			
	From To			SB/WB AM	NB/EB AM	SB/WB PM	NB/EB PM	
Wrightsboro Rd Segment 1	From Barton Chapel Rd To Jackson Rd	2012 Average	45	33 -26.67%	30 -33.33%	28 -37.78%	26 -42.22%	
		2011 Average		35 -22.22%	26 -42.22%	19 -57.77%	23 -48.88%	
		2010 Average		35 -22.22%	29 -35.55%	23 -48.88%	17 -62.22%	
		2007 Average		46 2.22%	38 -15.56%	35 -22.22%	43 -4.44%	
		2004 Average		35 -22.22%	27 -40.00%	24 -46.67%	32 -28.89%	
		2001 Average		36 -20.00%	31 -31.11%	33 -26.67%	23 -48.89%	
Wrightsboro Rd Segment 2	From Jackson Rd To Highland Ave	2013 Average	35	32 -8.57%	29 -17.14%	28 -20.00%	31 -11.43%	
		2008 Average		39 11.43%	35 0.00%	29 -17.14%	34 -2.86%	
		2005 Average		29 -17.14%	39 11.43%	25 -28.57%	39 11.43%	
		2001 Average		41 17.14%	40 14.29%	33 -5.71%	41 17.14%	
Wrightsboro Rd Segment 3	From Highland Ave To Fifteenth St	2013 Average	35	19 -45.71%	20 -42.86%	28 -20.00%	25 -28.57%	
		2011 Average		21 -40.00%	22 -28.88%	20 -42.85%	26 -25.71%	
		2010 Average		24 -31.14%	26 -25.71%	22 -37.14%	26 -25.71%	
		2009 Average		21 -40.00%	25 -28.57%	19 -45.71%	23 -34.28%	
		2007 Average		25 -28.57%	21 -40.00%	22 -37.14%	27 -22.86%	
		2006 Average		23 -34.29%	19 -45.71%	30 -14.29%	24 -31.43%	
		2001 Average		29 -17.14%	30 -14.29%	17 -51.43%	33 -5.71%	
		1999 Average		43 22.86%	40 14.29%	43 22.86%	41 17.14%	
		Wrightsboro Rd Saturday	From Barton Chapel Rd To Jackson Rd	2010 Average	35/40/45	N/A	N/A	33 -26.66%
		2009 Average		N/A	N/A	24 -40.00%	16 -60.00%	
		2008 Average		N/A	N/A	28 -30.00%	26 -35.00%	
		2004 Average		N/A	N/A	31 -11.43%	30 -14.29%	
		2001 Average		N/A	32 20.00%	N/A	30 25.00%	