Executive Summary

Introduction

In an effort to address the existing and future congestion and operational issues of the Interstate 526 (I-526) corridor in Charleston County, the South Carolina Department of Transportation commissioned a study to develop a long-range plan for the corridor. The I-526 corridor currently experiences high traffic volumes with considerable congestion during peak periods. Several large-scale developments are planned or have recently been constructed in the Charleston area and along the study corridor, putting additional pressure on I-526 to provide efficient traffic flow for area users.

I-526 has been identified by SCDOT as one of the most congested corridors in State, being one of three corridors that have been designated as a “Mega Project” in the State Long-Range Interstate Plan, signifying that construction costs for corridor improvements exceeds the funding of the entire South Carolina Interstate program for multiple years. A significant portion of the I-526 study recommendations have been programmed in the State Transportation Improvement Program (STIP) with additional interstate funding approved in the 2013 legislative session for SCDOT and the State Infrastructure Bank.

The purpose of the study is to look at potential improvement strategies for the corridor in a holistic manner, and not just wholesale widening. Four categories of improvement strategies are considered, consisting of: Travel Demand Management strategies, Modal strategies including Transit and Freight improvements, Traffic Operations strategies, and Capacity Improvement strategies. This study results in a menu of short-term and long-range projects by level of investment and ease of implementation in the four improvement strategy categories. The purpose of this report is to document the results of the study, including the geometric evaluation of the corridor, traffic analyses, and development of the various projects and programs for each improvement strategy.

The project study area consists of an eight-mile section of I-526 from US52/Rivers Avenue in North Charleston to US 17/Savannah Highway in West Ashley, including the system-to-system interchange of I-26 & I-526. The corridor is a major route for commuters traveling from suburban areas to urban Charleston and North Charleston as well as for traffic associated with various commercial and industrial operations along the route. The analyses also considered the operations of nine interchanges along the I-526 study corridor and three adjacent interchanges along I-26. The study area also extended outward along the crossing arterials to capture the area of influence for each interchange for evaluation. Exhibit ES1 illustrates the location of the study corridor.

Exhibit ES1: Project Study Area

Public Involvement

For the study of the I-526 project corridor, the community was engaged through several avenues, including the project steering committee, the project stakeholder committee, public information meetings, a project website, and surveys. Information gathered from the local Charleston community was vital in developing the ultimate improvement strategies considered in the analysis.

Steering Committee

The project steering committee consisted of individuals representing organizations who are currently addressing transportation issues in and around the I-526 study corridor. Six steering committee meetings were held, and the Steering Committee consisted of the following agencies, SCDOT, FHWA, BCDCOG, CARTA, Charleston County, City of Charleston, City of North Charleston, South Carolina State Ports Authority, and TriCounty Link.

Stakeholder Committee

The project stakeholder committee consisted of individuals representing organizations that have a vested interest in the I-526 study corridor due to their proximity to the corridor and/or the impact the study corridor has on their everyday operations. Committee members provided valuable input through three committee meetings as everyday users of the study corridor, giving the project team insight to the existing deficiencies along the corridor and potential improvements to address those deficiencies.

Public Information Meetings

The first public meeting was held on September 20, 2011 in the council chambers of North Charleston City Hall. Attendees were offered the opportunity to look at numerous graphics showing the study area and existing traffic data along the corridor, as well as a *VISSIM* video simulation of existing conditions. A presentation was given on the study approach and the four strategy areas being considered. Attendees were invited to share their thoughts and comments on reducing traffic congestion the study area on feedback sheets given to attendees as they arrived at the meeting.

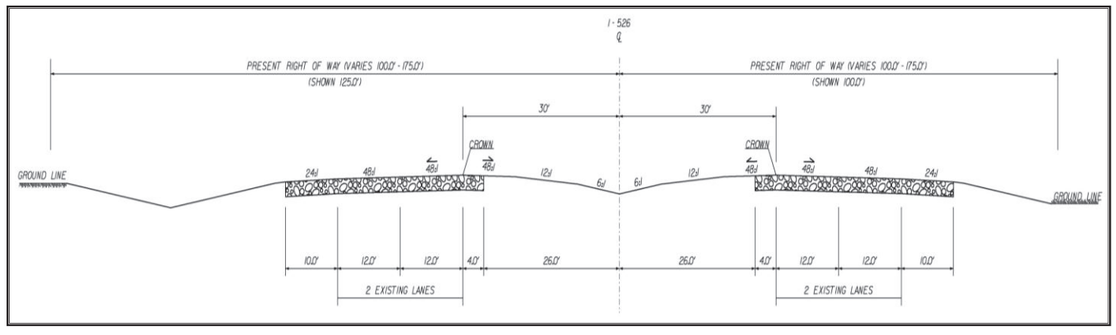
Existing Corridor Infrastructure

The I-526 roadway section is a four-lane, divided expressway, generally having a 60-foot median measured between edges of the travel lanes. A cable median barrier separates both travel ways to prevent head-on collisions. The speed limit along I-526 is 60 mph from US 17/Savannah Highway to north of International Boulevard, 55 mph from north of International Boulevard to east of Rivers Avenue, and 60 mph east of Rivers Avenue.

SCDOT has an up-to-date Traffic Management Center (TMC) located adjacent to the District 6 office in North Charleston. There are currently nine traffic cameras monitoring the I-526 corridor. As incidents are detected, the TMC employees notify the Highway Patrol to dispatch the appropriate responders, SCDOT incident responders, Highway Patrol or other emergency providers. There are also five Dynamic Message Signs (DMS) along the I-526 corridor to provide information to the traveling public, three in the eastbound direction and two in the westbound direction.

There are eight interchanges in the project limits, including the I-26 & I-526 system-to-system interchange. The interchange designs are varied, summing as three partial cloverleafs, two split diamonds, one diamond, and two partial diamonds.

Along the length of the I-526 corridor from Rivers Avenue to US 17/Savannah Highway, there are a total of 35 bridge structures including one bridge over I-526 and one bridge length culvert, over 20 feet along the roadway, under the Interstate. The Leeds Avenue bridge over I-526 is the only bridge that presents horizontal clearance restrictions to the mainline of I-526. The bridges are generally in good condition, with sufficiency ratings ranging from a low of 74.3 to a high of 96, with the average rating being approximately 90.



Existing Corridor Travel Data

To quantify the existing congestion issues along the I-526 corridor and in the Charleston area, a review of existing travel statistics and operations was conducted.

A review of the U.S. Census Bureau's 2006 – 2010 American Community Survey 5-Year Estimates indicates that the travel characteristics for the Charleston area are similar with other nearby cities, as shown in Table ES1. In Charleston County, the data indicates that 79% workers drive alone, 10% carpool, 2% take public transportation, and 4% work at home, with a mean travel time to work being 22 minutes.

Table ES1: Existing Travel Characteristics

	Charleston County	North Charleston	Charleston	Columbia	Greenville	Charlotte	Raleigh
Drive Alone	79%	76%	78%	66%	77%	76%	79%
Carpool	10%	15%	8%	8%	8%	12%	11%
Public Transportation	2%	2%	3%	2%	1%	4%	2%
Work at Home	4%	2%	3%	18%	5%	5%	5%
Other	5%	4%	8%	6%	10%	3%	4%
Mean Travel Time to Work	22 minutes	23 minutes	21 minutes	18 minutes	17 minutes	24 minutes	22 minutes

The *2011 Urban Mobility Report* developed by the Texas Transportation Institute (TTI) describes congestion problems on a national level and also provides congestion related numbers at the city level based upon travel time information. According to the report, there are 274 freeway lane miles and 3,631,000 vehicle miles traveled (VMT) daily on freeways in the Charleston/North Charleston area, which are 51% and 50% congested, respectively, during peak travel times. This congestion results in approximately 4.25 hours of rush hour traffic, time when the system may be congested, on a daily basis.

The travel time index, defined as the ratio of the actual travel time divided by the travel time under free flow conditions FHWA's *Recurring Traffic Bottlenecks: A Primer* reference, for the area is 1.16, ranking 37th highest out of the 101 urban areas. As an example, a trip that takes 45 minutes in rush hour traffic that would take 30 minutes at free-flow conditions would have a TTI of 1.50.

Existing Traffic Information

Existing traffic information was collected along the I-526 study corridor, including turning movement counts and machine counts, intersection signal timing and phasing plans, and geometric data.

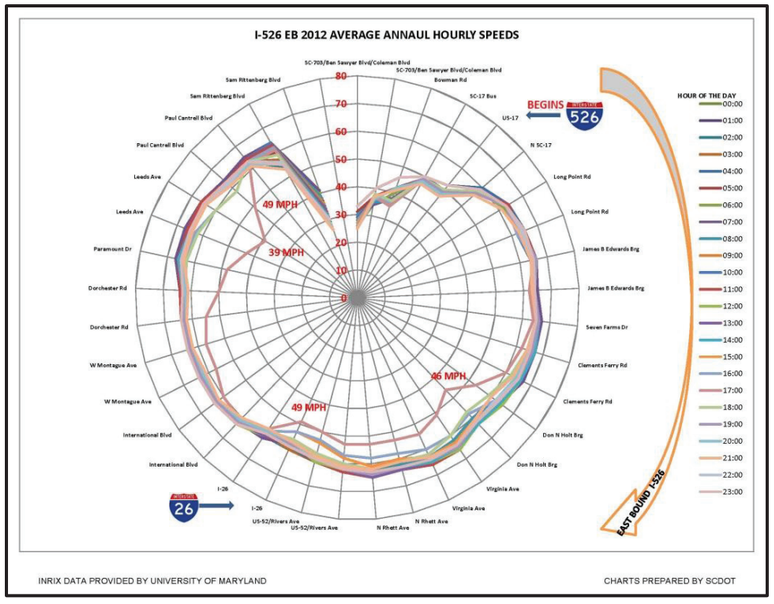
As part of the analyses for the I-526 corridor, actual origin-destination data was needed to accurately model existing vehicle paths for use in the study VISSIM micro-simulation model. After evaluating available methods for collecting origin-destination data, the project team decided on an innovative approach using Bluetooth technology. The results of the Bluetooth data collection were very valuable in the analyses, as several additional uses for the data were utilized as the analyses moved forward.

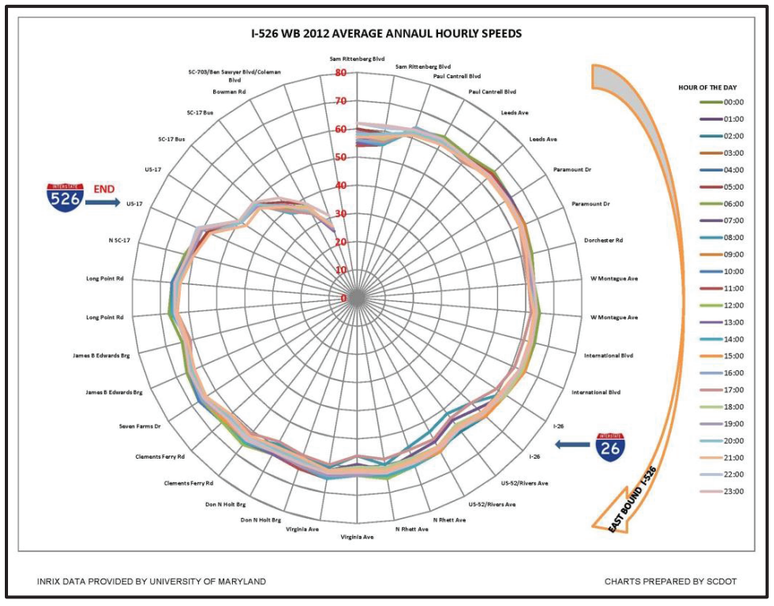
Origin-destination and travel time matrices were developed from the data for several time periods. The origin-destination matrices were utilized in the development of the study VISSIM micro-simulation models and the travel time matrices were utilized in calibration of the existing VISSIM base models. The origin-destination matrices were also utilized to determine the weaving movements approaching and departing the I-26 & I-526 interchange. Due to the closely-spaced interchanges and existing and projected future traffic congestion, weaving issues were identified as a significant deficiency for a number of movements around the I-26 & I-526 interchange. The utilization of the origin-destination data was vital in the determination of existing weaving movements around the I-26 & I-526 interchange. The data aided in the development of improvement recommendations to address the weaving deficiencies, including braided ramps, the addition of ramp lanes, and/or increased weaving lengths. Finally, the origin-destination matrices were also utilized in the planning of where new transit routes may be appropriate to remove vehicles from the study corridors.

Crash data was provided by SCDOT and collected within the project area over a three year period from 2008 to 2011. A total of 1,014 crashes were tabulated for the three-year review period. Of those crashes, over half (58.7%) were either right angle (118) or rear end (477) crashes. These types of accidents are generally associated with vehicular turning movements and stop and go conditions, respectively. Side swipe accidents (152) accounted for 15.0% of the accidents and are attributed to poor weave conditions. The 0.7% of fatal accidents is comprised of seven accidents involving eight fatalities.

SCDOT has developed travel speed graphs depicting average annual hourly speeds for Interstates around South Carolina, including I-526, using INRIX travel time information. The graphs provide a means of pinpointing congestion areas along I-526, as well as speed trends back from 2009. Exhibit ES2 illustrates the travel speed graphs of I-526 Eastbound and Westbound for 2012, respectively.

Exhibit ES2: 2012 I-526 Eastbound & Westbound Hourly Speeds





VISSIM

The analyses for the I-526 study corridor were conducted using the VISSIM traffic modeling software. The travel times in both the eastbound and westbound directions of I-526 increase considerably in the 2035 design year, especially in the PM peak hour where travel times for the 8.5-mile I-526 corridor are upwards of 30 minutes. The area between Leeds Avenue and I-26 appears to be an issue in both directions.

The VISSIM base models with the application of 2020 and 2035 traffic volume projections (2020 No-Build and 2035 No-Build) serve as the basis for comparison of major improvements that may be implemented in the future. These comparisons are used in this report to provide an evaluation of the major improvements along the I-526 corridor.

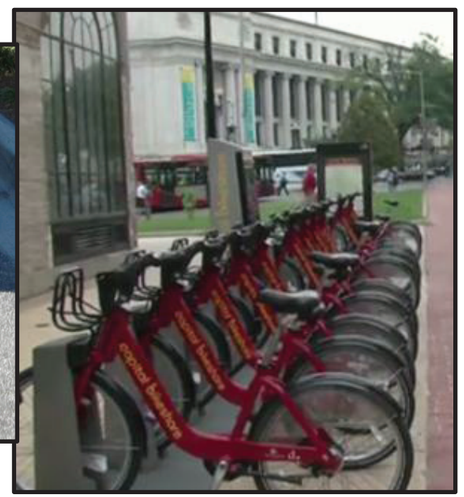
A number of scenarios were modeled for the build alternates by adding proposed improvements to the 2020 and 2035 No-Build models. Multiple scenarios at each problem interchange were evaluated individually and then compared against each other. Once major improvements were made at key interchanges, minor arterial improvements were evaluated to determine their effect on the network performance.

Travel Demand Management Strategies

Travel Demand Management (TDM) seeks to maximize the efficiency of existing transportation facilities by reducing overall (and peak) traffic demands or by moving peak travel to other times of the day. This reduction of peak travel demand in turn lessens the need to increase capacity and could improve environmental impacts and promote better health. There are a number of existing TDM programs that are currently in operation in the Charleston area that can be built upon, including:

- BCDCOG's Trident Rideshare matching website.
- CARTA & TriCounty Link have numerous Park & Ride locations.
- Boeing includes staggered shifts in its operations.
- The City of North Charleston currently utilizes and encourages carpools, compressed work weeks, and provides preferred parking spaces.
- Roper St. Francis Hospital implements work flextime and staggered shifts.
- Trident Technical College encourages student carpools.
- MUSC currently utilizes and encourages carpools, provides for preferred parking spaces, and utilizes shuttles in downtown Charleston.

Recommended TDM strategies for this study are provided in Table ES3 at the end of the Executive Summary and discussed in detail in Chapter 5.



Modal Strategies

The analysis of Modal improvement strategies includes consideration of mass transit improvements and freight mobility improvements for the I-526 corridor and the intersecting roadways. The modal strategies presented in the report are intended to help reduce the overall congestion along the I-526 corridor by encouraging the increased use of transit services, shifting travel away from the peak commute times, and encouraging the use of parallel routes and surface streets.

The I-526 corridor study area is served by both of the area's regional transit providers; CARTA and TriCounty Link. CARTA provides eight fixed routes, flex service, three express commuter routes, and paratransit service within the I-526 study area. TriCounty Link provides fixed route and demand-response services to the outlying rural areas through four routes within the study area, with passengers being able to transfer to CARTA routes at designated bus stops.

The efficient movement of freight is also a critical consideration for the I-526 corridor. The Port of Charleston is one of the busiest ports along the Southeast and Gulf coasts and is recognized as one of the nation's most efficient and productive ports. In 2011, the Port handled nearly 1.4 million twenty-foot equivalent container units (TEUs) and approximately 95% of the port- related traffic utilize the I-526 corridor at some point in their journey to and from the port terminals, rail facilities, warehouses, and deliveries. In addition to the port related freight movements, there are numerous other trucking firms and businesses that deliver goods and services to commercial and retail facilities.

Recommended Modal strategies for this study are provided in Table ES4 at the end of the Executive Summary and discussed in detail in Chapter 6.

Traffic Operations Strategies

Traffic operations improvements are low-cost measures that aim to minimize congestion or improve safety. These projects are focused to relieve specific operational concerns typically in the confines of the existing roadway network, and can be implemented along the I-526 study corridor or the adjacent arterial-street network. Traffic Operations improvements were separated into the following categories, Geometric Improvements, Pavement Marking Improvements, Signing Improvements, ITS Improvements, and Managed Lanes.

- Geometric traffic operation improvements considered for the I-526 study corridor include turn lane improvements, acceleration/deceleration lane improvements, and restriction of movements. The geometric improvements also include consideration of cross-street arterial improvements.
- Pavement markings deliver guidance and convey information to road users. When pavement markings are used consistently for similar road patterns, guidance and information become clearer to road users as opposed to inconsistent pavement marking patterns.
- Improvements to the signing along I-526 will improve traffic operations by providing motorists with clearer information allowing them to better anticipate upcoming exits and enter the correct lane in advance of the interchanges, reducing the large number of merging and diverging conflicts observed at the interchanges along the corridor. Because of the large number of visitors to the Charleston area, especially those arriving at the airport located along the corridor, clear signage is especially important.
- There are many potential uses for Intelligent Transportation Systems (ITS) technologies throughout the I-526 corridor. These technologies include signal timings, traffic cameras, incident response, and active traffic management.
- The Managed Lane analyses indicated that adding HOV lanes to the corridor between Paul Cantrell Boulevard and Rivers Avenue would be utilized well below capacity (14-15%). Furthermore, HOT lanes are not expected to generate sufficient revenue to pay for O&M costs attributable to tolling through the 30-year forecast period. Exhibits ES1 and ES2 provide a corridor view of traffic conditions under this No Build condition, and demonstrate that during AM and PM peak hours and travel directions, I-526 would operate below capacity.

Recommended Traffic Operations strategies for this study are provided in Tables ES5 and ES6 at the end of the Executive Summary and discussed in detail in Chapter 7.

Exhibit ES2: I-526 Eastbound AM Peak Hour Traffic, 2010, 2015, 2035

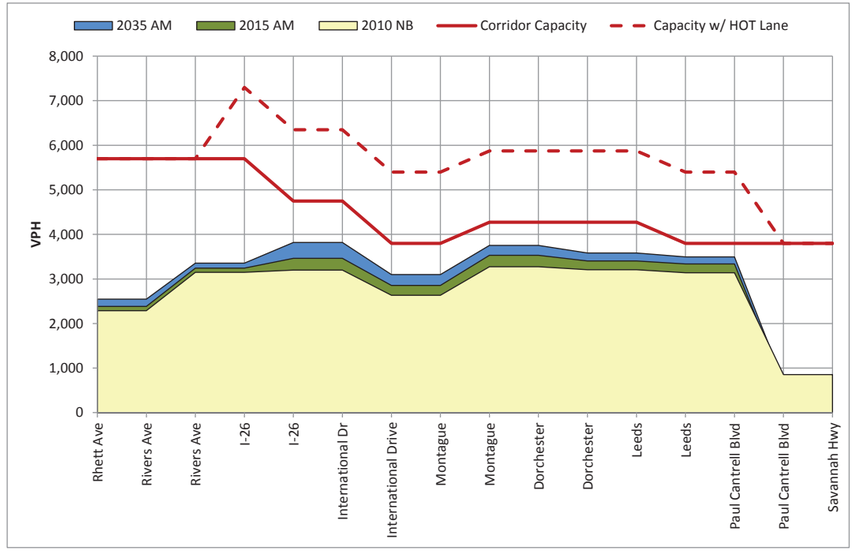
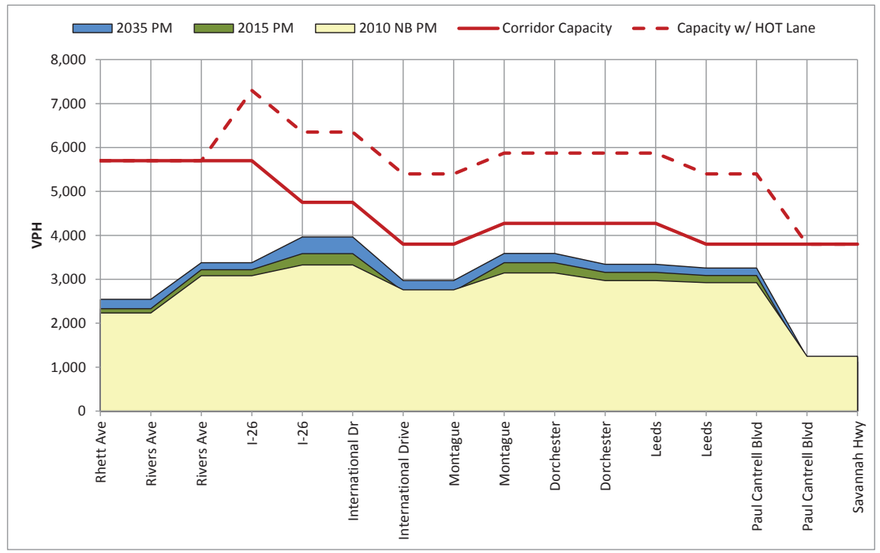


Exhibit ES3: I-526 Westbound PM Peak Hour Traffic, 2010, 2015, 2035



Capacity Improvement Strategies

Capacity Improvement Strategies for the I-526 corridor are improvements to the roadways within the corridor that are highly effective at solving congestion issues but come at a higher cost than other improvement strategies. Capacity Improvement strategies considered for this study include the widening of I-526 to a six-lane section, collector-distributor systems, interchange improvement alternates, braided entrance/exit ramps, barrier-separated lanes, alternate routes, and arterial widening.

Recommended Capacity strategies for this study are provided in Table ES7 at the end of the Executive Summary and discussed in detail in Chapter 8.

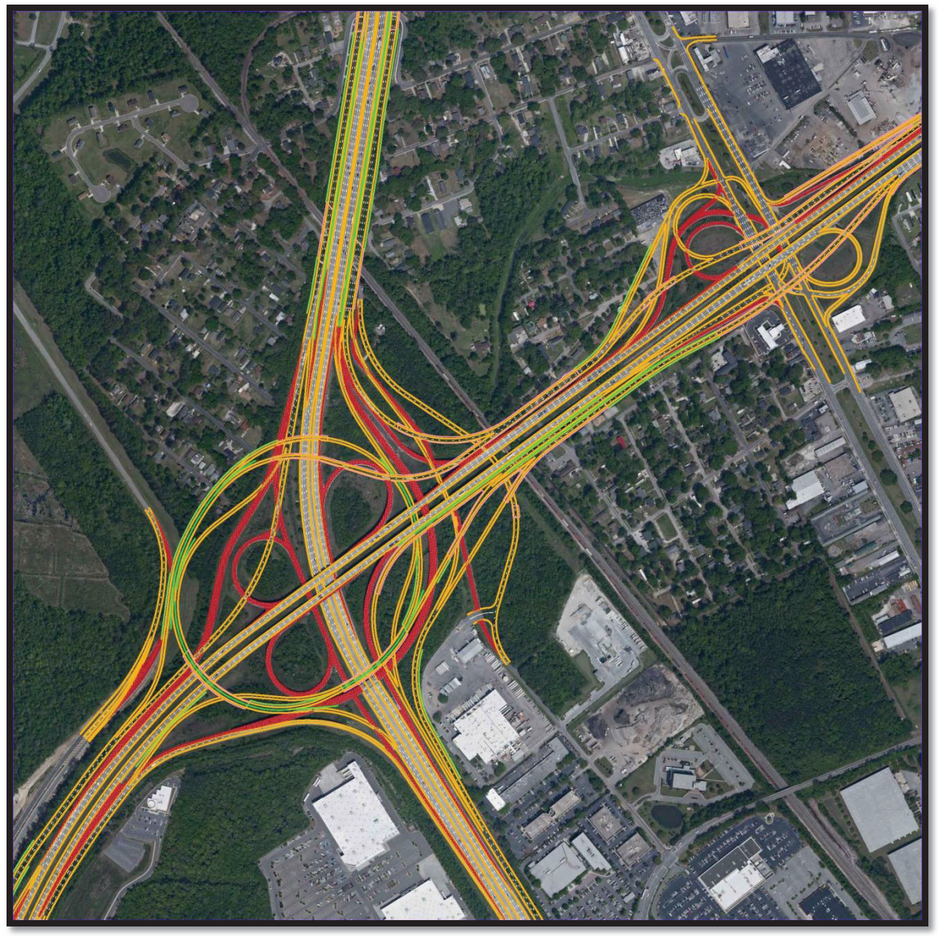
I-26/I-526 Interchange Improvements

The I-26 & I-526 System-to-System interchange currently consists of a combination of directional and loop ramps providing for all movements from one Interstate to another. There is a two-lane directional fly-over ramp from I-526 eastbound to I-26 westbound, loop ramps in the other three quadrants of the interchange, and a CD road in the two western quadrants of the interchange.

A total of fifteen deficiencies were identified for the I-26 & I-526 system-to-system interchange, and seven improvement alternates were developed to address these deficiencies. The viable alternates were modeled with the *VISSIM* analysis program, which simulated potential problem areas with the respective alternates. The alternates were then modified for the final concept designs.

The recommended I-26 & I-526 interchange alternate, illustrated in Exhibit ES2, replaces the existing interchange with a semi-directional turbine interchange. The key component of this design is that there is no weaving within the interchange. All weaving occurs on the lower-speed CD systems. The traffic from I-26 westbound to I-526 is placed on a CD system beginning at Montague Avenue. There are CD systems on both sides of I-526 between the I-26 and Rivers Avenue interchanges. The traffic from I-26 to I-526 westbound is on a braided-ramp system and the existing CD systems to and from Remount Road are extended to the new interchange at I-26 & I-526.

Exhibit ES4: I-26 & I-526 Alternate 7



Recommendations

The overall measures of effectiveness (MOE) were determined based on the strategies in each of the improvement categories. The measures utilized for the TDM and Modal strategies include the overall traffic reduction due to the strategies to reduce, or push back, the need for large-scale improvements. The measures utilized for the Traffic Operations and Capacity Improvement strategies, including the I-26 & I-526 interchange, were based upon the results of the VISSIM Build analyses.

Based on the analysis presented in this report as well as observations of the VISSIM simulation, it is clear that the proposed improvements along the I-526 corridor will have a very positive impact on traffic operations in the area. Thorough evaluations were completed to identify specific areas where various improvements may help. From there, multiple variations and iterations of possible designs were analyzed in VISSIM to ensure that the most beneficial design was recommended.

Traffic Volume Reduction Potential

A reduction of 5.2% of total overall traffic can be expected with the implementation of all of the TDM programs, and a reduction of 7.3% of total overall traffic can be expected with the implementation of transit (2.6% reduction) and freight improvement (4.8% reduction) Modal strategies. The combined potential reduction in traffic volumes for the TDM and Modal strategies is 12.6%.

With this potential reduction of traffic volumes due to the TDM and Modal strategies, the needs for the capacity improvement strategies, including the I-26 & I-526 interchange improvements, can be expected to be pushed back from **5 to 10 years**. The timing of the capacity improvements with consideration of the TDM and Modal strategies is summarized in Table ES2. The improvements to the I-526 interchanges with International Boulevard, Paul Cantrell Boulevard, and US 17/Sam Rittenberg Boulevard would likely be pushed back at least 5 years, while the other capacity improvement projects would likely be pushed back at least 10 years, including the widening of the I-526 mainline and improvements to the I-26 & I-526 interchange.

All of the improvement strategies were evaluated for suitability for the I-526 study corridor versus their respective benefits. Suitability is a consideration of the cost, time, environmental impacts, potential obstacles to implementation, and compatibility within the study. Tables ES8 through ES11 document the suitability/benefit analyses for the TDM, Modal, Traffic Operations, and Capacity Improvement strategies, respectively. The suitability tables are divided into zones of priority based on the combination of suitability and benefits.

Table ES2: Capacity Improvement Timing Considering TDM & Modal Impacts

Capacity Improvement #	Strategy	Timing	Timing with TDM/Modal Reduction
1	Improve I-26 & I-526 Interchange (Alternate 7)	2020	**2030+**
2	Widen I-526 to a six-lane section between Paul Cantrell Boulevard to Rivers Avenue	2020	**2030+**
3	Construct braided ramps along I-526 eastbound between Montague Avenue and International Boulevard	2020	**2030+**
4	Construct triple left-turn lanes to I-526 eastbound from Paul Cantrell Boulevard eastbound Extend I-526 eastbound acceleration lanes from Paul Cantrell Boulevard to the Ashley River Bridge	2020	**2030+**
5	Construct Two-lane exit ramp from I-526 westbound to Paul Cantrell Boulevard westbound	2020	**2030+**
6	Improve I-526 & US 17/Sam Rittenberg Boulevard Interchange (MCE Alternate G) Improve I-526 & US 17/Sam Rittenberg Boulevard Interchange (MCE No Build)	2025	**2030+**
7	Improve I-526 & International Boulevard Interchange Construct Braided ramps along I-526 eastbound and westbound between I-26 and Dorchester Road	2025	**2030+**
8	Improve I-526 & Paul Cantrell Boulevard Interchange	2030	**2035+**
9	Improve Paul Cantrell Boulevard & Magwood Drive Interchange	2030	**2035+**

The improvement strategies were also evaluated for cost versus their respective benefits to the I-526 corridor, based on level of impact. Tables ES12 through ES14 document the cost versus benefit analyses for the High Impact, Moderate Impact, and Low Impact congestion-reduction strategies, respectively. The costs were separated into three ranges, improvements that cost less than $10 million, improvements that cost between $10 million and $100 million, and improvements that cost more than $100 million.

The improvement strategies for all four improvement categories have been grouped together by year, which are shown in Tables ES15 through ES18. The improvement strategies for the traffic operations and capacity improvement categories have also been grouped into potential contract groups based upon the year that the improvements are projected to be needed. The preliminary contract grouping and associated costs are shown in Tables ES19 through ES21.

Table ES3: TDM Strategy Summary

Label	Strategy	Description	Timing	Costs	Potential Coordinating Agencies	Associated Strategies	Traffic Reduction Potential
TDM 1	Carpools/Rideshare Matching	Programs to encourage and match multiple workers with similar commutes to share trips to/from the workplace (funds for Marketing and Promotion).	2015	$ 100,000	BCDCOG	TDM 2	2.0%
TDM 2	Vanpools	Programs that provide multiple workers with similar commutes (usually 6 and greater) a van to share trips to/from the workplace (funds for Marketing and Promotion).	2015	$ 25,000	BCDCOG	TDM 1	
TDM 3	Transit Pass Incentives	Employer-provided passes that cover a portion (or all) the cost for travel to/from the workplace via transit (funds for developing programs).	2015	$ 250,000	BCDCOG, Counties, Cities	M 1	1.5%
TDM 4	Financial Incentives	Employer-based payments to travel to work via a different mode than a single-occupant vehicle (funds for Marketing and Promotion).	2015	$ 50,000	BCDCOG, Counties, Cities	M 1	
TDM 5	Telecommuting	Use of mobile telecommunications instead of physically commuting to a place of work.	2015	$ 75,000	BCDCOG, Counties, Cities		0.1%
TDM 6	Compressed Work Week	Work schedules allowing employees to work longer hours for fewer weekdays.	2015	$ 25,000	BCDCOG, Counties, Cities		
TDM 7	Work Flex Time	Work schedules allowing employees to arrive and/or depart work away from the peak hours.	2015	$ 25,000	BCDCOG, Counties, Cities		0.5%
TDM 8	Staggered Work Hours	Work schedules to minimize the number of employees arriving or departing work at the same time.	2015	$ 25,000	BCDCOG, Counties, Cities		
TDM 9	Bike/Walk Enhancements	Improving the bike lane and sidewalk connections along the arterials crossing I-526.	2018	$ 150,000	SCDOT, BCDCOG, Counties, Cities		0.1%
TDM 10	Education, Promotion, Marketing	Public outreach programs designed to inform commuters of the available options other than single-occupant vehicles.	Ongoing	$ 50,000	BCDCOG, Counties, Cities	M 1	1.0%
						Total TDM Reduction Potential:	**5.2%**

Table ES4: Modal Strategy Summary

Label	Strategy	Description	Timing	Costs	Potential Coordinating Agencies	Associated Strategies	Traffic Reduction Potential
M 1	Improve Existing Transit Routes	Modify existing routes to better serve ridership and increase public awareness	2015	$450,000/year	CARTA	TDM 3, TDM 4, TDM 10	0.30%
M 2	New Transit Routes	Add new route between West Ashley (Citadel Mall) and North Charleston (Tanger Outlet Mall)	2014	$600,000 capital $550,000/year	CARTA		1.10%
		Add new express service from Summerville to Charleston	just started	$480,000/year	CARTA		
		Add new Airport/Tanger Outlet Mall shuttle.	2014	$900,000/year	CARTA		
M 3	Improved Connectivity to/from Transit Stops	Add shuttle service and sidewalks	2018	$10,600,000 capital	CARTA, Counties, Cities		0.30%
		Construct Park-and-Ride facilities	2015	$75,000 capital	CARTA, PPP	TDM 1, M 6	
M 4	Improve Transit Facilities and Equipment	Add shelters, digital signs, and benches	2020	$10,800,000 capital	CARTA, BCDCOG, Counties, Cities, PPP		0.30%
M 5	Public/Private Partnerships	Develop Adopt-a-Shelter programs, private shuttles, commuter choice, capital projects	2020	$10,000,000	CARTA, PPP		0.60%
M 6	*BRT, Commuter Rail, Light Rail*	*Construct Bus Rapid Transit or rail-based transit modes*	*2035*	*$205,700,000 capital $14,000,000/year*	*CARTA, BCDCOG, Counties, Cities, PPP*		*3.40%*
M 7	*Zoning/Transit Oriented Developments*	*Encourage dense developments centered along transit routes and stops*	*2025*	*Varies by Development*	*Counties, Cities, Private Development*		*0.00%*
M 8	Increase Intermodal Split to Rail	Ship additional shipments via train versus truck	---	--	Norfolk Southern, CSX, Shippers		0.00%
		Inland Port construction	2018	$26,000,000 capital	SCSPA, Norfolk Southern		0.00%
		Construct new intermodal facilities (at the MacAlloy site or Navy Yard site)	2020	$100,000,000 capital	SCSPA, Norfolk Southern, CSX, SCPR		3.50%
M 9	Expand Port Operating Hours	Longer hours would shift truck traffic away from commuter peaks	---	--	SCSPA, US Customs, Truck & Rail Companies, Private Warehouses		0.00%
M 10	Construct Near-Terminal Staging Areas	Trucks arriving overnight could park near the port terminals	---	--	SCSPA, Private Sector		0.20%
M 11	Peak-Hour Incentives/Disincentives	Implement fee for truck traffic during peak hours	2020	$5,000,000/year	SCDOT, Counties, Cities		0.20%
M 12	Truck Routes away from I-526	Harbor drayage, or direct heavy vehicles to utilize surface streets rather than I-526 and I-26	2018	$500,000 capital	SCDOT, Counties, Cities		0.90%
Total Modal Traffic Reduction Potential (not including the BRT, Commuter Rail, Light Rail, or Zoning/Transit-Oriented Developments Strategies):							**7.4%**

Table ES5: Traffic Operations Summary

LABEL	TRAFFIC OPERATIONS CATEGORY	STRATEGY LOCATION	DESCRIPTION	TIMING	COST	ASSOCIATED STRATEGIES
OPS 1	Geometric Improvements	I-526 & Sam Rittenberg Boulevard	Remove the south leg of the Sam Rittenberg Boulevard & I-526 WB intersection, direct all traffic to Sam Rittenberg Boulevard	2020	$95,000	OPS 2, CAP 6
OPS 2	Geometric Improvements	I-526 & Sam Rittenberg Boulevard	Restripe SB approach to consist of dual left-turn and dual right-turn lanes at I-526 WB & Sam Rittenberg Boulevard	2025	$5,000	OPS 1, CAP 6
OPS 3	Geometric Improvements	I-526 & Sam Rittenberg Boulevard	Extend the I-526 WB Right-Turn Lane approaching Sam Rittenberg Boulevard	2015	$312,000	OPS 1, OPS 2, OPS 4, CAP 6
OPS 4	Geometric Improvements	US 17 & Sam Rittenberg Boulevard	Construct SB triple right-turn lanes on Sam Rittenberg Boulevard approaching US 17	2025	$472,000	CAP 6
OPS 5	Geometric Improvements	I-526 & US 17	Prepare Access Management Plan along US 17 through the I-526 Interchange	2013	$700,000	
OPS 6	Geometric Improvements	US 17 & Skylark Drive	Construct second SB approach lane to US 17	2020	$1,144,000	
OPS 7	Geometric Improvements	Sam Rittenberg Bl. & Skylark Dr.	Construct a Northbound Right-Turn Lane approaching Sam Rittenberg Boulevard	2025	$320,000	
OPS 8	Geometric Improvements	I-526 & Paul Cantrell Boulevard	Lengthen deceleration lane along I-526 WB to Paul Cantrell Boulevard EB loop	2015	$819,000	
OPS 9	Geometric Improvements	I-526 & Paul Cantrell Boulevard	Lengthen deceleration lane along I-526 WB to Paul Cantrell Boulevard WB	2015	$830,000	
OPS 10	Geometric Improvements	I-526 & Paul Cantrell Boulevard	Lengthen deceleration lane along I-526 EB to Paul Cantrell Boulevard WB loop	2015	$341,000	
OPS 11	Geometric Improvements	I-526 & Paul Cantrell Boulevard	Lengthen acceleration lane along I-526 EB from Paul Cantrell Boulevard	2020	$830,000	
OPS 12	Geometric Improvements	Paul Cantrell Bl. & Tobias Gadson Bl.	Construct EB dual left-turn lanes from Paul Cantrell Boulevard to Tobias Gadson Boulevard	2025	$795,000	
OPS 13	Geometric Improvements	Paul Cantrell Bl. & Tobias Gadson Bl.	Provide Signage for Paul Cantrell EB Right Lane Approach	2013	$2,000	
OPS 14	Geometric Improvements	I-526 & Leeds Avenue	Improve Ramps to I-526 to allow Dual Left-Turn Lanes from Leeds Avenue EB and WB	2030	$750,000	
OPS 15	Geometric Improvements	I-526 & Leeds Avenue	Extend acceleration lane from Leeds Avenue to I-526 WB	2015	$790,000	OPS 29
OPS 16	Geometric Improvements	I-526 & Leeds Avenue	Provide Ramp Metering for the I-526 WB entrance ramp from Leeds Avenue	2025	$95,000	
OPS 17	Geometric Improvements	I-526 & Dorchester Road	Remove the north leg of the Paramount Drive & I-526 EB intersection, direct all traffic to Paramount Drive	2015	$105,000	
OPS 18	Geometric Improvements	I-526 & Paramount Drive	Provide Near-Side Signal Heads along Paramount Road at I-526	2013	$5,000	
OPS 19	Geometric Improvements	I-526 & Dorchester Rd./ Paramount Dr.	Restrict Right-Turn On Red Movements at the Paramount Drive and Dorchester Road Exit ramps from I-526	2013	$500	
OPS 20	Geometric Improvements	I-526 & International Boulevard	Extend the acceleration lane from the I-526 EB loop ramp through the intersection with the I-526 WB ramps	2025	$1,350,000	
OPS 21	Geometric Improvements	I-526 & International Boulevard	Provide dual Left-Turn Lane from International Boulevard to I-526 WB	2025	$710,000	
OPS 22	Geometric Improvements	International Bl. & South Aviation Av.	Construct EB dual left-turn lanes at International Boulevard & S. Aviation Avenue	2025	$300,000	
OPS 23	Geometric Improvements	International Bl.& Centre Pointe Dr.	Construct EB triple left-turn lanes at International Boulevard & Centre Pointe Drive	2035	$751,000	
OPS 24	Geometric Improvements	International Bl. & Centre Pointe Dr.	Construct SB dual right-turn lanes at International Boulevard & Centre Pointe Drive	2035	$394,000	
OPS 25	Geometric Improvements	International Bl. & Tanger Outlet Bl.	Construct a WB right-turn lane at International Boulevard & Tanger Outlet Boulevard	2025	$394,000	
OPS 26	Geometric Improvements	Montague Av. & International Bl.	Construct SB dual right-turn lanes at Montague Avenue & International Boulevard	2025	$394,000	
OPS 27	Geometric Improvements	I-526 & I-26	End the outside I-526 EB to I-26 WB ramp lane 500 feet prior to the current merge area	2013	$10,000	
OPS 28	Geometric Improvements	I-526 & Rivers Avenue	Extend the acceleration lanes from the I-526 EB loop ramp and I-526 WB loop ramp	2015	$1,576,000	

Table ES6: Traffic Operations Summary Continued

Label	Traffic Operations Category	Strategy Location	Description	Timing	Cost	Associated Strategies
OPS 29	Pavement Marking Improvements	I-526 across the Ashley River	Restriping the Mainline Shoulders over the Ashley River Bridge for 3 lanes in each direction	2020	$55,000	OPS 15, CAP 2
OPS 30	Pavement Marking Improvements	I-526 east of I-26	Restriping the Mainline Shoulders Rivers Avenue and east for 3 lanes in each direction	2020	$4,300,000	OPS 49
OPS 31	Pavement Marking Improvements	Interstate Route Shield	Provide "To I-526" markings on the eastbound I-26 approach to I-526	2013	$5,000	
OPS 32	Pavement Marking Improvements	Acceleration Lane Markings	Provide 45-degree Arrows & Mini-Skip Markings on Paul Cantrell Boulevard acceleration lane from I-526 EB and on the I-526 WB acceleration lane from International Boulevard	2013	$5,000	
OPS 33	Signing Improvements	I-526 & US 17/Sam Rittenberg Bl.	Provide updated signing for the interchange of I-526 & US 17 / Sam Rittenberg Boulevard	2013	$31,500	
OPS 34	Signing Improvements	I-526 & Paul Cantrell Boulevard	Provide updated signing for the interchange of I-526 & Paul Cantrell Boulevard	2013	$622,000	
OPS 35	Signing Improvements	I-526 & Leeds Avenue	Provide updated signing for the interchange of I-526 & Leeds Avenue	2013	$576,000	
OPS 36	Signing Improvements	I-526 & Dorchester Rd./Paramount Dr.	Provide updated signing for the interchange of I-526 & Paramount Drive / Dorchester Road	2013	$425,000	
OPS 37	Signing Improvements	I-526 & International Bl./ Montague Av.	Provide updated signing for the interchange of I-526 & Montague Avenue International Boulevard	2013	$456,000	
OPS 38	Signing Improvements	I-526 & I-26	Provide updated signs for the interchange of I-526 & I-26	2013	$273,000	
OPS 39	Signing Improvements	I-526 & Rivers Avenue	Provide updated signs for the interchange of I-526 & Rivers Avenue	2013	$328,000	
OPS 40	Signing Improvements	I-26 West of I-526	Provide updated signs for eastbound I-26, west of I-526	2013	$106,000	
OPS 41	ITS Improvements	I-526 & US 17/Sam Rittenberg Bl.	Prepare Signal Retiming Plans	2013	$25,000	
OPS 42	ITS Improvements	I-526 & Paul Cantrell Boulevard	Prepare Signal Retiming Plans	2013	$25,000	
OPS 43	ITS Improvements	I-526 & Leeds Avenue	Prepare Signal Retiming Plans	2013	$25,000	
OPS 44	ITS Improvements	I-526 & Dorchester Road	Prepare Signal Retiming Plans	2013	$25,000	
OPS 45	ITS Improvements	I-526 & Montague Avenue	Prepare Signal Retiming Plans	2013	$25,000	
OPS 46	ITS Improvements		Enhanced Traffic Camera Coverage	2015	$30,000/camera	
OPS 47	ITS Improvements		Enhanced SHEP	2015	--	
OPS 48	ITS Improvements		Provide 1 Accident Investigation Area Along I-526	2015	$340,000	
OPS 49	ITS Improvements		Active Traffic Management (Design and Construction)	2020	$3,200,000	OPS 30
OPS 50	Managed Lanes		Managed Lanes (HOV, HOT, Truck Lanes)	--	--	

Table ES7: Capacity Improvement Summary

LABEL	STRATEGY DESCRIPTION	TIMING	COST	ASSOCIATED STRATEGIES
CAP 1	Improve I-26 & I-526 Interchange (Alternate 7)	2020	$256,500,000	
CAP 2	Widen I-526 to a six-lane section between Paul Cantrell Boulevard to Rivers Avenue	2020	$100,900,000	OPS 29
CAP 3	Construct braided ramps along I-526 eastbound between Montague Avenue and International Boulevard	2020	$5,800,000	
CAP 4	Construct triple left-turn lanes to I-526 eastbound from Paul Cantrell Boulevard eastbound	2020	$15,700,000	CAP 5
	Extend I-526 eastbound acceleration lanes from Paul Cantrell Boulevard to the Ashley River Bridge			
CAP 5	Construct Two-lane exit ramp from I-526 westbound to Paul Cantrell Boulevard westbound	2020	$16,000,000	CAP 4
CAP 6	Improve I-526 & US 17/Sam Rittenberg Boulevard Interchange (MCE Alternate G)	2025	$77,100,000	OPS 1, OPS 2, OPS 3, OPS 4
	Improve I-526 & US 17/Sam Rittenberg Boulevard Interchange (MCE No Build)		$7,500,000	
CAP 7	Improve I-526 & International Boulevard Interchange	2025	$109,300,000	
	Construct Braided ramps along I-526 eastbound and westbound between I-26 and Dorchester Road			
CAP 8	Improve I-526 & Paul Cantrell Boulevard Interchange	2030	$16,800,000	CAP 9
CAP 9	Improve Paul Cantrell Boulevard & Magwood Drive Interchange	2030	$27,800,000	CAP 8

Table ES8: Suitability Table – TDM Strategies

BENEFIT	SUITABILITY			
	A	B	C	D
1	**(TDM 1) - Carpools/Rideshare Matching** Programs to encourage and match multiple workers with similar commutes to share trips to/from the workplace (funds for Marketing and Promotion).	**(TDM 3) - Transit Pass Incentives** Employer-provided passes that cover a portion (or all) the cost for travel to/from the workplace via transit (funds for developing programs). **(TDM 4) - Financial Incentives** Employer-based payments to travel to work via a different mode than a single-occupant vehicle (funds for Marketing and Promotion). **(TDM 10) - Education, Promotion, Marketing** Public outreach programs designed to inform commuters of the available options other than single-occupant vehicles.		
2	**(TDM 2) - Vanpools** Programs that provide multiple workers with similar commutes (usually 6 and greater) a van to share trips to/from the workplace (funds for Marketing and Promotion). **(TDM 7) - Work Flex Time** Work schedules allowing employees to arrive and/or depart work from away from the peak hours.	**(TDM 8) - Staggered Work Hours** Work schedules to minimize the number of employees arriving or departing work at the same time.		
3		**(TDM 5) - Telecommuting** Use of mobile telecommunications instead of physically commuting to a place of work. **(TDM 6) - Compressed Work Week** Work schedules allowing employees to work longer hours for fewer weekdays. **(TDM 9) - Bike/Walk Enhancements** Improving the bike lane and sidewalk connections along the arterials crossing I-526.		

Legend

HIGH PRIORITY TO IMPLEMENT	MEDIUM PRIORITY TO IMPLEMENT	LOW PRIORITY TO IMPLEMENT	DIFFICULT TO IMPLEMENT

Suitability: A = High to D = Low
Benefits: 1 = High to 3 = Low

Table ES9: Suitability Table – Modal Strategies

BENEFIT	SUITABILITY			
	A	B	C	D
1		**(M 2) - New Transit Routes** Add new route between West Ashley (Citadel Mall) and North Charleston (Tanger Outlet Mall) Add new express service from Summerville to Charleston. Add new Aiport/Tanger Outlet Mall shuttle.	**(M 8) - Increase Intermodal Split to Rail** Ship additional shipments via train versus truck. Inland Port construction. Construct new intermodal facilities (at the MacAlloy site or Navy Yard site). **(M 12) - Truck Routes Away from I-526** Harbor drayage, or direct heavy vehicles to utilize surface streets rather than I-526 and I-26.	**(M 6) - BRT, Commuter Rail, Light Rail** Construct Bus Rapid Transit or rail-based transit modes.
2	**(M 1) - Improve Existing Transit Routes** Modify existing routes to better serve ridership and increase public awareness **(M 5) - Public/Private Partnerships** Develop Adopt-a-Shelter programs, private shuttles, commuter choice, capital projects.	**(M 3) - Improved Connectivity to/from Transit Stops** Add shuttle service and sidewalks. Construct Park and Ride facilities. **(M 4) - Improve Transit Facilities and Equipment** Add shelters, digital signs, and benches.	**(M 9) - Expand Port Operating Hours** Longer hours would shift truck traffic away from commuter peaks. **(M 11) - Peak-Hour Incentives/Disincentives** Implement fee for truck traffic during peak hours.	
3	**(M 10) - Construct Near-Terminal Staging Areas** Trucks arriving overnight could park near the port terminals.		**(M 7) - Zoning / Transit Oriented Developments** Encourage dense developments centered along transit routes and stops.	

Legend

HIGH PRIORITY TO IMPLEMENT	MEDIUM PRIORITY TO IMPLEMENT	LOW PRIORITY TO IMPLEMENT	DIFFICULT TO IMPLEMENT

Suitability: A = High to D = Low
Benefits: 1 = High to 3 = Low

Table ES10: Suitability Table – Traffic Operations Strategies

BENEFIT	SUITABILITY			
	A	B	C	D
1	**Geometric Improvements** (OPS 15) - Extend acceleration lane from Leeds Ave to I-526 WB **Pavement Marking Improvements** (OPS 27) - End the outside I-526 EB to I-26 WB ramp lane 500 feet prior to the current merge area (OPS 29) - Restriping the mainline shoulders over the Ashley River Bridge for 3 lanes in each direction (OPS 30) - Restriping the mainline shoulders Rivers Avenue and east for 3 lanes in each direction **ITS Improvements** (OPS 41) - Prepare signal retiming plans for US 17 / Sam Rittenberg Blvd near I-526 (OPS 42) - Prepare signal retiming plans for Paul Cantrell Blvd near I-526 (OPS 43) - Prepare signal retiming plans for Leeds Ave near I-526 (OPS 44) - Prepare signal retiming plans for Dorchester Rd near I-526 (OPS 45) - Prepare signal retiming plans for Montague Ave near I-526	**Geometric Improvements** (OPS 1) - Remove the south leg of the Sam Rittenberg Blvd & I-526 WB intersection, direct all traffic to Sam Rittenberg Blvd (OPS 2) - Restripe SB approach to consist of dual left-turn and dual right-turn lanes at I-526 WB & Sam Rittenberg Blvd (OPS 8) - Lengthen deceleration lane along I-526 WB to Paul Cantrell Blvd EB loop (OPS 9) - Lengthen deceleration lane along I-526 WB to Paul Cantrell Blvd WB (OPS 10) - Lengthen deceleration lane along I-526 EB to Paul Cantrell Blvd WB loop (OPS 11) - Lengthen acceleration lane along I-526 EB from Paul Cantrell Blvd		**ITS Improvements** (OPS 49) - ATM plan for I-526 between Rivers Ave & Clements Ferry Rd
2		**Geometric Improvements** (OPS 3) - Extend the I-526 WB right-turn lane approaching Sam Rittenberg Blvd (OPS 4) - Construct SB triple right-turn lanes on Sam Rittenberg Blvd approaching US 17 (OPS 5) - Prepare access management plan along US 17 through the I-526 interchange (OPS 14) - Improve ramps to I-526 to allow dual left-turn lanes from Leeds Ave EB & WB (OPS 21) - Provide dual left-turn lanes from International Blvd to I-526 WB (OPS 25) - Construct a WB right-turn lane at International Blvd & Tanger Outlet Blvd **Signing Improvements** (OPS 33) - Provide updated signing for the interchange of I-526 & US 17 / Sam Rittenberg Boulevard (OPS 34) - Provide updated signing for the interchange of I-526 & Paul Cantrell Boulevard (OPS 35) - Provide updated signing for the interchange of I-526 & Leeds Avenue (OPS 36) - Provide updated signing for the interchange of I-526 & Paramount Drive / Dorchester Road (OPS 37) - Provide updated signing for the interchange of I-526 & Montague Avenue International Boulevard (OPS 38) - Provide updated signs for the interchange of I-526 & I-26 (OPS 39) - Provide updated signs for the interchange of I-526 & Rivers Avenue (OPS 40) - Provide updated signs for eastbound I-26, west of I-526 **ITS Improvements** (OPS 46) - Enhanced traffic camera coverage (OPS 47) - Enhanced SHEP (OPS 48) - Provide 1 accident investigation area along I-526	**Geometric Improvements** (OPS 6) - Construct 2nd SB approach lane to US 17 from Skylark Dr (OPS 7) - Construct a NB right-turn lane on Skylark Dr approaching Sam Rittenberg Blvd (OPS 12) - Construct EB dual left-turn lanes from Paul Cantrell Blvd to Tobias Gadson Blvd (OPS 16) - Provide ramp metering for the I-526 WB entrance ramp from Leeds Ave (OPS 17) - Remove the north leg of the Paramount Dr & I-526 EB intersection (OPS 20) - Extend accel. lane from I-526 EB loop ramp to International through the I-526 WB intersection (OPS 22) - Construct EB dual left-turn lanes at International Blvd & S Aviation Ave (OPS 23) - Construct EB triple left-turn lanes at International Blvd & Centre Pointe Dr (OPS 24) - Construct SB dual right-turn lanes at International Blvd & Centre Pointe Dr (OPS 26) - Construct SB dual right-turn lanes at Montague Ave & International Blvd (OPS 28) - Extend acceleration lanes from I-526 loop ramps to Rivers Ave	
3	**Geometric Improvements** (OPS 18) - Provide near-side signal heads along Paramount Rd at I-526 (OPS 19) - Restrict right-turn on red movements at the Dorchester Rd & Paramount Dr exit ramps from I-526 **Pavement Marking Improvements** (OPS 31) - Provide "To I-526" markings on the eastbound I-26 approach to I-526 (OPS 32) - Provide 45-degree arrows & mini-skip markings on Paul Cantrell Blvd acceleration lane from I-526 EB and on the I-526 WB acceleration lane from International Blvd	**Geometric Improvements** (OPS 13) - Provide Signage for Paul Cantrell EB Right Lane Approach		**Managed Lanes** (OPS 50) - Managed Lanes (HOV, HOT, Truck Lanes)

Legend

HIGH PRIORITY TO IMPLEMENT	MEDIUM PRIORITY TO IMPLEMENT	LOW PRIORITY TO IMPLEMENT	DIFFICULT TO IMPLEMENT

Suitability: A = High to D = Low
Benefits: 1 = High to 3 = Low

Table ES11: Suitability Table – Capacity Improvement Strategies

BENEFIT	SUITABILITY			
	A	B	C	D
1	**Interchange Configuration** (CAP 1) - Improve I-26 & I-526 Interchange (Alternate 7) **Mainline Widening** (CAP 2) - Widen I-526 to a six-lane section between Paul Cantrell Blvd to Rivers Ave	**Interchange Configuration** (CAP 6A) - Improve I-526/US 17/Sam Rittenberg Blvd Interchange (MCE Build) (CAP 6B) - Improve I-526/US 17/Sam Rittenberg Blvd Interchange (MCE No Build) (CAP 7) - Improve I-526 & International Blvd Interchange & braided ramps along I-526 from Dorchester Rd to the interchange (CAP 8) - Improve I-526 & Paul Cantrell Blvd Interchange (CAP 9) - Improve Paul Cantrell Blvd & Magwood Dr Interchange		
2	**Interchange Configuration** (CAP 4) - Construct triple left turns to I-526 EB from Paul Cantrell Blvd & extend acceleration lanes to Ashley River Bridge (CAP 5) - Construct two lane exit ramp from I-526 WB to Paul Cantrell Blvd WB	**Interchange Configuration** (CAP 3) - Construct braided ramps on I-526 EB between Montague Ave & International Blvd		
3				

Legend

HIGH PRIORITY TO IMPLEMENT	MEDIUM PRIORITY TO IMPLEMENT	LOW PRIORITY TO IMPLEMENT	DIFFICULT TO IMPLEMENT

Suitability: A = High to D = Low
Benefits: 1 = High to 3 = Low

Table ES12: Cost/Benefit Table – Significant Impact on Reducing Congestion

Benefit	Estimates Cost					
	Year	$0.00 - $10.00 Million	Year	$10.00 - $100.00 Million	Year	Above $100.00 Million
Significant Impact on Reducing Congestion	2013	(TDM 10) - Education, Promotion, Marketing (OPS 27) - End the outside I-526 EB to I-26 WB ramp lane 500 feet prior to the current merge area (OPS 41) - Prepare signal retiming plans for US 17 / Sam Rittenberg Blvd near I-526 (OPS 42) - Prepare signal retiming plans for Paul Cantrell Blvd near I-526 (OPS 43) - Prepare signal retiming plans for Leeds Ave near I-526 (OPS 44) - Prepare signal retiming plans for Dorchester Rd near I-526 (OPS 45) - Prepare signal retiming plans for Montague Ave near I-526	2013	(M 2) - New Transit Routes	2013	
	2015	(TDM 1) - Carpools/Rideshare Matching (TDM 3) - Transit Pass Incentives (TDM 4) - Financial Incentives (OPS 8) - Lengthen deceleration lane along I-526 WB to Paul Cantrell Blvd EB loop (OPS 9) - Lengthen deceleration lane along I-526 WB to Paul Cantrell Blvd WB (OPS 10) - Lengthen deceleration lane along I-526 EB to Paul Cantrell Blvd WB loop (OPS 15) - Extend acceleration lane from Leeds Ave to I-526 WB	2015		2015	
	2018	(M 12) - Truck Routes Away from I-526	2018		2018	
	2020	(OPS 1) - Remove the south leg of the Sam Rittenberg Blvd & I-526 WB intersection, direct all traffic to Sam Rittenberg Blvd (OPS 11) - Lengthen acceleration lane along I-526 EB from Paul Cantrell Blvd (OPS 29) - Restriping the mainline shoulders over the Ashley River Bridge for 3 lanes in each direction (OPS 30) - Restriping the mainline shoulders Rivers Avenue and east for 3 lanes in each direction (OPS 49) - ATM plan for I-526 between Rivers Ave & Clements Ferry Rd	2020	(CAP 2) - Widen I-526 to a six-lane section between Paul Cantrell Blvd to Rivers Ave	2020	(M 8) - Increase Intermodal Split to Rail (CAP 1) -Improve I-26 & I-526 Interchange (Alternate 7)
	2025	(OPS 2) - Restripe SB approach to consist of dual left-turn and dual right-turn lanes at I-526 WB & Sam Rittenberg Blvd (CAP 6B) - Improve I-526/US 17/Sam Rittenberg Blvd Interchange (MCE No Build)	2025	(CAP 6A) - Improve I-526/US 17/Sam Rittenberg Blvd Interchange (MCE Build) (CAP 7) - Improve I-526 & International Blvd Interchange & braided ramps along I-526 from Dorchester Rd to the interchange	2025	
	2030		2030	(CAP 8) - Improve I-526 & Paul Cantrell Blvd Interchange (CAP 9) - Improve Paul Cantrell Blvd & Magwood Dr Interchange	2030	
	2035		2035		2035	(M 6) - BRT, Commuter Rail, Light Rail

Table ES13: Cost/Benefit Table – Moderate Impact on Reducing Congestion

Benefit	Estimates Cost					
	Year	$0.00 - $10.00 Million	Year	$10.00 - $100.00 Million	Year	Above $100.00 Million
Moderate Impact on Reducing Congestion	2013	(OPS 5) - Prepare access management plan along US 17 through the I-526 interchange (OPS 33) - Provide updated signing for the interchange of I-526 & US 17 / Sam Rittenberg Boulevard (OPS 34) - Provide updated signing for the interchange of I-526 & Paul Cantrell Boulevard (OPS 35) - Provide updated signing for the interchange of I-526 & Leeds (OPS 36) - Provide updated signing for the interchange of I-526 & Paramount Drive / Dorchester Road (OPS 37) - Provide updated signing for the interchange of I-526 & Montague Avenue International Boulevard (OPS 38) - Provide updated signs for the interchange of I-526 & I-26 (OPS 39) - Provide updated signs for the interchange of I-526 & Rivers Avenue (OPS 40) - Provide updated signs eastbound I-26, west of I-526	2013		2013	
	2015	(TDM 2) - Vanpools (TDM 7) - Work Flex Time (TDM 8) - Staggered Work Hours (M 1) - Improve Existing Transit Routes (M 9) - Expand Port Operating Hours (OPS 3) - Extend the I-526 WB right-turn lane approaching Sam Rittenberg (OPS 17) - Remove the north leg of the Paramount Dr & I-526 EB intersection, direct all traffic to Paramount Dr (OPS 28) - Extend acceleration lanes from I-526 loop ramps to Rivers Ave (OPS 46) - Enhanced traffic camera coverage (OPS 47) - Enhanced SHEP (OPS 48) - Provide 1 accident investigation area along I-526	2015		2015	
	2018		2018	(M 3) - Improved Connectivity to/from Transit Stops	2018	
	2020	(M 5) - Public/Private Partnerships (M 11) - Peak-Hour Incentives/Disincentives (OPS 6) - Construct 2nd SB approach lane to US 17 from Skylark Dr (CAP 3) - Construct braided ramps on I-526 EB between Montague Ave & International Blvd	2020	(M 4) - Improve Transit Facilities and Equipment (CAP 4) - Construct triple left turns to I-526 EB from Paul Cantrell Blvd & extend acceleration lanes to Ashley River Bridge (CAP 5) - Construct two lane exit ramp from I-526 WB to Paul Cantrell Blvd WB	2020	
	2025	(OPS 4) - Construct SB triple right-turn lanes on Sam Rittenberg Blvd approaching US 17 (OPS 7) - Construct a NB right-turn lane on Skylark Dr approaching Sam Rittenberg Blvd (OPS 12) - Construct EB dual left-turn lanes from Paul Cantrell Blvd to Tobias Gadson Blvd (OPS 16) - Provide ramp metering for the I-526 WB entrance ramp from Leeds Ave (OPS 20) - Extend acceleration lane from I-526 EB loop ramp to International Blvd through the intersection with the I-526 WB ramps (OPS 21) - Provide dual left-turn lanes from International Blvd to I-526 WB (OPS 22) - Construct EB dual left-turn lanes at International Blvd & S Aviation Ave (OPS 25) - Construct a WB right-turn lane at International Blvd & Tanger Outlet Blvd (OPS 26) - Construct SB dual right-turn lanes at Montague Ave & International Blvd	2025		2025	
	2030	(OPS 14) - Improve ramps to I-526 to allow dual left-turn lanes from Leeds Ave EB & WB	2030		2030	
	2035	(OPS 23) - Construct EB triple left-turn lanes at International Blvd & Centre Pointe Dr (OPS 24) - Construct SB dual right-turn lanes at International Blvd & Centre Pointe Dr	2035		2035	

Table ES14: Cost/Benefit Table – Little Impact on Reducing Congestion

Benefit	Estimates Cost					
	Year	$0.00 - $10.00 Million	Year	$10.00 - $100.00 Million	Year	Above $100.00 Million
Little Impact on Reducing Congestion	2013	(OPS 13) - Provide Signage for Paul Cantrell EB Right Lane Approach (OPS 18) - Provide near-side signal heads along Paramount Rd at I-526 (OPS 19) - Restrict right-turn on red movements at the Dorchester Rd & Paramount Dr exit ramps from I-526 (OPS 31) - Provide "To I-526" markings on the eastbound I-26 approach to I-526 (OPS 32) - Provide 45-degree arrows & mini-skip markings on Paul Cantrell Blvd acceleration lane from I-526 EB and on the I-526 WB acceleration lane from International Blvd	2013		2013	
	2015	(TDM 5) - Telecommuting (TDM 6) - Compressed Work Week	2015		2015	
	2018	(TDM 9) - Bike/Walk Enhancements	2018		2018	
	2020		2020		2020	
	2025		2025	(M 7) - Zoning/Transit Oriented Developments (M 10) - Construct Near-Terminal Staging Areas	2025	
	2030		2030		2030	
	2035		2035	(OPS 50) - Managed Lanes (HOV, HOT, Truck Lanes)	2035	

Table ES15: Project Grouping Strategies

Year		Strategy #	Description	TDM	Modal	Traffic Operations	Capacity
2013		TDM 10	Education, Promotion, Marketing	$50,000			
		M 2B	Add new express service from Summerville to Charleston		$480,000/year		
		M 8A	Ship additional shipments via train versus truck		--		
		M 9	Longer hours would shift truck traffic away from commuter peaks		--		
		M 10	Trucks arriving overnight could park near the port terminals		--		
		OPS 5	Prepare Access Management Plan along US 17 through the I-526 Interchange			$700,000	
		OPS 13	Provide Signage for Paul Cantrell EB Right Lane Approach			$2,000	
		OPS 19	Restrict Right-Turn On Red Movements at the Paramount Drive and Dorchester Road exit ramps from I-526			$500	
		OPS 33	Provide updated signing for the interchange of I-526 & US 17 / Sam Rittenberg Boulevard			$31,500	
		OPS 34	Provide updated signing for the interchange of I-526 & Paul Cantrell Boulevard			$622,000	
		OPS 35	Provide updated signing for the interchange of I-526 & Leeds Avenue			$576,000	
		OPS 36	Provide updated signing for the interchange of I-526 & Paramount Drive / Dorchester Road			$425,000	
		OPS 37	Provide updated signing for the interchange of I-526 & Montague Avenue International Boulevard			$456,000	
		OPS 38	Provide updated signs for the interchange of I-526 & I-26			$273,000	
		OPS 39	Provide updated signs for the interchange of I-526 & Rivers Avenue			$328,000	
		OPS 40	Provide updated signs for eastbound I-26, west of I-526			$106,000	
		OPS 18	Provide Near-Side Signal Heads along Paramount Road at I-526			$5,000	
		OPS 41	I-526 & US 17/Sam Rittenberg Boulevard: Prepare Signal Retiming Plans			$25,000	
		OPS 42	I-526 & Paul Cantrell Boulevard: Prepare Signal Retiming Plans			$25,000	
		OPS 43	I-526 & Leeds Avenue: Prepare Signal Retiming Plans			$25,000	
		OPS 44	I-526 & Dorchester Road: Prepare Signal Retiming Plans			$25,000	
		OPS 45	I-526 & Montague Avenue: Prepare Signal Retiming Plans			$25,000	
		OPS 27	End the outside I-526 EB to I-26 WB ramp lane 500 feet prior to the current merge area			$10,000	
		OPS 31	Provide "To I-526" markings on the eastbound I-26 approach to I-526			$5,000	
		OPS 32	Provide 45-degree Arrows & Mini-Skip Markings on Paul Cantrell Boulevard acceleration lane from I-526 EB and on the I-526 WB acceleration lane from International Boulevard			$5,000	
			Improvement Strategy Total:	$50,000	$0 $480,000/year	$3,670,000	$0
			Total Cost (2013):	**$3,720,000 $480,000/year**			

Year		Strategy #	Description	TDM	Modal	Traffic Operations	Capacity
2014		M 2A	Add new route between West Ashley (Citadel Mall) and North Charleston (Tanger Outlet Mall)		$600,000 $550,000/year		
		M 2C	Add new Airport/Tanger Outlet Mall shuttle		$900,000/year		
			Improvement Strategy Total:	$0	$600,000 $1,450,000/year	$0	$0
			Total Cost (2014):	**$600,000 $1,450,000/year**			

Table ES16: Project Grouping Strategies Continued

Year		Strategy #	Description	TDM	Modal	Traffic Operations	Capacity
2015		TDM 1	Carpools/Rideshare Matching	$100,000			
		TDM 2	Vanpools	$25,000			
		TDM 3	Transit Pass Incentives	$250,000			
		TDM 4	Financial Incentives	$50,000			
		TDM 5	Telecommuting	$75,000			
		TDM 6	Compressed Work Week	$25,000			
		TDM 7	Work Flex Time	$25,000			
		TDM 8	Staggered Work Hours	$25,000			
		M 1	Modify existing routes to better serve ridership and increase public awareness		$450,000/year		
		M 3B	Construct Park-and-Ride facilities		$75,000		
		OPS 3	Extend the I-526 WB Right-Turn Lane approaching Sam Rittenberg Boulevard			$312,000	
		OPS 8	Lengthen deceleration lane along I-526 WB to Paul Cantrell Boulevard EB loop			$819,000	
		OPS 9	Lengthen deceleration lane along I-526 WB to Paul Cantrell Boulevard WB			$830,000	
		OPS 10	Lengthen deceleration lane along I-526 EB to Paul Cantrell Boulevard WB loop			$341,000	
		OPS 15	Extend acceleration lane from Leeds Avenue to I-526 WB			$790,000	
		OPS 17	Remove the north leg of the Paramount Drive & I-526 EB intersection, direct all traffic to Paramount Drive			$105,000	
		OPS 28	Extend the acceleration lanes from the I-526 EB loop ramp and I-526 WB loop ramp at Rivers Avenue			$1,576,000	
		OPS 46	Enhanced Traffic Camera Coverage			$30,000/camera	
		OPS 47	Enhanced SHEP			--	
		OPS 48	Provide 1 accident investigation area along I-526			$340,000	
			Improvement Strategy Total:	$575,000	$75,000 $450,000/year	$5,113,000	$0
			Total Cost (2015):	**$5,763,000 $450,000/year**			

Year		Strategy #	Description	TDM	Modal	Traffic Operations	Capacity
2018		TDM 9	Bike/Walk Enhancements	$150,000			
		M 3A	Add shuttle service and sidewalks		$10,600,000		
		M 8B	Inland Port construction		$26,000,000		
		M 12	Harbor drayage, or direct heavy vehicles to utilize surface streets rather than I-525 and I-26		$500,000		
			Improvement Strategy Total:	$150,000	$37,100,000	$0	$0
			Total Cost (2018):	**$37,250,000**			

Table ES17: Project Grouping Strategies Continued

Year		Strategy #	Description	TDM	Modal	Traffic Operations	Capacity
2020		M 4	Add shelters, digital signs, and benches		$10,800,000		
		M 5	Develop Adopt-a-Shelter programs, private shuttles, commuter choice, capital projects		$10,000,000		
		M 8C	Construct new intermodal facilities (at the MacAlloy site or Navy Yard site)		$100,000,000		
		M 11	Implement fee for truck traffic during peak hours		$5,000,000/year		
		OPS 1	Remove the south leg of the Sam Rittenberg Boulevard & I-526 WB intersection, direct all traffic to Sam Rittenberg Boulevard			$95,000	
		OPS 6	Construct second SB approach lane to US 17 from Skylark Drive			$1,144,000	
		OPS 11	Lengthen acceleration lane along I-526 EB from Paul Cantrell Boulevard			$830,000	
		CAP 2	Widen I-526 to a six-lane section between Paul Cantrell Boulevard to Rivers Avenue				$100,900,000
		CAP 4A	Construct triple left-turn lanes to I-526 eastbound from Paul Cantrell Boulevard eastbound				$15,700,000
		CAP 4B	Extend I-526 eastbound acceleration lanes from Paul Cantrell Boulevard to the Ashley River Bridge				
		CAP 5	Construct Two-lane exit ramp from I-526 westbound to Paul Cantrell Boulevard westbound				$16,000,000
		CAP 1	Improve I-26 & I-526 Interchange (Alternate 7)				$256,500,000
		CAP 3	Construct braided ramps along I-526 eastbound between Montague Avenue and International Boulevard				$5,800,000
		OPS 29	Restriping the Mainline Shoulders over the Ashley River Bridge for 3 lanes in each direction			$55,000	
		OPS 30	Restriping the Mainline Shoulders Rivers Avenue and east for 3 lanes in each direction			$4,300,000	
		OPS 49	Active Traffic Management			$3,200,000	
			Improvement Strategy Total:	$0	$120,800,000 $5,000,000/year	$9,624,000	$394,900,000
			Total Cost (2020):	**$525,324,000 $5,000,000/year**			

Year		Strategy #	Description	TDM	Modal	Traffic Operations	Capacity
2025		M 7	Encourage dense developments centered along transit routes and stops		Varies by Development		
		OPS 2	Restripe SB approach to consist of dual left-turn and dual right-turn lanes at I-526 WB & Sam Rittenberg Boulevard			$5,000	
		OPS 4	Construct SB triple right-turn lanes on Sam Rittenberg Boulevard approaching US 17			$472,000	
		OPS 7	Construct a Northbound Right-Turn Lane on Skylark Drive approaching Sam Rittenberg Boulevard			$320,000	
		CAP 6B	Improve I-526 & US 17/Sam Rittenberg Boulevard Interchange (MCE No Build)				$7,500,000
		OPS 12	Construct EB dual left-turn lanes from Paul Cantrell Boulevard to Tobias Gadson Boulevard			$795,000	
		OPS 16	Provide Ramp Metering for the I-526 WB entrance ramp from Leeds Avenue			$95,000	
		OPS 20	Extend the acceleration lane from the I-526 EB loop ramp through the intersection with the I-526 WB ramps & International Boulevard			$1,350,000	
		OPS 21	Provide dual Left-Turn Lane from International Boulevard to I-526 WB			$710,000	
		OPS 22	Construct EB dual left-turn lanes at International Boulevard & S. Aviation Avenue			$300,000	
		OPS 25	Construct a WB right-turn lane at International Boulevard & Tanger Outlet Boulevard			$394,000	
		OPS 26	Construct SB dual right-turn lanes at Montague Avenue & International Boulevard			$394,000	
		CAP 7A	Improve I-526 & International Boulevard Interchange				$109,300,000
		CAP 7B	Construct Braided ramps along I-526 eastbound and westbound between I-26 and Dorchester Road				
			Improvement Strategy Total:	$0	$0	$4,835,000	$116,800,000
			Total Cost (2025):	**$121,635,000**			

Table ES18: Project Grouping Strategies Continued

Year		Strategy #	Description	TDM	Modal	Traffic Operations	Capacity
2030		OPS 14	I-526 & Leeds Avenue: Improve Ramps to I-526 to allow Dual Left-Turn Lanes from Leeds Avenue EB and WB			$750,000	
		CAP 8	Improve I-526 & Paul Cantrell Boulevard Interchange				$16,800,000
		CAP 9	Improve Paul Cantrell Boulevard & Magwood Drive Interchange				$27,800,000
			Improvement Strategy Total:	$0	$0	$750,000	$44,600,000
			Total Cost (2030):	**$45,350,000**			

Year		Strategy #	Description	TDM	Modal	Traffic Operations	Capacity
2035		M 6	Construct Bus Rapid Transit or rail-based transit modes		$205,700,000 $14,000,000/year		
		OPS 23	International Boulevard & Centre Pointe Drive: Construct EB triple left-turn lanes at International Boulevard & Centre Pointe Drive			$751,000	
		OPS 24	International Boulevard & Centre Pointe Drive: Construct SB dual right-turn lanes at International Boulevard & Centre Pointe Drive			$394,000	
			Improvement Strategy Total:	$0	$205,700,000 $14,000,000/year	$1,145,000	$0
			Total Cost (2035):	**$206,845,000 $14,000,000/year**			

Table ES19: Construction Contract Group Cost

Contract Grouping	Strategy #	Description	Cost	Total Cost
2013				
Contract 1	OPS 5	Prepare Access Management Plan along US 17 through the I-526 Interchange	$700,000	
Contract 1 Cost				**$700,000**
Contract 2	OPS 13	Provide Signage for Paul Cantrell EB Right Lane Approach	$2,000	
	OPS 19	Restrict Right-Turn On Red Movements at the Paramount Drive and Dorchester Road Exit ramps from I-526	$500	
	OPS 33	Provide updated signing for the interchange of I-526 & US 17 / Sam Rittenberg Boulevard	$31,500	
	OPS 34	Provide updated signing for the interchange of I-526 & Paul Cantrell Boulevard	$622,000	
	OPS 35	Provide updated signing for the interchange of I-526 & Leeds Avenue	$576,000	
	OPS 36	Provide updated signing for the interchange of I-526 & Paramount Drive / Dorchester Road	$425,000	
	OPS 37	Provide updated signing for the interchange of I-526 & Montague Avenue International Boulevard	$456,000	
	OPS 38	Provide updated signs for the interchange of I-526 & I-26	$273,000	
	OPS 39	Provide updated signs for the interchange of I-526 & Rivers Avenue	$328,000	
	OPS 40	Provide updated signs for eastbound I-26, west of I-526	$106,000	
Contract 2 Cost				**$2,820,000**
Contract 3	OPS 18	Provide Near-Side Signal Heads along Paramount Road at I-526	$5,000	
	OPS 41	I-526 & US 17/Sam Rittenberg Boulevard: Prepare Signal Retiming Plans	$25,000	
	OPS 42	I-526 & Paul Cantrell Boulevard: Prepare Signal Retiming Plans	$25,000	
	OPS 43	I-526 & Leeds Avenue: Prepare Signal Retiming Plans	$25,000	
	OPS 44	I-526 & Dorchester Road: Prepare Signal Retiming Plans	$25,000	
	OPS 45	I-526 & Montague Avenue: Prepare Signal Retiming Plans	$25,000	
Contract 3 Cost				**$130,000**
Contract 4	OPS 27	End the outside I-526 EB to I-26 WB ramp lane 500 feet prior to the current merge area	$10,000	
	OPS 31	Provide "To I-526" markings on the eastbound I-26 approach to I-526	$5,000	
	OPS 32	Provide 45-degree Arrows & Mini-Skip Markings on Paul Cantrell Boulevard acceleration lane from I-526 EB and on the I-526 WB acceleration lane from International Boulevard	$5,000	
Contract 4 Cost				**$20,000**
Total Cost - 2013				**$3,670,000**
2015				
Contract 1	OPS 3	Extend the I-526 WB Right-Turn Lane approaching Sam Rittenberg Boulevard	$312,000	
	OPS 8	Lengthen deceleration lane along I-526 WB to Paul Cantrell Boulevard EB loop	$819,000	
	OPS 9	Lengthen deceleration lane along I-526 WB to Paul Cantrell Boulevard WB	$830,000	
	OPS 10	Lengthen deceleration lane along I-526 EB to Paul Cantrell Boulevard WB loop	$341,000	
Contract 1 Cost				**$2,302,000**
Contract 2	OPS 15	Extend acceleration lane from Leeds Avenue to I-526 WB	$790,000	
	OPS 17	Remove the north leg of the Paramount Drive & I-526 EB intersection, direct all traffic to Paramount Drive	$105,000	
	OPS 28	Extend the acceleration lanes from the I-526 EB loop ramp and I-526 WB loop ramp at Rivers Avenue	$1,576,000	
Contract 2 Cost				**$2,471,000**
Contract 3	OPS 46	Enhanced Traffic Camera Coverage	$30,000/camera	
	OPS 47	Enhanced SHEP	--	
	OPS 48	Provide 1 accident investigation area along I-526	$340,000	
Contract 3 Cost				**$340,000**
Total Cost - 2015				**$5,113,000**

Table ES20: Construction Contract Group Cost Continued

Contract Grouping	Strategy #	Description	Cost	Total Cost
2020				
Contract 1	OPS 1	Remove the south leg of the Sam Rittenberg Boulevard & I-526 WB intersection, direct all traffic to Sam Rittenberg Boulevard	$95,000	
	OPS 6	Construct second SB approach lane to US 17 from Skylark Drive	$1,144,000	
Contract 1 Cost				**$1,239,000**
Contract 2	OPS 11	Lengthen acceleration lane along I-526 EB from Paul Cantrell Boulevard	$830,000	
	CAP 2	Widen I-526 to a six-lane section between Paul Cantrell Boulevard to Rivers Avenue	$100,900,000	
	CAP 4A	Construct triple left-turn lanes to I-526 eastbound from Paul Cantrell Boulevard eastbound	$15,700,000	
	CAP 4B	Extend I-526 eastbound acceleration lanes from Paul Cantrell Boulevard to the Ashley River Bridge		
	CAP 5	Construct Two-lane exit ramp from I-526 westbound to Paul Cantrell Boulevard westbound	$16,000,000	
Contract 2 Cost				**$133,430,000**
Contract 3	CAP 1	Improve I-26 & I-526 Interchange (Alternate 7)	$256,500,000	
	CAP 3	Construct braided ramps along I-526 eastbound between Montague Avenue and International Boulevard	$5,800,000	
Contract 3 Cost				**$262,300,000**
Contract 4	OPS 29	Restriping the Mainline Shoulders over the Ashley River Bridge for 3 lanes in each direction	$55,000	
	OPS 30	Restriping the Mainline Shoulders Rivers Avenue and east for 3 lanes in each direction	$4,300,000	
	OPS 49	Active Traffic Management	$3,200,000	
Contract 4 Cost				**$7,555,000**
Total Cost - 2020				**$404,524,000**
2025				
Contract 1	OPS 2	Restripe SB approach to consist of dual left-turn and dual right-turn lanes at I-526 WB & Sam Rittenberg Boulevard	$5,000	
	OPS 4	Construct SB triple right-turn lanes on Sam Rittenberg Boulevard approaching US 17	$472,000	
	OPS 7	Construct a Northbound Right-Turn Lane on Skylark Drive approaching Sam Rittenberg Boulevard	$320,000	
	CAP 6B	Improve I-526 & US 17/Sam Rittenberg Boulevard Interchange (MCE No Build)	$7,500,000	
Contract 1 Cost				**$8,297,000**
Contract 2	OPS 12	Construct EB dual left-turn lanes from Paul Cantrell Boulevard to Tobias Gadson Boulevard	$795,000	
	OPS 16	Provide Ramp Metering for the I-526 WB entrance ramp from Leeds Avenue	$95,000	
Contract 2 Cost				**$890,000**
Contract 3	OPS 20	Extend the acceleration lane from the I-526 EB loop ramp through the intersection with the I-526 WB ramps & International Boulevard	$1,350,000	
	OPS 21	Provide dual Left-Turn Lane from International Boulevard to I-526 WB	$710,000	
	OPS 22	Construct EB dual left-turn lanes at International Boulevard & S. Aviation Avenue	$300,000	
	OPS 25	Construct a WB right-turn lane at International Boulevard & Tanger Outlet Boulevard	$394,000	
	OPS 26	Construct SB dual right-turn lanes at Montague Avenue & International Boulevard	$394,000	
	CAP 7A	Improve I-526 & International Boulevard Interchange	$109,300,000	
	CAP 7B	Construct Braided ramps along I-526 eastbound and westbound between I-26 and Dorchester Road		
Contract 3 Cost				**$112,448,000**
Total Cost - 2025				**$121,635,000**

TableES21: Construction Contract Group Cost Continued

Contract Grouping	Strategy #	Description	Cost	Total Cost
2030				
Contract 1	OPS 14	I-526 & Leeds Avenue: Improve Ramps to I-526 to allow Dual Left-Turn Lanes from Leeds Avenue EB and WB	$750,000	
	CAP 8	Improve I-526 & Paul Cantrell Boulevard Interchange	$16,800,000	
	CAP 9	Improve Paul Cantrell Boulevard & Magwood Drive Interchange	$27,800,000	
Contract 1 Cost				**$45,350,000**
Total Cost - 2030				**$45,350,000**
2035				
Contract 1	OPS 23	International Boulevard& Centre Pointe Drive: Construct EB triple left-turn lanes at International Boulevard & Centre Pointe Drive	$751,000	
	OPS 24	International Boulevard & Centre Pointe Drive: Construct SB dual right-turn lanes at International Boulevard & Centre Pointe Drive	$394,000	
Contract 1 Cost				**$1,145,000**
Total Cost - 2035				**$1,145,000**