



Chapter 11 — Implementation Plan

Introduction

All long-range plans benefit from a good implementation or action plan. Taking action on the many recommendations in the *Long-Range Transportation Plan* requires attention to several factors, not the least of which is the ability to secure funding. Today, the SUATS Urban Area receives less than 60% of the federal gas tax funding they received only five years ago. With this in mind, leaders must allocate appropriate levels of funding to the highest priority projects. The need also exists to identify cost-effective projects that provide additional safety improvements or protect specific corridors through enhanced access management strategies. Lastly, given the lack of federal dollars coming to the region and the anticipate growth, we can expect the quality of the SUATS transportation system to diminish. Now more than ever, citizens of the region must come to consensus on creating additional funding resources to support the regional transportation infrastructure needs. Innovative financing strategies like a sales tax referendum, transportation bonds, developer impact fees, vehicle registration fees or a combination thereof will be needed over the next decade to maintain the quality of life and economic vitality of the region.

To adopt and implement the plan, the MPO's Policy Board and Transportation Plan Advisory Group must work proactively with stakeholders such as:

- Citizens and businesses
- South Carolina Department of Transportation
- Santee Wateree Regional Transportation Authority (SWRTA)
- City of Sumter
- Sumter County
- Shaw Air Force Base
- Private Development Industry
- Elected leadership in the South Carolina General Assembly
- Neighboring municipalities within the region



Completion of the *Long-Range Transportation Plan* represents an important step toward implementing multimodal improvements that affect travel safety, mobility, development patterns, and the aesthetics of the Sumter region. **Some of the recommended improvements will be implemented through the development review process.** Major infrastructure improvements most likely will be a product of state and federal funding. However, transportation improvement funds are limited and competition for them great.

Furthermore, during the course of this study a number of transportation and land development issues were raised by citizens, including frustration over delays in getting transportation improvements completed. Unfortunately, the planning, design, and construction of publicly-funded transportation projects typically takes 10 years or longer in environmentally-sensitive areas. Local, state, and private partnerships offer strategic advantages to implementing improvements on a timely basis. The implementation plan recognizes each challenge and suggests strategies to address them. General recommendations and actions strategies follow to help the SUATS MPO achieve its goals.

Responsible Agencies

To fully implement the plan, the region must identify stable, timely, and equitable methods of funding. Some municipalities are negotiating with developers to share responsibility for the “cost of growth” and eventually shift these costs to home buyers and businesses. It is expected that similar debates will occur in other communities throughout the region before the next update to the state’s Transportation Improvement Program (TIP). Evolution toward a creative and effective mix of funding from various sources and stakeholders in the economy and transportation system of this region is a worthy goal.

To successfully implement this plan, responsible agencies with influence and authority to enact recommendations have been identified. Policy and program initiatives, for the most part, will occur at the local level. Some of the proposed transportation improvements will encompass right-of-way that is owned by different public or private agencies, and some improvements will occur as a result of development and redevelopment opportunities. However, the majority of responsibility for implementing these recommendations will require a coordinated effort between SCDOT and the SUATS MPO.

Today, the SUATS Urban Area receives less than 60% of the federal gas tax funding they received only five years ago.



Action Plan

The following action items list appropriate steps for local leaders to implement the recommendations of this plan and key agencies that should be involved with the task. Some of the tasks are recommended to be initiated during the first two to four years following the completion of the plan to take advantage of momentum gained during the planning process. While all the listed items are not expected to be completed within this time frame, the process should be initiated.

Beyond the tasks listed below, the success of this plan hinges on the City and County continuing to work with and educate local citizens and businesses. While public support can encourage implementation, opposition can significantly delay a project.

General Action Items

- Adopt this *Long-Range Transportation Plan*. As a part of FHWA’s SAFETEA-LU requirements, federal funds cannot be allocated to a local highway project without it being a part of a mutually adopted, financially-constrained plan.
- Once adopted by the MPO, the plan should be submitted to SCDOT Urban Planning Branch. The plan will then be forwarded to the Federal Highway Administration staff in Columbia.
- Request inclusion of high-priority projects in the next update of the state’s Transportation Improvement Program (TIP).
- Create a citizen-based standing committee that will encourage and educate the public as well as seek to aide in the implementation of this plan.
- As areas are developed and redeveloped, introduce gateways or traffic calming improvements to minimize impacts that negatively affect the character and integrity of adjacent neighborhoods.
- Promote alternative modes of transportation through better street design and improved developer participation.
- As physical infrastructure improvements are made, avoid and/or minimize impacts to environmentally sensitive areas to preserve the natural environment.

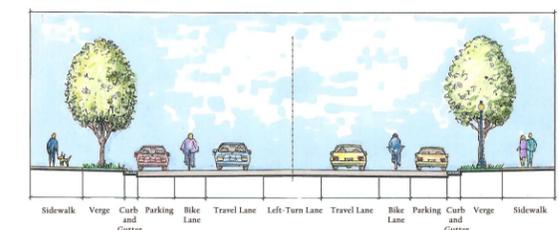
- Proactively support bicycle and pedestrian provisions in all SCDOT street improvements.
- Create aesthetic gateways (at key locations along major radial routes) that invite and welcome citizens and visitors to the SUATS region.
- Implement access management policies and construct measures that create a balance between the need for access to the transportation system and the desire to protect the mobility of major corridors. The recommendations in **Chapter 5** emphasize the protection of existing roadways through the inclusion of plantable medians and better access management design.
- Schedule a one-day summit with local leaders to discuss the recommendations of this plan and determine an action plan for a potential local sales tax or transportation bond referendum. In preparation for the summit, use the priorities outlined in this document to clearly define the projects as well as the anticipated revenue generation associated with each new funding source.



Potential Gateway Features

Policy Action Items

- As a requirement of FHWA’s SAFETEA-LU, local highway improvements should be based on an analysis that reflects regional congestion needs. This report identifies grouped prioritization (high, medium, and low) of projects based on the need for addressing current and long-term congestion needs. With this in mind, SUATS transportation decision-makers should revisit the prioritization of highway needs (**Chapter 5**) based on their own annual state TIP update process.
- The SUATS MPO region and its affiliated agencies should adopt a “Complete Streets” policy that establishes the need to accommodate bicycle, pedestrian, and transit safety and mobility as well vehicular needs to encourage a well-balanced transportation system.
- Revise local ordinances to require subdivisions larger than 100 dwelling units to include at least two points of access from a publicly maintained street and at least one stub-out street to extend and connect with future streets (where applicable).



Complete Street Example



- As a part of the development review process, it should be of regional consensus to require transportation infrastructure improvements from the development community based on level of impact. Therefore, planners, policy-makers, and community leaders should reinforce the need to work collaboratively with the development community on infrastructure improvements as a standard practice initiative.
- Create a US 76/378 Broad Street Corridor Overlay District within the City of Sumter’s Zoning Ordinance that will implement the intent of this plan. Items that should be addressed in the Overlay District include street signage control, streetscape elements, landscaping, access and cross access, parking, and building orientation and frontage.

Roadway Improvement Action Items

Short-Term Action Items (2 – 7 years implementation)

- Pursue “spot safety funds” through the SCDOT District office. Funds are needed for immediate improvements to the following locations based on three-year crash statistics that show crash rates higher than the statewide average for similar roadway and intersection types.
 - US 76/378 and SC 441 — Fifty percent of all collisions in the crash data were angle collisions (35 occurrences) and rear-end collisions (25 occurrences).
 - US 76/378 and SC 120 — The top crash types at this location were angle collisions (25 occurrences) and rear-end collisions (18 occurrences). Contributing circumstances for this location include drivers failing to yield the right-of-way (32 occurrences) and drivers traveling too fast for the roadway conditions.
 - US 15 and US 76/378 — The top crash types at this location were angle collisions (33 occurrences) and sideswipe collisions (7 occurrences) due to drivers failing to yield the right-of-way (14 occurrences) and drivers disregarding signs or signals (9 occurrences).
 - Broad Street (US 76 Business) and Gion Street — The top crash types at this location were angle collisions (27 occurrences) and rear-end collisions (14 occurrences).

- US 15 and US 521 (south) — The top crash types at this location were angle collisions (30 occurrences) and rear-end collisions (5 occurrences). Contributing circumstances for this location include drivers failing to yield the right-of-way (18 occurrences) and disregarding signs or signals (10 occurrences).

** Project prioritization based on Crash/Safety Analysis (Chapter 4).

- Vigorously pursue innovative public and private sources of funding for the following access management projects. New funding sources under consideration include Sales Tax, Transportation Bonds, Vehicle Registration Fees or Development Impact Fees.

- Robert Graham Freeway (US 76/378 Bypass) – from Carter Road to US 76 split – interchange and access improvements
- Broad Street – from Robert Graham Freeway (US 76/378 Bypass) to Washington Street – access management strategies
- Liberty Street – from Washington Street to Alice Drive – streetscape/gateway and access management strategies
- Lafayette Drive – from Pocalla Drive to US 76/378 – access management strategies
- Broad Street Closed-loop Signal System – Request a review and evaluation of traffic signal timing and coordination along existing US 76/378 and Broad Street between Carter Road and Bultman Drive. As appropriate, request state implementation of a closed-loop signal system along this stretch of existing roadway to reduce delay and improve the operation of the corridor. The City of Sumter should consider a moratorium on new traffic signals in this stretch.

** Project prioritization based on the Benefit and Impact Evaluation Matrix (Chapter 5) and reflects SAFETEA-LU compliance with congestion mitigation.



Eastbound US 76/378 approaching SC 441



Broad Street at Gion Street



Mid-Term Action Items (7 – 15 years implementation)

- Work with SCDOT officials to actively pursue planning, engineering, and construction dollars for the following projects:
 - Alice Drive (north) – Wise Drive to US 521 – widen to multilane including bicycle and pedestrian accommodations
 - Alice Drive (south) – Wise Drive to Liberty Street – widen to multilanes including bicycle and pedestrian accommodations
 - Wedgefield Road (SC 763) – Deschamps Road to Pinewood Road – widen to 4-lane divided
 - Wise Drive – Loring Mill Road to Alice Drive – widen to 4-lane divided
 - Manning Road – Lafayette Drive (US 15) to Guignard Parkway – widen to 4-lane divided

** Project prioritization based on the Benefit and Impact Matrix (Chapter 5) and reflects SAFETEA-LU compliance with congestion mitigation.

Long-Term Action Items (16 – 25 years implementation)

- Work with SCDOT officials to actively pursue planning, engineering and construction dollars for the following roadway and access management projects:
 - Red Bay Road – US 15 to Boulevard Road – streetscape/gateway and access management strategies
 - Red Bay Road (new location) – Boulevard Road to US 378 – widen to multilane including bike and pedestrian accommodations
 - Frierson Road – Sargent Road to US 521 – widen to 4-lane divided
 - Patriot Parkway (SC 441) – Loring Mill road to Fish Road – widen to 4-lane divided
 - Loring Mill Road – US 76/378 to Wedgefield Road – widen to 4-lane divided
 - Lewis Road – McCrays Mill Road to US 15 – widen to 3-lane

- Mason Road – Camden Highway (US 521) to Broad Street – widen to 4-lane divided
- US 521 – US 76/378 to Camden Highway – access management strategies
- Washington Street – Broad Street to Liberty Street – access management strategies
- Bultman Drive – Broad Street to Miller Road – access management strategies
- Kings Highway (SC 261) – US 76/378 to Cane Savannah Road – access management strategies, paved shoulders – freight corridor improvements
- Cane Savannah Road – Kings Highway (SC 261) to St. Pauls Church Road – access management strategies, paved shoulders – freight corridor improvements
- Westmark Boulevard – Broad Street to Broad Street Extension – widen to 2-lane divided; reserve right-of-way for 4-lane divided

** Project prioritization based on the Benefit and Impact Matrix (Chapter 5) and reflects SAFETEA-LU compliance with congestion mitigation.

Bicycle and Pedestrian Improvement Action Items

- Develop a project scoring system that uses technical criteria to rank candidate bicycle and pedestrian projects for prioritization by decision-makers.
- Adopt a policy that states all new collector streets and arterials must accommodate provisions for bicycles and pedestrians. The first catalyst project is Alice Drive (wide outside travel lanes and sidewalks).
- Pursue SCDOT Enhancement funds or Discretionary funds to complete the following projects consistent with the *Parks and Recreation Master Plan* and public survey results:
 - Cypress Trail should be extended to connect with existing trail between Broad Street and Wise Drive.



Northbound Alice Drive approaching Broad Street





- Signed routes/"Share the Road" signage should be installed along the following high priority routes:
 - Boulevard Road between Red Bay Road and Liberty Street
 - Liberty Street between Boulevard Road and Alice Drive
 - Main Street between Liberty Street and Red Bay Road
- Red Bay Road should be retrofitted to include wide outside lanes from Main Street to Boulevard Road.
- Pursue **Safe Routes to School** funding for implementing sidewalks and bike facilities within a ½-mile radius of the following public school facilities:
 - Sumter High School
 - Bates Middle School
 - Lakewood High School
 - Chestnut Oaks Middle School
 - Alice Drive Middle School
- Utilize Capital Improvement Program funding to "close the gap" in sidewalks for the following locations:
 - Winn Road between Mason Croft Drive and West Calhoun Street
 - West Hampton Avenue between North Purdy Street and Winn Road
 - Wedgfield Road between Loring Mill Road and Lawton Circle
 - Wise Drive between Pringle Drive and the Cypress Trail south of Robert Graham Freeway
- All existing rail and utility corridors should be reviewed for potential to use as multi-use trails.
 - Old CSX abandoned rail corridor should be used to implement the extension of the Cypress Trail from the existing trail at James Street southbound along the rail corridor to Liberty Street.



- Establish the following bicycle- and pedestrian-related programs:
 - **Education** — New and experienced bicyclists need to be made aware of where suitable routes are and what destinations can be accessed. Motorists, pedestrians, and cyclists need to understand the "rules of the road" to keep themselves safe while operating not only on but also adjacent to these facilities. Consider various means of educating the public in these regards.
 - **Encouragement** — People need to be encouraged to walk and bicycle. The more desirable the region becomes for pedestrians and cyclists (by providing more destinations oriented for them), the more successful these modes will become. Set a goal regionally and locally to be widely recognized as bicycle-friendly.
 - **Enforcement** — Work with local and county law enforcement officials to ensure laws pertaining to the interaction between motorists and pedestrians/cyclists are obeyed. Ensure high proportions (more than 90%) of such citations are upheld in court.
 - **Parking** — Consideration should be given to providing bicycle parking at key destination points throughout the region. Some potential areas include, but are not limited to, malls, theaters, parks, central business districts, libraries and schools. The cost for such amenities ranges from a few hundred to several thousand dollars, depending on the type and quality of the facility. A program to partially subsidize the cost could be considered. The following specific locations should be considered high priority:

▪ Sumter High School	▪ Hope Center
▪ Bates Middle School	▪ YMCA
▪ Lakewood High School	▪ University of SC Sumter
▪ Chestnut Oaks Middle School	▪ City Hall
▪ Alice Drive Middle School	▪ Sumter Library
▪ Iris Gardens	▪ Market Place
▪ Sumter County Career Center	▪ Sumter Square



Potential multi-use trail location



- The SUATS MPO should work cooperatively with the Sumter County Active Lifestyles (SCAL) group, the Sumter Easy Riders, the Sumter Chain Gang Cycling Club and other local constituents to initiate the following programs to better integrate bicycle and pedestrian facilities into the community:
 - Initiate a Safe Routes to School Program
 - Publicize and participate in the National Walk to School Day
 - Initiate annual rideabouts and bike rodeos
 - Participate in the School-Based Safety Education Program
 - Develop public services announcements to encourage a healthy community through enhanced cycling and walking

Transit Improvement Action Items

- Actively participate in promoting transit-supportive land use and site development
- Initiate the following programs and action items to enhance public perception of transit by:
 - Conducting a ridership survey
 - Developing a transit master plan
 - Introducing a coordinated marketing plan
- As identified through the public survey as well as Advisory Group and stakeholder meetings, a need exists to fulfill the current needs of some captive users through the following measures:
 - Extending duration of routes
 - Utilizing the master planning process to assess current service and explore changes in route frequency and duration
 - Improving the quality of taxicab services
- Identify satellite transfer stations for future expansion.

- Develop future transit expansion and system modifications based on the growth within the region by:
 - Promoting coordination and collaborative partnerships between the urban and rural transportation programs of SWRTA as well as with other public transit and human service agencies
 - Utilizing technology to ensure reliability of the transit system
 - Ensuring future routes are responsive to future land use patterns
 - Locating public transit within walking distance to civic land uses
 - Maximizing the use of the James E. Clyburn Intermodal Transportation Center
- Services for commuters must be a priority for the regional transportation system. Enhance service by expanding carpool matching service and SmartRide service in the Sumter market
- Increase passenger amenities such as sidewalks, shelters, and benches by enhancing bus stops and coordinating upgrades to transit stops with improvements to the pedestrian and bicycle network
- Initiate an organized carpool or vanpool for commuters traveling to and from Shaw Air Force Base.

Freight Improvement Action Items

- Designate truck routes and sign appropriately as recommended in **Chapter 8**. Truck route signage should be posted at the city limits, highway exits, and other appropriate locations directing truck drivers to those streets on which their movements are permitted. Consolidated truck routes should be clearly designated for the following primary routes:
 - US 76/US 378 Bypass: primary east-west truck route through town
 - US 15/US 521: primary north-south truck route through town
- Work with SCDOT to prioritize resurfacing on designated routes to reduce noise and vibration from trucks.
- Publish and distribute educational materials to businesses and industries concerning truck routes.





- Work with the South Carolina Trucking Association and SCDOT to create a secondary truck route between US 76/378 (west) and US 15 (south) by upgrading portions of Kings Highway (SC 261), Cane Savannah Road, St. Pauls Church Road, Cains Mill Road, and Clipper Road.
- Work with SCDOT to make improvements at critical intersections on truck routes to more easily facilitate large vehicle movements and encourage their use by truckers. Improved turning radii, wider lane, and dedicated turn lanes will greatly improve the efficiency and safety of these corridors.
- Adjust signal timing along high priority routes to allow uninterrupted through movements based on posted speed limits. The result will be improved travel times and reduced noise and air pollution.
- Publish and distribute educational materials to businesses and industries concerning proposed designated truck routes.
- Identify streets in industrial areas that function as industrial collectors and work with stakeholders to evaluate and implement the appropriate cross-section presented in Chapter 5.

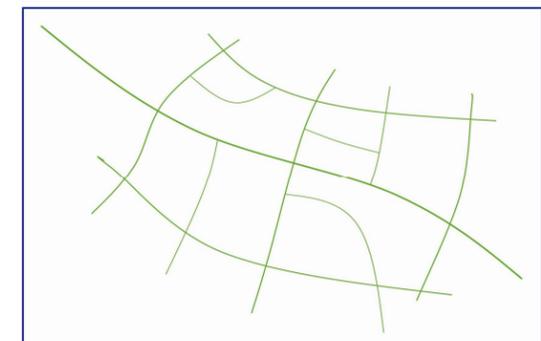
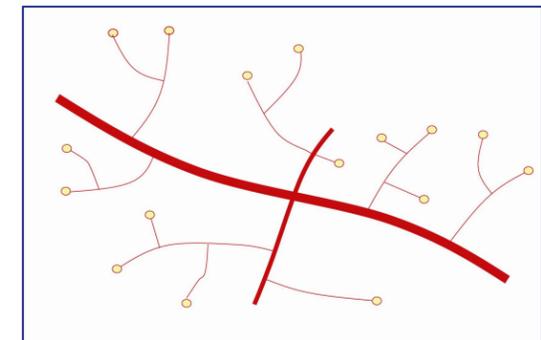
Land Use Action Items

- The SUATS region should encourage efficient use of the transportation system by promoting development patterns that favor higher densities and intensities, mixed land uses, and pedestrian-friendly environments.
- The City and County of Sumter should limit the number of cul-de-sacs to areas where topography, environment, or existing development make other street connections prohibitive.
- The number of driveways or curb cuts serving a property should be minimized and shared-use driveways should be encouraged on major roads including Broad Street, Bultman Drive and Pinewood Road. Cross access agreements should be required through the development review process.
- A streetscape plan for Liberty Street from Alice Drive to Washington Street should be developed as a community initiative for protecting the long-term sustainability and gateway to the community.
- As a proposed new connection to the Bypass, SUATS should develop a small area plan for the proposed interchange at US378 and Wise Drive.

- City staff should amend the current ordinance to require a traffic impact study accompany all development applications that could generate more than 100 peak hour (entering + exiting) or 1,000 average daily trips, or any other development deemed necessary by the Planning Director for review.
- The trip generation rates for major subdivision or site plans used in the City of Sumter Zoning and Development Standards Ordinance are now outdated and should be revised to reflect data published in the Institute of Transportation Engineers' (ITE) *Trip Generation*, Seventh Edition (2003).
- The City and County should work together to define common design elements that collectively reinforce a sense of place for high-profile corridors identified within the study area. These design elements then should be used to promote effective decisions regarding appropriate land use and development patterns for the area. In addition, a streetscape plan for specific corridors (e.g., Broad Street, Bultman Drive, Liberty Street, McCrays Mill Road, or Pinewood Road) should be developed as a community initiative for protecting the long-term sustainability of the community.
- The City of Sumter Zoning and Development Standards Ordinance requires sidewalks measure a minimum 4 ½ feet in width. City officials should increase the minimum sidewalks width in the Zoning and Development Standards Ordinance to 5 feet in residential neighborhoods with a 5-foot vegetative buffer from the street and up to 12 feet in width in retail centers or downtown that may accommodate benches, outdoor seating, etc.
- The City and County of Sumter should consider including the guiding principles for compact development in their respective Comprehensive Plans for implementing a more efficient transportation system.
- City and County officials should revise the right-of-way profiles and street width requirements of existing ordinances to mimic recommended typical sections included in the Long Range Transportation Plan (Chapter 5).
- The City and County should adopt an access management overlay ordinance that provides a legal framework to administer and enforce consistent access management standards along high-profile corridors like Broad Street, Bultman Drive, Wise Drive, McCrays Mill and Pinewood Road.
- A formal connectivity ordinance should be adopted to increase connections between existing and new developments and redevelopments by requiring coordination between the vehicular and non-vehicular circulation systems.



Location in need of improved turning radii



Land use decision should support connectivity



Alternative Funding Strategies

State revenues alone will not sufficiently fund a systematic program of constructing transportation projects in the SUATS region. Therefore, the MPO must consider alternative funding measures that could allow for the implementation of this plan. Several alternative funding measures under consideration in other areas follow.

- **Sales Tax Referendum** — Sales Tax referendums have been initiated in several communities/counties across the state including (Horry, York, Charleston, and Dillon Counties) to support community infrastructure needs (community facilities, water, sewer, transportation, etc.). Based on a demographic and economic analysis for Sumter County, a one cent sales tax will generate approximately \$11 million per year. Assuming a seven year horizon and 50% allocation, a sales tax will generate approximately \$38.5 million toward transportation improvements.
- **Developer Contributions** — Through diligent planning and earlier project identification, regulations, policies, and procedures could be developed to protect future arterial corridors and require contributions from developers when the property is subdivided. These measures would reduce the cost of right-of-way and would in some cases require the developer to make improvements to the roadway that would result in a lower cost when the improvement is actually constructed. To accomplish this goal, it will take a cooperative effort between local planning staff, SCDOT planning staff, and the development community.

One area where developers can be expected to assist in the implementation of transportation improvements is for new collector streets. Collector streets support the traffic impacts associated with local development. For this reason, developer contributions should be responsible sharing the cost of these improvements.
- **Transportation Bonds** — Transportation bonds have been instrumental in the strategic implementation of local roadways and non-motorized travel throughout South Carolina. Voters in communities both large and small regularly approve the use of bonds in order to improve their transportation system. Sumter citizens surveyed during the planning process indicated they would be open to the idea of a transportation bond (see **Chapter 2** for more information). Projects that historically have been funded through
- transportation bonds include sidewalks, road extensions, new road construction, and streetscape enhancements.
- **Impact Fees** — Developer impact fees and system development charges provide another funding option for communities looking for ways to fund collector streets and associated infrastructure. They are most commonly used for water and wastewater system connections or police and fire protection services, but recently they have been used to fund school systems and pay for the impacts of increased traffic on existing roads. Impact fees place the costs of new development directly on developers and indirectly on those who buy property in the new developments. Impact fees free other taxpayers from the obligation to fund costly new public services that do not directly benefit them. A few communities in South Carolina have approved the use of impact fees (e.g., Berkeley County). The use of impact fees requires special authorization by the South Carolina General Assembly.
- **Enhancement Grants** — State and federal grants can play an important role in implementing strategic elements of the transportation network. Several grants have multiple applications, including Transportation Enhancement Grants as well as State and Federal Transit Grants. The Enhancement Grant program, established by Congress in 1991 through the Intermodal Surface Transportation Efficiency Act (ISTEA), ensures the implementation of projects not typically associated with the road-building mindset. While the construction of roads is not the intent of the grant, the construction of bicycle and pedestrian facilities is one of many enhancements that the grant targets and could play an important role in enhancing the pedestrian safety and connectivity in the Sumter region. For more information on the grant program, please visit www.scdot.org/community/tep_app.shtml.
- **Oversize Agreement** — An oversize agreement provides cost sharing between the city/county and a developer to compensate a developer for constructing a collector street instead of a local street. For example, instead of a developer constructing a 28-foot back-to-back local street, additional funding would be provided by the locality to upgrade the particular cross-section to a 34-foot back-to-back cross section to accommodate bike lanes.