Chapter 3.7 Transportation Element

3.7.1: OVERVIEW

Transportation is an important Comprehensive Plan Element because it provides the strategies tying the movement of people and goods with the strategies of economic development and land use. Because roads are capital facilities maintained in part by the County, they are linked to the strategies for capital facility improvements and the provision of adequate public facilities. The impact of new development on the roadways is often felt on a countywide level. As development in areas of the County intensifies, one of the first things long time residents and new residents notice is an increase in traffic and traffic congestion. Furthermore, the general health, safety, and welfare of the citizens and visitors to Charleston County are strongly influenced by the road network's ability to handle evacuations during severe weather and other emergencies.

A transportation system that offers a complete network of transportation choices, including, but not limited to, pedestrian and bicycle facilities as well as public transportation and mass transit options, is key to developing a sustainable community. The provision of transportation in the County should reflect the unique characteristics of the landscape and adhere to the character outlined in the development quality strategies of the *Comprehensive Plan*. Safe and adequate transportation options should maintain and enhance the rural character throughout the County.

Transportation systems are not confined solely to roads. In Charleston County, the transportation system includes: a large port system; the Intercoastal Waterway, along with the Atlantic Ocean and various rivers used for shipping purposes; several airports, both public and private; Joint Base Charleston; public transportation systems; and a network of local roads, collector roads, arterial roads, and highways. The economy of the Berkeley-Charleston-Dorchester region is dependent upon the viability and success of these diverse transportation systems. Therefore, a key strategy in this Element is to support these systems and ensure that they are balanced with land use recommendations.

Purpose and Intent

The purpose of the Transportation Element of the Comprehensive Plan is to: present information and strategies that respect the scenic beauty, community character, natural resources, and cultural heritage of Charleston County in the provision and use of any transportation system; consider the impacts of proposed new development in the existing transportation systems during review of proposed developments; improve efficiency of the existing and planned transportation system by managing its supply and demand; encourage the provision of safe, convenient pedestrian and bicycle systems; encourage public transit options in the County; promote intermodal transportation systems such as park and ride, pedestrian and bike ways, and commuter rail; and support and improve the existing emergency evacuation and transportation planning policies.

3.7.2: BACKGROUND AND INVENTORY OF EX-ISTING CONDITIONS

The County's primary function in relationship to transportation is through improvements of roadways and drainage. The Transportation Development Department is responsible for these improvements, while the Public Works Department is responsible for drainage and maintaining county roads. In 2006, the County completed a *Comprehensive Transportation Plan* as part of the Charleston County Transportation Sales Tax Program, which is administered by the County's Transportation Development Department. The Plan includes a forecast of Charleston County road projects over the next 25 years, a review of funding sources and leverage options, and a review of mass transit systems. A Transportation Advisory Board (TAB) was created by the Charleston County Council to make recommendations on transportation sales tax expenditures for transportation projects.

In Charleston County, transportation planning is a combined effort of Charleston County, adjacent counties and municipalities, the South Carolina Department of Transportation (SCDOT), and the Berkeley-Charleston-Dorchester Council of Governments (BCDCOG), which is the Metropolitan Planning Organization (MPO) for the region as designated by the Federal Highway Administration (FHWA). Public transportation is provided by the Charleston Area Regional Transportation Authority (CARTA) and the Rural Transportation Management Agency (RTMA). Together, these agencies analyze the short- and long-range transportation needs of the region and offer a public forum for transportation decision making. The BCDCOG prepares a five year plan which is included in the biannual SCDOT Statewide Transportation Improvement Program (STIP).

South Carolina Department of Transportation

The SCDOT is responsible for transportation planning for federal and state highways. Its focus is on providing statewide regional networks of transportation. Plans from SCDOT allocate federal and state funds toward projects. The SCDOT Commission determines the funding priorities for the federal-aid program following each new federal highway bill and annual appropriations act which includes the funding level allocated to the BCDCOG through the Charleston Area Transportation Study (CHATS). Since the mid 1990s, the allocation between urban and rural federal-aid funds for MPOs and COGs, called Guideshare, has been based on study area population. Since the metropolitan population of the BCDCOG Region exceeds 200,000, CHATS is entitled to specific allocations of federal funds called Urban Attributable Funds.

Charleston Area Transportation Study

In 1977, the BCDCOG was appointed to perform the planning and programming functions of the Charleston Area Transportation Study (CHATS), in cooperation with the SCDOT, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). CHATS currently serves approximately 800 square miles comprised of the region's most urbanized areas. CHATS is governed by a 47-member board representing governmental and transportation-related organizations from throughout the CHATS region. There are many ongoing planning efforts associated with CHATS. The CHATS Transportation improvement plan lists three primary documents which encompass the regional transportation efforts.¹

- 2. The *Long-Range Transportation Plan* (LRTP) is used as a guide for region plans to invest in the transportation system over a 25 year period. The plan includes environmental, social, and intermodal considerations. The vision of the LRTP is guided by estimated available financial resources. The LRTP was adopted in April of 2005 and must be updated every five years to reflect changing conditions. The plan was most recently updated in 2010.
- 3. The *Transportation Improvement Program* (TIP) is a short-range five year capital improvement program prioritizing projects for federal funding. The current five year transportation improvements program was adopted in June 2009 and last amended on September 23, 2013. The current program spans from fiscal years 2010-2015. A project must have available funding and be included in the LRTP to be included in the TIP. CHATS also prepares an annual rural planning work program.

Public Transportation

Charleston Area Regional Transportation Authority (CARTA) provides local, express, and neighborhood bus service within the urban and suburban areas of the Berkeley-Charleston-Dorchester region. In Charleston County, CARTA provides service in and between North Charleston, Charleston, Mount Pleasant, West Ashley, and James Island. CARTA's services (other than fixed route services) include express routes, DASH service, and Tel-A-Ride vehicles all of which are described as follows.

Express Routes

Eight express service routes run between James Island and North Charleston, between West Ashley and Mount Pleasant, between Summerville and downtown



^{1.} The *Unified Planning Work Program* lists the transportation studies and tasks to be performed by the MPO staff, which is the BCDCOG staff, on an annual basis.

¹ Information from BCDCOG. 2008.

Charleston, and between downtown Charleston and Charleston International Airport in North Charleston. All routes include stops in downtown Charleston.

DASH Service

Rubber-wheeled trolleys provide bus service in downtown Charleston. This service is often utilized by downtown workers and tourists.

Tel-A-Ride Vehicles

This service provides curb-to-curb service for residents who meet the Americans with Disabilities Act Certification Requirements.

TriCounty Link provides rural bus service to Berkeley, Charleston, and Dorchester Counties. In Charleston County, three bus routes serve the western portion of the County, including Johns Island, Kiawah Island, Seabrook Island, and Edisto Island, as well as the Towns of Meggett, Hollywood, and Ravenel. Two routes serve the eastern part of the County and extend into the Towns of Awendaw and McClellanville. Commuter routes are also available through TriCounty Link.

Charleston County Transportation Committee

The Charleston County Transportation Committee (CTC) is a group of professionals appointed by the Legislative Delegation from all legislative bodies within the County. Charleston County appoints two of the ten members of the CTC. The main objective of the CTC is to distribute gas tax funding, which is 2.66 cents derived from the State Gas Tax of 16 cents, for small construction and resurfacing projects. The Charleston County Transportation Development Department acts as program manager for the CTC.

The Charleston County Comprehensive Transportation Plan

The Charleston County Comprehensive Transportation Plan (The Transportation Plan) as proposed by the Transportation Advisory Board in May 2006 is hereby included as the Transportation Element of the *Charleston County Comprehensive Plan*. The Transportation Plan is an initiative of the RoadWise Program, created through the *Charleston County Half Cent Transportation Sales Tax Program (Half Cent Sales Tax)*. The Transportation Plan was developed through a process that included participation from the regional planning organizations, local jurisdictions and the public. The plan includes reviews of the various transportation plans established by local municipalities, CTC, CHATS, BCDCOG, and SCDOT. The existing plans and priorities encompass roadways and greenways, bike and pedestrian paths, drainage and construction plans,

intersection improvements and signalization, as well as mass transportation options.

The Transportation Plan, which is funded by the Half Cent Sales Tax and required by *Ordinance No. 1343 Sales Tax Spending Plan*, is to develop structured, yet flexible, short-term and long-term strategies that can be implemented systematically to take advantage of available funding and improve the transportation network throughout Charleston County.

To guide the development of the *Comprehensive Transportation Plan*, Ordinance No. 1343 also created the Transportation Advisory Board (TAB) and tasked the Board with commenting on the plan and its recommendations, as well as receiving input from the public through the Public Information Meeting process. The County TAB developed a list of values to be considered in evaluating the projects and developing recommendations. Those value statements include:

1. Maintaining and completing existing infrastructure;

- 2. Environmental Impact;
- 3. Projects that include interconnects between communities;
- 4. Projects with regional benefits;
- 5. Projects that provide the greatest significance to the most people;
- 6. Projects with the capacity to leverage other funding sources; and
- 7. Projects that are multi-modal and/or multipurpose.

These values were used to generally evaluate projects for prioritization; however, they do not have universal applicability to all projects under consideration. Therefore, it was necessary to selectively apply them to the various categories. Staff completed a thorough analysis of projected resources and expenditures for the 25 year program and developed recommendations to improve the County's transportation network. The Transportation Plan reflects comments from the public and extensive financial analysis.

Bonding and Recommended Projects Revenue Projections

The Charleston County voters approved the Sales Tax Referendum in 2004 which will provide funding to the recommended improvements. The revenue projections from the Half-Cent Sales Tax are shown in *Table 3.7.1: Transportation Sales Tax Revenue Projections*. The Transportation Plan recommends the allocations of \$234,604,800 (18 percent of the sales tax revenues) to mass transit.

Bonding Approved in Referendum

Bonding approved in the referendum includes \$113 million in general obligation bonds sales that are payable from the proceeds of the Half-Cent Sales Tax. The Initial Bond Program, which consisted of \$36 million for greenbelts and \$77 million for roadways, allowed the County to finance portions of the following highway projects, all which are complete or near completion:

- \$25 million to complete the right-of-way acquisition and engineering process for widening and improvement of Johnnie Dodds Boulevard from the Arthur Ravenel, Jr. Bridge to the I-526 overpass (completed);
- \$7 million for the Glenn McConnell/Bees Ferry Road Intersection improvements, for which construction is scheduled to begin in May 2014;
- \$10 million for the road improvements on James Island, which included the Folly Road and Maybank Highway intersection improvements (completed), Harbor View Road improvements (future project), and loop-ramp interchange from the James Island Connector to Folly Road (deferred);
- \$6 million for the improvements to Folly Road from south of Windermere Boulevard to US Highway 61 (completed); and
- \$29 million for acquisition and construction of the Palmetto Commerce Parkway, the roadway connecting Ashley Phosphate Road and Ladson Road (completed).

Commitment to Fund the Arthur Ravenel, Jr. Bridge

The County has also committed funds in the amount of \$72 million for the State Infrastructure Bank as the County's matching funds for the construction of the Arthur Ravenel, Jr. Bridge.

Recommended Funding Allocations

Considering the commitments already made for a portion of the tax revenues, and in response to the comments received from the public on the need for funding in certain program areas, the Transportation Development Department recommends annual allocations to the following programs:

Local Paving Program	\$ 2.0 Million
Resurfacing Program	\$ 4.0 Million
Annual Drainage Projects	\$ 1.0 Million
Council/Public Works Projects	\$ 1.0 Million
Pedestrian/Bike Projects	\$ 0.5 Million
Annual Intersection Projects	\$ 2.0 Million

Recommended Bonding

County Council approved the sale of three tranches of general obligation bonds of \$77 million, \$42 million, and \$142 million. The proceeds from the bond issuance provide funding availability during the accelerated construction period. *Table 3.7.2* shows the project recommendations.

TABLE 3.7.1: TRANSPORTATION SALES TAX REVENUE PROJECTIONS, 2014

Year	Fiscal Year	4% Receipts	17% Green Space	18% Transit	65% Roads	
1	2005	5.870	0.998	1.057	3.816	
2	2006	37.116	6.310	6.681	24.125	
3	2007	39.521	6.719	7.114	25.689	
4	2008	40.097	6.816	7.217	26.063	
5	2009	37.470	6.370	6.745	24.356	
6	2010	36.293	6.170	6.533	23.590	
7	2011	37.931	6.448	6.828	24.655	
8	2012	40.673	6.914	7.321	26.437	
9	2013	42.527	7.230	7.655	27.643	
10	2014	46.000	7.820	8.280	29.900	
11	2015	48.250	8.203	8.685	31.363	
12	2016	50.180	8.531	9.032	32.617	
13	2017	52.187	8.872	9.394	33.922	
14	2018	54.274	9.227	9.769	35.278	
15	2019	56.445	9.596	10.160	36.689	
16	2020	58.703	9.980	10.567	38.157	
17	2021	61.051	10.379	10.989	39.683	
18	2022	63.493	10.794	11.429	41.270	
19	2023	66.033	11.226	11.886	42.921	
20	2024	68.674	11.675	12.361	44.638	
21	2025	71.421	12.142	12.856	46.424	
22	2026	74.278	12.627	13.370	48.281	
23	2027	77.249	13.132	13.905	50.212	
24	2028	80.339	13.658	14.461	52.220	
25	2029	56.925	9.677	9.677 10.247		
26	2030	-	-	-	-	
To	Totals		221.510	234.540	846.950	

FY 2005 includes 2 months of revenue, and FY 2030 includes no more than 10 months of revenue to reflect start of collection in May 2005. All amounts shown on the schedule are in thousands and are subject to annual budget submission to County Council and annual appropriation by County Council. FY 2005 - 2013 are actual amounts.

Source: Charleston County Transportation Development Department, 2014.

TABLE 3.7.2: PROJECTS RECOMMENDED FOR FUNDING

Project	Amount Authorized by Nov. 2004 Referendum	Amount Authorized by Referendum	Additional Bonded Funding GOB	Current Estimated Cost	Additional Sales Tax Funding Recommended	Recommended Other Funding				
A. Completion of Limited Scope of Initial Bond Projects										
Palmetto Parkway/Ashley Phosphate Rd. Acquisition and Construction	\$28.5 M	\$7.5 M	-	\$36.0 M						
Johnnie Dodds Blvd.	\$37.0 M	-	\$45.7 M	\$82.7 M						
Glenn McConnell/Bees Ferry Rd. Intersection Improvements	-	-	\$7.8 M	\$7.8 M						
Road Improvements on James Island										
Loop Ramp from James Island Connector to Folly Rd.	-	-	\$0.3 M	\$0.3 M						
Folly Rd./Maybank Hwy Intersection Improvements	\$5.0 M	-		\$5.0 M						
Harbor View Road	\$3.0 M	\$1.0 M	\$3.5 M	\$16.3 M		\$8.8 M SCDOT				
U.S. 17/Hwy. 61 Connector near Wesley Dr.	\$3.5 M			\$3.5 M						
Total Initial Bond Projects	\$77.0 M	\$8.5 M	\$57.3 M	\$151.6 M		\$8.8 M				
B. High Priority Regional Projects										
Completion of the Mark Clark Exwy.				\$556.0 M		\$556.0 M SIB				
Port Access Road and Railroad Overcrossing				\$300.0 M		\$300.0 M SIB				
Interchange at I-526/Hungry Neck Blvd.				\$40.0 M		\$32.0 M SIB \$8.0 M Federal Earmark				
Total High Priority Regional Projects				\$896.0 M		\$896.0 M				
C. High Priority Local Projects										
Glenn McConnell/I-526 Loop		\$7.5 M		\$7.5 M						
Bees Ferry Road Widening from Savannah Hwy. (Hwy 17) to Ashley River Rd. (Hwy. 61)		\$11.0 M	\$12.5 M	\$43.3 M		\$12.8 M SCDOT \$7.0 M Federal Earmark				
Folly/Camp Rd. Intersection		\$2.5 M	\$13.2 M	\$25.1 M		\$6.5 M SCDOT \$2.9 M Federal Earmark				
Future Dr. Loop to Ladson Rd. and Northside Dr. Extension		\$9.0 M	\$34.0 M	\$43.0 M						
Maybank Hwy. Widening (Johns Island - I-526 to Main Rd.)		\$1.0 M	\$14.0 M	\$15.0 M						
Medical University Roadway Infrastructure Improvement Project (Phase I)		\$2.5 M		\$4.8 M		\$2.3 M SCDOT				
Allocation Projects			\$11.0 M	\$11.0 M						
Total High Priority Local Projects		\$33.5 M	\$84.7 M	\$149.7 M		\$31.5 M				
Grand Total	\$77.0 M	\$42.0 M	\$142.0 M	\$1,197.3 M		\$936.3 M				

Source: Charleston County Transportation Development Department, 2014.

Other Transportation Initiatives

Mark Clark Expressway

In 2006 and 2012, the South Carolina State Infrastructure Bank (SIB) voted to commit a total of \$556 million of additional funding to Charleston County for the completion of I-526 (Mark Clark Expressway). Of the \$556 million, the SIB awarded the County \$99 million for preliminary design, environmental impact studies, engineering, and right-of-way acquisition. The SIB made a commitment to fund the Mark Clark Expressway's complete construction, from its current terminus at US Highway 17 South to the James Island Connector, as funding becomes available to the Bank. Charleston County Council directed the County's greenbelt consultant to conduct a study of the likely impacts of the proposed I-526 Mark Clark Expressway on the community of Johns Island.

The study, called the *Mark Clark Community Impact Assessment*, found that Johns Island will experience significant increases in the number of households and residential serving uses in the years ahead. Although regional growth patterns will bring more people to Johns Island with or without the Mark Clark, the completion of this road could shift land and development patterns in the region.

More growth occurs in areas with improved interstate access at the expense of other parts of the region; therefore, Johns Island can expect to capture a higher share of future regional growth than communities without enhanced interstate connections. An accelerated rate of development and change poses physical, social, and economic challenges for any community. The study also included recommendations to preserve the qualities most valued by community stakeholders and to lessen the impacts of development and land use and socioeconomic change resulting from the Mark Clark such as community design of corridors, green infrastructure, customized rural development standards, community design of interchanges, and promoting opportunities for affordable housing.

Widening of Maybank Highway

As noted above, the widening of Maybank Highway on

Johns Island, from the Stono River Bridge to Main Road, is a project that is recommended for funding through the *Half Cent Sales Tax.* This project was included as part of the 2004 bond referendum for the *Half Cent Sales Tax.* In June of 2007, the City of Charleston conducted a community planning effort for the area of Johns Island within the Urban Growth Boundary. The transportation objectives for the Maybank Highway Corridor that resulted from this effort were vastly different than the widening project included in the 2004 referendum.

Charleston County Council subsequently directed County staff to coordinate with the City of Charleston staff to evaluate the merits of both transportation improvement plans for the Maybank Highway Corridor to determine the most feasible route. Council also directed staff to include coordination of land use and transportation in the resulting study in order to ensure that the recommended transportation alternative does not negatively impact land use in the Corridor.

Commuter Rail

Commuter rail transit systems are short-distance transportation modes that primarily serve persons traveling to and from employment centers; therefore, ridership is generally confined to the morning and evening peak hours. These systems are often used to provide transportation choices, mitigate air quality impacts, effectuate urban form, or relieve overcrowded highways during peak travel times.

In response to increasing traffic congestion in the I-26 corridor, the BCDCOG, in partnership with CARTA, examined the potential success of a commuter rail system in the *Charleston Metropolitan Area Commuter Rail Feasibility Study*, completed in 2006. This study was an update of a 1990 study entitled *Study of Potential Commuter Rail Services in the Charleston Urban Area*. The 1990 study found that it was not appropriate for the Metropolitan Charleston Area to support a commuter rail project at that time; however, the study recommended that the potential for future commuter rail projects be revisited by the year 2000. The population increases and growth of the urban area since 1990 provides evidence that the region is ripe for a transit option that fo-

cus on commuters.

The 2006 study focused on a 22 mile corridor, the Norfolk Southern Line from the Charleston Peninsula to Summerville, running parallel to I-26. Capital costs for this project were estimated to be a total of \$45.8 million, with \$27 million for fixed facilities and \$18.8 million for equipment. These estimates did not include the cost of land acquisition, demolition, utility modifications, corridor clean-up, or track reconstruction. The study estimated annual operating costs to be approximately \$3.96 million with operating revenue, based on estimated ridership levels, to be \$2.55 million, making the operating deficit \$1.41 million.

Past studies coupled with continual population growth have indicated to regional leaders that a need exists for enhanced transit to alleviate traffic demands on the I-26 corridor. To obtain financial assistance from the Federal Transit Administration (FTA) in constructing a Fixed Guideway system (such as commuter rail), FTA requires detailed analyses of current and projected demand, based on current and projected populations within a defined service area, and various transit mode alternatives that could potentially serve the corridor. The region's Metropolitan Planning Organization (MPO), Charleston Area Transportation Study (CHATS), initiated a Fixed Guideway Analysis for the I-26 corridor under a previous federal transportation bill. Referred to as an Alternatives Analysis, FTA had a predefined methodology and submission requirements for conducting these analyses. With transition to a new federal transportation bill (MAP-21), concurrent with the region's submission to FTA to initiate the project, the requirements for such the defined Alternatives Analysis were integrated into a later stage of the project development process.

Working with FTA, a subcommittee of CHATS is now moving forward with performing an in-depth analysis of current transit service options, current and projected demands for public transportation within the corridor, potential alignments and transit modes to meet those demands, and a preliminary fiscal assessment to determine a locally preferred alternative for establishing a Fixed Guideway system along the corridor. The study is expected to be completed by June 2015².

Future development can have a direct impact on the success of a commuter rail service. Creating an urban form that supports transit service should be pursued in conjunction with the municipalities of Charleston County. Transit Oriented Development (TOD) is designed to maximize access by transit and non-motorized transportation, with other features, to encourage transit ridership. TOD does more than simply shift car trips to transit; it also increases accessibility and transportation options through land use clustering and the mix of residential and commercial facilities. It reduces the need for automobile use and parking. By reducing the distance required for car trips, it encourages walking and cycling, and allows some households to reduce their car ownership, which together can result in large reductions in vehicle travel. TOD strategies address how development on a "greenfield" site can be adjusted to incorporate transit strategies early on, and continue to be transit-accessible as the community grows.

Rail

Rail transport is an important component in the movement of freight in the region. Highway facilities are capacity constrained and coupled with limited funding for improvement, rail transport shows the potential to alleviate the demand on the entire transportation network. A multi-modal approach to the movement of goods and peo-

ple will be necessary to accommodate the growth in transportation demand.

To serve passenger transportation, an inter-modal transportation facility was originally planned for the intersection of West Montague Avenue and Dorchester Road in North Charleston; however, CARTA requested to relocate the inter-modal facility to the current AMTRAK site on Rivers Avenue and the Federal Transit Administration (FTA) approved the relocation. CARTA intends to sell the original site located at the intersection of West Montague Road and Dorchester Road. Proceeds from the sale, along with FTA funding, will enable a new inter-modal transportation center to be constructed for \$14.5 million. The inter-modal facility is scheduled to be constructed by the fall of 2016. The facility is planned to be interconnected with AMTRAK, CARTA, Greyhound/Southeastern Stages Bus Lines, and taxi-ground transportation services². Updates on this ongoing project can be found by contacting the BCDCOG.

Airports

Charleston County contains three airports including the Charleston International Airport located in North Charleston, the Charleston Executive Airport located on Johns Island, and the Mount Pleasant Regional Airport located in Mount Pleasant.

Charleston International Airport

The Charleston International Airport terminal complex includes approximately 270,000 square feet. In 2013, 1.5

million passengers enplaned and 1.4 million deplaned. Freight traffic increased in 2013 to 12.1 million pounds enplaned and 28.4 million pounds deplaned at Charleston International Airport.

Million Air, a new facility that opened in August 2007, is incorporated within the Charleston International Airport and the Air Force Base (AFB). Million Air includes a 22,000 square foot hangar and provides such services as luxury rental cars and limousine and catering services. It serves both private and corporate aircraft as well as charters.

Since 2011 when Boeing completed their facilities located in North Charleston, the Charleston International Airport has increased in service and significance to the local economy. The addition of Southwest Airlines and JetBlue Airlines led to increased passenger service. The expansion of aerospace industries has also been successful, partly due to the success of this local airport.

Charleston Executive Airport

The Charleston Executive Airport is located on the eastern edge of Johns Island next to the Stono River. The majority of the air traffic, 50 percent, is local general aviation. Approximately 41 percent is transient general aviation, five percent is military, and four percent is air taxi aviation. Between January 2012 and December 2012, the airport saw approximately 151 daily aircraft operations.

A new General Aviation Terminal was opened in May 2007 under the Atlantic Aviation banner, which is a

2 BCDCOG, 2014





Passenger airlines available at the Charleston International Airport in 2014.





modern 5,900 square foot facility and includes additional ramp parking for aircraft.

Mount Pleasant Regional Airport

The Mount Pleasant Regional Airport is located in the Town of Mount Pleasant. The majority of the air traffic at this airport, 60 percent, is local general aviation. Approximately 36 percent is transient general aviation, three percent is air taxi, and less than one percent is military air traffic. Between January 2007 and December 2007, the airport saw approximately eighty daily aircraft operations. An addition completed in 2009 added 2,400 square feet in support of general aviation activities.

Joint Base Charleston

A Joint Land Use Study (JLUS) was initiated in December 2006 and completed in 2008. The study goals and objectives are to encourage cooperative land use planning between the Charleston Air Force Base (AFB) - Naval Weapons Station (NWS) Charleston, which together form Joint Base Charleston, and the surrounding communities within the Berkeley-Charleston-Dorchester region to ensure future civilian growth and development is compatible with the operational mission objectives of these installations and to seek ways to reduce the operational impacts on adjacent civilian land. The 2008 JLUS provides an overview of existing land use issues and reviews relations between the military operations and civilian growth surrounding Joint Base Charleston. It also provides recommendations such as a Transfer of Development Rights Program (TDR), zoning overlay districts, land acquisition programs, noise and sound abatement measures and real estate disclosures. In the fall of 2013, the BCDCOG began implementing tasks from the 2008 JLUS including a TDR Feasibility Study and Maritime Traffic Study. The BCDCOG is also drafting model ordinances for an Air Installation Compatible Use Zone (AICUZ) Overlay Zoning District and Sound Attenuation and Noise Abatement Standards. A Communications Plan will also be established to enhance coordination among the many jurisdictions.

Ports

The South Carolina State Ports Authority (SCSPA) owns and operates five marine terminals in the Port of Charleston: Union Pier, Wando Welch Terminal, North Charleston Terminal, Columbus Street Terminal, and Veterans Terminal. The Wando Welch Terminal is the only terminal located in unin-corporated Charleston County. In 2013, the Port of Charleston handled approximately 1.56 million twen-ty-foot equivalent units (TEUs). The SCSPA has an approximate capacity of 2.6 million TEUs at its three existing container facilities, encompassing 450 acres of land designated for container operations. Union Pier, Columbus Street, and Veterans Terminals handle non-containerized cargoes such as vehicles and breakbulk goods.

Currently, the SCSPA is developing a new container facility at the former Navy Base. Permitted in April 2007, the new facility is proposed to have a capacity of 1.4 million TEUs, increasing the Port's container capacity by about 50 percent. Extensive site preparation to stabilize the expansion site began in late 2007 and construction of the storage yard and berth was projected to begin around 2010. Phase I of the new terminal, which encompasses 170 acres, is expected to open by 2014. An SCDOT access road is proposed for ingress/egress between I-26 and this Terminal with funding from the State Infrastructure Bank.

Aside from the public marine terminals operated by the SCSPA, there are several private terminals in the Port of Charleston that handle commodities such as bulk coal and fuel.









3.7.3: TRANSPORTATION ELEMENT GOAL

A transportation system that is coordinated with land use patterns, community character, and promotes alternative ways to move people and goods with an acceptable level of service that supports economic development and maintains a high quality of life.

Transportation Element Needs

Transportation Element needs include, but are not limited to, the following;

- Tying transportation with the strategies of housing, economic development, and land use;
- Encouraging transportation options such as public transit and pedestrian and bicycle systems;
- Improving the efficiency of the existing and planned transportation system, with particular attention to connectivity and evacuation planning; and
- Ensuring that transportation planning is a coordinated effort of all jurisdictions.

3.7.4: TRANSPORTATION ELEMENT STRATEGIES AND TIME FRAMES

The County should undertake the following action strategies to support the transportation Goal and the Vision for this Plan. These implementation strategies will be reviewed a minimum of every five years and updated every ten years from the date of adoption of this Plan.

- T 1. Administer and implement the approved roadway improvements detailed in *Charleston County Ordinance No. 1324*, the Charleston County Half Cent Sales Tax Referendum, adopted in 2004.
- T 2. Continue to require traffic impact studies consistent with the *Zoning and Land Development Regulations Ordinance*.
- T 3. Adopt and administer standards requiring provision of adequate transportation infrastructure including but not limited to:
 - Connecting existing sidewalk and bicycle facilities to proposed road facilities;
 - Adding turn lanes at driveways and intersections;
 - Installing traffic signals; and
 - Widening roads and bridges.

These types of proposed improvements should be made in accordance with the appropriate transportation agency based on traffic impact studies and should be made as a condition of approval for all proposed developments, zoning changes, or special use approvals. Incentives or fee-based programs should also be used to promote transportation improvements.

T 4. Create and adopt a major thoroughfare plan including functional classifications as defined by the South Carolina Department of Transportation (SCDOT) and the Charleston County Zoning and Land Development Regulations Ordinance and identify planned right-of-way to be set aside for future roadways, sidewalks, and bicycle paths. The Zoning and Land Development Regulations Ordinance should provide incentives to dedicate thoroughfares during the development approval process.



Note: The 2006 *Charleston County Comprehensive Transportation Plan* is incorporated into this *Comprehensive Plan*.

- T 5. Create and adopt a set of access management standards to regulate levels of access depending on the function of the roadway.
- T 6. Adopt "Complete Streets" policies for publicly owned and maintained streets, which are transportation policies that incorporate aesthetics as well as alternative modes of transportation such as bike lanes, sidewalks and mass transit into the transportation system.
- T 7. Preserve future transportation corridors and other rights-of-way to reduce future acquisition costs.
- T 8. Coordinate with all communities throughout the County to develop traffic impact studies.

3.7.4: TRANSPORTATION ELEMENT STRATEGIES AND TIME FRAMES CONTINUED

- T 9. Mandate that adequate transportation infrastructure be in place prior to, or concurrent with, additional development.
- T 10. Coordinate transportation strategies with growth management and land use strategies.
- T 11. Promote increased traffic safety along roadways including but not limited to separation of pedestrian and bicycle traffic from motorized traffic, intersection improvements, access management plans such as curb cuts, and lower speed limits.
- T 12. Support and participate in Metropolitan Planning Organization functions, as designated by the Federal Highway Administration and SCDOT.
- T 13. Continue to monitor the status of population evacuation for emergency preparedness for natural or man made disasters.
- T 14. Continue to identify additional ways of financing transportation improvements including the Transportation Half-Cent Sales Tax Program and public/private partnerships.
- T 15. Support the functions of the Charleston County Transportation Committee (CTC).
- T 16. Promote multi-transit opportunities including the improvements at the Charleston International Airport/Air Force Base, State Ports Authority, and maintaining the Intracoastal Waterway.
- T 17. Support initiatives and plans to expand and enhance public transportation networks in the Urban/Suburban Area, as this will benefit residents by possibly decreasing transportation costs and providing more transportation options.

- T 18. Promote a transportation network and systems that contribute to a sustainable development pattern for long-term success of Charleston County.
- T 19. Base transportation plan approvals on the projected capacity of various types of transportation facilities to accommodate development of a mix of land uses over time in response to market conditions.
- T 20. Adopt innovative planning and zoning techniques such as Form-Based Zoning District regulations to encourage flexible street design that is context-sensitive and reflects adjacent land uses.
- T 21. Support the comprehensive trails plan developed by the Charleston County Park and Recreation Commission (CCPRC), to be implemented through the Charleston County Transportation Development Department, and recognize that some municipalities have developed their own bike and pedestrian plans to be implemented through coordination with the County's Transportation Development Department.
- T 22. Encourage pedestrian and bike access be incorporated on all public roadways, including bridges, and explore potential funding sources for additional pedestrian and bike access projects.
- T 23. Coordinate with the City of Charleston, Dorchester County, Town of Summerville, and the SC Department of Transportation on the potential extension of the Glenn McConnell Parkway.