

# South Jersey Transportation Planning Organization 2035 Regional Transportation Plan Update

## C. Plan Outlook Analysis



**Approved July 2008**

**Revised November 2010**

## Table of Contents

Plan Outlook Analysis.....	3
Introduction .....	3
Congestion Mitigation and Regional Corridor Improvements.....	3
NJ 55 and the NJ 55/47/347 CR652 Corridor .....	4
US 40/322 Corridor .....	5
Cumberland County CR 552 .....	5
Wrangleboro Road Corridor.....	6
US 9/Garden State Parkway Corridor.....	6
US 130 / NJ 49 Corridor.....	6
Bridges.....	7
Pavement .....	7
South Jersey Travel Demand Model Enhancements.....	7
Congestion Management System (CMS) .....	8
Safety.....	8
Emergency Evacuation .....	9
Results .....	10
ITS Implementation and Regional Architecture.....	10
Transit.....	11
South Jersey Regional Rail Study.....	12
Bicycle/Pedestrian.....	12
Priority Actions.....	13
Cumberland County Bike Trail Study.....	14
Multimodal Including Freight.....	15
Tourism .....	16
SMART GROWTH.....	16



## Plan Outlook Analysis

### *Introduction*

Work conducted as part of the RTP Update has identified the region's transportation goals and policies, the regional context, existing and projected future condition of transportation infrastructure, and the needs and problems of the region's multi-modal transportation system. This information and analysis led to the development of a series of issues, or concepts, that should be advanced to improve the transportation system, better serve the mobility needs of people and goods, and move toward fulfillment of the RTP's goals and policies. This memo defines action items in response to the identified needs and problems.

### *Congestion Mitigation and Regional Corridor Improvements*

Although the SJTPO region covers a relatively large land mass, the primary highway system consists of a limited number of arterials. These arterials must serve the dual purpose of providing regional mobility and access to centers of activities for longer-distance travel, as well as local mobility and access for commuters and residents. The amount of travel demand placed on the roadways varies significantly based on the day of the week and the season of the year. Volumes can increase significantly in the summer season on many roadways, placing a severe strain on the region's primary roadways.

Population and employment is projected to grow by about 25 percent over the plan period. This growth will place an increasing strain on a currently congested transportation system. Overall congestion is forecast to grow considerably over the plan period. Trips and the Vehicle Miles Traveled (VMT) in the SJTPO region are forecast to increase 25 percent, in pace with overall population and employment growth. However, total time spent traveling is forecast to more than double, indicating that the growth in trips will result in a significant increase in system delay, and harming mobility. Mobility is a key to economic growth, and managing congestion is very important to the sustainability of the SJTPO region.

Minor improvement concepts have been proposed or are being advanced to improve the efficiency of the existing system. However, a comprehensive assessment of the long-term needs of the primary corridors in the SJTPO region is necessary to determine the extent of the deficiencies and to develop comprehensive improvement plans. The SJTPO has also conducted a number of corridor studies and has prepared longer-term recommendations for improvements. Further work is needed on the priority corridors identified in this plan including the NJ 55/47/347 and US 40/322 corridors. The following sections lists the corridors recently studied and the proposed priority corridors for study and concept development.

## NJ 55 and the NJ 55/47/347 CR652 Corridor

The NJ 55/47 Corridor extends from NJ 55 and 47 in Vineland to the terminus of NJ 55 at NJ 47 in Port Elizabeth, and follows NJ 47/347 toward Cape May County and the shore. Several areas along this corridor are identified as significant problem areas both now and in the future. In fact, this corridor has been identified as a problem corridor for many years. Interim improvement concepts, such as signalized intersection upgrades and a modest motorist information system, have provided some short-term relief, but still fall far short of significantly improving traffic flow conditions in the corridor today and do little to address the long-term needs of this growing regional problem.

The NJ 55 corridor serves two vital functions in the region: as a primary recreational corridor, and as a primary emergency evacuation corridor. As the tourist season and the demands it places on the system extend in duration with each passing year, more stress is placed on the primarily local roadways that service traffic in this corridor. Numerous studies have been conducted calling for improvements in the corridor. The Shore Connection Committee, composed of local, county, and state transportation agencies and officials along with business and citizens groups, concluded in 1998 that significant seasonal congestion exists in and around the corridor and measures should be taken to address this growing problem. The Committee also supported the completion of NJ 55 as a long-term improvement.

The SJTPO has called for measures to add sufficient capacity through major expansion, upgrading of existing facilities, or the development of new facilities on new alignments to develop a lasting solution. A possible completion of the NJ 55 corridor would extend from the existing terminus of NJ 55 in the City of Millville, Cumberland County, to the Garden State Parkway (GSP), in Dennis Township, Cape May County, and additional concepts and potential alignments have been proposed. From a traffic perspective, a new segment of NJ 55 is forecast to carry a significant amount of traffic volume, as the new roadway would draw recreational and long distance traffic from overtaxed local roadways not designed to handle the current and future demands. Congestion and delays are present on NJ 47 and NJ 49, particularly during the summer months, and the future demand is expected to exceed capacity on these two state roads. Thus, the new segment of NJ 55 would provide significant relief to the roadway system, as summer traffic volume would be diverted from two-lane state and county roads.

The shore communities of Cape May County contribute significantly to the state and federal treasuries. Tourism is a major revenue generator in the region, and employs over one hundred thousand people in the area. The southern resorts and businesses are in competition with other regions, and failure of the transportation system to serve existing and future demand will lead to the erosion of this important economic engine. In addition, as demonstrated in the emergency evacuation assessment, completion of NJ 55 is forecast to significantly improve the ability to move people and goods in the event of an emergency. In these times of increased security threats and the need for homeland security, NJ 55 could play a vital role in everyday life as well as providing an enhanced level of safety that is impossible to achieve with the existing transportation system. In

events ranging from hurricanes to nuclear emergencies, the benefits of improved evacuation of up to 650,000 visitors, and the residents and workers in 16 municipalities, far outweigh the cost and impact of completing this vital missing transportation link.

Improving the NJ 55/47 corridor, in a manner that is respectful of the communities through which it passes, and in the least intrusive environmental manner as possible, is a critical need.

### US 40/322 Corridor

This corridor experiences congestion and was identified through the SJCMS update for 2035 as one of the most congested corridors in the SJTPO region. The corridor serves east-west traffic in the region, one of the few arterials that provided this valuable local and regional mobility, and also serves commercial traffic. It is important that the traffic conditions along this corridor be monitored and evaluated to determine if an improvement concept study should be advanced.

At a minimum, preservation of existing capacity should be a priority in this corridor. Measures to achieve this objective include the control of access, keeping pavement and bridges in the corridor in a good state of repair, and working with the municipalities to promote smart growth concepts in and surrounding the corridor. The ability to manage future growth in traffic will be important as well as examining methods and improvements to extract the maximum efficiency out of the existing system, including elements of ITS. Capacity enhancements may also be proposed as a result of the corridor study process.

### Cumberland County CR 552

This corridor extends from Laurel Street in Bridgeton city to Main Road in the City of Vineland, and along Orchard Road from CR 552 to Chestnut Avenue. A corridor study, completed in 2003<sup>1</sup>, was undertaken to determine the transportation needs of the Corridor based on both existing and future design hour traffic flows. Other areas such as school speed limits and emergency response travel patterns were also examined. The findings showed that the CR 552 corridor will ultimately require widening to a four to five lane section from Kenyon Road to Main Road with additional improvements at some of the intersections. West of the Carmel area, CR 552 as a two-lane roadway will operate with satisfactory flows. The Orchard Road corridor from CR 552 to Chestnut Avenue will operate sufficiently as a two-lane roadway; however, the County should re-examine the need for widening Orchard Road to a three-lane section with the potential development in the area.

With the various intersection and roadway improvements in place, CR 552 should maintain acceptable levels of service. In order to limit the widening that may be needed at various intersections and to aid in decreasing traffic along and within the vicinity of the corridor, trip reduction strategies and/or the introduction of public transit along the corridors should be considered. Ongoing evaluation of the corridor either through traffic studies as required by the

---

<sup>1</sup> Traffic Engineering Study, Cr 552/Orchard Road Corridors, June 2003, Horner & Cantor Associates

various municipalities or the County, or through the SJTPO yearly traffic data collection program, is recommended.

### **Wrangleboro Road Corridor**

This corridor serves as a north-south connector between rapidly developing sections of Egg Harbor, Hamilton, and Galloway Townships, and is a vital link for both local and regional travelers. Access to several key regional travel corridors is provided through an interchange with the Atlantic City Expressway and signalized intersections at the Black Horse Pike (US 40/322), White Horse Pike (US 30), and Tilton Road (CR 563); the Atlantic City Airport lies adjacent as well. A key element of the project is a widening of the bridge over the Atlantic City Expressway, which is proposed in a study currently being conducted by SJTA. Widening of the Wrangleboro Road/ Pomona Road corridor, as well as intersection improvements were recommended. The intersection improvements have since advanced to construction.

### **US 9/Garden State Parkway Corridor**

The US 9/Garden State Parkway (GSP) corridor serves as the main north-south access route for the New Jersey Shore and the barrier island resort cities. Together, these two parallel roadways provide the primary recreational routes into Cape May County from Central and Northern New Jersey, as well as New York, New England, and Canada. The purpose of this Corridor Study was to develop general concepts that address documented needs and deficiencies throughout the US 9 and Garden State Parkway corridors, as well as along CR 623 and Bay Avenue. Short- and long-term concepts and recommendations, as well as multi-modal and non-motorized alternatives, were evaluated. A series of High and Medium Priority recommendations were made, over both the short- and long-term. Short-term recommendations were assumed to be implementable by a sponsoring agency within a few years because they would not require extensive design or analysis, right-of-way taking, environmental review, or large capital expenditures. Long-term concepts must be prioritized by a sponsoring agency and the SJTPO. The long-term recommendations would require extensive design or analysis, large capital expenditures, and perhaps right-of-way taking. The improvements and range of problems addressed included bicycle and pedestrian facilities, drainage improvements, geometric deficiencies, intersection improvements, roadway rehabilitation, and interchange improvements.<sup>2</sup>

### **US 130 / NJ 49 Corridor**

A study of this corridor was undertaken 2005. The corridor is approximately 13 miles long and spans three Salem County municipalities – Carneys Point, Penns Grove, and Pennsville. Key study area issues included congestion and delay, safety, mobility deficiencies, smart growth, regional growth, and economic development. The study area was targeted by Salem County's Delaware River and I-295/New Jersey Turnpike Planned Growth Corridor Study, which seeks to guide future growth to areas where supporting infrastructure already exists.<sup>3</sup> Six primary needs were identified for the US 130 / NJ 49 corridor: economic development, the promotion of alternative modes of transportation,

<sup>2</sup> US 9/Garden State Parkway, Corridor Study, Draft Final Report, Louis Berger Group, Inc., April 2004

<sup>3</sup> Route 130/39 Corridor Study, June 2005, Urban Engineers, Inc., <http://www.sjtpo.org/rt130-49-report.htm> accessed April 16, 2008

roadway and pedestrian safety, congestion relief, re-configuring the triangle area (confluence of I-295, New Jersey Turnpike, US 130, NJ 49, and Hook Road), and smart growth objectives. An implementation plan was developed, identifying sidewalk, intersection operational improvements, regional improvements, smart growth, and other initiatives for the area. Follow up on the study's implementation plan is recommended.

### ***Bridges***

Bridge Management System data supplied by NJDOT for 2008 indicate a total of about 28 percent of the region's bridges are either structurally deficient or functionally obsolete (14.6 and 13.5 percent respectively). This actually represents a degraded condition compared to the total of about 23 percent from the Department's data for 2004 (10.9 percent structurally deficient and 11.9 percent functionally obsolete). Trend-line data indicate some worsening in the overall state of the region's bridges during this period, with structurally deficient or functionally obsolete bridges increasing from 23 percent of the total in 2000 to 28.1 percent in 2008.

This is a significant finding, as it indicates that the region has not made measurable progress in addressing bridge needs over the eight-year period covered by the data. As the overall bridge needs are increasing throughout the state and the nation, the SJTPO must work to secure adequate funding to address priority needs, especially in light of the recent bridge failures and problems.

### ***Pavement***

Pavement Management System data was supplied by NJDOT for 2006 (the most recent year currently available). These data indicate some worsening of overall pavement conditions since 2001; almost one-half of the roadway pavement rated as *Good* in 2001 degraded to *Fair* by 2006.

The data indicates a concern, as the trend is moving to a worse state of repair of the area's pavement conditions. If pavement conditions continue to deteriorate, the impact due to user cost will rise and comfort and capacity will degrade. More funding to support pavement rehabilitation projects in the SJTPO region is necessary.

### ***South Jersey Travel Demand Model Enhancements***

The South Jersey Travel Demand Model was originally placed into service in 2000. Model applications include support of regional travel forecasting efforts and air quality conformity assessment. The model was upgraded as part of the 2004 RTP Update, and a follow-up effort was completed in 2006 as part of an ongoing process to ensure quality and accuracy. Significant upgrades to the model chain and source files were implemented as part of the current RTP update, in order to provide a working model for the 2035 analysis year. The current enhancements include:

- improvements to the trip distribution model the modal split logic modules;
- trip assignment validation to a new base year of 2000 consistent with the 2000 Census and revised demographic projections;

- assignment runs through the 2035 forecasting year using the updated demographics; and
- development of emergency evacuation scenario and implications for regional planning efforts.

Ongoing update and enhancement work efforts are necessary in order to keep the model current and useful in assessing transportation conditions, testing improvements, and evaluating air quality conformity. Further work to improve the off-peak season modeling capabilities is also needed.

### ***Congestion Management System (CMS)***

Although it has been useful in other parts of New Jersey the statewide Congestion Management System (NJCMS) has severe limitations when applied to the unique travel conditions, time periods, and peaking characteristics of the SJTPO region, where congestion is most severe on summer weekends for recreational and shore-oriented travel, and weekend evening travel related to the Atlantic City gaming industry.

To address these deficiencies, the SJTPO Congestion Management System (SJCMS) was conceived as a long-term, multi-phased effort to develop the data resources, tools, and procedures relevant to transportation planning efforts in the SJTPO region. Phase I of SJCMS development was completed in 2002; Phase II was completed in 2003, and established the critical parameters and performance measures for identifying and evaluating congestion in the SJTPO region. An on-going data collection effort has been underway to help monitor congestion throughout the SJTPO region.

Building upon the SJCMS 2025 screening, a limited review of needs through the 2035 analysis year was undertaken for this plan update. This analysis was based on the SJCMS screening method that uses a combination of Volume-to-Capacity (V/C) ratios and area types (based on area type, size, and density), but did not incorporate the full SJCMS scoring method. It is recommended that a full update of the SJCMS be undertaken, incorporating the latest traffic count information and modeling data including the latest demographic forecasts to develop a full identification and scoring of each corridor to update the work conducted in 2003.

### ***Safety***

SJTPO received a prestigious National Roadway Safety Award [www.roadwaysafetyawards.org](http://www.roadwaysafetyawards.org) for its Local Road Safety Audit (RSA) Program. The RSA Program, which was begun in 2004, examines roads with a significant crash history or potential to identify low-cost, quick turnaround safety improvements. These measures, such as lighting, signage, signal upgrades, striping, and others, are eligible for federal safety funds as a result of being identified by the RSAs. Of special interest is the interdisciplinary nature of the audit teams, which consist of county representatives, the police, engineering and public works staff of the affected municipalities, the NJDOT, the New Jersey Division of Highway Traffic Safety, and the Federal Highway Administration. The audits have raised awareness among local decision-makers by identifying low-cost, quick turnaround safety improvements that are expected to yield immediate safety benefits. It is one of the first local programs of its kind, utilizing federal planning funds to systemically identify local road segments of concern, organize a team of

independent specialists, engage a consultant team for the audits and secure federal funding for the resulting recommended improvements.<sup>4</sup>

The South Jersey Traffic Safety Alliance (SJ TSA) is a unique traffic safety organization with the goal to integrate traffic safety into the metropolitan and state planning process by creating an alliance of traffic safety professionals from law enforcement, community education, fire, rescue, engineering, and planning to work closely with the SJ TPO to decrease fatalities and injuries resulting from traffic crashes.

Seat belt surveys were conducted in 2006 and 2007. An analysis of the 2007 data indicated that the driver seat belt use rate in the SJ TPO region is 88 percent, a dramatic increase from the 77 percent use rate in the 2006 SJ TPO survey. This rate falls below the 2007 New Jersey drivers' usage rate of 92 percent, but is higher than the 2006 national average of 82 percent. The increased 2007 usage rate is attributed to fewer out-of-region visitors in the survey as well as ongoing educational and police enforcement efforts.

Facilities identified as exhibiting safety concerns should be evaluated to determine appropriate corrective action measures. The work of the South Jersey Traffic Safety Alliance should be continued. The effectiveness of the SJ TPO's efforts in promoting measures to assess and mitigate highway safety issues as well as educate the public regarding the important of highway safety measures is evident, and this work should continue into the future.

The SJ TPO is currently developing a strategy to systematically identify high-crash locations and rates on the entire South Jersey roadway system. This plan for a safety management system will generate safety projects and programs addressing all needs, including capital improvements, low-cost, quick-turnaround projects, operations, enforcement, and community awareness. As the system is completed, the SJ TPO will have an additional tool in identifying locations for study and assessment.

### ***Emergency Evacuation***

The SJ TPO region has a very significant inflow of people throughout the recreational season. During an emergency, the ability to evacuate this large population base, which is many times greater than the year-round population, is critical. Evacuation may be necessary during severe weather, when roadways are flooded, making many impassible. The ability to provide a system that can withstand the adverse elements and reliably move a large number of persons in a limited amount of time is a fundamental need of the shore communities and region.

Demographic and travel model forecasts indicate significant growth in the region's transportation needs over the next twenty years. This growth and congestion translates into increased delays getting to and from the region's shore communities particularly during the peak summer months.

---

<sup>4</sup> <http://www.sjtpo.org/award-roadway-safety.htm>, accessed April 16, 2008

Delays of this magnitude can become a safety hazard should an area have to be evacuated in the event of an emergency or disaster.

To illustrate the magnitude of this problem the SJTPO has developed an evacuation scenario, using the South Jersey Travel Demand Model, to evaluate the ability of the region’s roadways to evacuate a large number of vehicles in a short time period. This scenario represents a worst case of what might happen if a sudden disaster were to trigger a full and immediate exodus of the Shore areas in Cape May and Atlantic Counties on a typical summer evening. The analysis identified critical links/bottlenecks and tested the impact of completing NJ 55 to the shore.

## ***Results***

The scenario testing for the 2035 analysis year indicates that vehicle throughput in the danger districts as defined by the number of vehicle hours traveled (VHT), improves by 2.68 percent during the PM peak period. This improved throughput would mean that an additional 2,310 vehicles can make it through the danger districts to safety during the PM peak period. Based on an estimated vehicle occupancy of 2.0, an additional 4,620 people could make it to safety during the PM peak period.

Hourly volume forecasts indicate that the PM peak period represents 22.4 percent of the daily volume. Extrapolating over a 24-hour period from the PM peak period translates into an additional 10,315 vehicles or an additional 20,630 persons that can make it to safety if the NJ 55 Freeway is completed (see Table 1). These results indicate the critical need to complete NJ 55 to address emergency evacuation in the region.

**Table 1 Evacuation Scenario Statistics**

<b>Daily</b>	<b>2035 No-Build</b>	<b>2035 Build</b>
<b>Vehicle Hours Traveled</b>	78,610	76,500
<b>Base Evacuation Trips</b>	86,280	86,280
<b>Average Vehicle Occupancy</b>	2.0	2.0
<b>Additional Vehicles Evacuated</b>	2,310	10,315
<b>Additional Persons Evacuated</b>	4,620	20,630

## ***ITS Implementation and Regional Architecture***

Maximizing the efficiency of the existing highway system is a priority in view of limited financial resources and environmental constraints. Intelligent Transportation Systems (ITS), including motorist information systems and incident detection systems, are particularly important to the South Jersey region due to the large number of motorists who are unfamiliar with the highways, mainly recreational travelers, and the limited capacity of primary and secondary routes to absorb incident-related capacity reductions. Variable message signs (VMS) have been used in the region during peak periods and have proven effective. A system of closed-circuit cameras linked to VMS signs and the South Jersey Traffic Operation Center operated by NJDOT provides motorists with “live”

traffic information regarding route selection during the peak travel periods. Additional measures, such as the expansion of the Atlantic City Computerized Traffic Signalization system and other signal systems, have also been effective in improving vehicle throughput. Additionally, E-Z Pass has now been implemented on all the toll roadways and bridges leading into the SJTPO region.

The SJTPO engaged in a major effort with the New Jersey Department of Transportation (NJDOT) and the North Jersey Transportation Planning Authority (NJTPA) to develop statewide and regional (for SJTPO and NJTPA) ITS Architectures. The Regional and Statewide ITS Architectures help establish the framework for ensuring institutional agreement and technical integration of ITS projects in the respective areas, and identify opportunities for making ITS investments in a more cost-effective fashion.

The development of the ITS architecture(s) allows New Jersey to comply with the FHWA Rule/FTA Policy on Architecture and Standards. The FHWA Final Rule (and corresponding FTA policy) to implement Section 5206(e) of the TEA-21 requires that Intelligent Transportation Systems (ITS) projects funded through the Highway Trust Fund conform to the National ITS Architecture and applicable standards.<sup>5</sup>

A new motorist information system, NJ511, has recently begun operation. According to the NJDOT website, "NJ511 is a free phone and web service that consolidates traffic and transportation information into a one-stop resource for commuters and motorists in the Garden State. NJ511 provides up-to-the-minute traffic conditions and its available seven days a week, 365 days a year."

SJTPO will work with the NJDOT to ensure that motorist information is readily available to southern New Jersey commuters and tourists. Limited data is currently available. No traffic cameras are available for view on the Garden State Parkway or the Atlantic City Expressway in the SJTPO region. Additional ITS components for the SJTPO region should be explored to enhance the data available through the NJ511 system, particularly as it relates to recreational travel.

### *Transit*

Although transit service is available in every county of the SJTPO region, it is generally sparse due to the low population densities. Most of the region's transit service is concentrated in Atlantic County, and more specifically in Atlantic City. This concentration is a result of the tens of thousands of commuters and tourists who work and visit Atlantic City on a daily basis year-round that provide the demand necessary for successful transit operations.

However, there are many transit needs in the region. There are unmet needs for transit-dependent and rural populations in the region. Additionally, as employment continues to spread out along highway corridors, new bus services may be needed and expansions of existing services may be warranted. Further, it is critical to build upon the transit services that currently operate in the region

---

<sup>5</sup> [http://www.sjtpo.org/ITS%20Report%20\(Draft\)%2010-29-04.pdf](http://www.sjtpo.org/ITS%20Report%20(Draft)%2010-29-04.pdf) accessed April 16, 2008

so that the mobility offered by these essential services is maintained and improved. The SJTPO will work with NJTRANSIT to assess and identify necessary transit service enhancements in the region, including an examination of existing bus routes and service levels.

### ***South Jersey Regional Rail Study***

This Interim Report, completed in 2002, evaluated the potential for restoring passenger rail service to abandoned lines and freight rail corridors within the South Jersey area. Four candidate rail corridors were identified for further study:

1. Atlantic City to Mays Landing
2. Winslow Junction to Cape May
3. Millville-Vineland-Winslow Junction - Bridgeton (spur)
4. Glassboro - Vineland.

Currently, the only rail corridor offering commuter rail service in the SJTPO region is the Atlantic City Rail Line serving the towns of Hammonton, Egg Harbor City, Absecon, and Atlantic City. The South Jersey Regional Rail Study provides the basis for more detailed planning to reactivate one or more abandoned rail lines for passenger service. Another option that should be considered is Bus Rapid Transit (BRT) systems. BRT offers advantages of generally lower costs than fixed rail systems, and depending on the alignment developed can utilize exclusive right-of-way or share right-of-way with other vehicles. The SJTPO will engage with NJTRANSIT to determine if there are potential BRT opportunities in the SJTPO region.

Specialized and demand responsive paratransit services in the SJTPO region include NJTRANSIT's region-wide Access Link service, and a variety of locally sponsored programs. Additional service is provided by public agencies, county and municipal governments, and a mixture of primarily non-profits or hospitals to serve their own client needs. While there is some level of coordination among a few providers within each of the counties, each agency operates its own transportation program independently. Most of this service is restricted to passengers who meet specific eligibility requirements that usually pertain to disability or senior citizen status or as a client to a human-service agency or organization.

The SJTPO supports specialized and demand responsive paratransit services and the findings of the Job Access and Reverse Commute Plan (JARC). SJTPO will work with the service providers and NJTRANSIT to determine a course of action to address identified needs and implement recommended service enhancements.

### ***Bicycle/Pedestrian***

It is important to encourage the use of alternative modes to provide mobility, accessibility, and improve the quality of life of residents and tourists, and to an integrated transportation system, that includes non-motorized modes. This is particularly true in recreational areas where walking and

## South Jersey Transportation Planning Organization

biking trips can play an important role in transportation. It is very important that pedestrian and bicyclist safety be considered and efforts made to improve the facilities in the SJTPO region. Sharing the road and dedicated infrastructure including sidewalks and bike trails will help improve accommodating non-motorized modes.

The SJTPO has taken many steps to address the needs of bicyclists and pedestrians, as well supporting regional planning studies. The current Transportation Improvement Program (2008-2011) for the region identifies the following projects for implementation:

**Table 2 - Projects for Implementation in the FY2008-2011 TIP**

County	Route	Program	Description
Atlantic	US 9	Northfield Sidewalk Replacement II	New sidewalks, curbs, curb cuts, and crosswalks
Atlantic	US 30 / CR 575	Pomona Road	Pavement Resurfacing and/or Rehabilitation and Widening narrow pavements and Bicycle and Pedestrian Facilities
Atlantic	US 30	Pedestrian Walkway US 30	Build a pedestrian walkway at Route 30 to improve safety
Atlantic	NJ 52	Causeway Replacement Contract A	Reconstruct bridges (no additional travel lanes) and provide Bicycle and Pedestrian Facilities

### *Priority Actions*

The following are proposed as priority actions for bicycle and pedestrian travel in the SJTPO region.

- Support Efforts by Counties to Advance Bicycle and Pedestrian Projects – The SJTPO will support efforts by the counties to advance bicycle and pedestrian projects so that more short trips can be served in the region by these alternative modes. Many counties and municipalities in the region have developed local bicycle and pedestrian facility plans, adopted bicycle and pedestrian-friendly comprehensive plans and/or made requirements for bicycle facilities part of the development review process. The improvements called for in these plans should be prioritized for funding.
- Continue to Work with NJDOT to Maximize New Facility Mileage in South Jersey – The use of bike and walk modes continues to grow in the region. The shares of bike and walk to work in the SJTPO region are higher than the overall state shares, and within the region, the greatest shares of walk and bike to work trips are found in Atlantic and Cape May counties. The barrier islands in Atlantic and Cape May have high population and employment densities as well as mixed land uses and a resort environment, all of which supports bicycle and pedestrian travel. Some high-density population centers in Cumberland County (Bridgeton, Millville, and Vineland) and Salem County (Penns Grove and Salem City) also permit walking or biking for

some work, school, and shopping trips. The update of the New Jersey Bicycle and Pedestrian Master Plan, being developed by NJDOT, will be reviewed when available and the guidance incorporated into the SJTPO planning process as much as possible.

- *Work with NJTRANSIT to promote intermodal connections.* There exist several strategies in linking bicyclists and pedestrians with transit services. NJTRANSIT allows bicycles on transit vehicles, including trains and buses. As of 2003, half of the NJTRANSIT bus fleet was considered “bicycle friendly.” Further, bicycles can be accommodated on all NJTRANSIT buses from Atlantic City to areas south; both standard frame and collapsible bicycles are allowed on the Atlantic City Rail Line, without restriction.
- *Facilities need to be provided to increase foot and bicycle traffic for both tourism and non-tourism-related travel in the region.* – Roadway improvements should be planned, designed, constructed, and maintained to accommodate shared-use by motor vehicles, bicycles, and pedestrians. Additionally, funds need to be secured to continue the development of designated facilities for bicyclists and for improved facilities for pedestrians, including sidewalks, especially in the more urbanized areas.
- *Assist in System Assessment and Planning and Design Standards Work Efforts of the Counties and NJDOT/NJTRANSIT* – This action will help ensure that roadway improvements accommodate bicyclists and pedestrians, transit facilities are accessible by both pedestrians and bicyclists, and designated facilities are designed to current standards.
- *Develop Regional Promotional or Marketing Materials* – Educating the public about mobility options is a critical step to expand the use of non-motorized modes of travel and to support greater travel by bicycle in southern New Jersey. Given the developed tourism markets in Atlantic and Cape May counties as well as growing eco-tourism along the Delaware Bay shore, a comprehensive guide containing information on bicycle routes and facilities in the region is a priority.

### ***Cumberland County Bike Trail Study***

The majority of Cumberland County’s roads are favorable for bicycling by virtue of their wide shoulders or very low traffic volumes. The Cumberland County Bike Trail Study provides a comprehensive review of actions, system improvements and programs that can help advance bicycling for local transportation and recreation uses as well as for attracting bicycle touring and events. The Bike Trail Study provides recommendations that integrate or expand bicycling into existing County efforts such as the County Ecotourism Plan, the County Transportation Master Plan and regional bicycle safety programs. Critical components of the study include a mapping effort that evaluated 300 miles of County roadways for bicycle compatibility; a recommended county bike route network and potential trail facility locations; and suggested programmatic strategies for attracting bicycling activity to the County. Potential funding opportunities from all levels of government, commercial, and nonprofit private sectors to noted resources and organizations are also identified.

## ***Multimodal Including Freight***

The movement of goods is vital to the economic well-being of an area. Freight movement can have a considerable impact on quality-of-life issues. Intermodal connections should be improved in the SJTPO region to facilitate the movement of goods. Upgrades to the region's rail system are important to maximize the amount of freight that can be carried by rail, thus helping to limit the increase in truck traffic. Improving access of local rail carriers to regional and interstate facilities has been identified as a need to keep the rail lines competitive and open to new markets.

Findings from the New Jersey Comprehensive Freight Plan (NJCFP) work effort indicated that the majority of freight moves to, from, within, and through New Jersey by trucks, at an estimated mode share of 75 percent of all goods moved by weight. While the overall amount of truck traffic that occurs in the SJTPO region is modest, it is forecast to grow. Travel demand modeling of truck movements, as reported in the NJCFP, indicates that overall truck Vehicles Miles of Travel (VMT) in New Jersey will increase by about 112 percent by the year 2030. Higher than average growth is expected in Atlantic County (over 400 percent increase), Cape May County (144 percent increase), with Cumberland and Salem growing but below the statewide average (72 percent and 92 percent respectively).

Trucks are also the dominant mode of transport in the intermodal freight business – truck to rail, truck to ship, and truck to air. There are a number of quarries in Cumberland and Cape May counties, and most of the materials from the quarries travel a portion of their trips via trucks. This again demonstrates the importance of truck trips to the SJTPO economy.

Rail also is used to move goods, accounting for about 7 percent of good moved by weight. The short line railroad operators in the region provide a valuable service of linking area industry and businesses to the Class I railroad system through the Conrail network providing access to primarily to Norfolk Southern (NS) and CSX railroads. Short line railroads operating in Southern New Jersey include the Southern Railroad Company of New Jersey and the Winchester and Western Railroad.

Area ports and airports must also have adequate access to the multimodal transportation system to promote the efficient movement of both people and goods.

A number of issues have been identified regarding the movements of goods. The Delair Bridge is a major chokepoint for freight entering from Pennsylvania. An engineering analysis is needed to determine the modifications necessary to correct this problem. Significant trucking activity causes capacity problems at many area intersections; turning radius is also a problem at key locations. Maintenance of rail facilities is very important, in order to provide competitive service and satisfy customer needs.

The SJPTO supports a comprehensive assessment of freight needs and issues in the SJTPO region.

## *Tourism*

Tourism is vital to the SJTPO region and the entire state. Tourism is New Jersey's second largest industry. According to the state Division of Travel and Tourism, over 75 million people visited New Jersey in 2007, generating almost \$38 billion in revenue.<sup>6</sup> Mobility is essential to assuring that this valuable source of employment and revenue will continue well into the future. Planning and development of regional transportation infrastructure is crucial to supporting the continued growth and economic stability of the tourism industry.

In the SJTPO region, the vast majority of visitors arrive by automobile, although a considerable number of visitors – about 6.7 million in 2003 – are casino bus passengers to Atlantic City. Prospects for growth in visit-trips by air are excellent, as plans by the South Jersey Transportation Authority for increased scheduled air service and an extensive capital improvement program at the Atlantic City International Airport near fruition.

Nevertheless, the automobile will remain far and away the dominant mode for tourism travel in the foreseeable future. Corridor planning and project development involving facilities leading to tourism areas must therefore fully acknowledge seasonality, time-of-week/time-of-day, and other trip-making characteristics common to recreational travel. This is nowhere more true than along the NJ 55/NJ 47/NJ 347 corridor, which, as mentioned earlier, lacks a long-term solution to the chronic and growing congestion, delay, and environmental degradation brought about by tourism-related travel.

Helping travelers find their way around the region and through traffic problems will be vital to promoting tourism in the SJTPO region. Way-finding signage is important to reduce visitor confusion and make trips more positive experiences. Variable message signs to alert travelers to changing traffic conditions and the availability of alternative routes are important to keep traffic flowing in the region. Maximizing the information available through NJ511 is also important.

## ***SMART GROWTH***

The SJTPO region is expected to grow considerably by the year 2035. Measures to mitigate congestion growth must be undertaken on several fronts, including measures to limit the growth in demand through supporting smart growth/land use planning, promotion of alternative modes to single occupant vehicles, including transit, pedestrian and bicycling enhancements, and improvements to the highway system. The linkage of transportation and land use is strong, and the impact of one on the other can be significant. The SJTPO encourages cooperative land use/transportation planning among the transportation providers in the region and the counties and municipalities.

---

<sup>6</sup> <http://www.chron.com/disp/story.mpl/ap/fn/5690503.html> accessed April 16, 2008