South Jersey Transportation Planning Organization

2035 Regional Transportation Plan Update

Approved July 2008

Revised November 2010

Acknowledgements

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The SJTPO Policy Board drove the development of the Plan's goals and objectives, and provided the endorsement of Plan, with technical guidance provided by the SJTPO Technical Advisory Committee.

The SJTPO Citizens' Advisory Committee (CAC), which brings representatives from a broad cross-section of interests into SJTPO's structure, played an important role in soliciting public input throughout the development of the Plan.

Our appreciation extends as well to the many interested members of the public, elected officials, and agency representatives who contributed a great deal to the Plan.

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Introduction

About the SJTPO

The South Jersey Transportation Planning Organization (SJTPO) is the Metropolitan Planning Organization (MPO) for the southern New Jersey region. Formed in mid-1993, SJTPO replaced three smaller, existing MPOs while incorporating other areas not previously served. Covering Atlantic, Cape May, Cumberland, and Salem counties, the SJTPO works to provide a regional approach to solving transportation problems.

SJTPO coordinates the planning activities of participating agencies and provides a forum for cooperative decision-making among state and local officials, transit operators, and the general public. In addition, the SJTPO adopts long-range plans to guide transportation investment decisions, and maintains the eligibility of its member agencies to receive federal transportation funds for planning, capital improvements, and operations.

What is an RTP and Why Do We Need It?

The RTP serves as the official plan for the SJTPO region and guides the region's transportation decision-making for the next 25 years. It does this by maintaining the existing transportation infrastructure while addressing future problems and needs of the region. In addition, the RTP provides the basis for coordinated transportation planning around the region and identifies future needs so that more detailed studies may take place. Finally, these detailed planning studies provide the technical and environmental analyses needed to enter projects into the federal and state funding pipeline. The RTP also includes a comprehensive review of current transportation resources in South Jersey. It includes highways, transit, bicycle, pedestrian, and intermodal facilities. For each travel mode, the demand for travel is reviewed, needs are assessed, and opportunities and strategies for improvement are discussed.

Regional Transportation Plan FAQ

What Is It?

The RTP guides the transportation decision-making for a 25-year horizon. It establishes needs and identifies key issues for regional transportation. It serves to identify and prioritize available funding sources, and reflects regional priorities.

Why Is It Prepared?

The RTP is required by federal legislation in order to receive transportation funds.

Who Prepares It?

The South Jersey Transportation Planning Organization (SJTPO) is responsible for the preparation of the RTP.

How Do I Find It?

Paper copies are available at SJTPO offices, and electronic copies are available on the SJTPO website.

How Do I Get Involved?

Contact the SJTPO and review the 2035 RTP Public Involvement Plan:

Online: www.sjtpo.org
By Email: sjtpo@sjtpo.org
By Phone: (856) 794-1941

Public Involvement and Agency Guidance

The Public Involvement Program ensures that the RTP Update furthers the Plan's established goals and policies and is consistent with the Federal planning factors by incorporating input from both the public and key regional decision makers and transportation service providers. The RTP Update incorporates public involvement at critical milestones and is designed to accommodate a wide range of participant access and input.

The outreach efforts during the RTP update process included meetings of the Citizens Advisory Committee, the Technical Advisory Committee, the SJTPO Policy Board, and the general public through two public meetings.

Public Involvement Links

- **SJTPO Policy Board**
  The governing body of the SJTPO is the Policy Board. It consists of eleven voting members: one elected official from each county government, one municipal elected official from each county (specifically including the Mayors of Atlantic City and Vineland), and one representative each from the New Jersey Department of Transportation, New Jersey Transit, and the South Jersey Transportation Authority.

- **Citizens' Advisory Committee (CAC)**
  The Citizens Advisory Committee represents a broad cross-section of civic and business groups, environmental interests, and private provider and user groups.

- **Technical Advisory Committee (TAC)**
  A fourteen member Technical Advisory Committee provides input to the Policy Board.

- **RTP Public Meetings**

- **FY '09 TIP Conformity – November 2008**
  Documents the demonstration of transportation conformity of the SJTPO FY 2009-2012 Transportation Improvement Plan and the 2035 SJTPO RTP.

- **2025 RTP Public Outreach Program Support**
  Designed to complement SJTPO public outreach efforts for the 2025 Regional Transportation Plan, the goal for the program was to foster regional awareness of the Year 2025 Regional Transportation Plan.

- **Telephone Opinion Survey – May 2007**
  In order to gain insight into the public's perceptions of the issues and concerns that were expressed during these previous research efforts, the SJTPO conducted a telephone opinion survey among area residents that would present meaningful information for the SJTPO 2035 regional plan update.

- **FHWA 2007 MPO Certification Report**
  Contains an assessment of the operations of the SJTPO and its conformance with the Federal planning process.

- **Environmental Justice – June 2002**
  Contains a discussion of the findings from outreach efforts directed toward community-based organizations, social agencies, and others that work with low-income and minority populations.

Goal Setting

Transportation planning and decision-making for the SJTPO region are guided by a series of goals and policies. These goals and policies reflect the priorities, needs, and values of the region's citizens, decision-makers, and business community. Input was solicited from members of the SJTPO Policy Board and TAC on the 2035 RTP Goals and Policies. Based on the responses, the following goals and policies are proposed to guide the regional transportation decision-making process; the proposed revisions must be adopted by the board before becoming the official goals and policies of the SJTPO.

Goal: Promote Transportation Choices for the Movement of People and Goods

Policies:

- Expand and improve non-auto transportation systems as needed: aviation, passenger rail, marine, rail freight, bicycle, pedestrian, and public transit.
- Provide for affordable mobility options to all segments of the transportation-disadvantaged

and support welfare-to-work transportation initiatives.
- Support transit-operating subsidies to ensure affordable mobility options.

Goal: Support the Regional Economy
Policies:
- Advance projects to interconnect the transportation system across modes and for all users.
- Improve access to areas of major employment and tourism.
- Improve the efficiency and operations of the existing transportation system.

Goal: Improve Transportation Safety
Policies:
- Ensure the safety of all users of highway, transit, bicycle, pedestrian, and freight systems.
- Fully integrate emergency evacuation issues into regional planning, corridor planning, and project development activities, as appropriate.
- Continue and enhance support of the South Jersey Traffic Safety Alliance and integrate traffic and pedestrian safety considerations into SJTPO's policies and programs.

Goal: Improve Security
Policies:
- Ensure the security of users of highway, transit, bicycle, pedestrian, and freight systems.
- Fully integrate emergency evacuation security issues into regional planning, corridor planning, and project activities development as appropriate.

Goal: Mitigate Traffic Congestion
Policies:
- Improve the efficiency and operations of the existing transportation system.
- Develop and implement innovative technologies.

Goal: Protect and Enhance the Environment
Policies:
- Encourage cooperative land use and transportation planning activities.
- Encourage the use of alternative transportation modes.

- Mitigate negative environmental and social impacts of transportation improvements and augment the positive.
- Promote community design and site planning that accommodate and promote transportation choices.

Goal: Enhance the integration and connectivity of the transportation system

Policies:

- Encourage cooperative land use and transportation planning activities.
- Advance projects to interconnect the transportation system.

Goal: Restore, Preserve, and Maintain the Existing Transportation System

Policies:

- Secure dependable, reliable sources of transportation funding.
- Ensure the key elements of the transportation system are restored, preserved, and maintained.
- Explore alternative financing for transportation improvements to supplement fuel and property taxes.

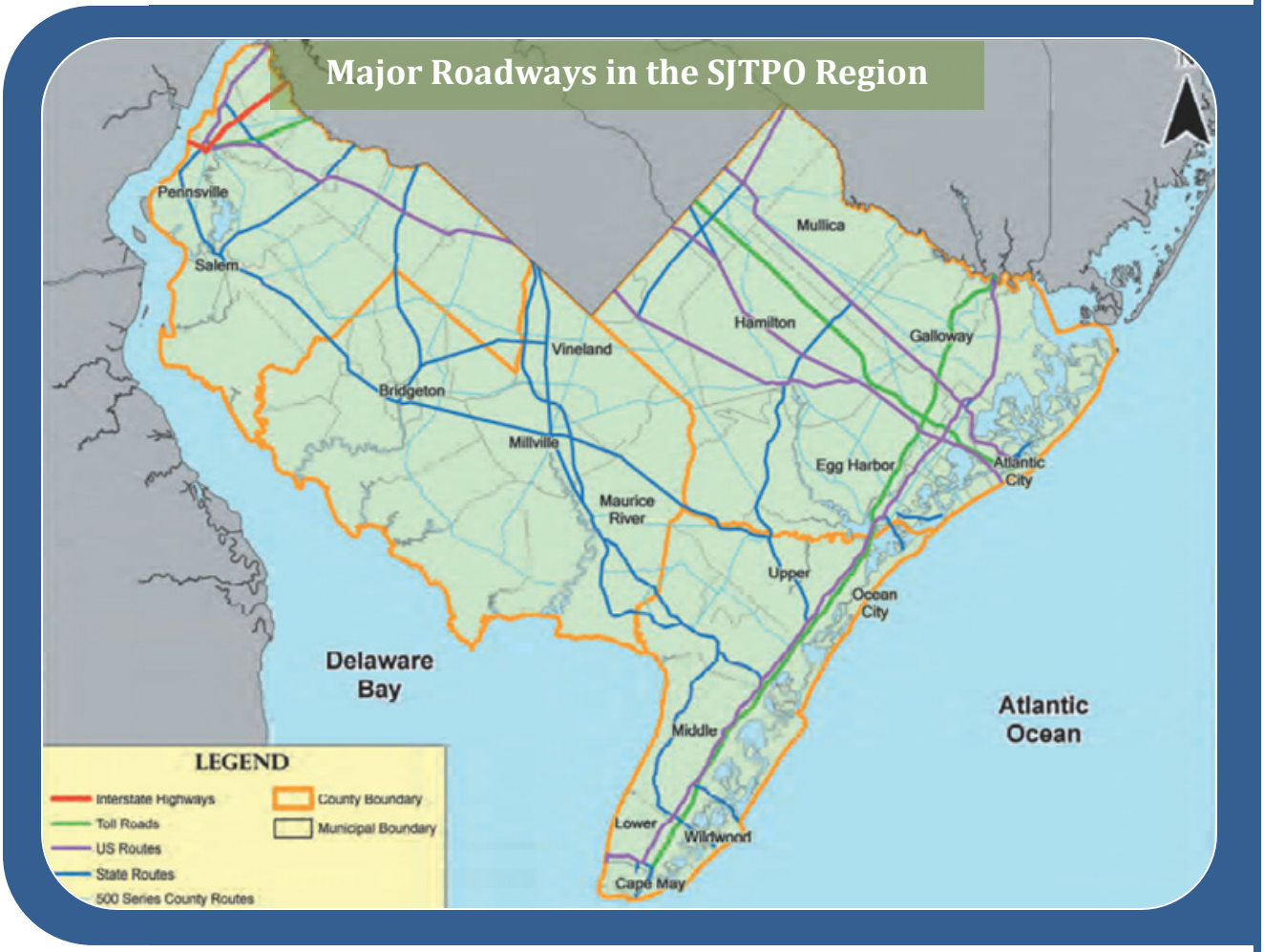
Context – Regional Overview and Assessment

The RTP examines the context for transportation planning and decision-making in South Jersey. Long-range transportation planning requires understanding the demographic characteristics that combine to create the demand for travel. In addition, to be considered are the unique challenges and influencing factors that shape the region.

The demand for travel in southern New Jersey differs from the rest of the state in several key ways, and is dominated by three themes: the unique character of the region compared to the rest of the state, the importance of the gaming and tourism industries, and the seasonal variation in travel.

The SJTPO Regional Profile is prepared by the SJTPO to provide a “snap-shot” of the SJTPO region; it documents the geographic, transportation, and population characteristics of the four counties that comprise the SJTPO region.

The SJTPO region is comprised of 68 municipalities in the four counties of Atlantic, Cape May, Cumberland, and Salem. The region is about 1,778 square miles in total area, accounting for nearly 20 percent of New Jersey's total area of 8,722 square miles but contains less than 7 percent of the State's population.



Demographics

Demographic characteristics of an area influence the demand for travel. Long-range transportation planning requires understanding how demographic characteristics combine to create travel demand. Increases or decreases in the number of people living in an area together with increases or decreases in the number of jobs in that area or region can affect the number, length, and distribution of trips that must be made and consequently the need for transportation facilities and services.

However, the demand for travel in southern New Jersey differs from the rest of the state in several key ways. Southern New Jersey is more rural, its population and jobs are more widely dispersed, the greatest concentration of employment is in one location – Atlantic City – and tourism is an important industry. The southern four counties that comprise the planning area for the SJTPO offer a wide range of land uses, and particular care must be taken to protect the natural resources that characterize the region, making it an attractive and desirable tourist destination.

SJTPO Population and Employment Forecasts

The SJTPO is responsible for preparing and maintaining population and employment forecasts for the region. These forecasts are provided in 5-year increments and are used to support a variety of planning efforts including the development and maintenance of the South Jersey Travel Demand Model (SJTDM).

The most recent forecasts include projections through the year 2035. The official SJTPO Demographic Forecasts are adopted by the SJTPO Board for use by SJTPO and its member agencies. Overall, the regional employment is forecast to grow about 25 percent and regional population is expected to grow approximately 20 percent. The bulk of the region's growth in population and employment through 2035 is projected to occur in Atlantic County.

Regional Population and Employment Forecasts

	Population				Employment			
	Total		Change		Total		Change	
County	2007	2035	Net	%	2007	2035	Net	%
Atlantic	276,160	357,570	84,410	29.5%	155,530	204,913	49,383	31.8%
Cape May	101,780	116,010	14,230	14.0%	47,440	56,594	9,154	19.3%
Cumberland	155,160	176,060	20,900	13.5%	64,070	71,053	6,983	10.9%
Salem	66,700	72,710	6,010	9.0%	21,010	25,987	4,977	23.7%
Total	599,800	722,350	122,550	20.4%	288,050	358,547	70,497	24.5%

Source: SJTPO Population and Employment Forecasts, June 2006

SJTPO Population by Age Group, 2000

County	Age 0 to 19 Years		Age 20 to 44 Years		Age 45 to 64 Years		Age 65 Years and Over		Total Pop
Atlantic	69,928	27.7%	91,626	36.3%	56,561	22.4%	34,437	13.6%	252,552
Cape May	24,970	24.4%	30,529	29.8%	26,146	25.6%	20,681	20.2%	102,326
Cumberland	40,929	27.9%	54,402	37.2%	32,020	21.9%	19,087	13.0%	146,438
Salem	18,090	28.1%	21,338	33.2%	15,546	24.2%	9,311	14.5%	64,285
SJTPO	153,917	27.2%	197,895	35.0%	130,273	23.0%	83,516	14.8%	565,601
New Jersey	2,284,107	27.1%	3,104,225	36.9%	1,912,882	22.7%	1,113,136	13.2%	8,414,350

Source: 2000 US Census, SF1

Challenges for the Region

The SJTPO faces numerous challenges in meeting the region's travel needs now and in the future. This section documents those challenges identified through the RTP process and includes various reports and studies prepared to investigate them through the SJTPO's regional planning process. Specific actions in response to these challenges are presented in the Strategies Implementation Plan section of this document.

- **Relieving Congestion**
  - Shore Connection Committee Report – 1998
  - US 130 / NJ 49 Corridor Study – June 2005

  - CR 552 Study – June 2003
  - US 9/Garden State Parkway Study – April 2004
  - Millville Airport Study – August 2002
- **Making Driving, Bicycling, and Walking Safer**
- **Planning Emergency Evacuation Routes**
  - Emergency Evacuation Assessment – June 2004
- **Preserving and Aging Infrastructure**
- **Enhancing Tourism**
- **Getting Workers to Jobs**
  - Job Access Reverse Commute (JARC) – 2002, updated in the 2007 SJTPO Human Services Transportation Plans (Atlantic, Cape May, Cumberland, and Salem Counties)
- **Improving Freight Movement**
- **Mobility and Travel Alternatives**
  - South Jersey Regional Rail Study – December 2002
  - Regional ITS Architecture – October 2004
- **Promote Smart Growth Development Solutions**
  - NJFIT Web Site
  - Environmental Mitigation Activities – May 2007

Influencing Factors

SJTPO employment data reflects the importance of the gaming and tourism industries. Shore communities, in particular, experience significant seasonal fluctuations in both population and employment. The transportation system must accommodate an enormous influx of seasonal and **recreational** visitors, the majority of whom travel by car or bus. Many shore communities have lengthened the traditional summer tourist season in recent years; a number have seen a rise in year-round versus summer-only residents. Atlantic City is a year-round destination for millions.

As such, travel conditions vary considerably from those in much of the rest of the state. These conditions include seasonal variations and **non-traditional peak periods** related to both summer recreational travel and the gaming industry. SJTPO has long maintained that standard measures of travel demand and congestion overlook and under-represent the magnitude and duration of travel peaks experienced in the four-county region.

The SJTPO is also faced with the enormous task of **maintaining the existing transportation infrastructure** while addressing future needs by undertaking significant improvements to the infrastructure. The scale of existing maintenance needs has necessitated targeting most resources and efforts to making these necessary repairs.

Reflecting both Federal planning guidelines and local needs, **safety and security** issues have moved to the forefront of SJTPO planning efforts as indicated in the RTP 2035 Goals.

Key Influencing Factors:

- Gaming and Recreational Travel
- Non-Traditional Travel Peaks
- System Preservation
- Safety and Security

Multimodal Transportation System

The multimodal transportation system assessment presents a review of transportation resources in the SJTPO region, by mode. It begins with highway and continues with transit, bicycle/pedestrian, and intermodal travel, which includes aviation and goods movement. A review is presented, beginning with an overview of facilities and services, demand for travel, condition, and state of repair of infrastructure, an assessment of needs and problems, concerns and influencing factors that represent the unique circumstances of the regions, and opportunities and strategies for improvement.

This assessment builds upon the context presented and documented in previous sections, which described the makeup and diversity of the region and how these attributes shape the unique characteristics of travel in the SJTPO region.

Regional Travel Demand Model

- Household Travel Survey
- Population and Employment Projections

Transit System Performance

Bicycle/Pedestrian

- Cumberland County Bike Trail Study

Intermodal and Freight

Management Systems

- SJTPO Congestion Management System
- Statewide Congestion Management System
- Statewide Bridge Management System
- Statewide Pavement Management System
- Statewide Safety Management System

NJDOT Congestion Management System

The NJDOT maintains a Statewide Congestion Management System (NJCMS) to assist in identifying and evaluating congestion trouble spots across the state using a consistent set of data inputs and measures. The NJCMS relies primarily on traffic volume data and V/C (volume/capacity) ratios to assess traffic conditions on the state's primary roadways. Although it has proven useful in other parts of New Jersey, the 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 beach traffic, and weekend evening travel related to the Atlantic City's gaming industry. To address these shortcomings, the SJTPO has developed its own South Jersey CMS (SJCMS) to better track and reflect traffic congestion in the region.

Two NJCMS data sets are included in the following table. These data indicate some worsening of traffic congestion between the 2001 and 2005 data.

Number of Congested Hours Per 24-Hour Weekday

Hours	2001		2005	
	Miles	% of Total	Miles	% of Total
0 to 1	500.77	97.1%	514.87	95.5%
1 to 2	4.00	0.8%	17.34	3.2%
2 or more	11.00	2.1%	7.16	1.3%
Total	515.77	100.0%	539.37	100.0%

Sources: 2001 data – 1990 NJDOT CMS, v. 1.2; 2007 data – 2005 NJDOT CMS, v. 4.04.90

NJDOT Bridge Management System

NJDOT employs a Bridge Management System (BMS) to maintain an inventory of all bridges with a span over 20 feet in New Jersey with information on their physical characteristics, condition, and ownership. Bridges are inspected periodically and the various characteristics are rated on a numerical scale. Based on these data, a bridge can be defined as structurally deficient, functionally obsolete, or both. The purpose of the rating system is to identify eligibility and priority for available funding.

Three BMS data sets are included in the following table. These data indicate some worsening of overall bridge conditions between the 2000 and 2008 ratings, with percentages of Structurally Deficient, Functionally Obsolete ratings increasing over the 9-year period.

Bridge Ratings in the SJTPO Region

	2000		2003		2008	
Bridge	**Number**	**% of Total**	**Number**	**% of Total**	**Number**	**% of Total**
Structurally Deficient	55	11.5%	64	10.9%	78	14.6%
Functionally Obsolete	55	11.5%	70	11.9%	72	13.5%
Neither	368	77.0%	452	77.1%	383	71.9%
Total	478	100.0%	586	100.0%	533	100.0%

Sources: NJDOT Bridge Management System – June 2000, December 2003, January 2008

NJDOT Pavement Management System

NJDOT maintains a database with information on the condition of pavement throughout the state of New Jersey; this database is updated every two years. Until recently, the rating system was based primarily on two criteria. The Ride Quality Index (RQI) describes the comfort level by measuring roughness. The Surface Distress Index (SDI) compiles and measures the severity of surfaces distresses such as cracking, patching, shoulder condition, shoulder drop, faulting, and joints. The Department has recently developed a new rating system, which based on the International Roughness Index (IRI) uses a numerical score to rate pavement condition. The score is then scaled to a pavement rating. The scale varies by facility type with three groupings: Interstate, Freeways, and NHS Highways; Non-NHS Highways; and Other County Highways, with the Interstate/Highway group having the most stringent standards for pavement condition and a more lenient scale for the lesser facilities.

The following table compares pavement conditions for three data sets – 1997, 2001, and 2006. These data indicate some worsening of overall pavement conditions with almost one-half of the roadways rated as Good in 2001 having degraded to Fair by 2006.

Pavement Conditions in the SJTPO Region

	1997		2001		2006	
Pavement Rating	**Miles**	**% of Total**	**Miles**	**% of Total**	**Miles**	**% of Total**
Very Poor*	3.6	0.9%	9.9	2.5%	20.3	4.2%
Poor	49.4	12.0%	44.5	11.2%	113.3	23.3%
Fair	106.8	26.0%	53.6	13.5%	166.3	34.2%
Good/Very Good	250.6	61.1%	289.2	72.8%	186.5	38.3%
Total	410.4	100.0%	397.2	100.0%	486.4	100.0%

Sources: NJDOT Pavement Management System, 1997, 2001, 2006

Growth Impacts

The SJTDM generates performance measures that indicate how well vehicles flow through the highway network and how the system will operate in the future. Indicators include the total number of trips made, vehicle miles of travel (VMT), and vehicle hours of travel (VHT). VMT represents an estimate of the total miles driven by all motorists in a time period. VHT represents the total hours spent driving by motorists within that same time period.

Population and employment growth influence the demand for travel. SJTPO projects 20.4 percent growth in population and 24.5 percent growth in employment by 2035. SJTDM forecasts similar growth in trips and VMT (24 and 26 percent respectively), but significantly higher growth in VHT (52 percent). The VHT data indicate a worsening of congestion over time, well in excess of the growth in demand and travel measures. The build scenario indicates improved travel conditions with a decrease in total VHT compared to the no-build scenario for 2035.

Future Build Analysis

A variety of methodologies, tools, and data sources were employed to identify future highway needs. These include traffic safety data, the NJDOT management systems (Congestion, Bridge, and Pavement), SJTPO Congestion Management System (SJCMS), SJTPO demographic data forecasts, and the South Jersey Travel Demand Model (SJTDM).

Based on these sources, a list of high-priority need locations was developed. These individual roadway need segments were combined to form two principal high-priority corridors. These corridors formed the basis of the air quality conformity build assessment. Improvement concepts were applied to these two corridors to form the build condition:

- NJ 55/47/347/657 – 42 total lane-miles widened by one lane and 16 interchanges/ intersections upgraded
- US 40/322 – 30 total lane-miles widened by one lane and 18 interchanges/intersections upgraded

Regional Travel Indicators, 2007 – 2035 South Jersey Travel Demand Model, Daily Assignment

	2007	2035 No-Build	% Change v. No-Build	2035 Build	% Change v. Build
Daily Trips	1,716,178	2,133,798	24.3%	2,133,256	24.3%
Daily Vehicle Miles Traveled	19,572,469	24,218,080	23.7%	24,589,939	25.6%
Daily Vehicle Hours Traveled	539,374	841,687	56.0%	818,062	51.7%

Strategies and Implementation Plan

The RTP Implementation Plan proposes improvements and action items in response to the region's identified needs and problems, and enhancements to the process used to evaluate and plan for the future health and function of the regional transportation system. In addition to the Transportation Improvement Program and long term investments projects, this proposed multimodal plan includes enhancements to the regional travel demand model, safety and emergency evacuation, ITS, transit, multimodal including freight, and proposals to better integrate land use and transportation to provide long-term congestion benefits and create more livable and sustainable development patterns. According to federal guidance, the RTP must be constrained to reasonable expectations of available financial resources.

The strategies and actions are grouped into the categories below:

- **Transportation Improvement Program (TIP)**
- **Congestion Mitigation and Regional Corridor Improvements**
  - NJ 55 and the NJ 55/47/347/CR 657 Corridor
  - US 40/322
  - Cumberland County CR 552
  - Wrangleboro Road Corridor
  - US 9/Garden State Parkway Corridor
  - US 130 / NJ 49 Corridor
  - Additional Corridors
- **NJDOT Management Systems**
  - Bridge Management System
  - Pavement Management System
  - Congestion Management System
- **South Jersey Travel Demand Model (SJTDM) Enhancements**
- **CRDA / Atlantic City Regional Transportation Plan**
- **Safety and Security**
- **ITS Implementation and Regional Architecture**
- **Transit**
  - South Jersey Regional Rail Study
- **Bicycle/Pedestrian Mobility**
  - Cumberland County Bicycle Trail Study
- **Multimodal and Freight Movement**
- **Tourism and the Regional Economy**
- **Smart Growth and Environmental Protection**

Transportation Improvement Program (TIP)

The TIP is prepared by the SJTPO in collaboration with NJDOT. The TIP lists projects, plans, and programs scheduled for implementation within the next four fiscal years (2008 through 2011). These include state and federally funded state and local highway projects, public transit projects, and statewide transportation programs. The federal government mandates that the TIP be fiscally constrained, based on the resources that can be reasonably expected to be available over its term.

FY2008-2011, the SJTPO region is receiving 10.2 percent of the $5.5 billion statewide transportation program (excluding statewide programs). The following includes a sampling of SJTPO projects approved for TIP funding (a complete list is available on the SJTPO website):

- Almond Road (CR 540), Centerton Road to Maurice River
- Delilah Road Bridges over US 30 and Water Mains
- Elmer Road, East Avenue to Main Road Resurfacing
- Garden State Parkway Interchange Improvements
- US 9, Northfield Sidewalk Replacement
- CR 575 Pomona Road
- NJ 49/55, Interchange Improvements at NJ 55
- NJ 50 Tuckahoe River Bridge
- NJ 52 Causeway Replacement and Somers Point Circle

Congestion Management and Regional Corridor Improvements

Many arterials in the SJTPO region must serve the dual purpose of providing regional and local mobility. 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.

Trips and the vehicle miles traveled in the SJTPO region are forecast to increase 25 percent, in pace with overall population and employment growth. However, total time spent traveling more than doubles, indicating that the growth in trips will result in a significant increase in system delay, and harming mobility.

While minor improvement concepts have been proposed or are being advanced to improve the efficiency of the existing system, 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. 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 list the corridors recently studied and the corridors proposed as priority corridors for study and concept development.

NJ 55 and the NJ 55/47/347/CR 657 Corridor

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.

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.

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.

US 40/322

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.

At a minimum, preservation of existing capacity should be a priority in this corridor. Measures to achieve this include the control of access, maintaining in a good state of repair the pavement and bridges in the corridor, and working with the municipalities to promote smart growth concepts in the corridor and surrounding areas.

Cumberland County CR 552

A corridor study, completed in 2003, was undertaken to determine the transportation needs of the Corridor based on both existing and future design peak-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 would ultimately require widening to a four to five-lane section from Kenyon Road to Main Road with additional improvements at some of the intersections.

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 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

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. This corridor study made a series of High and Medium Priority recommendations over both the short- and long-term. The improvements and range of problems addressed included bicycle and pedestrian facilities, drainage improvements, geometric deficiencies, intersection improvements, roadway rehabilitation, and interchange improvements.

US 130/NJ 49 Corridor

Key study area issues for this corridor 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. Six primary needs were identified for the US 130 / NJ 49 corridor: economic development, the promotion of alternative modes of transportation, roadway and pedestrian safety, congestion relief, reconfiguring the triangle area (confluence of I-295, the 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.

Additional Corridors

In meetings with the Citizens Advisory Committee, several additional corridors were identified for future study:

- Vineland/Millville - CR 555
- NJ 47/Vineland/Millville

Bridge Management System

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 indicates 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.

Pavement Management System

Pavement Management System data supplied by NJDOT indicates 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.

Congestion Management System

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. Building upon the SJCMS 2025 screening, a limited review of needs through the 2035 analysis year was undertaken for this plan update.

It is recommended that a full update of the SJCMS for the 2035 analysis year be undertaken, incorporating the latest traffic count information, modeling data, and demographic forecasts to develop a full identification and scoring of each corridor to update the work conducted in 2003.

South Jersey Travel Demand Model (SJTDM) Enhancements

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:

- Improving the performance of the predictive capabilities of the model by improving the temporal model factor tables
- An update to the traffic count pattern files with the latest traffic information available plus available historic data to track patterns of growth
- Working with the DVRPC to obtain new networks and trip tables for the base and future years and reattach them to the SJTPO model
- An update to the commercial and small truck trip generation formulas 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.

CRDA/Atlantic City Regional Transportation Plan

Atlantic City and the gaming industry are critical to the health of the regional economy. The SJTPO should work with the CRDA to develop regionally beneficial improvement concepts.

Safety and Security

SJTPO received a prestigious National Roadway Safety Award 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. Of special interest is the interdisciplinary nature of the audit teams, which consist of state, county, and local representatives. 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.

The South Jersey Traffic Safety Alliance (SJTSA) is a unique traffic safety organization with its goal being 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 SJTPO to decrease deaths and injuries resulting from traffic crashes.

An analysis of 2007 seat belt study data indicated that the driver seat belt use rate in the SJTPO region is 88 percent, a dramatic increase from the 77 percent use rate in the 2006 SJTPO 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.

The SJTPO 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.

The following are recommended to improve transportation safety in the region:

- Support the South Jersey Traffic Safety Alliance (SJTSA)
- Continue to local Road Safety Audit (RSA) program
- Promote measures to educate the public on safety issues
- Complete the Safety Management System and conduct an assessment of high crash locations
- The following are recommended to improve transportation security in the region:
- Emergency Evacuation – complete NJ 55 to facilitate emergency evacuation in the SJTPO region and work with state and local authorities to implement elements of the New Jersey Hurricane Evacuation Study, particularly evacuation implementation planning
- Work with SJTPO member agencies to facilitate increased awareness of security concerns through outreach and education
- Promote ITS system enhancements designed to provide critical real-time information at times of emergencies

Emergency Evacuation – Strategies

During an emergency, the ability to evacuate a large population base made up of the year-round population and seasonal traffic is critical. 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.

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. The analysis identified critical links/bottlenecks and tested the impact of completing NJ 55 to the shore.

Emergency Evacuation – Results

The scenario testing performed for the 2035 analysis 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 could make it through the danger districts to safety during the PM peak period. Based on an assumed 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. The results indicate the critical need to complete NJ 55 to address emergency evacuation in the region.

ITS Implementation and Regional Architecture

The SJTPO engaged in a major effort with the NJDOT and the North Jersey Transportation Planning Authority (NJTPA) to develop statewide and Regional (for SJTPO and NJTPA regions) ITS Architectures. These 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.

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."

The following ITS actions are recommended:

- Work to ensure enhanced motorist information is available in the SJTPO region to promote energy efficiency and environmentally-sound mode choice decisions
- Promote the use of NJ511 travel information services
- Evaluate the need for additional ITS components in the SJTPO region
- Work with NJDOT to provide traffic cameras for real-time traffic information

Evacuation Scenario Results – 2035 No-Build v. Build

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

Transit

Although transit service is available in every county of the SJTPO region, it is generally sparse due to low population densities. Most of the region's transit service is concentrated in Atlantic County, and more specifically in Atlantic City. However, there are many unmet transit needs in the region amongst the transit-dependent and rural populations. 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 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.

The following transit actions are recommended:

- Assess and identify potential transit service enhancements and expansion in the SJTPO region, including an examination of existing routes, service levels, and gaps; affordable mobility options; and potential rail corridors including Pleasantville
- Continue exploring the option of reactivating one or more of the abandoned rail lines evaluated by the South Jersey Regional Rail Study for passenger service
- Determine if there are potential bus rapid transit (BRT) opportunities in the SJTPO region
- Identify and support improvements to Access Link, and support specialized and demand-responsive paratransit services, county human service transportation plans, and the findings of the Job Access and Reverse Commute (JARC) Plan
- Support study of SJTPO region access as part of the PATCO extension study

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:

- Atlantic City-Mays Landing
- Winslow Junction-Cape May
- Millville-Vineland-Winslow Junction-Bridgeton (spur)
- Glassboro-Vineland

Currently, the only rail corridor offering commuter rail service in the SJTPO region is the Atlantic City Rail Line. 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 a bus rapid transit (BRT) system. BRT offers advantages of generally lower costs than fixed rail systems, and depending on the alignment, 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, NJTRANSIT's paratransit service. 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 finding of the Job Access and Reverse Commute (JARC) Plan. The 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 Mobility

It is important to encourage the use of alternative modes to improve mobility, accessibility, and quality of life of residents and tourists, and an integrated transportation system that includes non-motorized modes. This is particularly true in recreational areas where walking and biking trips can play an important role in transportation. It is also very important that pedestrian and bicyclist safety be considered as improvements are made to facilities in the SJTPO region.

SJTPO has taken many steps to address the needs of bicyclists and pedestrians. The current Transportation Improvement Program (FY2008-2011) for the region identified four projects, all located in Atlantic County, for implementation.

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
- Continue to work with NJDOT to maximize new facility mileage in South Jersey
- Work with NJTRANSIT to promote intermodal connections
- Facilities need to be provided to increase foot and bicycle traffic for both tourism and non-tourism related travel in the region
- Assist in system assessment and planning and design
- Standardize work efforts of the counties and NJDOT/ NJTRANSIT
- Develop regional promotional or marketing materials

Cumberland County Bike Trail Study

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.

Multimodal Freight Movement

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 curb 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) indicated that the majority of freight moves to, from, within, and through New Jersey by truck. 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 vehicle miles of travel in New Jersey will more than double by the year 2030. Trucks are also the dominant mode of transport in the intermodal freight business – truck to rail, truck to ship, and truck to air. With regards to rail freight, 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. Area ports and airports must also have adequate access to the multimodal transportation system to promote the efficient movement of both people and goods.

The SJPTO supports a comprehensive assessment of freight needs and issues in the SJTPO region. The following intermodal and freight movement actions are recommended:

- Improve intermodal connections, especially to areas of major employment and tourism and the Atlantic City International Airport
- Improve access of local rail carriers to regional and interstate systems
- Maintain and upgrade rail facilities
- Examine potential transit options to improve accessibility to Atlantic City International Airport
- Conduct a comprehensive assessment of freight needs and issues in the SJTPO region, including an analysis of the Delair Bridge as well as intersections at which turning radius may be a problem for trucks

Tourism and the Regional Economy

In the SJTPO region, the vast majority of visitors arrive by automobile, although a considerable number of visitors – more than 6 million in 2006 – 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 by far 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 in the NJ 55/47/347 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 will be critical.

The following tourism actions are recommended:

- Consider the seasonal and time-of-week/time-of-day variations in traffic flow in corridor planning and project development to support tourism and regional economic growth
- Help travelers find their way around the SJTPO region and through traffic problems by posting way-finding signs and variable message signs and maximizing the information available through NJ511

Smart Growth and the Environment

The SJTPO region is expected to grow considerably by the year 2035. Measures to mitigate congestion 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 the single occupant vehicles including transit and 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 and transportation planning amongst the transportation providers in the region and the counties and municipalities.

Air Quality Conformity Assessment

SJTPO must assure conformity of transportation decisions with the State Implementation Plan (SIP) and the Federal 1990 Clean Air Act Amendments. To achieve the required “Air Quality Conformity” an assessment process was conducted based on federal guidelines and with the participation of both FHWA and EPA. The process is based on the latest planning assumptions (including adopted SJTPO demographics projections), and utilizes the SJTDM to examine the air quality impacts of the region’s proposed transportation plans, projects, and programs. The table below depicts the results of the action scenarios testing versus the budgets established for each emission level for the analysis years. Emissions generated are a result of both the future year demographic inputs and the new projects, or actions, added to the base network. Emissions are then compared to the corresponding analysis year emission budgets. Analysis demonstrates that the 2035 RTP Update will conform to the Statewide

Implementation Plan (SIP) with respect to the established motor vehicle emissions budgets and will meet all requirements under the 8-hour Ozone, and the Carbon Monoxide (CO) National Ambient Air Quality Standard (xNAAQS) tests.

Budget Tests – SJTPO FY 2009-2012 Conformity Assessment VOC Budget Test, SJTPO (tons per day)

	2009	2010	2017	2025	2035
Budget	13.03	13.03	13.03	13.03	13.03
Action	12.84	12.17	7.46	6.42	6.96
Budget-Action	0.19	0.86	5.57	6.61	6.07
Pass/Fail	Pass	Pass	Pass	Pass	Pass

NOx Budget Test, SJTPO (tons per day)

	2009	2010	2017	2025	2035
Budget	29.64	29.64	29.64	29.64	29.64
Action	18.65	17.17	6.80	3.65	3.39
Budget-Action	0.22	1.70	12.07	15.22	15.48
Pass/Fail	Pass	Pass	Pass	Pass	Pass

Financial Overview

The Transportation Improvement Program (TIP) for the SJTPO lists state and federally funded state and local highway projects, public transit projects, and statewide transportation programs scheduled for implementation within the next four fiscal years (FY2009-2012). The FY2009-2012 TIP provides for $628 million of transportation investments in southern New Jersey for this period. The TIP includes a detailed description and a funding schedule for each project and program. The FY2009-2012 TIP is constrained to currently available funding.

The current project prioritization process, coupled with funding limitations, leaves many projects with little or no financial backing. This leads to future challenges as the region continues to develop and transportation needs increase. Insufficient funding means these needs will continue to grow, especially as the region's existing transportation system ages. The SJTPO is faced with the enormous task of maintaining the existing transportation infrastructure while addressing future needs by undertaking significant improvements to the infrastructure. The scale of existing maintenance needs has necessitated targeting most resources and efforts to making these necessary repairs. The need to maintain the existing highway system in a state of good repair is of paramount importance to the SJTPO region.

Given the current TIP and the historic funding sources, and the steady to slightly increasing SJTPO allocation of funds, the RTP action plan is within the reasonable guidelines of being a financially constrained plan. However, additional funding is needed to address the backlog of maintenance needs as well as to accommodate the growth expected to occur over the plan's horizon. It is

important that the SJTPO realizes increased levels of funding in the future years and secures extraordinary funding for projects of regional significance in order to address the mobility and accessibility needs of people and goods in the region.

South Jersey Transportation Planning Organization (SJTPO) Distribution of Funds

(Note: Does not include expenditures from "Statewide" Programs within NJDOT & NJTRANSIT)

NJDOT Funding Category	FY 2009	FY 2010	FY 2011	FY 2012	FY 2009-2012
FHWA: Bridge	$49.0	$49.6	$53.6	$48.1	**$200.2**
FHWA: CMAQ	$1.9	$1.9	$1.9	$1.9	**$7.6**
FHWA: Equity Bonus	$3.5	$3.5	$3.5	$3.5	**$13.8**
FHWA: High Priority	$2.8	$9.4	$9.9	$17.4	**$39.6**
FHWA: I-Maintenance	$7.8	$0.0	$0.0	$0.0	**$7.8**
FHWA: NHS	$0.0	$6.6	$0.0	$5.0	**$11.6**
FHWA: Rail-Hwy Crossing	$1.5	$1.5	$1.5	$1.5	**$5.8**
FHWA: Safety	$1.4	$2.0	$1.4	$1.4	**$6.2**
FHWA: SPR/PL	$0.9	$0.9	$0.9	$0.9	**$3.7**
FHWA: STP-SJTPO	$10.2	$8.6	$10.2	$10.2	**$39.1**
FHWA: STP-Statewide	$2.2	$2.2	$7.9	$2.2	**$14.5**
FTA: SPR/PL	$0.5	$0.5	$0.5	$0.5	**$1.8**
Other Funds	$7.0	$0.0	$0.0	$14.6	**$21.6**
Transportation Trust Fund	$24.5	$47.7	$17.3	$36.7	**$126.1**
NJDOT Sub total	**$113.0**	**$134.3**	**$108.3**	**$143.7**	**$499.3**

NJTRANSIT Funding Category	FY 2009	FY 2010	FY 2011	FY 2012	FY 2009-2012
FTA: JARC	$0.2	$0.2	$0.2	$0.2	**$0.8**
FTA: New Freedom	$0.1	$0.1	$0.1	$0.1	**$0.4**
FTA: SEC 5307	$12.9	$13.6	$14.1	$12.9	**$53.5**
FTA: SEC 5307-TE	$0.0	$0.0	$0.0	$0.0	**$0.1**
FTA: SEC 5309	$1.6	$1.6	$1.7	$1.7	**$6.6**
FTA: SEC 5309D	$0.8	$0.0	$0.0	$0.0	**$0.8**
FTA: SEC 5310	$0.2	$0.2	$0.2	$0.3	**$1.0**
FTA: SEC 5311	$0.3	$0.3	$0.3	$0.3	**$1.1**
Casino Revenue	$1.6	$1.6	$1.6	$1.6	**$6.3**
Match Funds	$0.4	$0.5	$0.5	$0.5	**$1.9**
Other Funds	$0.6	$0.6	$0.6	$0.6	**$2.3**
Transportation Trust Fund	$13.0	$11.8	$13.7	$15.1	**$53.6**
NJTRANSIT Subtotal	**$31.6**	**$30.4**	**$33.1**	**$33.3**	**$128.4**

Total	**$144.6**	**$164.7**	**$141.4**	**$177.0**	**$627.7**

Additional Information

SJTPO 2035 RTP Update Transportation Improvement Program

The RTP Update includes this document, which acts as the executive summary, and the following:

- RTP Public Involvement Program
- Financial Outlook
- Plan Outlook Analysis
- Transportation System Assessment

Transportation System Assessment

A multimodal review of travel needs and conditions, and transportation resources in the SJTPO region: highway, transit, bicycle/pedestrian, and intermodal travel, including goods movement and aviation.

Strategies and Implementation Plan

This follow up to the technical analysis of the Transportation System Assessment describes the proposed strategies and 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.

RTP Public Involvement Program

This memorandum documents the various Public Involvement activities conducted as part of the 2035 RTP Update, including development of the Goals and Policies, meetings conducted, and comments received.

Transportation Improvement Program (TIP)

The TIP for the SJTPO lists projects, plans, and programs scheduled for implementation within the next four fiscal years. It includes state and federally funded state and local highway projects, public transit projects, and statewide transportation programs.

The TIP and RTP must also demonstrate financial constraint within reasonably expected sources of funding.

Air Quality Conformity Determination

SJTPO must assure conformity of transportation decisions with the air quality State Implementation Plan (SIP) and the Federal 1990 Clean Air Act Amendments.

South Jersey Transportation Planning Organization

2035 Regional Transportation Plan Update

A. Public Involvement Program

Approved July 2008

Edited November 2010

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RTP Public Involvement Program

Introduction

The Intermodal Surface Transportation Efficiency Act (ISTEA) and its successor, the Transportation Efficiency Act for the 21st Century (TEA-21), greatly enhanced the Metropolitan Planning Organization's (MPO) role and responsibilities in long-range decision-making and project development and prioritization. The most recent legislation was enacted in August 2005. The Safe Accountable Flexible Efficient Transportation Equity Act – a Legacy for Users (SAFETEA-LU), provides an enhanced set of terms MPO's must follow when updating their Regional Transportation Plans.

As the designated MPO for southern New Jersey, the South Jersey Transportation Planning Organization (SJTPO) is required to develop a Regional Transportation Plan (RTP) on a four-year cycle. The RTP sets the course for the future of the region, and must incorporate the eight metropolitan planning factors and management system outputs. It should address measures to support the region's economic vitality, promote safety, accessibility, and mobility, protect the environment, improve intermodalism, address evacuation scenarios, preserve the system, manage congestion, satisfy air quality conformity requirements, and utilize visualization techniques. The plan must be developed in consultation with all interested parties and provide reasonable opportunities for all parties to comment.

This update to the RTP is drawn primarily from existing and new work products available from the SJTPO and its partners, supplemented by an updated assessment of the multi-modal transportation system and NJDOT management systems data. As envisioned, the 2035 RTP Update will serve as a roadmap to policy, information, and data resources for the SJTPO region and facilitate public information exchange and input.

This report on the Public Involvement Plan documents the public outreach activities associated with the development of the RTP. The PIP draws upon NJDOT's Guidelines for Public Involvement and Community Impact Assessment and includes strategies for soliciting feedback and insight, building local consensus on improvement concepts, and providing opportunities for public involvement throughout the duration of the project.

Federal Certification Review

During the recently completed Federal Certification Review, the Federal Highway Administration found that "the SJTPO's public involvement process meets Federal requirements for timely notifications and adequate public comment periods. In addition to newspaper notifications on major transportation decisions for public review, the SJTPO distributes key documents and other information for public review to public libraries and key participating agencies, such as the SJTA and the NJDOT."

However, the review also found that "while basic requirements are met, USDOT… recommends that SJTPO incorporate proactive approaches to public involvement."

Among the suggested actions was an effort by the SJTPO to reactivate the Citizen's Advisory Committee. FHWA cited a need to enhance the profile of the SJTPO among the public and encourage

greater stakeholder participation and input into the regional planning process. This action would introduce a broad cross-section of civic and business groups, environmental interests, and private provider and user groups into the regional planning process. As a result, an active effort was undertaken during the RTP Update to reactive the CAC. Two meetings were held, concerns were discussed, and significant input was provided to the RTP. These efforts are documented below in the Citizens Advisory Committee section. Reports from each meeting, including attendees, meeting minutes, and action items, are provided as an attachment to this memorandum.

Goals and Policies

Under previous authorizing legislation, the *Intermodal Surface Transportation Efficiency Act* of 1991 (ISTEA) and the *Transportation Equity Act for the 21st Century* of 1998 (TEA-21), Congress showed support for metropolitan and statewide transportation planning by emphasizing eight distinct areas which metropolitan planning organizations (MPOs) and states should consider when developing their plans. Most recently in 2005, the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), added emphasis in two areas: security and the environment. Transportation security is now a standalone factor, signaling an increase in importance from prior legislation. The factor relating to the environment is expanded, to promote consistency of the long-range transportation plan with planned growth and development.

Through the RTP, the MPO demonstrates that its goals and policies are consistent with the eight SAFETEA-LU planning factors.

1. Supports the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increases the safety of the transportation system for all motorized and non-motorized users.
3. Increases the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.
4. Increase accessibility and mobility of people and freight
5. Protect and enhance the environment, promote energy conservation, improve the quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system

The RTP addresses these issues in its goals and policies, as documented in the following table. These are consistent with the federal planning factors.

SAFETEA-LU PLANNING FACTORS	RELATED SJTPO GOAL OR POLICY
Protect and enhance the environment, promote energy conservation, improve the quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns.	**Goal:** Protect and enhance the environment **Policies:** • Encourage cooperative land use and transportation planning activities. • Encourage the use of alternative transportation modes. • Mitigate negative environmental and social impacts of transportation improvements and augment the positive. • Promote community design and site planning that accommodate and promote transportation choices.
Enhance the integration and connectivity of the transportation system, across and between modes, for both people and freight.	**Goal:** Enhance the integration and connectivity of the transportation system **Policies:** • Encourage cooperative land use and transportation planning activities. • Advance projects to interconnect the transportation system.
Promote efficient transportation system management and operation.	**Goal:** Mitigate traffic congestion **Policies:** • Improve the efficiency and operations of the existing transportation system. • Develop and implement innovative technologies
Emphasize the preservation of the existing transportation system.	**Goal:** Restore, preserve, and maintain the existing transportation system. **Policies:** • Secure dependable, reliable sources of transportation funding. • Ensure the key elements of the transportation system are restored, preserved, and maintained. • Explore alternative financing for transportation improvements to supplement fuel and property taxes

SAFETEA-LU PLANNING FACTORS	RELATED SJTPO GOAL OR POLICY
Supports the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.	**Goal:** Support the regional economy **Policies:** • Advance projects to interconnect the transportation system across modes and for all users. • Improve access to areas of major employment and tourism. • Improve the efficiency and operations of the existing transportation system
Increases the safety of the transportation system for all motorized and non-motorized users.	**Goal:** Improve transportation safety **Policies:** • Ensure the safety of all users of highway, transit, bicycle, pedestrian and freight systems. • Fully integrate emergency evacuation issues into regional planning, corridor planning, and project development activities as appropriate. • Continue and enhance support of the South Jersey Traffic Safety Alliance and integrate traffic and pedestrian safety considerations into SJTPO's policies and programs.
Increases the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.	**Goal:** Improve security **Policies:** • Ensure the security of users of highway, transit, bicycle, pedestrian and freight systems. • Fully integrate emergency evacuation security issues into regional planning, corridor planning and project activities development as appropriate.
Increase accessibility and mobility for movement of people and freight	**Goal:** Promote transportation system choices for the movement of people and goods **Policies:** • Expand and improve non-auto transportation systems as needed: aviation, passenger rail, marine, rail freight, bicycle, pedestrian, and public transit. • Provide for affordable mobility options to all segments of the transportation disadvantaged and support welfare-to-work transportation initiatives. • Support transit operating subsidies to ensure affordable mobility options

Public and Citizen Involvement

Federal rules also require that there be adequate opportunity for public official and citizen involvement in the development of the transportation plan before it is approved by the MPO. For the SJPTO, oversight in developing the RTP was successfully produced through the board and committee structure of the SJTPO as

well as public involvement activities. The board and committee structure of the SJTPO is briefly described below:

- **SJTPO Policy Board** – The governing board of the SJTPO, which encompasses eleven voting members. Members include one selected official from each county, one municipal official elected from each county (including the mayors of Atlantic City & Vineland), and one delegate from the New Jersey Department of Transportation, NJTRANSIT, and the South Jersey Transportation Authority. The Policy Board approves planning processes and adopts all goals, policy statements, and action steps.
- **Technical Advisory Committee (TAC)** - Nominated by the Policy Board, the TAC consists of fourteen members and provides input to the Policy Board. Work includes overseeing and developing the RTP, and reviewing technical products and policy issues. It consists of staff of each Policy Board member, as well as representatives of the New Jersey Turnpike, the New Jersey Highway Authority, the Delaware River and Bay Authority, and the Chairperson of the Citizens Advisory Committee.
- **Citizens Advisory Committee (CAC)** - The CAC was created to provide guidance in the public involvement process conducted by the SJTPO and to emphasize the importance of public involvement to the organization. This committee represents an extensive assortment of interests including environmental issues, tourism concerns, civic and business issues, and private transportation provider and user issues. Other interested individuals and associations may also participate and be added to the mailing list upon request.

These groups have direct involvement in developing the SJTPO RTP. Additionally, through stakeholder outreach meetings, public meetings, and the SJTPO website and mailings, a broad base of outreach activities provided input to the plan development process.

Technical Advisory Committee (TAC)

Working products and drafts were presented at several TAC meetings over the course of RTD development. Comments received were considered and incorporated, where appropriate. Meeting dates included the following:

- August 13, 2007 TAC – draft versions of the RTP goals and policies were presented. Only minor changes were made since the previous RTP update. PB also presented an initial mockup of the RTP format for comment.
- April 14, 2008 TAC – updated drafts of RTP products were presented for comment
- June 9, 2008 – final drafts of RTP products were presented for comment, including the proposed strategies and implementation plan, a discussion of the TIP and financial constraint, and the air quality conformity assessment

Citizens' Advisory Committee (CAC)

The purpose of the public involvement activities is to provide and expand opportunity for citizens and groups to provide input to and comment on the RTP and the overall regional planning process in general. RTP strategies, projects, and policies should reflect this input, and one of the key goals of the 2035 RTP update process is to revive the Citizens Advisory Committee (CAC), as indicated in the comments from the Federal Certification Review.

Many MPOs have a CAC or its equivalent. The neighboring DVRPC, for example, has a Regional Citizens Committee (RCC), which meets on a monthly basis. The RCC is considered critical to fulfilling the DVRPC's public involvement commitments.

The 2007 FHWA Federal Certification Review found that the SJTPO's CAC has been inactive for the past seven years and that the committee needs to function as a much more active participant in decision making to improve. These findings were confirmed by SJTPO's recent Public Opinion Survey, which found a low awareness of both the SJTPO as an organization and of its role in developing and implementing transportation improvements and policies that benefit the region.

The previous RTP Update stated that the CAC was created to:

- provide guidance in the public involvement process;
- emphasize the importance of public involvement to the organization; and
- represent an extensive assortment of interests.

Working with PB and sub-consultant Martine A. Culbertson, Associates (MAC), the SJTPO convened two meetings to begin the process of reviving the CAC. The first meeting was held April 1, 2008 at the Cumberland County College; the second on June 3, 3008 at the Cape May County Adm. Building, Cape May Court House, NJ. Through a collaborative effort, a mailing list of potential stakeholders was developed with the goal of inviting a broad range of inviting participants representing a broad range of interests and concerns.

Eighteen individuals attended the first meeting. A vigorous discussion was held, covering a variety of topics including the following:

- Public transportation, including bus and rail and both local and regional service
- Better integration of transit services and fare collection across modes and provider agencies
- Casino access and mobility is critical, including casino workers not just patrons
- Truck and rail freight
- Importance of Job Access Reverse Commute programs to local economies and mobility
- NJ 55 connector – both for and against
- Other local and regional highway connector links
- Funding should support a balance of project types and modes
- Opportunities for transit villages
- Coordinate RTP with SDRP and other state plans and initiatives

The second meeting was designed to provide an opportunity for CAC members to review RTP findings and recommendations, consistent with the goal of having a plan that reflects a variety of interests. A full presentation of the Road Map – 2035 RTP Update was given followed by a discussion and comment period.

Comments and recommended changes to the RTP documents include the following:

- Additions to congestion/problem areas
  - NJ 55 corridor, Vineland/Millville
  - NJ 47 from Vineland to Millville
  - Delaware memorial bridge connection
  - Woodstown Borough connections and mobility improvements
  - Update SJCMS through 2035 to assist in future problem area identification and evaluation
- Transit
  - Re-iterate importance of transit improvements needed in the region – expansion / new routes / non-traditional alternatives, not just refinement of existing services/routes
  - North-south transit service is limited in Atlantic County
  - US 9 – Tilton Road / Black Horse Pike
  - PATCO expansion should look beyond Philadelphia region; consider Glassboro / Vineland connections
  - Impact to traffic with the creation of NJ Motor Sports, Millville, NJ
  - Pleasantville may be among most promising rail corridors
- Include Bike-Pedestrian Trail enhancements proposed, in the works, or completed:
  - Cumberland County bike trail
  - Examine access and connections to existing regional bike trail (potential County park connections in the region)
- Airport Connections
  - Atlantic City and Philadelphia International Airports
  - Public transit options - peak and off peak (consumers and employees)
  - Colleges / industrial and research parks / malls
  - Shuttle services which tie to other mobility options (rail, bus, park and ride lots); possible Pomona location to create shuttle link to Airport and employment locations
- Goals and Policies for the Plan
  - The list is not in a priority order; consider reordering
  - Text should be added to the Plan to indicate the importance of all Goals to be met and that the list is not in a priority rank or sequence, because a reader may focus on the first few more than the last few.
  - Members were asked to provide comments on the Goals and indicate a preference of order to be listed. A list of the Goals were sent via email to all CAC members for comment, with additional comment to be provided by June 15

Public Comment

A draft version of the RTP was presented to the public for review and comment. The meeting was held from 4:00 – 7:00 pm, on June 3, 2008 at the Cape May County Adm. Building, Cape May Court

House, NJ. Comments received during the mandatory public comment period were considered and, where applicable, incorporated into the final version of the RTP Update. As with the revival of the CAC, the public meeting was designed to address comments from the federal certification review that SJTPO invite and incorporate public comment into the transportation planning and decision-making process, and the formulation of recommended actions.

The public meeting was held in an open format to foster discussion and questions, and with display boards highlighting key finding and recommendations from the RTP. A visualization tool was also developed, which included a slide show of graphics from NJDOT's smart growth initiatives. The slide show displayed a series of images depicting principles of smart growth, such as roadway connectivity, multi-modal street design, and integrated land use and transportation planning methods.

Comments and questions from the public included the following:

- What is the status of the proposed extension of NJ 55?
- Regional rail can provide benefits for mobility needs and to address peak period traffic congestion
- The existing portion of NJ 55 needs better connections to local destinations as it passes through the region
- Is the Garden State Parkway a viable route to support emergency evacuation?
- NJDOT traffic cameras are recommended on SJTPO roadways to provide real-time traffic information

SJTPO

Citizens Advisory Committee

SOUTH JERSEY TRANSPORTATION ORGANIZATION
REGIONAL TRANSPORTATION PLAN 2035

COUNTIES OF ATLANTIC, CAPE MAY, CUMBERLAND AND SALEM
CITIZENS ADVISORY COMMITTEE MEETING NO. 1 REPORT

DATE: Tuesday, April 1, 2008

TIME: 10:00 a.m. – 12:00 p.m.

LOCATION: George P. Luciano Family Center at Cumberland County College

ATTENDEES

First Name	Last Name	Representing	Phone	Email
		Project Team - Steering Committee		
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Fred	Winkler	Winchester and Western Railroad	856-451-6400	tthompson@unimin.com

PURPOSE OF MEETING

To review the purpose and role of the Citizens Advisory Committee (CAC), to present an overview of the SJTPO, the Regional Transportation Plan Update and goals for the project, and to seek input and discussion from CAC members on the Plan and next steps for public outreach. (Agenda attached).

MEETING SUMMARY

1. Martine Culbertson, meeting facilitator, opened the meeting with introductions and thanked participants for their time and interest in re-activating the Citizens Advisory Committee (CAC) for the South Jersey Transportation Planning Organization (SJTPO).

2. Bill Schiavi provided an overview of the SJTPO as the Metropolitan Planning Organization for Atlantic, Cape May, Cumberland and Salem Counties. The SJTPO provides a regional approach to solving transportation issues through planning activities, directing of funding, and providing a forum for cooperative decision-making among state and local officials as well as participating agencies and the general public. SJTPO is re-activating the CAC to assist in updating the Regional Transportation Plan (RTP) and assisting SJTPO with community input and support for the transportation needs of the region.

3. After a review of the agenda, Martine explained the information contained in the blue CAC Portfolio. She noted the need to look over the CAC contact list, which is a preliminary list from previous initiatives and organizations involved in transportation. SJTPO would like balanced participation from each county and interest groups such as tourism, recreation, commerce, economic, environmental and residential to be represented on the CAC. The other information in the portfolio is a Project Team contact list, a Fact Sheet on the SJTPO and Regional Transportation Plan, and the CAC Purpose, Goals and Structure for members to review and provide comments.

4. Pete Kremer, the Project Engineer for the RTP update from PB Americas, presented background on the development of the SJTPO and the Regional Transportation Plan, which is required by FHWA in order to determine the transportation needs in the region and allocate the federal transportation funds for planning, capital improvements, and operations (See attached PowerPoint presentation information).

(a) The Regional Transportation Plan is available on the SJTPO web site for viewing. It is possible to receive a copy by contacting Bill Schiavi.
(b) Every other month the Policy Board meets to discuss the status of projects, funding and planning initiatives. There is also a Technical Advisory Committee (TAC) and the Citizens Advisory Committee (CAC).
(c) A Telephone Opinion Survey was conducted in May 2007 to obtain input from the general public on transportation interests, needs and knowledge of the SJTPO and process. The survey results are on the SJTPO web site for viewing (www.sjtpo.org).
(d) The Regional Transportation Plan has a series of goals and policies, which guide the SJTPO's transportation decision making; these include supporting the regional economy, safety and security, and multi-modal travel. The Plan requires public input and the SJTPO is re-establishing the CAC as a means for dialogue on the goals and needs. Since there are more transportation needs in the region than funding, it is important to determine the relative importance of the transportation needs both short term and long-term potential projects.

5. Tony DeJohn, PB Project Manager, presented information on the development and objectives of this version of the RTP update.

(a) Traditionally the Plan has been a thick multi-page document, but it is now a more concise document posted on the web with the ability to link to resources and supporting information.
(b) It is intended to create the Plan as interactive, so as data is available, it is incorporated into the Plan.

(c) The opportunity to provide comments allows the plan to be more responsive as well.

6. Tony noted that due to the age of bridges in the State of New Jersey and the cost of replacement, more of the funding over the coming years will be dedicated to bridge rehabilitation and replacement due to safety and access needs. Thus transportation improvements other than bridges will be difficult to move forward without support. The CAC needs to champion the transportation mobility interests of the region and be advocates for funding allocation. The Plan drives the decision process so input from the CAC on the Plan and direction on providing people mobility, as gas prices rise is critical. Most important question for consideration is "what do you want to see happen?"

7. A question was raised. Does the existing plan get approved by the Board? The response is yes once it is reviewed by the Technical Advisory Board (TAC).

8. The meeting was opened to group discussion. CAC provided the following comments when asked what would they like to see addressed by the plan, where should the SJTPO focus their efforts in the coming years to address transportation, access and safety needs for the four Counties in the region:

Regional Transportation Plan (RTP) - Comments

- See light rail extended to Glassboro
- See freight rail expand in the area
- Look to support public transit, which must be convenient to be effective
- Support and encourage regional service similar to Camden to Philadelphia, PATCO & NJ TRANSIT
- Develop connection for Cape May to Winslow
- In scenario of hurricane evacuation rail can carry high volume of passengers more efficiently
- Support Atlantic City Rail Line – need for feeder service to improve use and optimize rider ship
- Atlantic City Rail Line - increase evening service, improve rail connections to line; coordinate service with Casino work shifts
- No direct connection to the River Line – (located in the DVRPC region)
- Support long distance Express Bus Service - Millville to Atlantic City
- NJ TRANSIT expansion in the region, especially residential to employment areas
- Bus Service for Bridgeton to Vineland and connection to Atlantic City
- Need for bus service, to provide circulator services with in communities to industrial business parks
- Support for rail use is critical to the region
    - it is environmentally compatible
    - Consumes less land
    - High capacity service
    - runs independently
    - electric lines, not gas dependent
    - Camden to Atlantic City
- Town-friendly Rail Line – multi levels: local, regional and inter-city
- Maintain and expand Job Access Reverse Commute Program in Cumberland
    - increase hours of operation
    - late evening service
    - also explore para-transit options

- Support and encourage United We Ride Program
  - local transportation services and funding
  - improve NJ TRANSIT routes
- Lack of service to Millville Industrial Park
- Enhance access Route 553
- CMAC Funds
- How to overcome funding cuts - collaborate on agency resources, joint projects, partnerships
- Public Transit – needs to stand on its own, source and destination compatible
- Develop circulator service for Industrial Parks for effective ridership
- 650M – River Line State – example
- CAC needs to be an advocate for transportation funding
- Concern for local communities with no transportation - many have no vehicle access or personal means of transportation
- Region's transit service is centered in Atlantic City, need to target other areas of Salem and Cumberland Counties
- Support environmental justice opportunities for mobility consistent in the region
- Important to develop plan to provide access for economically challenged to employment opportunities
- Support Bayshore Heritage Scenic Byway
- More efficient public transportation to airport(s) (Atlantic City and Philadelphia airports)
- Improve Cape May County public transportation
- There is a rail gap from Woodbine to Cape May Court House
- Unify reservation systems for bus and train to link mobility services
- Make bus and train connections information available via cell phone and linked on web sites
- Link services to improve ridership - Amtrak, Septa, NJTRANSIT, other Buses
- Support mobility of bus and train to connect to Food Banks
- Education and communication for public transit needed to enhance ridership and relive congestion
- National and 800 numbers to link transportation sources
- Route 55 completion is supported by some members and not by other members
- Support for options to improve access and circulation to the barrier islands to relieve congestion
- Woodstown Bypass – Delaware Memorial Bridge – large project
- Balance of projects - support various initiatives, each county and regional connections
- Determine bottleneck areas and missing links
- Develop transit villages
- RTP should be consistent with State plans, i.e. SDRP and NJDOT Long Range Plan

9. Question was raised as to the status of improvements on the Garden State Parkway.

(a) Traffic signals on Garden State Parkway are in preliminary design

(b) The theoretical expansion of the Parkway between interchanges 9 and 6 – still several years to construction

10. In summary, Martine asked participants to share any thoughts or ideas regarding the RTP and SJTPO CAC efforts. Additional comments noted as follows:

CAC - Ideas and Additional Comments

- Set up Link RTP to other existing web sites, which support mobility and access - local and county
- Written literature on SJTPO and RTP needed as well as on the web
- Successful CAC input on RTP should use Multi-modal communication
  - meetings: in person dialog
  - on-line information: exchange, links
  - hard copy documents: libraries post offices
- Monitor news articles – collect information – post articles
- Use mechanism as Celebrate New Jersey - use of simple questionnaire online form Where's My Opinion
- Statewide - improve way finding signage
- For public outreach meeting - use local radio stations, newspaper with free articles, Channel 23
- Bridgeton need for efficient east-west roadway for commerce in Cumberland County with limited access to have efficient transport of goods and services
- Need for direct efficient connection to Route 55 from Bridgeton for economic viability, sustainability
- Improve public transportation so to move products and people
- Plan responsible connectivity to Delaware Memorial Bridge - local roads, easy drive, options for drivers
- Get information to everyone - exchange of ideas and sharing information
- Bus / rail transit improvements preferred over increasing capacity for vehicles
- High performance bus service
- Everyone should have use of circulatory service, not limited to economically challenged
- Rail lasts longer than bus - a viable alternative, environmentally sensitive advantage

11. Participants were then asked to provide ideas on how to obtain participation from the general public and to best implement a public meeting in the region for input on the RTP. Comments noted as follows:

Public Outreach Meeting Comments (*Where/How to Host*)

- Present at Existing Scheduled Public Meetings by County
- Present at Township Planning Board Meetings
- Malls (Glassboro Mall, County College Campuses)
- Advertise/post info for meetings at library, post office or retail areas with public presence
- Cape May Court House - Hospital, Acme
- Develop display board about SJTPO and RTP to exhibit at libraries and municipal buildings

12. In closing, Martine then asked for key word or thoughts as feedback from the CAC members. Action items for CAC members are listed in the next section. Meeting adjourned at noon.

Closing Comments - Key Word or Thoughts

- CATS Program - Reduce congestion through other means of transportation and access
- Disability considerations be included - ADA compliance
- County meeting(s) or presentations
- Funding
- Gaming / tourism / transportation
- Local feeder transportation to a stem (spokes on a wheel or ribs on a spine)
- Emergency transportation
- "Infectus connectus"
- Better regional connection ++
- Public transportation – 3 aspects: social, economic, and environmental
- Sustainability
- Public education / awareness – improve transportation planning ++
- Reach out – more members – newspaper, web links
- Fix it first
- Steel wheel, steel rail
- Emails for advocacy
- Make noise to bring about direction and change
- Business representation summit

KEY ACTION ITEMS

1. Meeting minutes will be provided and posted on the SJTPO web site (M. Culbertson)
2. CAC input and comments to be incorporated into RTP (P. Kremer)
3. Next CAC Meeting to be held in May/June, draft RTP due by end of June
4. Multi-modal communications and perspective for future CAC meetings
5. CAC members to review the following items:
    a. SJTPO website
    b. RTP Plan on website
    c. Telephone Opinion Survey
    d. Portfolio information – provide comments or revisions
    e. Provide potential CAC contact information on stakeholders, citizens, or interest groups
    f. Identify Means - provide preferred choice for communication (email, phone, fax, mail)

NEXT MEETING - CAC Meeting No. 2 and Public Meeting

Date: Tuesday, June 3, 2008

Time: 1:00 pm - 3:00 pm, and then Public Meeting (4:00 p.m. - 7:00 p.m.)

Location: Freeholder's Room, Cape May County Admin. Bldg., Cape May Court House, NJ

We believe the foregoing to be an accurate summary of discussions and related decisions. We would appreciate notification of exceptions or corrections to the minutes within three (3) working days of receipt. Without notification, these minutes will be considered to be record of fact.

Martine Culbertson
RTPU CAC Meeting Facilitator

Counties of Atlantic, Cape May, Cumberland, and Salem Citizens' Advisory Meeting, No. 2, Report

DATE: Tuesday, June 3, 2008

TIME: 1:00 pm – 3:00 pm

LOCATION: Intermediate Meeting Room, William E. Sturm, Jr. Building. Cape May County Administrative Building, Cape May Court House, NJ

ATTENDEES

First Name	Last Name	Representing	Phone	Email
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PURPOSE OF MEETING

The purpose of the meeting is to review issues and comments provided at the first CAC meeting, present highlights of the Regional Transportation Plan 2035 Update, and determine CAC communications methods and schedule for future CAC meetings (Agenda attached).

MEETING SUMMARY

Martine Culbertson, meeting facilitator, opened the meeting with a review of the agenda. After introductions, she explained the materials distributed at the meeting: the updated contact list and CAC Meeting No. 1 report.

Pete Kremer, Project Planner, reviewed the issues raised at the first CAC meeting. He asked members to share any additional issues or comments for consideration. The following were noted:

RTP Issues:

1. Improve, enhance and create new public transit to tourism destinations, to provide new linkages to tourist destinations

2. Revise the last bullet point on CAC Meeting No. 1 Report to indicate the planning process to be “bottom up”, rather than "top down", where the State plans should incorporate and support the SJTPO RTP, so there is consistency in the plans. It was agreed that this bullet point should be changed to “Encourage cooperative land use and transportation planning activities,” and that references to the SDRP should be removed.

3. Tony DeJohn, Project Manager, presented highlights of the proposed Regional Transportation Plan update (See power point presentation attachment to the report). He explained that this Plan would be posted on the web in an interactive web-based style allowing links to other documents and sites rather than a large document repeating information from other reports.
   (a) In order to print to standard letter size (8 1/2x11), more pages may be needed for ease of reading and printing. Decision made to not use 11x17 charts, which would make it difficult to read on the screen and print on standard printers.
   (b) The RTP will act as a "road map" or guide to other important sources of planning information, travel demand models and forecasting data.
   (c) This update of the RTP is intended to keep the planning process dynamic. It is being developed to "take on the road", so the CAC and TAC (Citizen Advisory Committee and Technical Advisory Committee) can share the information with their constituents and provide input to the SJTPO directly.
   (d) With a web-based Plan, the links and electronic access to studies and reports means that as information that the Plan references changes, so the Plan will be updated.

4. Tony reviewed the goal setting objectives for the RTP and explained each Goal (included in the power point presentation). A handout of the Goals will be made available to CAC members for review and comment. *ACTION ITEM*

5. An important aspect of this Plan is the need to understand that the congestion and "choke points" in the transportation network in South Jersey occurs as 'non-traditional' traffic volume peaks. Rather than during traditional commuter traffic peaks, the high volumes of congestion occur on weekends and summer seasonal patterns. Thus, the models and analysis for determination of need must be adjusted to address the South Jersey, which includes much of the SJTPO regional area. Thus, the types of connections and solutions for mobility and access options differ in South Jersey compared to northern New Jersey.

6. Sections of the Plan include information on:
   - Examination of the Existing System (set the stage, regional profile)
   - Challenges
   - Influencing Factors (recreational travel, safety and security)
   - Multi-Modal Transport System Assessment (percent going in poor direction, level of need, how well the system is working)
   - Strategies and Implementation Plan (what SJTPO is doing, existing projects, what's needed in the future, problem areas)

7. The RTP will be reviewed at Monday, June 9, TAC (Technical Advisory Committee) meeting to discuss and agree to the list of problems and priorities to be identified by the Plan. Comments from today’s

8. New items added to the Plan:
   - Emergency evacuation -be certain coordinated procedures are in place

- NJ511 – designed by motorists to provide real time information
- ITS – need to provide enhancement in South Jersey. No NJDOT traffic cameras are currently available in the SJTPO region to augment traffic data resources.
- Transit – mobility should drive improvements rather than cost and funding as determination
- BRT (bus rapid transit) – alternative transportation transit solutions must satisfy better demand/improved response system
- Bike/Pedestrian access – need to develop regional promotional material to support alternative modes
- Multi-Modal – aspects must include Freight
- Tourism & Regional Economy – need to integrate concepts and benefits for local population
- Smart Growth & Environmental Protection

9. Congestion/problem areas to add to the list are:
   - CR 555 corridor, Vineland/Millville
   - NJ 47 from Vineland to Millville
   - Delaware Memorial Bridge connection
   - Woodstown Borough connections and mobility improvements
   - Update SJCMS through 2035 to assist in future problem area identification and evaluation
10. Tony asked CAC members to contribute their thoughts and comments regarding the sections of the Plan:
    - Transit
      - Important for the Plan to re-iterate importance of transit improvements needed in the region – expansion / new routes / non-traditional alternatives, not just refinement of existing services/routes
      - North-south transit limited in Atlantic County
      - US 9 – Tilton Road / Black Horse Pike
      - PATCO expansion beyond Philadelphia region; consider Glassboro / Vineland connections
      - Impact to traffic with the creation of NJ Motor Sports, Millville, NJ
      - Pleasantville may be among most promising rail corridors
    - Include Bike-Pedestrian Trail enhancements proposed, in the works, or completed:
      - Cumberland County bike trail (information can be obtained from Bob Brewer)
      - Examine access and connections to existing regional bike trail (potential County park connections in the region)
    - Add Airport Connections needed (public transit) into Plan
      - Atlantic City and Philadelphia International Airport
      - Public transit options -peak and off peak (consumers and employees)
      - Colleges / industrial and research parks / malls
      - Shuttle services which tie to other mobility options (rail, bus, park n' ride lots); possible Pomona location to create shuttle link to Airport and employment locations
11. Tony reviewed the Goals and Policies for the Plan and asked CAC members for comments on the Goals.
    (a) The list is not in a priority order; consider reorder
    (b) Text should be added to the Plan to indicate the importance of all Goals to be met and the list is not in a priority rank or sequence, however a reader will focus on the first few more than the last few. Therefore, members were asked to provide comments on the Goals and indicate a preference of order to be listed.

    ACTION ITEM

(c) The goals and policies are based upon the federal planning factors by June 15. The draft document must be completed into a final document by the end of the month.

12. Tony presented information on Examine the Existing System where the stage is set for the Plan with regional profile information.
    (a) A draft of the excerpts of the Plan, as presented by Tony at this meeting, will be distributed for comment via email to CAC members Please provide comment by June 15th. The draft document must be completed into a final document by the end of the month. *ACTION ITEM*
    (b) Once the Plan is approved, it will reside on the SJTPO web site.

13. In presenting the Strategies and Implementation section of the Plan, Tony and Pete discussed the list of where the current congestion areas are and what SJTPO is doing and would like to address in the future. CAC members should provide any transportation corridor areas where there are deficiencies or need for improvements to Pete Kremer to include in the Plan. *ACTION ITEM* Comments noted.
    (a) NJ 55 was acknowledged as a continual traffic concern during summer season
    (b) CR 555 in Vineland is a congestion concern
    (c) Vineland to Millville on NJ 47 is a congestion concern
    (d) Connectivity to Delaware Memorial Bridge
    (e) Status of Woodstown bypass – no longer a priority,
    (f) TMS coordination – maximize capacity on two lane roadways and provide left hand turn lane slots
    (g) ITS -improve signage, variable messages and traffic cameras where needed
    (h) Plan should indicate ADA compliance and transit which supports such mobility needs (Access Link)

14. Tony noted new items in the Plan to be included as follows:
    (a) Information on Emergency Evacuation in the region and the coordinated procedures in place
    (b) The NJ511 cell number to be designed by motorists for real time information
    (c) Need for ITS improvements in south Jersey -traffic cameras and variable message signs are limited
    (d) Bus Rapid Transit (BRT) for Mobility rather than driving as means to reduce vehicles, thus congestion
    (e) Bicycle and Pedestrian improvements -develop regional promotional materials to enhance system
    (f) Multimodal concepts included freight issues in the region
    (g) Tourism and regional economy importance and considerations
    (h) Smart Growth and Environmental Protection importance and considerations for the region

15. In summary, Tony explained the need for the Air Quality Conformity Assessment, which is required to ensure that the Plan achieves the goal of improving the air quality of the region. A Financial Overview is also required for the Plan to indicate that any transportation improvements can be feasibly funded based on reasonable assumptions from various funding sources

16. The next step is to finalize the Plan by the end of June. All CAC comments should be sent as soon as possible (by June 15). A Public Hearing for Air Quality Conformity will be held tentatively on July 1 at SJTPO in Vineland to obtain final comments from the public on the Plan. The meeting

notice will be on the SJTPO web site and advertised in the local paper as a formal Public Hearing. *ACTION ITEM*

17. In closing, Martine discussed CAC future involvement, which will be under the direction of Bill Schiavi at SJTPO. CAC Members agreed to rotate meeting locations from County to County, perhaps holding the meetings in association with the county planning board meetings to encourage public participation and interest from each county or conduct the CAC meetings at a breakfast location prior to the workday at a convenient location within each county. Perhaps a citizen representative from each County could assist Bill

    CAC Members suggested:
    - Meet once a quarter which means each county would host a meeting within the year
    - Maintain frequency to sustain participation and interest
    - Rotate locations regionally
    - Schedule meetings on Tuesday/Wednesday/Thursday for convenience

18. Tim Chelius and Bill Schiavi thanked CAC members for their participation and input to the Plan. Meeting adjourned at 3:00 pm prior to the Public Meeting, to be held from 4:00 pm to 7:00 pm in the Freeholder's Room for the general public to view information on the Regional Transportation Plan, ask questions, and provide comments.

KEY ACTION ITEMS

1. Pete Kremer – to incorporate CAC input and comments into RTP
2. CAC Members – to review the following items:
    a. RTP Goals and Policies – provide comments to Pete Kremer
    b. RTP proposed Plan sections presented at CAC Meeting No. 2 – provide comments to Pete Kremer
    c. Provide potential CAC contact information on stakeholders, citizens, or interest groups
    d. Visit or go to SJTPO web site regularly to review the status of the Plan, upcoming meetings and other SJTPO activities.
3. Martine Culbertson - To provide CAC meeting minutes via email
4. Bill Schiavi – To inform CAC members of future meetings via email and post info on SJTPO website
5. SJTPO – To hold a Public Hearing to finalize the Air Quality Conformity Assessment at SJTPO in Vineland, tentatively on July 1, 2008 (information will be posted on SJTPO web site)

NEXT CAC MEETING

Date: to be determined by SJTPO – Fall 2008

Time: to be determined by SJTPO – breakfast, after planning board

Meetings Location: to be determined (*alternate between Counties*)

We believe the foregoing to be an accurate summary of discussions and related decisions. We would appreciate notification of exceptions or corrections to the minutes within three (3) working days of receipt. Without notification, these minutes will be considered to be record of fact.

Martine Culbertson CAC Meeting Facilitator

SJTPO Regional Transportation Plan 2035

Citizens Advisory Committee Meeting No. 2: AGENDA

Date: Tuesday, June 3, 2008

Time: 1:00 pm -3:00 pm

Location: Intermediate Meeting Room, Cape May County Administration Building

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I. Welcome and Introductions

II. Review Issues and Comments from CAC Meeting No. 1

III. Highlights of the Regional Transportation Plan

IV. Proposed CAC Meeting Schedule and Communication Methods

V. Group Discussion

VI. Next Steps:

- Public Meeting (4:00 -7:00 pm)
- Next CAC Meeting
- Public Hearing

South Jersey Transportation Planning Organization

2035 Regional Transportation Plan Update

B. Financial Outlook

Approved July 2008

Revised November 2010

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Financial Outlook

Introduction

This memo describes current financial mechanisms and analyzes future spending requirements for the SJTPO. This memo demonstrates that the proposed transportation investment agenda contained in the plan is consistent with reasonably available sources of funds.

Federal transportation planning requirements assert that financial plans are a required element of regional transportation plans for Metropolitan Planning Organizations (MPO). However, MPO plans may include for illustrative purposes, additional projects that would be included beyond identified resources of the financial plan if those resources were to become available.

The transportation requirements of the region go far beyond those listed in the annual Transportation Improvement Program (TIP), which can only address the most pressing needs because of funding limitations. The SJTPO must strike a balance between funds used for maintenance and improvements to substandard infrastructure, and those used for new construction to meet growing travel demands.

Transportation Improvement Program (TIP)

Current funding for transportation improvements in the SJTPO region is dedicated through FY 2012.[1] The actual budgeting of federal and state funds for projects within the MPO is a product of the development of regional Transportation Improvement Programs (TIP), the State Transportation Improvement Program (STIP), and the Annual Capital Program. There may be significant variations in the amount of funds actually programmed within an MPO, as needs and specific project implementation schedules dictate. These programming decisions are made by cooperative participation of NJDOT, NJTRANSIT, local government representatives, and other agencies.

The Transportation Improvement Program (TIP) for the SJTPO lists state and federally funded state and local highway projects, public transit projects, and statewide transportation programs scheduled for implementation within the next four fiscal years (2009 through 2012). The TIP provides for $628 million of transportation investments in southern New Jersey for this period. The TIP includes a detailed description and a funding schedule for each project and program.

The FY2009-2012 TIP is constrained to currently available funding.

The FY2009-2012 TIP was developed over a number of months by NJDOT, NJTRANSIT, and the SJTPO. To develop the TIP, projects are screened for their ability to be advanced for implementation and to

[1] Financial data based on the following:
http://www.sjtpo.org/FY09 TIP-Table-1.pdf accessed June 24, 2008
http://www.sjtpo.org/FY09 TIP-Table-4.pdf accessed June 24, 2008
http://www.sjtpo.org/FY09 TIP-Table-7.pdf accessed June 24, 2008

verify their scope and cost. Projects that pass this initial screening are placed in the project pool for further evaluation and review. The SJTPO employs a project prioritization process that is used to evaluate the project pool.

The current project prioritization process, coupled with funding limitations, leaves many projects with little or no financial backing. This leads to future challenges as the region continues to develop and transportation needs increase. Insufficient funding means these needs will continue to grow, especially as the region's existing transportation system ages.

Continued federal and state funding is required to support the SJTPO's short-term investment program. Although adequate funding levels are in place to support this plan's short-term investments, on-going planning studies will identify additional short and long-term investments needed in the region. The actual budgeting of funds with the funding categories will be a product of the planning process: needs analysis, prioritization, project selection, and the TIP negotiation process. Plan updates and the requirements of a fiscally constrained TIP will ensure that investments are economically feasible for this region.

The SJTPO is faced with the enormous task of maintaining the existing transportation infrastructure while addressing future needs by undertaking significant improvements to the infrastructure. The scale of existing maintenance needs has necessitated targeting most resources and efforts to making these necessary repairs. The need to maintain the existing highway system in a state of good repair is of paramount importance to the SJTPO region. In particular, there are many bridges throughout the region that appear on the bridge deficiency list, indicating that they are either *structurally deficient* or *functionally obsolete*. This backlog of bridge projects must be systematically addressed to bring all bridges into a state of good repair. Funds needed to maintain and preserve the system must be made available, as deferring maintenance leads to increased long-term maintenance cost and shortened useful lifecycles. Funds in the SJTPO have also been used to make the existing system more efficient. In contrast, projects that expand our region's transportation system have only been implemented selectively due their great cost, the need to minimize environmental impacts and difficulty in selecting and acquiring right-of-way. The system enhancements identified in the plan echo this balanced approach to the region's needs.

New Jersey's Transportation Trust Fund has provided a stable source of funding for the state's transportation system. However, maintaining and enhancing the SJTPO's infrastructure requires a tremendous amount of additional investment. Even with this source of stable funding in place, the SJTPO still requires adequate levels of funding to improve or replace the existing transportation infrastructure.

Table 1 includes the overall NJDOT and NJTRANSIT expenditures.

The SJTPO region historically receives somewhere between 4 percent and 6 percent of available funds (excluding statewide programs). In recent years, however, this percentage has increased to

somewhere between 8 percent and 11 percent of available funds (excluding statewide programs). This is due in part to the funding associated with a major project, the NJ 52 Causeway replacement, and Somers Point Circle project, which included $180 million in funding for FY 09-12. For FY2009-2012, the SJTPO region is receiving 9.5 percent of the $5.5 billion transportation program (excluding statewide programs), while NJTPA, the MPO for northern New Jersey is receiving 73.9 percent and DVRPC, the MPO for central New Jersey, is receiving 16.6 percent.

See Table 2 for details by year for each MPO, including the distribution of funds for short-term investments included in this plan. An additional $2.5 billion is expected to be available for statewide programs over the four-year period. This includes projects funded by independent agencies, like the South Jersey Transportation Authority (SJTA), through dedicated tolls and other revenue sources.

Table 3 includes a detailed breakdown by year and funding category for the SJTPO FY2009-2012 TIP.

Table 1 - Expendatures: NJDOT and NJTRANSIT ($ millions)

Funding Category	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2009-18
NJDOT											
Federal	$955.70	$840.00	$832.30	$790.70	$759.70	$738.00	$709.70	$709.70	$759.70	$859.70	**$7,955.20**
Other	$54.00	$84.50	$104.50	$57.60	$33.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$333.50**
Transportation Trust	$975.00	$1,000.00	$1,000.00	$1,055.80	$1,087.40	$1,174.70	$1,209.90	$1,246.20	$1,223.90	$1,137.60	**$11,110.50**
Subtotal (NJDOT)	**$1,984.70**	**$1,924.50**	**$1,936.70**	**$1,904.00**	**$1,880.10**	**$1,912.70**	**$1,919.60**	**$1,955.90**	**$1,983.60**	**$1,997.40**	**$19,399.30**
NJTRANSIT											
Federal	$600.80	$583.40	$603.10	$643.60	$665.20	$735.70	$759.40	$784.20	$759.30	$685.10	**$6,819.80**
JARC	$4.00	$4.00	$4.20	$4.20	$4.20	$4.20	$4.20	$4.20	$4.20	$4.20	**$41.60**
Match Funds	$9.60	$10.00	$10.50	$10.80	$11.10	$11.50	$11.90	$12.20	$12.20	$12.20	**$111.90**
Other	$47.30	$47.30	$47.30	$47.30	$47.30	$47.30	$47.30	$47.30	$47.30	$47.30	**$473.40**
Transportation Trust	$625.00	$600.00	$600.00	$592.30	$610.00	$573.70	$590.90	$608.60	$686.60	$830.20	**$6,317.20**
Subtotal (NJTRANSIT)	**$1,286.70**	**$1,244.80**	**$1,265.10**	**$1,298.20**	**$1,337.90**	**$1,372.40**	**$1,413.70**	**$1,456.50**	**$1,509.60**	**$1,579.00**	**$13,763.90**
TOTAL	**$3,271.40**	**$3,169.30**	**$3,201.80**	**$3,202.20**	**$3,218.00**	**$3,285.10**	**$3,333.30**	**$3,412.50**	**$3,493.20**	**$3,576.30**	**$33,163.20**

Table 2 - Distribution of Funds by MPO; NJDOT ($ millions)

MPO	FY 2009	FY 2010	FY 2011	FY 2012	Total	Percent of Total	Percent of Total*
DVRPC	$206.5	$202.6	$210.3	$248.1	**$867.6**	11.2%	16.6%
NJTPA	$1,038.0	$965.9	$986.3	$878.9	**$3,869.2**	49.9%	73.9%
SJTPO	$113.0	$134.3	$108.3	$143.7	**$499.3**	6.4%	9.5%
MPO Subtotal	**$1,357.5**	**$1,302.8**	**$1,305.0**	**$1,270.7**	**$5,236.0**		**100.0%**
Statewide	$627.2	$621.7	$631.7	$633.3	**$2,513.9**	32.4%	100.0%
Statewide Subtotal	**$627.2**	**$621.7**	**$631.7**	**$633.3**	**$2,513.9**		**100.0%**
Total	**$1,984.7**	**$1,924.5**	**$1,936.7**	**$1,904.0**	**$7,749.9**	**100.0%**	**100.0%**

*Excluding Statewide Programs

Table 3 - SJTPO FY 2009-12 TIP Distribution of Funds (NJDOT and NJTRANSIT) ($ millions)

Funding Category	FY 2009	FY 2010	FY 2011	FY 2012	FY 2009-12
NJDOT					
FHWA: Bridge	$49.00	$49.60	$53.60	$48.10	**$200.20**
FHWA: CMAQ	$1.90	$1.90	$1.90	$1.90	**$7.60**
FHWA: Equity Bonus	$3.50	$3.50	$3.50	$3.50	**$13.80**
FHWA: High Priority	$2.80	$9.40	$9.90	$17.40	**$39.60**
FHWA:I-Maintenance	$7.80	$0.00	$0.00	$0.00	**$7.80**
FHWA: NHS	$0.00	$6.60	$0.00	$5.00	**$11.60**
FHWA: Rail-Hwy Crossing	$1.50	$1.50	$1.50	$1.50	**$5.80**
FHWA: Safety	$1.40	$2.00	$1.40	$1.40	**$6.20**
FHWA: SPR/PL	$0.90	$0.90	$0.90	$0.90	**$3.70**
FHWA: STP-SJTPO	$10.20	$8.60	$10.20	$10.20	**$39.10**
FHWA: STP-Statewide	$2.20	$2.20	$7.90	$2.20	**$14.50**
FTA: SPR/PL	$0.50	$0.50	$0.50	$0.50	**$1.80**
Other Funds	$7.00	$0.00	$0.00	$14.60	**$21.60**
Transportation Trust Fund	$24.50	$47.70	$17.30	$36.70	**$126.10**
NJDOT Subtotal	**$113.00**	**$134.30**	**$108.30**	**$143.70**	**$499.30**
NJTRANSIT					
FTA: JARC	$0.20	$0.20	$0.20	$0.20	**$0.80**
FTA: New Freedom	$0.10	$0.10	$0.10	$0.10	**$0.40**
FTA: SEC5307	$12.90	$13.60	$14.10	$12.90	**$53.50**
FTA: SEC5307-TE	$0.00	$0.00	$0.00	$0.00	**$0.10**
FTA: SEC5309	$1.60	$1.60	$1.70	$1.70	**$6.60**
FTA: SEC5309D	$0.80	$0.00	$0.00	$0.00	**$0.80**
FTA: SEC5310	$0.20	$0.20	$0.20	$0.30	**$1.00**
FTA: SEC5311	$0.30	$0.30	$0.30	$0.30	**$1.10**
Casino Revenue	$1.60	$1.60	$1.60	$1.60	**$6.30**
Match Funds	$0.40	$0.50	$0.50	$0.50	**$1.90**
Other Funds	$0.60	$0.60	$0.60	$0.60	**$2.30**
Transportation Trust Fund	$13.00	$11.80	$13.70	$15.10	**$53.60**
NJTRANSIT Subtotal	**$31.60**	**$30.40**	**$33.10**	**$33.30**	**$128.40**
TOTAL	**$144.60**	**$164.70**	**$141.40**	**$177.00**	**$627.70**

*Does not include expenditures from "Statewide" programs within the region.

Transportation Funding Sources

The major federal funding sources for transportation in the SJTPO region are described in Table 4 as authorized through SAFTEA-LU.

Table 4 – Federal Funding Sources for Transportation

Highway and Bridge Programs	Program Description
Bridge Program	Repairs and maintains key bridges
Congestion Mitigation and Air Quality Program (CMAQ)	Assists states and Metropolitan Planning Organizations to meet federal Clean Air Act requirements
High Priority Corridors	Funding for identified high priority corridors, which includes I-295 in the SJTPO region
National Highway System (NHS)	Maintains a comprehensive system of highways to serve national transportation and economic goals and policies
Interstate Maintenance Program	Provides funding to maintain the Interstate Highway System
Surface Transportation Program (STP)	Funds highway maintenance and improvement, safety programs, and transportation enhancements.

Transit Programs	Program Description
Section 5307	Provides capital, operating and planning assistance for transit.
Sections 5310 and 5311	Provides transit services for the elderly, persons with disabilities, and rural transportation
Section 5309	Provides funding for the establishment of new rail or busway projects (new systems), and the improvement and maintenance of existing rail and other fixed guideway systems and the upgrading of bus systems.

There are additional sources of funding as well, including discretionary and demonstration funds, which are awarded on a competitive basis to projects that meet Federal Highway Administration or the Federal Transit Administration criteria. Congressional earmarks are another source of funding.

State Highway and Transit Funding

Transportation projects in New Jersey are funded primarily through the New Jersey Transportation Trust Fund, which was created in 1984 to provide a stable source of funding for transportation improvement projects.

The proceeds, which come from the selling of bonds financed from appropriations to the legislature, are used to fund capital programs for NJDOT and NJTRANSIT as well as provide aid for local roads. The initial Trust Fund legislation covered fiscal years 1985-1988 and was renewed in 1988 for another seven years and then renewed again to 2000 and again to 2004. The most recent Trust Fund reauthorization was in March 2006 and provides $1.6 billion annually in fiscal years FY2008-2011. Revenues for the Trust Fund come from motor fuels taxes, appropriations from the General Fund, heavy truck/diesel fees, and contributions from toll road authorities. For the purposes of this exercise, it was assumed that the Trust Fund would continue to provide stable funding for

transportation in New Jersey through the plan horizon of 2035. However, the State had not yet identified long term funding sources required to meet the projected future needs of the Trust Fund.

Specific investments that will be pursued over the period of the plan cannot be fully identified. Current experience indicates that the majority of funding will be targeted toward investments that preserve, maintain, and improve our region's existing transportation facilities. The majority of the region's future transportation system is already in place, and this system must be maintained and preserved so it can continue to serve both current and future needs. Deferring maintenance cannot continue, or the system will lose its ability to satisfy travel demand in a safe and efficient manner.

Given the needs for maintenance and preservation, the SJTPO will face tough choices allocating limited remaining funds to proposals for capacity expansion for the highway and transit system.

Investment Package – Future Year Build Scenario (RTP Action Plan)

Based on work done to support the New Jersey Long Range Plan effort, it is anticipated that overall financial, environmental, and resource issues will result in the ability to improve about 300 lane-miles and improve about 200 interchanges/intersections overall in the state in the next 25 years. Translating these figures into the amounts expected to occur in the SJTPO region, resulted in approximately 72 lane-miles of improved roadway and 34 interchanges/intersections improvements. The level of improvement will vary at a particular location, these totals represent "typical" improvements, where the roadway may be widened to add a lane in each direction, and the intersections upgraded to provide additional capacity through geometric improvements like turning lane additions, widening, or in some cases overpasses.

For the purpose of conducting the air quality conformance testing, improvements were coded into the travel demand model to test the impact of making the investments described above. Two corridors were chosen as priority corridors based on the results of the transportation system assessment process. The amount of highway segment improvements coded into the model was split between the two corridors as follows:

- NJ 55/47/347/657 42 Lane-miles and 16 interchanges/intersections
- US 40/322 30 Lane-miles and 18 interchanges/intersections

More detail on this process can be found in the Transportation System Assessment memorandum.

In order to determine if this investment package represent a financially viable and constrained investment, PB estimated the total cost of the investment package as follows:

Cost for adding a lane mile of highway corridor was estimated at $5 million per mile, costs for building an interchange at $27 million each, and cost for upgrading intersections were estimated at $4 million each. This estimation is in line with the costs associated with developing the estimates

used in the NJDOT LRP financial assessment, which was the source for the deriving the amount of improvements that could be added to the future year assessment.

The estimated cost to fund the 72 lane-miles of improved roadway is therefore $360 million, to construct four interchanges about $108 million, and to upgrade 30 intersection $120 million. Total package cost is estimated as $588 million.

Given the average funding for highway improvements over the FY 09-12 period is about $125 million per year, total funds available through 2035 is estimated at $3.375 billion (27 years x $125 million per year). The total cost of the future year investment scenario, or RTP Action Plan, of $588 million represent about 17 percent of that total. As it is highly likely that a significant portion of the funding for these improvements would be from major projects, which may be considered as "extraordinary" projects that would require funding beyond typical levels (as the completion of NJ 55, for example), and/or could be funded by toll authorities (as the Garden State Parkway interchange improvements in the current TIP), this level of investment is reasonable given the overall funding anticipated.

Financial Assessment Summary

NJDOT conducts the transportation budgeting process in collaboration with the state's three MPOs to develop each MPO's Transportation Improvement Programs (TIP), the State Transportation Improvement Program (STIP), and the Annual Capital Program. The TIP for the SJTPO lists projects, plans, and programs scheduled for implementation within the next four fiscal years. For over 20 years, New Jersey's Transportation Trust Fund has provided a stable source of funding; however, its long-term outlook is unknown.

In the past, the SJTPO has received 4 to 6 percent of available funds (excluding statewide programs). Recently, this percentage has increased to 8 to 11 percent (due to extraordinary project impacts). For FY2008-2011, the SJTPO region is receiving 10.2 percent of the $5.5 billion statewide transportation program (excluding statewide programs). Given the current TIP level of investment and the historic funding sources and levels, the RTP action plan is within the reasonable guidelines of being a financially constrained plan.

Despite this finding additional funding is important to achieve the region's goals and objectives, as costs to address maintenance needs and to accommodate anticipated regional growth impacts will be considerable.

South Jersey Transportation Planning Organization

2035 Regional Transportation Plan Update

C. Plan Outlook Analysis

Approved July 2008

Revised November 2010

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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[1], 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

[1] 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.[2]

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.[3] Six primary needs were identified for the US 130 / NJ 49 corridor: economic development, the promotion of alternative modes of transportation,

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

[3] 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 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.[4]

The South Jersey Traffic Safety Alliance (SJTSA) 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 SJTPO 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 SJTPO region is 88 percent, a dramatic increase from the 77 percent use rate in the 2006 SJTPO 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 SJTPO'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 SJTPO 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 SJPTO will have an additional tool in identifying locations for study and assessment.

Emergency Evacuation

The SJTPO 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.

[4] 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

Daily	2035 No-Build	2035 Build
Vehicle Hours Traveled	78,610	76,500
Base Evacuation Trips	86,280	86,280
Average Vehicle Occupancy	2.0	2.0
Additional Vehicles Evacuated	2,310	10,315
Additional Persons Evacuated	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.[5]

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

[5] 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

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 faculties 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.[6] 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.

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

South Jersey Transportation Planning Organization

2035 Regional Transportation Plan Update

D. Transportation System Assessment

Approved July 2008

Revised November 2010

Table of Contents

Transportation System Assessment

Introduction

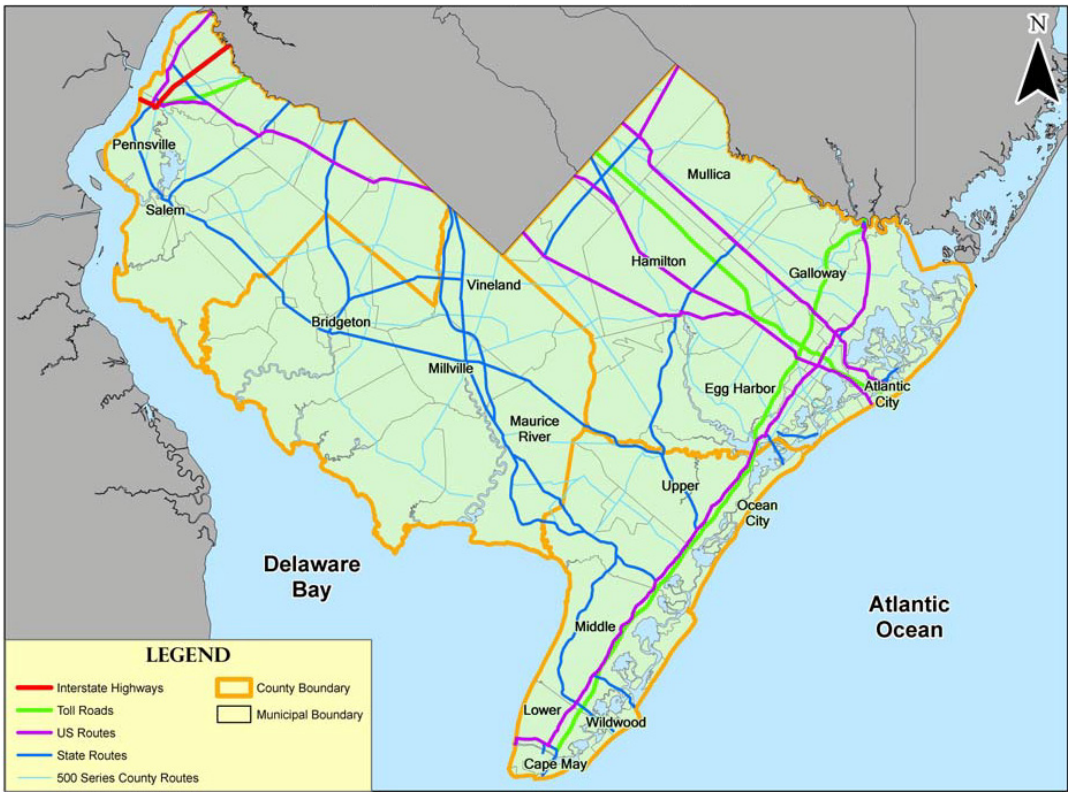
This memorandum presents a review of transportation resources in the SJTPO region. It begins with highway travel and continues on to transit, bicycle/pedestrian, and intermodal travel, including freight and goods movement as well as aviation.

1. Highway System

Introduction

This section presents a review of highway travel and needs in the SJPTO region. The process begins with an overview of the highway system that describes some of the unique characteristics and principal highway facilities in the region. A conditions assessment follows, derived from data from NJDOT's management systems (Congestion, Bridge, and Pavement), as well as a safety assessment, which draws upon data from the NJDOT, the South Jersey Traffic Safety Alliance, and references the SJTPO Safety Management System. The analysis concludes with a summary of highway needs and problem assessment. This assessment uses a variety of data sources to establish highway travel performance for both the baseline (2007) and future (2035). This process makes use of the South Jersey Travel Demand Model as an analysis tool, and the model scenarios are driven by the SJTPO demographic projections.

Figure 1 - Major Roadways in the SJTPO Region



Regional Highway System Overview

Atlantic County

Home to world famous beaches and the center of the gaming industry on the East Coast, Atlantic County receives a significant amount of traffic on its toll, state, and county roadways. Two limited-access roadways play a major role in traffic movement in Atlantic County. The Garden State Parkway, which is four lanes in this area, runs north-south and provides beach and Atlantic City access from North Jersey and New York. The Atlantic City Expressway, also a four-lane highway, provides similar access from western New Jersey and Pennsylvania. These two roadways also provide access to Atlantic City International Airport, which serves an ever-growing passenger demand along with cargo and New Jersey Air National Guard functions.

Parallel to the Garden State Parkway, US 9 provides alternate north-south access to the shore communities of Margate, Atlantic City, and Brigantine. In the center of the county, NJ 50, which becomes CR 563 north of US 30, provides north-south movement through Mays Landing and Egg Harbor City, as well as access to the Atlantic City Expressway, US 322, US 40, and US 30. In the western portion of the county, NJ 54 passes through Buena and Hammonton, and provides similar highway connections before connecting to US 206 and Burlington County.

US 322 and US 30 run parallel to the Atlantic City Expressway and provide alternate movement from western New Jersey and Pennsylvania to Atlantic City and the shore communities, passing through Hammonton at the western edge of the county. US 40 continues east from the Delaware Memorial Bridge through Buena in the southwest corner of the county until it merges with US 322 near Atlantic City.

The Atlantic City-Brigantine Connector opened to the public in 2001. The 2.3-mile connector is a limited-access roadway linking the Atlantic City Expressway with US 30 and Atlantic City's Marina District and Brigantine City. The project includes a covered tunnel section as it passes though the city's Westside section.

Cape May County

Due to Cape May County's recreational and tourist attractions, including miles of beaches and the Cape May Lighthouse, the County encounters significant seasonal recreational travel. The major traffic movement in Cape May County is north-south travel along the Garden State Parkway and US 9. The Garden State Parkway is a four-lane divided limited-access highway that services shore communities such as Ocean City, Sea Isle City, Avalon, Stone Harbor, Wildwood, and Cape May. US 9 runs parallel to the Garden State Parkway, and serves as an alternate north-south route in different sections of the county. These two roadways serve both inter- and intra-county travel. NJ 47 provides north-south access from areas such as Cumberland and Salem counties to the Western Cape May County shore. At its southernmost end, it turns east to carry motorists directly into Wildwood, a major destination within the County.

The majority of east-west traffic travels along a series of county roads, which connect Ocean Drive and the seaside communities to the Garden State Parkway and US 9. West of US 9 and the Garden State Parkway, several county roads connect US 9 to NJ 47. Coupled with NJ 83, which also runs west from US 9, and CR 550 from US 9 to Woodbine, a limited network is formed across the county.

The current termination of the NJ 55 expressway in Cumberland County complicates travel to and from Cape May County from points west. This condition contributes to congestion along the supplementary routes used to complete movements from the terminus of NJ 55 to the shore, which are forced to serve conflicting local access with this regional mobility need.

Cumberland County

A four-lane limited-access freeway, NJ 55 is available for north-south travel in Cumberland County, passing through Millville and Vineland, the largest cities in Cumberland County. The NJ 55 expressway terminates at NJ 47 south of Millville. NJ 47 runs mostly parallel to NJ 55 as a two- to four-lane principal arterial until the two run coincident and then split into NJ 47 and NJ 347. From there, NJ 47 continues into Cape May County, providing access to the shore communities. NJ 77 continues south from Salem County to Bridgeton in Cumberland County. Smaller county roads such as CR 555, which runs through Millville and Vineland, and CR 553, which runs through Bridgeton, also service north-south traffic.

East-west travel in Cumberland County is served by NJ 49, a two- to four-lane minor arterial that connects shore towns to the east with the Delaware Memorial Bridge, via Cumberland County.

Salem County

In Salem County, the Delaware Memorial Bridge provides a major regional connection between New Jersey and Delaware. Several major highways provide access to this bridge, including I-295, the New Jersey Turnpike, and US 130 from the north, US 40 from the east, and NJ 49 from the southeast. US 40 is a four-lane principal arterial that stretches from near the Delaware Memorial Bridge at the New Jersey Turnpike to Atlantic City. US 130 provides access to and from the bridge to Gloucester County and areas to the north such as Camden and Mercer County.

Roadway Ownership

Total linear roadway mileage in the SJTPO region is over 5,100 miles. State ownership includes 397 miles owned by NJDOT, 94 by the independent authorities and commissions[1], and 45 miles by various other State agencies.[2] Almost all of the balance, nearly 4,600 miles, is owned by various counties and local governments.

Electronic Tolls

Significant congestion occurs at many of New Jersey's toll collection facilities in both AM and PM peak travel hours and during many holidays and weekends. Electronic toll collection is designed to

[1] Includes sections of the Atlantic City Expressway, Garden State Parkway, and New Jersey Turnpike located within SJTPO region

[2] Data compiled by NJDOT

reduce traffic congestion and improve air quality and traveler convenience by mitigating bottlenecks that occur at tollbooths and plazas.

The E-Z Pass electronic toll system is widely used in the eastern United States, including each state between Maine and West Virginia as well as facilities in Indiana and Illinois.[3] The E-Z Pass electronic toll collection is operational on all of New Jersey's tolled roadways (Garden State Parkway, New Jersey Turnpike, and Atlantic City Expressway). In the SJTPO region, the Atlantic City Expressway offers a discount to frequent patrons who sign up for the E-Z Pass Frequent User Plan.[4]

Traffic Safety

The SJTPO incorporates safety considerations into the planning process through two primary venues: the Road Safety Audit Program and the South Jersey Traffic Safety Alliance.

Road Safety Audit Program

SJTPO advances safety in the South Jersey region by needs identification, project development, project selection, and programming, as reflected in SJTPO's Road Safety Audit (RSA) program. SJTPO annually conducts RSAs to generate improvement recommendations for roadway segments demonstrating a history of, or potential for, a high incidence of motor vehicle crashes.

An RSA is a proactive approach to improving transportation safety. An RSA is an examination of an existing or future roadway, in which independent, qualified experts report on safety issues. An RSA can be performed during any stage of a project, including planning, design, traffic control planning, construction, pre-opening, and on existing roads. In SJTPO, however, RSAs are conducted on existing roads as the primary approach to implementing safety improvements in a timely fashion.

The SJTPO RSA program answers the Federal Highway Administration's call for New Jersey MPOs to advance low-cost, quick-turnaround safety improvements. In addition, RSA recommendations may be implemented by SJTPO counties and municipalities with their own funds. For larger-scale improvements, an audit can be the basis for a Problem Statement and eventual Study and Development or TIP entry. This is especially important in light of the emphasis on safety evident in SAFETEA-LU.

Following the FY2004 RSA Pilot Program, the SJTPO conducted Road Safety Audits in Atlantic, Cumberland, and Salem counties in FY2005, FY2006, and FY2007. The procedure for selecting the sites for the audits is outlined below.

Site Nomination

This process is primarily qualitative, utilizing recommendations from county engineers, planners, and SJTSA traffic safety officers based on their knowledge and experience. The officials are asked to consider the potential for the safety impacts that could be realized by low-cost, quick-turnaround

[3] http://www.ezpass.com/static/faq/index.shtml, accessed April 30, 2008
[4] http://www.ezpass.com/static/info/discount.shtml, accessed April 30, 2008

measures. SJTPO then screens the nominated sites for suitability in terms of geographic compactness, local support, local control, and available planning funds.

This process also has a quantitative component in that the sites are reviewed and ranked on crash history (a high number of total crashes, crash clusters, and crashes per mile). Crash totals and rates for these sites are obtained from NJDOT crash data.

Crash Data Analysis

SJTPO also identifies RSA candidates through an extensive crash data analysis. This investigation uses two years of crash data and constitutes a "top down" approach, in that it covers all roads in the SJTPO region, and isolates those roads with the highest crash per mile history. These sites are also verified to contain the qualities of a suitable selection listed above (local control, etc.).

As result of using these two procedures, the SJTPO Road Safety Audit Program represents a systematic approach to identifying safety needs. The SJTPO has begun to develop measures of effectiveness for its safety projects and programs, beginning with seat belt use survey and analysis conducted in 2006.

Another 2006 initiative is the Western Atlantic County Road Safety Scan. This project utilized consultant assistance to conduct an investigation of programmatic safety needs (i.e., signage, striping, raised pavement markings, etc.) in a rural portion of the SJTPO region. This overview yielded low-cost measures that can be implemented quickly by County forces with local or state funds.

South Jersey Traffic Safety Alliance

Teaming with the New Jersey Division of Highway Traffic Safety, the SJTPO spearheaded the creation of the South Jersey Traffic Safety Alliance (SJTSA) in 1998. Based on its record of regional cooperation, the SJTPO Policy Board supported forming a similar four-county organization to help SJTPO carry out federally funded regional planning and project development in the region. Heading the Alliance is an Executive Board made up of twelve members, three from each county. The main purpose of the Executive Board is to make recommendations to the General Membership. These recommendations address legislative issues, committee appointments, safety programs, and training.[5]

The SJTSA is a unique traffic safety organization with its goal being 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 SJTPO to decrease deaths and injuries resulting from traffic crashes. Its objectives are to:

- develop region-wide traffic safety programs;
- share successful practices;
- exchange information; and

[5] http://www.sjtsa.org/, accessed April 8, 2004

- support capital projects geared toward traffic and pedestrian safety.

SJTSA activities have included member surveys, organized safety activities and programs, and development of a resource library. Since 1998, the SJTSA has helped SJTPO select locations for sidewalks, acquire speed trailers, and identify specific problem locations for the Regional Transportation Plan. In a reciprocating relationship, SJTPO acted on behalf the SJTSA, by reaching out to members of the County Planning Departments, county engineers, and the New Jersey Department of Transportation, to address specific safety concerns identified by SJTSA members.[6]

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 SJTPO region is 88 percent, a dramatic increase from the 77 percent use rate in the 2006 SJTPO 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.[7]

The effectiveness of the SJTPO'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. The RTP update will continue to stress the importance of these measures in addressing the important safety goals for the region.

Management Systems

A significant source of data that is available to evaluate conditions in the SJTPO region is the management system data. Information from available management systems were obtained and utilized in the development of the RTP, including information from NJDOT's Bridge Management System, Pavement Management System, and Congestion Management System, and the SJTPO Congestion Management System. Data derived from the Safety Management System was also utilized. The information is presented in the following sections.

Bridge Management System

NJDOT employs a Bridge Management System (BMS) to maintain an inventory of all bridges with a span over 20 feet in New Jersey with information on their physical characteristics, condition, and ownership. Bridges are inspected periodically and the various characteristics are rated on numerical scale. The scale ranges from zero to nine, with a zero representing a failed condition and a nine representing an excellent condition. A bridge can be defined as *structurally deficient*, *functionally obsolete*, or both. A bridge is deemed *structurally deficient* if its deck, superstructure, substructure or culvert are rated 4 (poor) or less or if the overall structure evaluation for load capacity or waterway adequacy is rated 2 (critical) or less. *Structural deficiency* does not necessarily mean that a bridge is unsafe. It could mean that the bridge is unable to handle the vehicle loads or speeds that would

[6] http://www.nhtsa.dot.gov/people/outreach/safedige/summer2002/su01_w11_NJ.htm, accessed April 8, 2004

[7] http://www.sjtpo.org/fy07-seatbeltsurvey-report.pdf, accessed April 16, 2008

normally be expected on the roadway where the bridge is located and is posted to indicate these limitations.

A bridge is classified as *functionally obsolete* if the deck geometry, underclearances (vertical and horizontal), approach roadway alignment, overall structural evaluation for load capacity or waterway adequacy are rated as 3 (serious) or less. *Functional obsolescence* could mean the width or vertical clearance of the bridge is inadequate. Bridges become *functionally obsolete* due to highway improvements, such as lane additions on the approaches to the bridge, or due to changes in freight movement technology or practice.

The overall rating given to each bridge is called the sufficiency rating, which indicates a bridge's ability to remain in service. The rating may range from 100, which represents a bridge meeting state-of-the-art standards, to zero, which represents a bridge in need of immediate repair or replacement. The physical condition of the structure is monitored by NJDOT at a minimum of once every two years to ensure that each bridge can safely carry vehicles at the posted truckload.

The primary use of the sufficiency rating is to allocate federal funds to address bridge needs. A structure is eligible for federal funds if its sufficiency rating is less than 80 and is designated as *structurally deficient* or *functionally obsolete*. If the sufficiency rating is between 50 and 80, the federal funds are applied for rehabilitation purposes only, while a sufficiency rating of less than 50 allows federal funds to be used for rehabilitation and replacement.

Data sets for three years are included in the table for the SJTPO region: 2000, 2003, and 2008. The trend line indicates 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. The identification of the need for more funding to support bridge rehabilitation and replacement projects in the SJTPO region will be recommended in the RTP.

Table 1 – Bridge Ratings in the SJTPO Region

	2000		2003		2008	
Bridge	**Number**	**% of Total**	**Number**	**% of Total**	**Number**	**% of Total**
Structurally Deficient	55	11.5%	64	10.9%	78	14.6%
Functionally Obsolete	55	11.5%	70	11.9%	72	13.5%
Neither	368	77.0%	452	77.1%	383	71.9%
TOTAL	478	100.0%	586	100.0%	533	100.0%

Source: NJDOT Bridge Management System Database – June 2000
NJDOT Bridge Management System Database – December 2003
NJDOT Bridge Management System Database – January 2008

Pavement Management System

NJDOT maintains a database with information on the current condition of pavement throughout the state of New Jersey, which is updated every two years. The most recent 2006 database was used for this report and comparison to data for 1997 and 2001 are also included. The rating system used to rank the roadways is primarily based on two criteria. The Ride Quality Index (RQI) describes the comfort level by measuring roughness. The Surface Distress Index (SDI) compiles and measures the severity of surface distresses such as cracking, patching, shoulder condition, shoulder drop, faulting, and joints. If any of these criteria is less than the specified value, then a resurfacing project longer than 6/10 of a mile may be initiated. The average Rut Depth (RD) is also taken into account, but any projects based solely on rut depth are given lowest priority.

A final pavement rating from zero to five is calculated from RQI and SDI to determine the quality of pavement. The scale is:

0.00 – 1.0 = Very Poor
1.01 – 2.0 = Poor
2.01 – 3.0 = Fair
3.01 – 4.0 = Good
4.01 – 5.0 = Very Good

Table 2 summarizes the pavement condition data. Based on these data, overall pavement conditions improved between 1997 and 2001, but have since degraded; about one-half of the roadways previously rated *Good/Very Good* degraded to *Fair* between 2001 and 2006. In the SJTPO region, only 38.3 percent the roadways were reported *Good* or *Very Good* condition in 2006, and more than 4 percent are in *Very Poor* condition.

Table 2 - Pavement Conditions in the SJTPO Region

	1997		2001		2006	
Pavement Rating	**Miles**	**% of Total**	**Miles**	**% of Total**	**Miles**	**% of Total**
Very Poor *	3.6	0.9%	9.9	2.5%	20.3	4.2%
Poor	49.4	12.0%	44.5	11.2%	113.3	23.3%
Fair	106.8	26.0%	53.6	13.5%	166.3	34.2%
Good/Very Good	250.6	61.1%	289.2	72.8%	186.5	38.3%
Total	410.4	100.0%	397.2	100.0%	486.4	100.0%

Source: 1997 Pavement Management System, NJDOT

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. The identification of the need for more funding to support pavement rehabilitation projects in the SJTPO region will be recommended in the RTP.

Congestion Management Systems

The New Jersey Congestion Management System (NJCMS) is a computer program that analyzes highway and rail network files encompassing the entire state. NJCMS focuses primarily on highway

congestion and the roadway network. For the SJTPO region, the roads on the NJCMS network are interstate highways, principal arterials, and minor arterials which carry long distance traffic and through trips. This analysis tool has the capability to evaluate multimodal performance, identify the location and causes of congestion, and identify and evaluate the performance of both traditional and non-traditional measures.

The NJCMS can produce corridor-level performance measures, such as Vehicle Miles Traveled (VMT) by Level of Service (LOS), lane-miles by LOS, VMT by Volume/Capacity (V/C) ratio, and recurring vehicle delay. Roadway-level performance measures are also available, including measures that can be used to determine which roadway links meet the definition of "congestion", defined as exceeding a threshold V/C ratio.

NJCMS Regional Overview

The NJCMS data represents average travel conditions for a typical (non-summer) weekday. Traffic volumes reported represent two-way Average Weekday Daily Traffic (AWDT). AWDT indicates the number of vehicles traveling on a particular roadway on a typical weekday. However, many of the most severe problems in South Jersey occur in the summer during Friday PM peaks and weekends. Because of its design to represent overall average travel conditions, the NJCMS has severe limitation when applied to the unique travel conditions, time periods, and unusual peaking characteristics of the SJTPO region.

Seasonality of Travel Patterns and Limitations of the NJCMS for the SJTPO Region

The SJTPO region differs greatly from what is typical for the rest of the state. While New Jersey is the most densely populated state in the nation, the four South Jersey counties have a population density that is about one-third of the statewide average, and much more similar to that of neighboring Delaware. Most of the region's population is found in the developed areas surrounding the City of Vineland and the shore communities, including Atlantic City. Nearly two-thirds of the population resides in Cape May and Atlantic counties. Much of the region is rural and undeveloped. Large sections of the Pine Barrens are found in South Jersey, as well as significant tracts of farmland, wetlands, Wildlife Refuge and Wildlife Management Areas, State Parks, and State Forests.

Tourism and recreation are among the region's chief industries, and while Atlantic City is a significant employment destination, the region lacks other large regional employment destinations that characterize much of the rest of state. Travel patterns for tourism, recreation, and gaming industry purposes vary greatly from those of the typical daily commute and its predictable patterns of AM and PM peaks. Recreation travel destined to the Jersey Shore is highest in the warm summer months and concentrated around the weekends. Travel to Atlantic City is also highest on the weekends and often highest at night.

Consequently, seasonal variation is a significant factor in assessing South Jersey travel demand, and in using and understanding South Jersey travel data. Statewide averages illustrate that traffic volumes are typically higher during the warmer months, as people tend to travel more in summer

and less in the winter. This trend is even more pronounced in many shore communities and along the principal routes that provide access to the shore.

Data from the NJ 47/55 Corridor Study indicate several key trends: (1) travel is highest on weekends, (2) travel has a directional component, and (3) late summer travel is higher than the early summer. The summer season, especially on weekends, is traditionally the heaviest travel demand within the NJ 55 study area. Generally, average volumes during summer weekend peak periods were found to be 60-80 percent higher than average summer weekday peak period volumes. The predominant peak flows were southbound and towards the shore on Fridays and Saturdays, and the highest northbound peaks were generally observed on Sundays. The data also indicate an increase in both volumes and duration of late summer travel compared to early summer. Volumes on some routes were found to be about 10 percent higher and sustained over longer periods of time than the early summer.

Because of these trends and observations, care must be exercised in the use of NJCMS travel data for South Jersey. In particular, NJCMS travel and performance-related data such as Level of Service (LOS) and Volume-to-Capacity (V/C) ratio are typically reported for the average weekday while many of the most severe problems in South Jersey occur in the summer during Friday PM peaks and weekends. Although the NJCMS can still be useful when used as a guide it must be supplemented by data from other sources and more relevant time periods.

Extent of Congestion as Reported by the NJCMS

The NJCMS version 4.04.90 was run for 2005 resulting in calculated data such as Volume-to-Capacity (V/C) ratio, average weekday daily traffic, daily truck volumes, etc. Two key measures of effectiveness that depict how the state's roadways operate are (1) the level of congestion, and (2) the duration of congestion. As noted in the discussion of seasonality, the NJCMS data, which forms the basis of the following discussion of regional highway conditions represents average conditions for a typical (non-summer) weekday, rather than the summer Friday PM peak, which is considered the most heavily traveled day in the SJTPO region.

The level of congestion can be measured based upon the maximum volume-to-capacity (V/C) ratio. The V/C ratio is a measure of operational performance and indicates how well a given roadway segment is able to accommodate demand. A V/C ratio below 0.75 (Below Capacity) suggests that a roadway is operating well and has capacity available to accommodate growth. A V/C ratio approaching 1.0 (Approaching Capacity) suggests that a roadway is operating poorly with little capacity available for growth. A V/C ratio over 1.0 (Beyond Capacity) suggests that a roadway is operating at failing conditions with no available capacity for growth.

The amount of time a particular route is rated Approaching Capacity or Beyond Capacity is a method of quantifying traffic congestion. The Duration of Congestion statistic is a measure of the number of hours per day the V/C ratio is greater than 0.9. For example, a route with a high V/C ratio for only one hour may be less problematic for highway travelers than a route with a moderately high V/C ratio for

more than one hour. A higher Duration of Congestion statistic, therefore, indicates a longer peak traffic period and a more serious congestion problem.

The data for Duration of Congestion are averaged out to represent a typical day, and do not reflect worst-case conditions, seasonal fluctuations, or unusual single-day peaks such as special event, accidents, holidays or summer travel. As such, this analysis may depict better conditions for a given roadway than those that may be experienced by some travelers.

As shown in Table 3, the most recently available NJCMS data (2005) indicate that on a typical non-summer weekday the SJTPO region experienced an overall low level of Duration of Congestion – only 4.5 percent of the region's roadways are congested for one or more hours per day, based on the NJCMS average day methodology. This data should be considered to be more reflective of "off-peak" conditions in the SJTPO region, rather than peak conditions as reported by the NJCMS. Two data years are included in the table, 2001 and 2005, and the data indicate some worsening of traffic congestion during this period. The percentage of SJTPO roadways experiencing at least one hour of congestion per 24-hour weekday period increased from 3.1 percent to 4.5 percent during this period.

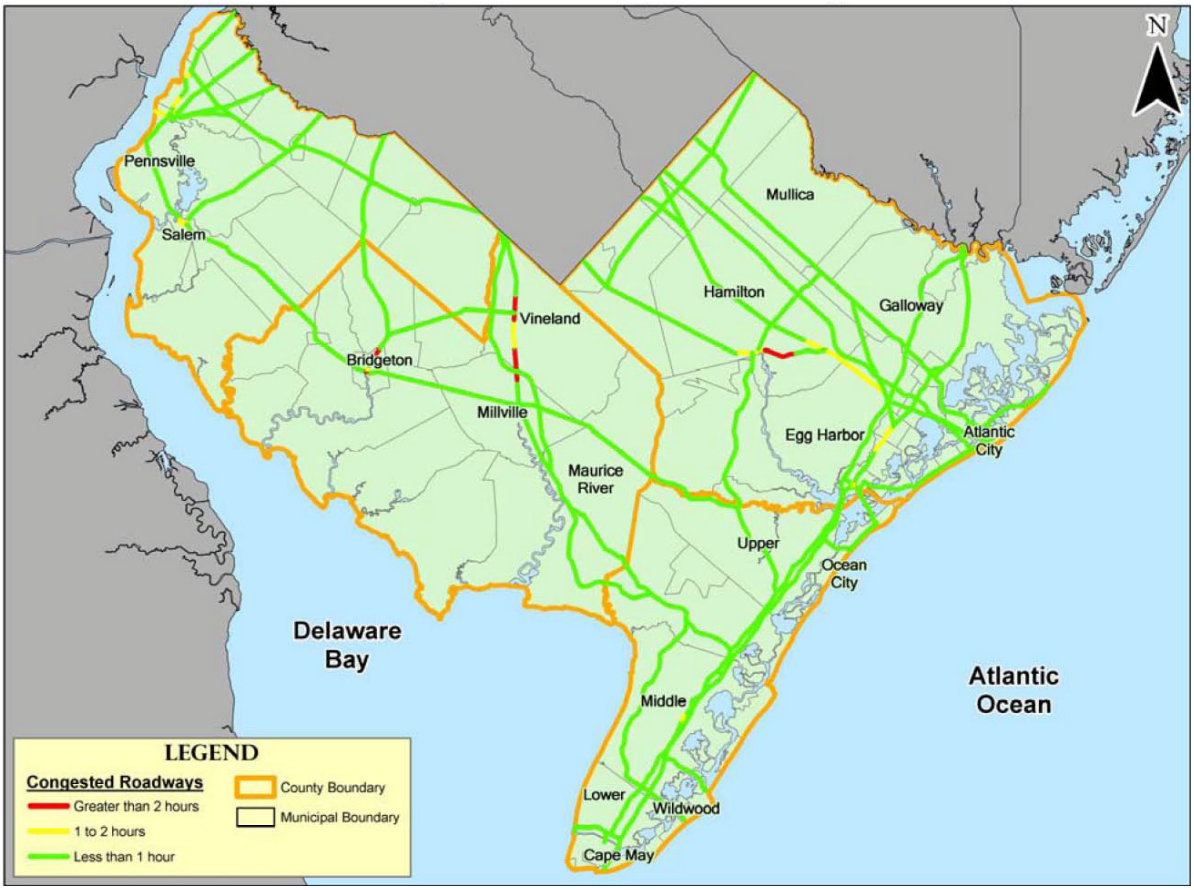
Although the results are not typical for a summer condition, off-peak travel periods are more reflected in the NJCMS data. While conditions did not significantly degrade over the four-year period, they did move in a negative direction indicating an increase in overall congestion, and resulting in an increase in delays. As the region continues to grow, this condition will likely worsen as time moves forward, and should be monitored. Figure 2 depicts the region's congested roadways as identified by the NJCMS. These include segments of NJ 55, US 322, and NJ 40.

Table 3 - Duration of Non Summer Congestion in the SJTPO as reported by the NJCMS

Congested Hours Per	2001		2005	
24-Hour Weekday	Miles	% of Total	Miles	% of Total
0 to 1	500.77	97.1%	514.87	95.5%
1 to 2	4.00	0.8%	17.34	3.2%
>2	11.00	2.1%	7.16	1.3%
Total	515.77	100.0%	539.37	100.0%

Source: 2001 data derived from 1990 NJDOT Congestion Management System, version 1.2
2005 data derived from 2005 NJDOT Congestion Management System, version 4.04.90

Figure 2 - Congested Roadways in the SJTPO Region



SJTPO Congestion Management System

As described in the previous section, the statewide Congestion Management System (NJCMS) was developed to assist in identifying and evaluating traffic congestion across the state. Although it has been useful in other parts of New Jersey, the NJCMS has proven to be less beneficial for the SJTPO. The NJCMS was designed to report on average, weekday, peak-period congestion, typically found during the AM and PM commuting hours. Because of this design, the statewide tool has severe limitations when applied to the unique travel conditions, time periods, and unusual 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. To date, the SJCMS development effort has completed the following milestones:

- Established the critical parameters and performance measures for identifying and evaluating congestion and applicable in the SJTPO region;

- Defined analysis areas and applicable volume to capacity ratio (V/C) ranges for measuring congestion using the South Jersey Travel Demand Model (SJTDM);
- Packaged and applied these data resources, measures, and tools into a database tool called the *SJCMS Tracker* used to identify, track, and evaluate congested intersections, interchanges, and corridors in the four-county region;
- Defined these congested locations as *SJCMS Needs;*
- Developed a traffic monitoring program to coordinate ongoing data collection efforts with the need to monitor congestion at identified *SJCMS Need* locations; and
- Proposed future enhancements.

The SJCMS was envisioned as critical tool to support the SJTPO regional transportation planning process. Use of the SJCMS and Tracker for the Phase I and II updates identified more than 100 existing and 125 future CMS Needs.

After the completion of the CMS Need identification process, those locations with identified transportation deficiencies (these are called CMS Needs in the SJCMS process) were grouped together, into study corridors based on the various performance measures and standards set forth. CMS Need locations include deficient roadway segments and intersections that have been identified and analyzed individually, but because strategies that are appropriate for one need location may affect other need locations, it becomes necessary to examine the inter-relationships among these locations and to group together adjacent and/or contiguous locations into combined study corridors.

One of the important applications of SJCMS is to prioritize the study corridors and provide data and justification for future program activities, including more detailed technical studies. For the SJTPO region, the CMS has identified a series of deficient segments/corridors for each of the four counties, in order to evaluate priority among these corridors; four criteria have been developed to support the prioritization process. These four criteria are:

- **Area of Impact** – based on the four area types developed for CMS analysis. The order of significance is: Urban, Seasonal, Rural/Rural Center
- **Degree of Need** – based on whether the segment is an existing and/or future CMS Need
- **Performance Index** – V/C based measure based on data from the SJCMS Tool. The three categories of performance index are:
  - "Over capacity" (V/C greater than 1.00 for urban and seasonal areas and V/C greater than 0.90 for rural and rural center areas);
  - "Approaching capacity" (V/C between 0.80 and 1.00 for urban and seasonal areas and between 0.75 and 0.90 for rural and rural center areas); and
  - Links that are referred by other sources as needs but not from the SJ Model.
- **Segmentation** – segments/corridors can either be broken down into sub-segments or analyzed as a whole.

Finally, a total score for each corridor was calculated and an overall ranking was prepared with the highest scores representing the high priority study corridors. The following list is based on the 2025 data run for the SJCMS Phase II update (see Table 4). An update of the priority corridors using the 2035 SJTPM model assignment was not part of the RTP update work effort.

Table 4 – SJTPO 2025 Study Corridors

County	High	Medium	Special Consideration
Atlantic	A24 (US 9) A34 (CR 585) A42 (CR 563)	A5 (Garden State Parkway) A18 (US 30 - White Horse Pike) A36 (SR 152) and A46 (CR 559) A44 (CR 604/CR 563) A47 (CR 670)	A24 + A34 + A42 as one study
Cape May	CM13 (US 9 - SR109 to Cape May Ferry)	CM1 (Garden State Parkway) CM41 (Garden State Parkway) CM12 (US 9 - SR 47 to CR 657) CM42 (US 9 - Nummytown Rd to SR 47) CM43 (US 9 - CR 657 to Atlantic Co. line) CM31 (SR 109) and CM46 (SR 162) CM29 (CR 623) and CM44 (CR 631)	CM41 + northern portion of CM43 CM1 + southern portion of CM43
Cumberland	CU11 (SR 47) CU23 (CR 615 - East & West Blvd.)	CU21 (CR 552 - Sherman Avenue) CU30 (CR 540/SR 56)	Southern portion of CU4 (SR 55) + CU10 (SR47) + CU12 (SR 347 - Summer months)
Salem		S8 (Main St) + S6 (US 130) + S12 (SR 140)	

2035 Screening Using SJCMS Methodologies

Building upon the SJCMS 2025 screening, a review of needs through the 2035 analysis year was undertaken. 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 described in the previous section, as this full effort was not a part of the RTP update process. The analysis identified the following individual roadway segments as high priority need locations:

Atlantic County

US 322	Gloucester Co Line to US 40/322
US 30	Camden County line to Atlantic City
US 40/322	US 322 to Atlantic City
US 40	US 40/322 to Landis Avenue
CR 561	US 9 to Cologne Avenue (CR 614)

Cape May County

CR 657	NJ 40 to 2nd Ave/Stone Harbor
NJ 550	CR 557 to US 9

Cumberland County

NJ 77	NJ 49 to NJ 56
NJ 56	NJ 77 to CR 555
NJ 55	Gloucester Co Line to NJ 47
NJ 47	NJ 55 to the Garden State Parkway/Wildwood (Cumberland and Salem)

Salem County

US 40	NJ 55 to NJ 48
NJ 49	I-295 to CR 667
NJ 45	NJ 49 to CR 540

Data from both the NJCMS and the SJCMS review was factored into the identification of problem corridors for further review and study. The information was also used as part of the process of identifying the improvements that were modeled in the future year build scenario, as described further in the future year highway section of this report.

Safety Management System

NJDOT maintains list of high-priority crash locations. The NJDOT requested that these data not be released in this report.

The SJTPO is currently developing a strategy to systematically identify high crash locations and rates for 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. The information is not ready for public release, and when available will be posted on the SJTPO website.

Highway Needs and Problem Assessment

This section of Regional Transportation Plan presents an assessment of highway conditions for the region. The technical work program was based on the following tasks: establish baseline conditions; identify existing problem areas; and forecast future transportation conditions. This assessment is based, in part, on data from the South Jersey Travel Demand Model (SJTDM).

SJTPO Demographics Data Forecasting

Population and employment growth are factors that influence the demand for travel. The number and types of trips that are made on a daily basis are influenced largely by the demographic makeup of the region. The current and projected future demographic makeup of the region – including population and employment – are critical inputs to the SJTDM. From these data, the SJTDM is capable of generating performance measures that indicate how well vehicles flow through the highway network and how the system will operate in the future.

The SJTPO is responsible for preparing and maintaining population and employment forecasts for the region. These forecasts are provided in 5-year increments and are used to support a variety of general planning efforts including the development and maintenance of the South Jersey Travel

Demand Model (SJTDM) and for use in assessing air quality conformance. The official SJTPO Demographic Forecasts are adopted by the SJTPO Board for use by SJTPO and its member agencies. The most recent forecasts include projections through the year 2035, and the year 2035 summary by county is depicted in Table 5. The forecasting process and breakdown by municipality can be found at the SJTPO website at the following locations:
http://www.sjtpo.org/pop-employ-scenarios.pdf and
http://www.sjtpo.org/2030_projections_municipalities.pdf

Overall, both population and employment are growing by over 20 percent in the forecast period. The bulk of the region's growth in population and employment through 2035 is projected to occur in Atlantic County, with about a 30 percent increase in both measures. This growth will result in additional trips occurring in the future years, placing a further burden on an already congested transportation system. The impact of the growth is demonstrated by the use of the SJTDM, as discussed in the following section.

Table 5 - Regional Population and Employment Forecasts

	Population				Employment			
	Total		Change		Total		Change	
County	2007	2035	Net	%	2007	2035	Net	%
Atlantic	276,160	357,570	81,410	29.5%	155,530	204,913	49,383	31.8%
Cape May	101,780	116,010	14,230	14.0%	47,440	56,594	9,154	19.3%
Cumberland	155,160	176,060	20,900	13.5%	64,070	71,053	6,983	10.9%
Salem	66,700	72,710	6,010	9.0%	21,010	25,987	4,977	23.7%
Total	599,800	722,350	122,550	20.4%	288,050	358,547	70,497	24.5%

Source: SJTPO Population and Employment forecasts, June 2006

Baseline Highway Conditions

The baseline for this RTP is the year 2007. The establishment of baseline conditions forms the foundation for the RTP's technical work effort. Information was collected and analyzed for the transportation system, demographics, and air quality indicators. From these data, the existing demographic conditions as well as physical and performance characteristics of the transportation network are addressed in sufficient detail to foster an understanding of the problems and opportunities facing the region.

The South Jersey Travel Demand Model (SJTDM) is a traditional four-step model designed to replicate regional travel patterns across Southern New Jersey. It can be used to assess existing travel conditions in the region and forecast and assess future year travel and the impact and/or need for transportation improvements, based on the interaction between population and employment changes and transportation infrastructure.

The model encompasses all four SJTPO counties, plus adjacent counties in Central New Jersey and Philadelphia as well as connections to neighboring Delaware, to accurately capture the regional nature of travel in the area and the interactions among each.

The model consists of a detailed highway networks and demographic data set. The highway network includes about 12,000 lane-miles of roads of varying functional classes. Trips are generated through some 1,900 traffic zones using population and employment data sets for base and future years. These demographic data sets were developed by the SJTPO, which is responsible for the region's demographic projections. The SJTDM incorporates a mode choice model, which splits person trips into trips by auto, transit, and walk/bike modes.

This analysis is based on data from the Friday Summer PM Peak-period simulation and uses only the highway portion of the model. The highway system model serves as a good measuring stick for the impact of multi-modal strategies.

Future Year Highway Conditions

The comprehensive process of multiple sources was again used to identify future problem areas within the SJTPO region for the year 2035. These sources include problem areas identified for the baseline year analysis; system performance of future condition based on data from the SJTDM, available technical sources such as the NJCMS, previous studies conducted within the subject region, and a review of the SJTPO's adopted Transportation Improvement Program (TIP) for Fiscal Years 2008-2011.

Future conditions of the "no build" network were estimated by SJTDM in terms of volume to capacity (V/C) relationship. The "no build" network consists of the existing network plus all known committed projects. The degree of congestion was grouped into two categories: "moderate" for facilities with V/C ratio of 0.80 to 1.00; and "heavy" for facilities with V/C ratio higher than 1.00. Future problem locations were identified based on these V/C criteria.

Analysis of V/C data for existing problems verified that all identified locations exhibited consistently deficient or worse capacity in the future. For intersection problems, V/C link data of the future network was analyzed at those locations instead to verify that intersection approaches exhibited consistently deficient or worse capacity in the future years.

It should be noted that the SJTDM was run for a Friday Summer peak period (3:00-7:00 pm) to identify problem locations. The peaking characteristics of facilities in the SJTPO region, with heavy recreational demands, are very different from typical commuting corridors. Many problems occur on Saturdays, Sundays, or during the week, and these problems may not have been identified through the model. Where possible, these problems were identified by other sources and included as part of the assessment.

Future Year Travel Characteristics and Performance Indicators

The South Jersey Travel Demand Model was used to forecast future year 2035 traffic conditions in the SJTPO area. The basis for the forecasts is the future year population and employment data for the year 2035. For comparative purposes, the model is first run with year 2007 base year demographic inputs and then run with 2035 demographic inputs. The model outputs are compared to indicate where and to what magnitude travel conditions change.

Driving the changing traffic conditions is the growth forecast in population and employment. In order to gauge the impact of this growth, highway system performance measures are used. The SJTDM generates several performance measures that indicate how well vehicles flow through the highway network and how the system will operate in the future. Indicators used include the total number of trips made, vehicle miles of travel (VMT), and vehicle hours of travel (VHT); definitions of these performance measures are as follows:

- Vehicle Miles of Travel (VMT) represents an estimate of the total miles driven by all motorists on the system in a defined time period (a year or a day, for example). It is generally considered the key statistical measure of motor vehicle travel.
- Vehicle Hours Traveled (VHT) represents the total number of hours spent driving by motorists within that same time period.

The population and employment growth is forecast to result in a 24.3 percent rise in the number of trips taken during a typical Friday summer day in the year 2035 compared to the year 2007 totals. Total vehicle miles traveled will increase about 25.6 percent, while total vehicle hours traveled will increase 51.7 percent (see Table 6).

Table 6 – Regional Travel Indicators, 2007-2035, SJTDM, Daily Assignment

Daily	2007	2035 No-Build	% Change vs. No-Build	2035 Build	% Change vs. Build
Trips	1,716,178	2,133,798	24.3%	2,133,256	24.3%
VMT	19,572,469	24,218,080	23.7%	24,589,939	25.6%
VHT	539,374	841,687	56.0%	818,062	51.7%

This result indicates more trips, overall longer trips, and significantly more time spent traveling on the regional highway system. Overall trips and the travel mileage rise in about the same proportion as the population and employment growth (about 24 percent). However, the amount of time it will take to complete the trips forecast in the year 2035 more than doubles the growth in trip making, increasing by about 52 percent over the base year of 2007. This indicates that congestion will rise considerably from the impact of the additional trips, resulting in increasing delays associated with most trips. The transportation system will not be able to absorb the additional trips resulting from growth without a significant degrading of the overall traffic flow conditions, particularly in the peak

periods. This impact may be amplified under emergency conditions, as the ability to evacuate people quickly and safely will be impacted by the overall increase in traffic congestion.

The RTP will recommend measures to mitigate congestion growth from several fronts, including measures to limit the growth in demand through supporting smart growth/land use planning, promotion of alternative modes to the single occupant vehicles including transit and pedestrian and bicycling enhancements, and improvements to the highway system.

Summary of Highway Needs and Problem Assessment

This section presents a summary of highway needs for the RTP assessment. A variety of methodologies, tools, and data sources were employed in conducting this assessment. These include traffic safety data, the NJDOT management systems (Congestion, Bridge, and Pavement), SJTPO Congestion Management System (SJCMS) and screening method from the SJCMS, SJTPO demographic data forecasts, and evaluation of existing and future highway conditions using the South Jersey Travel Demand Model (SJTDM).

Using these data and building upon the list of priority location developed for 2025 and 2035 using the SJCMS and SJTDM, a final list of high-priority locations was developed. Many of the individual roadway segments from the 2025 and 2035 lists were found to be continuous or adjacent to one another and a series of congested intersections and/or interchanges are also co-located with these segments. As such, many of the individual segments and intersections were combined into two principal high-priority corridors:

- NJ 55/47/347/657
- US 40/322

These two corridors also serve the principal through travel needs and include roadways that provide access to the major destinations of the area: the Jersey Shore and Atlantic City.

Future Year Build Scenario

To investigate the ability of highway system to address future year needs, a future year build model run was conducted. This model run used the same 2035 demographic input as was used in the no build runs, but with an enhanced highway network. The highway network improvement focused on the two corridors identified above, NJ 55/47/347/657 and US 40/322.

Based on work done to support the New Jersey Long Range Plan effort, it is anticipated that overall financial, environmental, and resource issues will result in the ability to improve about 300 lane-miles improve about 200 interchanges/intersections overall in the state in the next 25 years. Translating these figures into the amounts expected to occur in the SJTPO region, resulted in approximately 72 lane-miles of improved roadway and 34 interchange/intersection improvements. The level of improvement will vary at a particular location, these totals represent “typical” improvements, where the roadway may be widening to add a lane in each direction, and the intersections upgraded to

provide additional capacity through geometric improvements like turning lane additions, widening, or in some cases overpasses.

PB developed modification to the highway network to reflect typical capacity increases expected to result from additional lane-miles and interchange/intersection improvements. The highway segment improvements coded into the model were split between the two corridors as follows:

- NJ 55/47/347/657 42 Lane-miles and 16 interchanges/intersections
- US 40/322 30 Lane-miles and 18 interchanges/intersections

These improvements were also transferred to the air quality conformity assessment process, as these improvements constitute the "build" condition of the assessment. The results of this assessment can be found in the technical memorandum describing the air quality assessment and the financial assessment.

Emergency Evacuation Assessment

The SJTPO 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. This growth and congestion translates into increased delays getting to and from the region's shore communities particularly during the peak summer months. Delays of this magnitude can become a safety hazard should an area have to be evacuated in the event of an emergency or disaster.

The South Jersey Travel Demand Model was used to evaluate the ability of the region's roadways to evacuate a large number of vehicles in a short time period. A scenario was developed that 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 improvement measures, including constructing the NJ 55 extension.

Methodology

The SJTPO region was divided into a series of districts, classified as either "safe" or "danger" districts, based on their proximity to shore areas. Danger areas are those districts where it was assumed that all personnel would be evacuated "from". Safe districts are those areas where it was assumed personnel would be evacuated "to". The district concept was developed using Storm Surge Maps produced by the Army Corp of Engineers. These maps illustrate flood-inundated areas based on

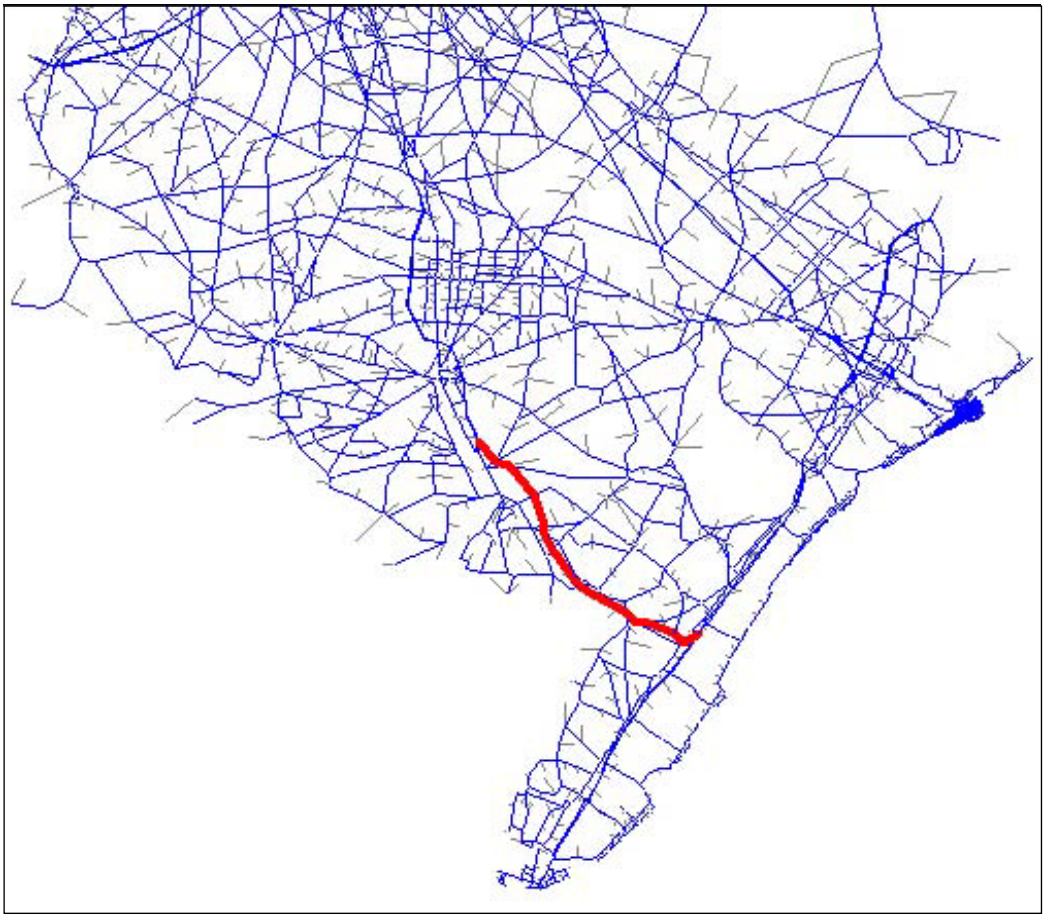
different classes of Hurricanes. The Class 4 Hurricane flood maps were used to estimate the safe and danger districts.

An evacuation trip table was developed based on the following simplified assumptions. Trips traveling from danger district to danger district (danger-to-danger) were redirected to a safe district (danger-to-safe) based on the existing danger-to-safe distribution in the district of origin. This means that local trips will cease to exist under an evacuation scenario. Inbound trips, which are defined as originating in a safe district and ending in a danger district, were reduced by 90 percent. The remaining 10 percent of the inbound trips represent emergency vehicles and personnel entering and exiting the area to facilitate the evacuation process from a staging, logistics, or rescue perspective. Trips that originate in a danger district and ending in a safe district (danger-to-safe) were left untouched. Trips that originate and end in a safe district (safe-to-safe) were left untouched.

These assumptions were applied to the SJTDM's PM peak-period trip table (3:00 to 7:00 pm) to generate a trip table designed to evacuate the typical Summer population from the SJTPO shore region to designated safety regions farther inland.

Having identified key bottleneck areas from past model runs, a what-if scenario was developed to test the region's ability to move people more effectively during an evacuation situation. This what-if, or build scenario, consists of the completion of NJ 55 from the existing terminus in the City of Millville, Cumberland County, to the Garden State Parkway (GSP), in Dennis Township, Cape May County. The proposed four-lane, limited-access freeway would be built primarily as a new road extending from NJ 55 to cross CR 548, Hunter's Mill Road, CR 550, and CR 651 before following NJ 83 on the existing, upgraded alignment to US 9 and the GSP. The proposed alignment is depicted in Figure 3.

Figure 3 - Proposed NJ 55 Alignment



The completed NJ 55 was added to the base scenario 2035 Plan network and it represents the only infrastructure change in the build network. To highlight the effectiveness of the what-if scenario, two scenarios were built for comparison. The first is a **No-Build Scenario**, which uses the Plan 2025 network and assigns to it the evacuation trip table. The second is a **Build Scenario**, which uses the upgraded NJ 55 network and assigns to it the evacuation trip table. The assignments were done for the evening peak period, which is from 3:00 to 7:00 pm on a typical July weekday. The PM peak-period results were then extrapolated over a 24-hour period to generate daily evacuation figures.

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 could make it through the danger districts to safety during the PM peak-period. Based on an assumed 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 7). These results indicate the critical need to complete NJ 55 to address emergency evacuation in the region.

Table 7 - Evacuation Scenario Results – 2035 No-Build vs. Build

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

2. Transit Services

Introduction

This section examines transit services in the SJTPO region. It includes an examination of regional transit services, including passenger rail, bus, and ferry services, ridesharing, specialized transit, and the transit issues from the Job Access and Reverse Commute (JARC) Plan.

Regional Transit Services Overview

Although transit service is available in every county of the SJTPO region, most of this service is centralized within Atlantic County and Atlantic City in particular. The tens of thousands of commuters and tourists that work and visit the City on a daily basis provide the demand that is necessary for successful transit operations. However, due to the relatively low population densities in the region, transit service is generally sparse.

Passenger Rail Service

Atlantic City Line

NJTRANSIT offers commuter rail services between 30th Street Station in Philadelphia to the Atlantic City Rail Terminal seven days a week on its Atlantic City Line (ACL). The ACL includes stops in Philadelphia (30th Street), Cherry Hill, Lindenwold, Atco, Hammonton, Egg Harbor, Absecon, and Atlantic City.

The Cape May Seashore Line

Through a lease agreement with NJTRANSIT, The Cape May Seashore Line (CMSL) operates passenger rail service on segments of the 30-mile rail line between Tuckahoe and Cape May City. The service is seasonal and the rail line focuses on the recreational/tourism market. Currently rail service is provided on a 30-mile round trip between Richland and Tuckahoe, and on a 22-mile round trip between Cape May Court House, Cold Spring Village, and Cape May city. Both operations are on the former Reading Company's steel speedway to the shore. More information can be found at the company's website at http://www.capemayseashorelines.org .

Passenger Bus Service

Local and Intrastate Bus Service

NJTRANSIT provides a variety of bus routes within the SJTPO region, as indicated in Table 8.

Table 8 - NJTRANSIT Local Bus Service Routes

Route Number	Description
313	Philadelphia – Wildwood – Cape May via NJ 47
315	Philadelphia – Wildwood – Cape May via Black Horse Pike
316	Philadelphia – Cape May Express
319	New York – Atlantic City Express
401	Philadelphia – Salem
402	Philadelphia – Woodbury
408	Philadelphia – Millville
410	Philadelphia – Bridgeton
423*	Wilmington – Pennsville – Penns Grove
551	Philadelphia – Atlantic City

Note: *Operated by Salem County Transit under contract with NJTransit Corporation. Source: NJTRANSIT

In addition to NJTRANSIT's local bus service, other operators also provide local bus service. In Atlantic City, mobility is fostered by the Atlantic City Jitneys, providing service along four primary routes. Service is operated 24 hours a day, 365 days a year.

Additional shuttle bus services are also operated in the region. Tropiano Transportation, a private carrier, offers bus service from the Atlantic City International Airport to casinos within Atlantic City. Shoreline Express Tours runs a non-casino hotel/motel shuttle. Shoreline operates scheduled and on-demand shuttles along the White Horse Pike (US 30) and the Black Horse Pike (US 40) to major chain motels and hotels.

The Delaware River and Bay Authority (DRBA) also provides bus shuttles from the Cape May Ferry Terminal to the Cape May Bus Terminal. All shuttle bus service is scheduled to coincide with the arrival and departure of the ferry. According to the DRBA website, two continuously looping shuttles operate in Delaware: one between Lewes and the ferry terminal; the other among the DART Park & Ride lot, the Tanger Outlets, Rehoboth Beach, and the ferry terminal. The Cape May shuttle continuously loops between downtown Cape May and the ferry terminal. The shuttle operates with weekend service only from May to mid-June and October. During the summer tourist season, it operates daily. More information is available on the DRBA's website at www.cmlf.com or from their information and reservation office at 1-800-64-FERRY.

Lion Trailways provides bus shuttle services in the city of Cape May called Cape Area Transit (CAT) Shuttle System. This service operates on Fridays and weekends in the late spring and early fall, while service is provided seven days a week during the summer.

Interstate Commuter Bus Service

In addition to operating commuter rail service on the Atlantic City Line, NJTRANSIT provides interstate commuter bus services in the region, linking the SJTPO region to cities such as Wilmington, Philadelphia, and New York City. Table 9 lists interstate bus services operating in the SJTPO region and the average number of weekday passenger trips.

Table 9 - NJTRANSIT Interstate Commuter Bus Routes

Route Number	Description
468*	Penns Grove – Woodstown
501	Atlantic City – Brigantine Beach
502	Atlantic City – Hamilton Township
504	Bungalow Park – Ventnor Plaza
505	Atlantic City – Longport
507	Atlantic City – Ocean City
508	Atlantic City – Hamilton Mall
509	Atlantic City – Somers Point
552	Atlantic City – Cape May
553	Atlantic City – Upper Deerfield
554	Atlantic City – Lindenwold
559	Atlantic City – Lakewood

Note: *Operated by Salem County Transit under contract with NJTRANSIT Corporation.
Source: NJTRANSIT

Casino Bus

Atlantic City was visited by over 33.3 million people in the year 2007, about 16 percent of those visitors, more than 5.4 million, arrived by bus. This high number of visitors arriving by transit reduces thousands of auto trips in the City each day, improving the overall operating characteristics of the roadway system in Atlantic City and the region and reducing the overall environmental impact of automobile traffic.[8]

The South Jersey Transportation Authority (SJTA) actively supports programs to facilitate the casino bus operations. The SJTA oversees a bus management program to regulate all casino-related bus activities in Atlantic County, including bus intercept, bus parking, bus maintenance, site capacities, traffic management, computerized/electronic permit or medallion validation, routes of travel, discharge and loading of passengers, bus operations and activities, enforcement, and maintenance of a daily bus manifest. The SJTA operates several casino bus parking facilities, providing services to help promote the continuation of transit vehicle use, which bring about one-quarter of all visitors to Atlantic City. The environmental benefit of these visitors arriving by bus versus private automobile is significant. The SJTPO supports the SJTA's efforts to promote, manage, and enhance private bus operations within Atlantic City.

[8] http://www.atlanticcitynj.com/resources_research.asp accessed May 5, 2008

The Five-Mile Beach Electric Railway Company

The Five-Mile Beach Electric Railway Company (run by the Great American Trolley Co.) operates a trackless boardwalk tram, trackless trolleys, and "community-based services" in Cape May County. Service is provided via the Cape May Loop, Ocean City Loop, Wildwood Crest Loop, and the Rio Grande, Wildwood, and North Wildwood routes. Service is provided on some routes year-round, however, some trips are only made once or twice a day. The Wildwood/Rio Grande/Cape May Court House service has a summer and winter schedule, and during the summer only, the service to Wildwood Crest/North Wildwood operates seven days a week with many trips per day. The website has a complete listing of the routes and schedules at http://www.gatrolley.com/h_fm1.htm .

Ferry Services

Cape May has a bi-state ferry service that offers a 17-mile, 80-minute cruise across the Delaware Bay from Lewes, Delaware to Cape May on a daily basis throughout the year. The Cape May-Lewes Ferry, owned and operated by the DRBA, provides the service via a fleet of five vehicles. This service runs 365 days a year and accommodates pedestrians, bicyclists, and autos. Information on the Cape May-Lewes Ferry is available at www.clmf.com. The DRBA operates a "Three Fort Ferry Crossing" linking Fort DuPont in Delaware City, Fort Delaware on Pea Patch Island, and Fort Mott.

Park-and-Ride Facilities

There are a number of park-and-ride facilities in the SJTPO region, both state-owned and joint-use facilities. Table 10 provides a description of the official park-and-rides available in the SJTPO region.

Table 10 – Official NJDOT Park-and-Ride Locations in the SJTPO Region

County	Location	Town
Atlantic	Atlantic City Expressway, Employee Intercept Lot, MP 2.0	Pleasantville
Atlantic	Atlantic City Service Area, GSP, MP 41.2 at Jimmy Leeds Rd	Galloway Township
Atlantic	Atlantic City Bus Terminal	Atlantic City
Atlantic	Pleasantville Bus Terminal	Pleasantville
Cape May	Wildwood Bus Terminal	Wildwood city
Cape May	Ocean City Transportation Center	Ocean City
Cape May	Garden State Parkway, Exit 10A Southbound	Cape May Court House
Cape May	Cape May Transportation Center	Cape May
Cape May	Garden State Parkway, Ocean View Service Area	Ocean View
Cape May	Garden State Parkway, Exit 25A Southbound	Ocean City/Marmora
Cumberland	Vineland Bus Terminal	Vineland

Source: http://www.nj.gov/transportation/commuter/rideshare/prlocate.shtm ; accessed May 5, 2008

Ridesharing/Alternative Commutation Services

There is no Transportation Management Association (TMA) in Atlantic, Cape May, Cumberland, or Salem Counties. TMAs are non-profit member corporations that coordinate local commuter transportation services, including but not limited to, public transportation, vanpools, carpools, bicycling and pedestrian modes, as well as trip reduction strategies such as alternative work schedules and telecommuting, as well as providing other similar services for New Jersey businesses, employees, developers, individuals, and other groups. However, because there is some demand for ridesharing, the NJDOT has provided the Cross County Connection (CCC) TMA limited funding to provide rideshare matching in southern New Jersey. The CCC is available to assist any resident, business, or local government agency in southern New Jersey with rideshare or other transportation needs. The CCC, which operates primarily in Camden and Burlington Counties, keeps potential carpool participants on file for possible matching.

Specialized Transit Services

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. Access Link is NJTRANSIT's paratransit service. 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. Although these services provide transit options to various groups, the client eligibility requirements associated with these services act to restrict travel options throughout the region as other populations that have a need for transit services (i.e., low-income persons or zero-vehicle households) often fall outside of the designated client group defined for the services.

Information on Access Link is available at http://www.njtransit.com/as_al.shtml

Services by County

The following sections describe specialized services' issues for each county based on recent information. A regional summary of the 2002 Job Access and Reverse Commute (JARC) Plan follows.

Atlantic County

Atlantic County provides a wide range of transportation services to residents of the County. The Transportation Program is designed to provide necessary service to the maximum number of County residents, in conjunction with other non-profit transportation service programs throughout the County. The Division of Intergenerational Services, Transportation Unit provides services on a "first-come, first-served" basis to Qualified Residents, weekdays from 7:30 am to 5:30 pm, for both Life Essential and Life Enhancing service requests. Any county resident who is 60 years of age or older, disabled, a veteran (traveling for veteran medical services,) and/or a resident of the rural

western areas of the County are eligible. In addition, limited service is provided to TANF-eligible clients to/from various worksites. However, Atlantic County does not duplicate transportation services that are available and provided elsewhere. Therefore, residents living in institutional or assisted care facilities, along NJTRANSIT routes, and/or approved for NJTRANSIT Access Link services, may not be eligible for County services. Further eligibility information is available at (609) 645-5910.[9]

Cape May County

Transportation services are provided through the Cape May County Fare-Free Transportation program.

As a community paratransit system, Fare Free Transportation provides demand-response, subscription, and modified-fixed route bus service to senior citizens, persons with disabilities, veterans, low-income individuals, and the public on a first-come, first-served basis.[10]

For more information, contact the County at (609) 889-3700 or email at farefree@co.cape-may.nj.us.

Cumberland County

In addition to NJTRANSIT, Cumberland County also provides four local bus routes through its in-house Transit System. For more information, go to http://www.co.cumberland.nj.us/content/173/251/1555/1560.aspx

Salem County

The Salem County Inter-Agency Council (IAC) is partnering with the County of Salem to bring reliable and convenient shuttle bus services to employers and residents of Salem County. The service is funded through NJTRANSIT, the Salem Health and Wellness Foundation, the County of Salem, and the TD Bank North Foundation. For more information, contact (856) 935-4194.[11]

Job Access and Reverse Commute Plan

This plan was updated in 2002 to identify regional transit needs and service strategies to improve the ability of Work First New Jersey participants to reach places of training, job placement, and employment. Various services for low-income, transportation-dependent people are described, by county, under specialized transit services. This section summarizes the service needs identified in the Plan Update and strategies proposed to address them. No further update is available since the 2002 report.

Atlantic County

Issues

- A pocket of residential development south of Black Horse Pike near English Creek Avenue is without transit service.

[9] http://www.aclink.org/intergenerational/mainpages/transportation.asp; accessed May 6, 2008

[10] http://www.capemaycountygov.net/Cit-e-Access/webpage.cfm?TID=5&TPID=8504; accessed May 6, 2008

[11] http://www.driveless.com/pdfs/Salem_County_Emp_Trans_Serv.pdf; accessed May 6, 2008

- Some residents of Buena Vista Township do not have access to fixed-route transit.
- The route of the new Community Shuttle that would operate between Buena and Hammonton along NJ 54 may be too long.

Recommendations

- Extend CARTS service hours to better serve work trips.
- Review alignment for Community Shuttle.

Cape May County

Issues

- Gaps in transit service exist along US 9, especially between Cape May Court House and Ocean View. Several nursing homes in the corridor need more transit service for their staff.
- North-south connections should be improved and more frequent transit connections to Rio Grande should be provided to give better access to the significantly increased employment opportunities associated with the new convention center in Wildwood.
- Passengers going to the Crest Haven complex must cross the Garden State Parkway; although the intersection is signalized, it is not pedestrian friendly.
- Extending hours of Fare Free service would help serve workers with non-traditional schedules.

Recommendations

- Increase bus service between Wildwood and Rio Grande.
- Establish community bus service between Wildwood and Cape May.
- Improve pedestrian access to Crest Haven complex.
- Improve transit connections to Ocean View.
- Extend service hours for Fare Free Transportation.

Cumberland County

Issues

- A transit connection is needed between Vineland and Bridgeton along NJ 56.
- Employers along NJ 56 outside Vineland are not well-served by fixed-route transit; perhaps the Vineland Shuttle's route should be modified to serve those locations.
- A transit connection in needed between Salem and Bridgeton via NJ 49.

Recommendations

- Extend service hours for CATS.
- Consider providing connections between Vineland and Bridgeton.
- Consider providing connections between Salem and Bridgeton.

Salem County

Issues

- Service gaps have been identified around Elmer, Olivet, Norma, and Brotmanville, in the eastern part of the county, and near the Delaware River between Carneys Point, Penns Grove, and Woodstown.
- Additional transit services are needed to connect workers with the Pureland Industrial Complex in Gloucester County, as well as with those in Wilmington and Christiana, DE.
- Better transit connections are needed between Salem and Bridgeton.

Recommendations

- Extend service to Pureland.
- Improve transit connections to job opportunities in Delaware.
- Provide paratransit to serve job access transportation.
- Provide connections between Salem and Bridgeton.

On a regional basis, the Job Access and Reverse Commute Plan Update recommends developing transportation partnerships, introducing a regional or county-based mobility manager, promoting ridesharing programs, and developing an automobile ownership program.

SJTPO Environmental Justice 2007 Update

Environmental justice is not simply about adverse effects and discrimination, but rather is about providing equal access to the planning and decision processes that shape communities. The premise of environmental justice (EJ) is to reach out to those communities that have been historically marginalized, thus giving them a voice. In this regard, the SJTPO, like all MPOs, commissioned a public outreach strategy and commissioned the Louis Berger Group to perform an initial EJ analysis in 2002. The data at the time was limited, as the Census Bureau had not yet released all of the population tabulations for 2000. One of the key recommendations was the updating of the analysis as soon as better data was available. In that effort, this report is the update to the 2002 analysis and utilizes the latest Census, State, and Local data to define and map these communities of concern.

Whereas Executive Order 12898, and subsequent DOT orders only required the location and analysis of effects on minority populations and households under the poverty threshold populations, the SJTPO chose to expand upon those populations. It was decided that based on the low-density nature of the region, the following populations should also be included in any environmental justice program:

- Elderly populations;
- Zero-Vehicle Households;
- Disabled persons over 5 years of age; and
- Limited-English Proficient (LEP) populations.

Each of these populations has a different set of needs and thus warrants identification. In order to locate concentrations of EJ populations, a threshold needed to be developed. For the SJTPO a

concentration is defined as any block group that meets or exceeds the regional threshold, with the threshold being the regional average for any EJ population. Any block group that met or exceeded this ratio was classified as a community of concern. This was done for all EJ populations. Below is a list of the regional thresholds for each EJ population:

Table 11 – Regional Thresholds for EJ Populations

Population	SJTPO Pop	EJ Pop	Ratio*
Minority	565,604	175,298	31%
Low-Income	544,955	60,802	11%
Elderly	565,604	83,516	15%
Zero-Vehicle Households	210,577	27,848	13%
Mobility Impaired 5+	565,604	47,048	8%
Limited-English Proficient HH†	210,577	37,430	18%

* Rounded to nearest whole number.
† Spanish Speaking Households: 20,841, 10% of Households

3. Bicycle and Pedestrian

Introduction

SJTPO makes bicycle and pedestrian mobility and safety a high priority by planning future initiatives and conducting safety campaigns. Each county has been active in planning efforts to further the development of bicycle and pedestrian facilities. Further, many municipalities in the SJTPO region require bicycle and pedestrian facilities in new development. Nearly every municipality in the four-county region has existing or planned bicycle and pedestrian facilities for both commuting and recreational purposes.

State Bicycle and Pedestrian Goals

Echoing the goals embodied in New Jersey's Statewide Bicycle and Pedestrian Master Plan, the following five goals embody the principle that bicycling and walking are a routine part of the transportation system and should be treated as such, rather than being treated as separate modes.

One: Create a bicycle and pedestrian-friendly transportation infrastructure by planning, designing, constructing, and managing facilities that will accommodate and encourage use by bicyclists and pedestrians and be responsive to their needs.

Two: Make community destinations, transit facilities, and recreation facilities accessible and convenient to use by all types and levels of bicyclists and pedestrians.

Three: Continue to reform land use policies, ordinances, and procedures to maximize opportunities for walking and bicycling.

Four: Continue to develop education and enforcement programs that will result in reduction of crashes and a greater sense of security and confidence for bicyclists and pedestrians.

Five: Increase bicycling and walking by fostering a pro-bicycle and pro-walking ethic in individuals, private-sector organizations, and all levels of government.

Table 12 - Proposed Bicycle and Pedestrian Projects

County	Route	Program	Description
Atlantic	NJ 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	NJ 30	Pedestrian Walkway Rt. 30	Build a pedestrian walkway at US 30 to improve safety
Atlantic	NJ 52	Causeway Replacement Contract A	Reconstruct bridges (no additional travel lanes) and provide Bicycle and Pedestrian Facilities

Performance Criteria

1. Transportation facilities, at a minimum, shall be planned, designed, constructed, and maintained to accommodate shared-use by motor vehicles, bicycles, and pedestrians.
2. Where appropriate, and especially when a roadway project is an integral element of a city, town, or village center development plan, transportation facilities shall be designed, constructed, and maintained to encourage pedestrian activity.
3. Where appropriate, or when a roadway project is an integral element of a bicycle transportation plan or designated bicycle facility system, transportation facilities shall be designed, constructed, and maintained to encourage use by bicyclists.
4. Pedestrian traffic shall be given primacy over motor vehicle traffic in the design of projects located within zones dedicated to pedestrian movement.
5. Bicycle traffic shall be given primacy over motor vehicle traffic in the design of projects that encourage use by bicyclists.

Proposed Bicycle/Pedestrian Projects

SJTPO and its counties are actively engaged in a great number of bicycle and pedestrian improvements to the region's transportation system. The current Transportation Improvement Program (FY2008-2011) for the region identifies the following projects for implementation:

Table 13 - Proposed Bicycle and Pedestrian Projects

County	Route	Program	Description
Atlantic	NJ 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	NJ 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

Journey to Work

Bicycling and walking continue to capture relatively small percentages of regional work trips compared to other modes. The goal of smart growth development and initiatives such as NJDOT's integrated land use and transportation plans is to create communities and road systems that are more accommodating to alternate modes including bicycling, walking, and transit.

Some areas in Atlantic and Cape May counties have high population and employment densities, as well as mixed land uses and a resort environment; these attributes are conducive to alternate modes of travel.

Statewide Development and Redevelopment Plan

New Jersey's communities are being increasingly designed to accommodate pedestrians and bicyclists. Centers are the focus of community activity and their core areas should be the domain of pedestrians. As such, the State Development and Redevelopment Plan seeks to change future development patterns in New Jersey by creating Centers of various kinds (Urban, Regional, Village, Town, and Hamlet) and encouraging growth and redevelopment in existing Centers. This includes providing sidewalks on both sides of all roadways in Centers, in all residential and commercial development plans in Centers, and in almost all development plans in Planning Areas 1 (Metropolitan) and 2 (Suburban). The SDRP also recommends the provision of shoulders to accommodate pedestrians and bicyclists where sidewalks are not to be provided.

Transit Services and Intermodal Connections

There exist several strategies in linking bicyclists and pedestrians with transit services. Providing bicycle-exclusive parking facilities at transit stops and stations is effective in connecting bicyclists with transit facilities.

NJTRANSIT provides parking capacity for approximately 1,600 bicycles at its public facilities. Racks are located at 90 percent of the train stations in New Jersey, at several NJTRANSIT-owned and operated park-and-ride facilities, and at several bus terminals.

NJTRANSIT allows bicycles on transit vehicles, including trains and buses. Bicycles are permitted on all buses with bike racks or having an under floor luggage compartment. This service is on a first come, first served basis. 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.

Impediments to Pedestrian and Bicycle Travel

To facilitate pedestrian and bicycle travel, the built environment must encourage walking and bicycling. Planning and design decisions must consider these users. There are many impediments throughout the region that discourage or reduce safety of bicycle and pedestrian travel.

Some common problems related to pedestrian travel include:

- Difficulty crossing streets and highways;
- Inadequate pedestrian facilities and signal clearance time;
- High-speed traffic;
- High-volume traffic;
- Sidewalk gaps or obstructions;
- Inadequate lighting;
- Lack of pedestrian advocacy groups;
- Little consideration of pedestrians by drivers; and
- Land-use patterns that discourage pedestrian usage.

Some common problems related to bicycle travel include:

- Lack of pavement width for shared roadways;
- Pavement with debris or cracks;
- Rumble strips and roadway reflectors;
- Utility covers and drainage grates;
- Lack of consideration from motor vehicles;
- Lack of bicycle parking facilities at activity centers;
- Barriers or restrictions to traveling on bus or rail with bicycles; and
- Safety issues in areas with many driveways.

Existing Conditions

The region has a limited number of transportation-oriented designated bicycle facilities. The majority of bicycle facilities in the region are non-designated facilities consisting of paved shoulders and shared roadways. However, the existing roadways and streets in the region provide the greatest

potential resource for bicyclists. In most cases, existing roadway width, space, and surface conditions may be sufficient to allow safe bicycle travel. Under certain conditions, such as low traffic volumes and low operating speeds or where paved shoulders of adequate widths are present, the existing street and highway network can represent a cost-effective means for developing a bicycle network.

Nevertheless, despite the importance of the existing roadway network, the identification of bicycle compatible streets and highways is a complex task. The factors that need to be examined include traffic volumes, lane widths, presence, and width of shoulder, motor vehicle speeds, type of traffic, parking conditions, commercial driveways, grade, and sight distance. Therefore, to determine bicycle compatibility of area roadways, it is advisable that each be examined individually.

It is also not uncommon to find a lack of pedestrian accommodations or missing links in sidewalks in developed areas of the region as well. Pedestrian facilities include sidewalks, crosswalks, signals, overpasses, underpasses, malls, trails, and greenway paths. Sidewalks are common in urban areas but are far less common in suburban and rural areas. Sidewalks need to be continuous, accessible, and well maintained in order to be useful. Many sidewalks in the region do not meet these criteria.

Like the rest of New Jersey, the impediments listed above for both bicycle and pedestrian travel are common and many are widespread in the region. Removing barriers, such as those listed above, to bicycle and pedestrian travel are needed in the region. If bicycling and walking are to become more widespread in the region, a more bicycle-friendly and pedestrian-friendly environment must be created. Creating these more friendly environments require improvements in the engineering and operation of streets and highways and creating more compact land use forms.

As can be seen in the number of projects specifically targeted for bicycle and pedestrian accommodation in the region and the number of roadway and bridge improvements that are being designed to be bicycle and pedestrian compatible, where feasible, the SJTPO is actively engaged in making improvements to address the needs of bicyclists and pedestrians.

It is important to encourage the use of alternative modes to provide mobility, accessibility, and improve the quality of life of residents and tourists. The RTP Update will include a discussion of the need to plan and integrated transportation system that includes non-motorized modes. This is particularly true in recreational areas where walking and bicycling trips can play an important role in transportation. It is very important that pedestrian and bicyclist safety be considered and efforts be 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.

4. Intermodal Issues

Introduction

This section of the Plan presents information on additional elements of the transportation system. Data was gathered from a variety of sources, including the New Jersey Comprehensive Freight Plan.

Freight and Goods Movement

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. For goods movement within the state, the importance of trucks is even larger, moving about 97 percent of all goods. This mode-share is echoed in the SJTPO region.

Overall, the amount of goods that are destined to or move out of the SJTPO region is low compared to statewide totals. The four counties that make up the SJTPO area comprise a total of 11 percent of inbound truck movements, but just 2 percent of outbound truck movements. Contrast these figures to Middlesex County, where 10 percent of inbound truck movements and 14 percent of outbound truck movements occur. However, it is of interest that Cumberland County as an origin county has some of the highest origin-destination pairs for intrastate truck traffic, with the highest destination counties being Gloucester, Mercer, Camden, and Cumberland itself. This signifies the importance of trucks in moving good generated by Cumberland County to others areas of the state.

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 Vehicle Miles of Travel 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 truck. This again demonstrates the importance of truck trips to the SJTPO economy.

Major truck routes in the region include I-295, US 130, US 40, and the New Jersey Turnpike through Salem County, NJ 47 through Cumberland and Cape May Counties, NJ 77 in Cumberland County, NJ 109 in Cape May County, and US 322, US 206, and NJ 54 in Atlantic County. A number of truck terminals are in the region with the majority of major truck terminals located in Vineland, Cumberland County. There are no high speed, high capacity routes that provide east-west connections for goods movement in the SJTPO region.

Rail is also used to move goods, accounting for about 7 percent of goods 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, 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.

Key Freight Issues Summary

County representatives of SJTPO's Technical Advisory Committee met in February 2004 to discuss issues related to the movement of freight in the region. This meeting was held in conjunction with the Statewide Freight Plan effort. Significant issues and concerns raised at the meeting are summarized below:

- Double-stacked container freight on rail is increasing in an effort to accommodate the significant rise in freight that must be moved. Due to height restrictions, however, double-stacked containers cannot travel in southern New Jersey.
- 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.
- All major freight corridors in the SJTPO region should be analyzed to identify any other chokepoints (e.g., Hunter Street Bridge in Woodbury) that preclude double-stacked containers.
- Significant truck activity is causing capacity problems at many intersections and corridors across the region. Turning radii along the US 322 and 40 corridors (especially during the summer) and are very hard on pavement surfaces. This is also true to a lesser extent in the US 30 corridor (Egg Harbor is a chokepoint).
- Freight movement in Atlantic City is not a major problem since the casinos have established their own distribution centers off island; however, trucks bringing product in compete with the tour buses on local roadways and have difficulty navigating in city streets because of their size. Unlike the buses, trucks do not have designated routes in the city.
- Maintenance of rail facilities is crucial. Once rail freight capacity is lost, it will not come back.
- Freight movement in the SJTPO is inherently disadvantaged and inefficient, because of its peninsular shape. Rather than accommodating through-travel, freight routes operate as one-way spur movements, moving into and out of the region and often travel empty on the reverse leg.

Aviation

A number of airports are located within the SJTPO region, including one commercial air carrier airport, and primary and secondary general aviation airports.

Atlantic City International Airport

The South Jersey Transportation Authority, an agency of the State of New Jersey, operates the terminal, runways and related facilities at Atlantic City International Airport (ACY). The Federal Aviation Administration William J. Hughes Technical Center and New Jersey Air National Guard are located at the airport. ACY is located 10 miles from downtown Atlantic City – a gaming and resort community that attracts millions of visitors annually. The airport is situated adjacent to the Atlantic City Expressway, which runs from Atlantic City to the Philadelphia metropolitan region, and intersects with the Garden State Parkway.

General Aviation Airports

In addition to ACY, the SJTPO region is home to several smaller publicly and privately owned and operated airports including Spitfire Aerodrome (formerly Oldman's Airport) and Millville Municipal Airport. These general aviation airports serve private passenger, agricultural, and/or commercial charter and freight aircraft (see Table 13).

Table 14 – General Aviation Airports

Airports	Location	County
Spitfire Aerodrome (formerly Oldman's)	Oldmans Twp	Salem
Buck's	Bridgeton	Cumberland
Cape May	Wildwood	Cape May
Hammonton Municipal	Hammonton	Atlantic
Kroelinger	Vineland	Cumberland
Li Calzi	Bridgeton	Cumberland
Millville Municipal	Millville	Cumberland
Ocean City	Ocean City	Cape May
Piney Hollow	Hammonton	Atlantic
Rudy's	Vineland	Cumberland
Vineland-Downstown	Vineland	Cumberland
Woodbine Municipal	Woodbine	Cape May

Source: Economic Impact of New Jersey's General Aviation Airports Ports

The Millville Airport and Industrial Park Access Plan was completed in 2002. The study identified a phased plan of improvements designed to improve access to the airport and adjacent industrial park area and relieve congestion on existing local access roadways. The study is described in greater detail on the SJTPO website www.sjtpo.org.

Ports

Salem Terminal (The Port of Salem), a port entry since 1682, is one of the oldest ports on the East Coast, and is the newest addition to South Jersey Port Corporation. Leased and operated by Salem Terminals Limited, extensive renovations are planned for this facility.[12]

The Port of Salem has 24 acres of private area and 3 acres of public area. It has a depth of 17 feet, and serves domestic and international vessels containing bulk cargoes. The private port ships various supplies to Bermuda at an average of two ships per week. The Southern Railroad of New Jersey serves the port and provides connections to CSX/Norfolk Southern. NJ 49 provides truck access. This port is designated as a Foreign Trade Zone and is thus excluded from US Customs regulations, which greatly reduces shipping and importing costs.

The Port of Bridgeton, currently not in operation, has a depth of 17 feet and supports barge traffic containing bulk cargoes such as gravel, lumber, and oil. Truck access is provided by NJ 49. The South

[12] http://www.southjerseyport.com/facilities.asp?Type=1&SectionNumber=3&TextType=2&Is3D=0, accessed March

Jersey Port Commission hopes to find a new tenant. There are also ports in Paulsboro and Gloucester City. There is direct rail and highway access to each of these terminal facilities.

Intermodal Connectors

Intermodal connectors are defined as highways that provide access between major intermodal facilities (mainly port and rail terminals) and the National Highway System. The National Highway System (NHS) includes the interstate roadways, principal arterials, strategic highway network, and connectors (important to defense and emergency preparedness). The majority of the New Jersey State highway system is part of the NHS, including the toll roads.

There are three intermodal connectors defined in the SJTPO area. All three are served by existing NHS routes, indicating that it was not necessary to define an additional facility named as the connector. The three include:

- Atlantic City Airport, facility ID NJ35A, which is served by an existing NHS route;
- Atlantic City Rail Station, facility ID NJ38T, which is served by an existing NHS route; and
- Cape May Ferry Terminal, facility ID NJ36F, which is served by an existing NHS route.

5. Tourism

Introduction

Tourism is a significant industry in the SJTPO region, and not just in Atlantic City. While the casino resorts generate the greatest number of visitors to the region, ecotourism and cultural and heritage attractions are becoming increasingly important. The importance of a transportation network adequate to move these people to their destinations cannot be overstated. Competition for tourism is very strong among states on the East Coast, and people will choose to go elsewhere if the trip is too difficult.

Issues and Needs Identification

Atlantic City leads the region in employment, with employment expected to increase nearly 32 percent to over 205,000 by 2035. About 35 million people visited the casinos; attended conventions, trade shows, and other special events; and enjoyed the beaches in 2007. Similarly, the population of Cape May County increases to more than 600,000 during the summer season peak, about six times greater than the County's 2000 Census population of nearly 102,500. Tourism is the largest industry in Cape May County and generates billions of dollars annually.

A Visitor Center welcomes tourists to Salem County, where visitors can enjoy arts and music, natural areas, parks, and numerous historical sites, including Fort Mott State Park, which is served by the "Three Forts" ferry service offered by the Delaware River and Bay Authority. The Cowtown Rodeo in Pilesgrove is the oldest rodeo on the East Coast.

Cumberland County also features agri-tourism, lighthouses, nature trails, historic sites, Wheaton Village, the Maurice River (part of the National Wild and Scenic River System), and the many attractions offered by the Delaware Bay.

Transportation issues that must be addressed include the following:

- Congestion relief for NJ 55 is critical to the long-term success of the region. Its completion would improve its role as both a recreational access corridor and as the region's primary emergency evacuation corridor. The issues and benefits are discussed in greater detail in the Implementation Plan section of evacuation assessment.
- Getting to and from the region – East-west connections are limited within the region, as are access to and from Maryland and Delaware. The connections that do exist carry both local and regional travel, and are heavily congested during the summer.
- Getting around within the region – While employment will grow significantly in Atlantic City, its population will not. More and more people will commute to Atlantic City, adding to the burden already present from tourists. More local and regional transit would be welcome, as well as increased parking and more and improved facilities for bicycling and walking. The Casino Reinvestment Development Authority (CRDA) is conducting a study of the Atlantic City area to formulate an improvement program to address mobility and growth issues, including transit access.
- Signage – Way-finding signage is important to reduce visitor confusion and make trip experiences that are more positive for visitors. 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.