SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
ROUTE 55 TRANSPORTATION STUDY
Shore Connection Committee

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SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION  
ROUTE 55 TRANSPORTATION STUDY  

Shore Connection Committee

### LIST OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Representing</th>
<th>Alternate</th>
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<tbody>
<tr>
<td><strong>Members</strong></td>
<td></td>
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</tr>
<tr>
<td>The Honorable Daniel Beyel</td>
<td>Cape May County</td>
<td>James Smith</td>
</tr>
<tr>
<td>Harold Noon, Jr.</td>
<td>Maurice River Township</td>
<td>Stephen Kehs</td>
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<tr>
<td>The Honorable Douglas Fisher</td>
<td>Cumberland County</td>
<td>David Moore</td>
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<tr>
<td>Don Kirchhoffer</td>
<td>NJ Conservation Foundation</td>
<td>Gloria VanDuyne</td>
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<tr>
<td>Jay Laubengeyer</td>
<td>The Nature Conservancy</td>
<td>Lynda Pagliughi</td>
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<td>Vince Leonetti</td>
<td>SJ Transportation Authority</td>
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<tr>
<td>Roy Little</td>
<td>NJ Highway Authority</td>
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<tr>
<td>Mayor Andrew McCrosson, Jr.</td>
<td>Upper Township</td>
<td>Stoddard Bixby</td>
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<tr>
<td>Mayor James Pickering, Jr.</td>
<td>Dennis Township</td>
<td>Dave Watson</td>
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<td>Mayor William Pikolycky</td>
<td>Woodbine Borough</td>
<td>Harry Ciabatoni</td>
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<tr>
<td>Mayor James Quinn</td>
<td>Millville City</td>
<td>John Hollings</td>
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<tr>
<td>Chairman Douglas Raineart</td>
<td>Mayors of Cumberland County</td>
<td></td>
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<tr>
<td>Mayor Micheal J. Voll</td>
<td>Mayors of Cape May County</td>
<td>Mayor Martin Pagliughi</td>
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| **Invited Guests**             |                                     |                              |
| The Honorable Nicholas Asselta | NJ Assemblyman                      |                              |
| The Honorable James Cafiero    | NJ State Senator                    |                              |
| Gordon Dahl                    | SJ Econ. Development Council        |                              |
| Peter Dunne                    | New Jersey Audubon Society          | Thomas Gilmore               |
| The Honorable John Gibson      | NJ Assemblyman                      |                              |
| Chuck Horner                   | Pinelands Commission               |                              |
| Ken Koschek                    | NJ DEP, Office of Program Coord.    |                              |
| Robert Patterson               | Cape May Cty. Chbr. of Commerce     | George Henry                 |
| Ira Shaffer                    | Vineland Chbr. of Commerce          |                              |
| Brian Tomlin                   | Millville Chbr. of Commerce         |                              |
| Berwin Kirby                   | Citizens United                     | Glenn Ewan                   |

| **Project Support Team**       |                                     |                              |
| Tim Chelius                    | SJ Transp. Planning Organization    |                              |
| Dave Cox                       | NJDOT, Bureau of Mobility Strategies|                              |
| Martine Culbertson             | M. A. Culbertson                    |                              |
| Tony DeJohn                    | Parsons Brinckerhoff                |                              |
# South Jersey Transportation Planning Organization
## Route 55 Transportation Study
### Shore Connection Committee

<table>
<thead>
<tr>
<th>Name:</th>
<th>Representing:</th>
<th>TEL./FAX:</th>
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<tr>
<td><strong>MEMBERS</strong></td>
<td></td>
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</tr>
<tr>
<td>The Honorable Daniel Beyel</td>
<td>Freeholder, Cape May County</td>
<td>465-1065</td>
</tr>
<tr>
<td>4 Moore Road</td>
<td></td>
<td>465-6189</td>
</tr>
<tr>
<td>Cape May Court House, NJ 08210</td>
<td></td>
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</tr>
<tr>
<td>Harold Noon, Jr.</td>
<td>Maurice River Township</td>
<td>785-1120</td>
</tr>
<tr>
<td>P.O. Box 218</td>
<td></td>
<td>785-1974</td>
</tr>
<tr>
<td>Leesburg, NJ 08327</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Honorable Douglas Fisher</td>
<td>Freeholder, Cumberland County</td>
<td>451-6270</td>
</tr>
<tr>
<td>109 Rutgers Avenue</td>
<td></td>
<td>453-9491</td>
</tr>
<tr>
<td>Bridgeton, NJ 08302</td>
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</tr>
<tr>
<td>Don Kirchhofer</td>
<td>NJ Conservation Foundation</td>
<td>268-2226</td>
</tr>
<tr>
<td>100 Three Bridge Road</td>
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<td>268-6822</td>
</tr>
<tr>
<td>Shamong, NJ 08088</td>
<td></td>
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<tr>
<td>Jay Laubengeyer, Director</td>
<td>The Nature Conservancy</td>
<td>785-1735</td>
</tr>
<tr>
<td>Delaware Bayshores Office</td>
<td></td>
<td>785-1766</td>
</tr>
<tr>
<td>P.O. Box 194, 9550 Highland Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mauricetown, NJ 08329</td>
<td></td>
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<tr>
<td>Vincent Leonetti, Director</td>
<td>SJ Transportation Authority</td>
<td>965-6060</td>
</tr>
<tr>
<td>Farley Service Plaza, P.O. Box 351</td>
<td></td>
<td>965-7315</td>
</tr>
<tr>
<td>Hammonton, NJ 08037</td>
<td></td>
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</tr>
<tr>
<td>Roy Little, Director</td>
<td>NJ Highway Authority</td>
<td>(732) 442-8600</td>
</tr>
<tr>
<td>P.O. Box 5050</td>
<td></td>
<td>x6442</td>
</tr>
<tr>
<td>Woodbridge, NJ 07095-5050</td>
<td></td>
<td>(732) 293-1106</td>
</tr>
<tr>
<td>Mayor Andrew J. McCrosson, Jr.</td>
<td>Upper Township</td>
<td>628-2011</td>
</tr>
<tr>
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<td>Mayor James H. Pickering, Jr.</td>
<td>Dennis Township</td>
<td>861-9700</td>
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<tr>
<td>Dennisville, NJ 08214</td>
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</table>

M. A. Culbertson - RT55 SCC - 1/21/98
### SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
### ROUTE 55 TRANSPORTATION STUDY
### Shore Connection Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Representing</th>
<th>TEL./FAX</th>
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<tbody>
<tr>
<td>Mayor William Pikolycky</td>
<td>Woodbine Borough</td>
<td>861-2153</td>
</tr>
<tr>
<td>P.O. Box 444</td>
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<td>861-2529</td>
</tr>
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<tr>
<td>Mayor James Quinn</td>
<td>Millville City</td>
<td>825-7000</td>
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<tr>
<td>P.O. Box 609, 18 S. High Street</td>
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<td>Mayor Douglas Raineart</td>
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</tr>
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<td>33 Mechanic Street</td>
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<td>465-7201</td>
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<td>Cape May Court House, NJ 08210</td>
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</tbody>
</table>

### MEMBERS - ALTERNATES

James Smith, Director
DN 309, 4 Moore Road
Cape May Court House, NJ 08210

Stephen L. Kehs, Director
800 E. Commerce Street
Bridgeton, NJ 08302

### INVITED GUESTS

The Honorable Nicholas Asselta
NJ State Assemblyman
226 W. Landis Avenue
Vineland, NJ 08360

The Honorable James Cafiero
NJ State Senator
3319 New Jersey Ave., P.O. Box 789
Wildwood, NJ 08260

M. A. Culbertson - RT55 SCC - 1/21/98
# SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

## ROUTE 55 TRANSPORTATION STUDY

### Shore Connection Committee

<table>
<thead>
<tr>
<th>Name:</th>
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<tbody>
<tr>
<td><strong>Gordon Dahl, Director</strong></td>
<td>SJ Economic Dev. Council</td>
<td>794-8497, 794-8431</td>
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<tr>
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<td><strong>Peter Dunne, Director</strong></td>
<td>NJ Audubon Society</td>
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<td>Cape May Bird Observatory</td>
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<tr>
<td><strong>The Honorable John Gibson</strong></td>
<td>NJ State Assemblyman</td>
<td>624-1222, 624-0244</td>
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<td>2087 South Shore Road</td>
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<td>Pinelands Commission</td>
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<td><strong>Ken Koschek</strong></td>
<td>NJ DEP, Office of Program Coordination</td>
<td>292-2662, 777-0942</td>
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<tr>
<td>401 E. State Street, P.O. Box 418</td>
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<td><strong>Robert C. Patterson</strong></td>
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<td><strong>Ira Shaffer</strong></td>
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**SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION**  
**ROUTE 55 TRANSPORTATION STUDY**  
**Shore Connection Committee**

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<th>Name</th>
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<tr>
<td><strong>PROJECT SUPPORT TEAM</strong></td>
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<tr>
<td>Tim Chelius, Director</td>
<td>SJ Transp. Planning Organization</td>
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<tr>
<td>Dave Cox</td>
<td>NJDOT, Bureau of Mobility Strategies</td>
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<tr>
<td>1035 Parkway Avenue, CN 609</td>
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<td>Martine Culbertson</td>
<td>M. A. Culbertson</td>
<td>795-0524</td>
</tr>
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<tr>
<td>Haddonfield, NJ 08033</td>
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Participant Roles

The Role of the Committee Member:

- Attends all SCC meetings; notifies Alternate to attend when necessary.
- Participates and represents the point of view of their interest group.
- Listens to other points of view and is open to new information.
- Exchanges ideas and offers suggestions in an effort to achieve mutual understanding.
- Keeps their interest group and their Alternate informed of meeting proceedings.
- Adheres to the SCC operational procedures and Agreements.

The Role of the Facilitator:

- Opens and closes SCC meetings.
- Keeps meeting topics focused and moving according to the agenda and ensures that all points on the agenda are covered unless there is consensus from the Committee to omit or revise topics.
- Maintains balanced participation and creates an environment where all members have the opportunity to express their views.
- Ensures people are listened to and treated with respect (enforces the Agreements).
- Maintains clear communication which is understood by all participants and observers during the SCC meetings.
- Manages differences of opinion and helps the group work towards an appreciation of each person's point of view.
- Offers agenda items as needed.
- Monitors the time during each SCC meeting.
- Communicates with Committee members and the Project Study Team between meetings as needed.
The Role of The Project Study Team:

- Assists the facilitators during the SCC meetings.
- Provides technical information and resource support to the Committee.
- Assists the Committee in understanding the transportation project development process and guidelines.
- Provides answers to questions and provides any technical data requested.
- Provides input on environmental requirements and protection policies.
- Offers agenda items as needed.
- Reviews Meeting Report and assists in the distribution to the Committee.
- Coordinates agency participation.
SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
ROUTE 55 TRANSPORTATION STUDY

Shore Connection Committee

Purpose

The purpose of the Shore Connection Committee is to discuss the issues and concerns of local municipalities and interest groups of which they represent and to provide input, feedback and pertinent information to the Project Support Team regarding the development of options for transportation improvements along the New Jersey Route 55 / Route 47 Transportation Study corridor.

Goals

• To convey the interests and concerns of local residents, organizations, municipalities and businesses in the study area.

• To actively participate in developing transportation solutions that maximize safety and traffic efficiency while minimizing environmental impacts, historic and community disruption, and costs.

• To provide input to the Project Support Team in a collaborative fashion utilizing consensus to reach agreement.

• To assist in communications with the community in order to enhance understanding of the project.

• To maximize broad-based public participation in the transportation planning process.
Structure

- The Shore Connection Committee is composed of members who represent local governments or interest groups who have expressed concern or interest in the New Jersey Route 55 Transportation Study in South Jersey.

- Each local government or interest group will choose one primary representative and one alternate (optional) to represent them on the Shore Connection Committee. In order to best facilitate dialogue and group interaction, the committee will be kept to a minimum number of people.

- There are four sub-divisions of the Committee:
  1. Members are the decision-making participants and are expected to attend and actively contribute at each meeting.
  2. Invited Guests are welcomed to attend all meetings in order to observe and listen.
  3. The Project Study Team will actively participate and assist the Committee with facilitation and technical resource support, however they have no voting or decision-making authority.
  4. Alternates assume the role and responsibilities of Members when their Member is absent and may attend meetings similar to an Invited Guest when their Member is present.

- All sub-divisions of the Committee receive SCC handbooks, meeting reports and agendas. At their discretion, Members may decide to allow for varying degrees of participation from Invited Guests, Alternates or outside parties at each meeting.

- Visitors - such as the general public, government agencies, or other organizations such as the media, are welcomed to attend as an observer and listen. Active participation by visitors is at the discretion of the Members.

- Alternates - A committee Member may select a single alternate to represent them and their constituents if the Member is unable to attend SCC meetings. Both are responsible for keeping the other individual informed of SCC meeting proceedings.

Responsibility

All Committee members share the mutual responsibility for assuring that the purpose, structure, operating procedures and agreements are observed and maintained. Participants are free to question, in good faith, actions of other SCC members which come within the scope of these agreements.
SCC AGREEMENTS

- Remain Open-Minded

- Be Flexible

- Be Positive

- Respect Differences of Opinion

- Joe and Donuts

- Work Towards Win-Win

- Make Decisions / Build Consensus

- Actively Participate
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## SECTION 3 - MEETING REPORTS AND AGENDAS

- Meeting Report No. 10
- Meeting Report No. 9
- Meeting Report No. 8
- Meeting Report No. 7
- Meeting Report No. 6
- Meeting Report No. 5
- Meeting Report No. 4
- Meeting Report No. 3
- Response to Questions Raised by the SCC - 4/29/97
- Shore Connection Working Group Summary - 1/29/97
Meeting No. 11
October 21, 1998

AGENDA

Objective: To review the Shore Connection Committee Report, to ensure that the report accurately reflects the SCC findings, and to determine the next step in the program.

I. Welcome and Introductions
   • SCC Agenda Review
   • Program Overview

II. Shore Connection Committee Report
   • Report Information Discussion
   • Executive Summary

III. Summary
   • Recommendation to SJTPO Board
   • Closing Comments
Meeting No. 10  
June 24, 1998

AGENDA

Objective: To prioritize the transportation improvement concepts; determine direction of unresolved corridor alternatives; and present SCC recommendations, next step in the study process, and Committee closure.

I. Welcome and Introductions
   • Approval of Meeting Report No. 9
   • SCC Agenda Review

II. SCC Recommendations
   • Presentation of Corridor Information
   • Group Discussion and Consensus

III. Next Steps
   • SJTPO Process, NJDOT Program
   • SCC Communication

IV. Summary and Close
   • Recap, Action Items, Evaluation
   • Closing Comments
South Jersey Transportation Planning Organization
Route 55 Transportation Study

SHORE CONNECTION COMMITTEE

Meeting No. 10 Report

DATE: June 24, 1998
TIME: 7:00 p.m. - 9:00 p.m.
LOCATION: Dennis Township Municipal Building

ATTENDEES:

SCC Members:
The Honorable Dan Beyel
The Honorable Doug Fisher
Don Kirchhoffer
Jay Laubengeyer
Roy Little
Mayor James Pickering, Jr.
Mayor William Pikolycky

SCC Alternates:
Tim Brill
Harry Ciabatoni
Lynda Pagliugh
Gloria Van Duyne
Jim Smith

Invited Guests:
The Honorable Nick Asselta
Chuck Horner
Berwyn Kirby
Ken Koscheck
Bob Patterson

Project Support Team:
Dave Cox
Tim Chelius
Martine Culbertson
Tony DeJohn
Chet Ambler

REPRESENTING:
Cape May County
Cumberland County
NJ Conservation Foundation
The Nature Conservancy
New Jersey Highway Authority-GSP
Dennis Township
Woodbine Borough
Cumberland County
Woodbine Borough
South Jersey Transportation Authority
The Nature Conservancy
Cape May County
NJ State Assemblyman
Pinelands Commission
Citizens United
NJDEP - Office of Program Coordination
Cape May County Chamber of Commerce

NJDOT
SJTPO
M.A. Culbertson
Parsons Brinckerhoff
SJTPO

SJTPO
South Jersey Transportation Planning Organization
18 N. East Avenue, Vineland, New Jersey, 08360
Tel: 609-794-1941 • Fax: 609-794-2549
Visitors:
Chris Betterelli Legislative Aide, Assemblyman Assetta
Leslie M. Ficcaigli Port Elizabeth Planning Board
John T. Turner Ocean View
Douglas Turner Ocean View

1. PURPOSE OF MEETING

Objective

To prioritize the transportation improvement concepts; determine direction of unresolved corridor alternatives; and present SCC recommendations, next step in the study process, and Committee closure.

2. MEETING REPORT

Welcome and Introductions

Tim Chelius welcomed all to the meeting and everyone present introduced themselves. On motion, the Meeting No. 9 Report was unanimously approved.

Martine Culbertson explained that the core Members of the Shore Connection Committee, as the decision-makers selected to provide broad representation, were again seated around a central table. She then discussed the previous meeting’s agenda and the difficulty the group had in assigning alternatives to the “Unlikely/Dismiss” category. Therefore, under this meeting’s agenda, the goal will be to group the alternatives into a Near Term Plan and a Long Term Plan.

Corridor Information

Tony DeJohn distributed and briefly introduced a primer on Intelligent Transportation Systems (ITS) and their applicability to the study area. He also discussed the feasibility of a reversible center lane on Route 47, the traffic monitoring program to be conducted this summer, and the strong demand for travel along Routes 47 & 347. DeJohn provided the following relative range of costs for various alternatives:

- 55 Freeway - $500 million (1990 $)
- 550 Corridor - $50 million (includes the GSP interchange upgrade @ $5-10 million)
- 47 Reversible lane - $10 million
- Bypasses - $20-25 million each
- 49/50 Corridor - $5 million

Discussion of Group Recommendations

Martine Culbertson asked the Members group if sorting the alternatives between Near Term and Long Term Plans was acceptable. (See definitions in the attached table.) Some wanted to dismiss alternatives involving new right-of-way, such as the Route 55 Freeway, but others wanted
these kept in the Long Term Plan. The Members group continued to discuss the various alternatives and whether they should be included in the Near Term or Long Term Plans.

The group reached consensus that the alternatives that would maximize the performance of the existing system, such as TDM/ITS and various spot improvements, should be in the Near Term Plan. However, Tony DeJohn emphasized that additional capacity is needed in the 550 or 47/347 corridor well beyond what all those TDM/ITS alternatives combined would provide.

The other alternatives were then debated at length. Based upon discussion on the reversible lane option, some members proposed consideration of the option of widening the two key sections of Route 47 through Port Elizabeth and Dennisville to two lanes each way. The results of the group’s discussion are summarized in the attached table.

During the course of the debate, there was also much discussion of the effect of a group decision to add an alternative to one of the Plans. In response, Tim Chelius and Martine Culbertson explained that simple operational improvements could be quickly implemented. However, putting a more complicated alternative in the Near Term Plan would only give it priority for further Study and Development work. This would result in engineering to see if it is workable, to identify the impacts, and to answer the questions raised by the Committee. Dave Cox and Chelius emphasized that Study and Development does not include design, and that there would be further priority setting by SJTPO with lots of public involvement before implementation.

Culbertson also explained that the next step after this meeting would be preparation of a final report on the Committee’s entire effort. It will outline where there is agreement and where there is not full agreement on options to recommend for Study and Development.

The group could not come to consensus on some alternatives and agreed to record a mix of support and opposition by voting (see notes with the attached table). Due to lack of time, some alternatives were not directly addressed, or were only partially addressed. Missing or inconclusive entries in parts of the table reflect these results.

**Summary and Close**

Martine Culbertson asked the members to respond to the attached list of queries related to future Committee communication. The Committee felt that the appropriate response in all cases would be to notify SJTPO Executive Director Tim Chelius. However, they believed that the situation under Query #6, negative comments about the Committee by a member, would not happen.

Culbertson thanked all for the hard work and said they made important progress. She also distributed evaluation forms which were completed before leaving. She urged all to remember the Committee’s original Agreements on their operating procedures (Be open-minded, etc.). Tim Chelius expressed thanks on behalf of the group to Tony DeJohn and Martine Culbertson. He said the Committee should be proud of the agreements reached.

Dave Cox anticipated that a draft of the final report would be distributed for comment in August. It would then be presented to the SJTPO Policy Board, and all would be invited. Chelius noted that all were now part of SJTPO’s world and would receive items such as newsletters and annual reports.
4. NEXT STEPS

Support Team

▼ Prepare draft final report and distribute to Committee for comments.
▼ Present revised final report to SJTPO Policy Board.

Report prepared by:

SJTPO

[Signature]
Chet Ambler, SJTPO

a:rt55min.10
<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>NEAR TERM PLAN</th>
<th>LONG TERM PLAN</th>
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<tr>
<td><strong>Corridors</strong></td>
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<tr>
<td>49/50 Corridor</td>
<td>A. Rt. 55/49 interchange improvements</td>
<td>A. ✓</td>
</tr>
<tr>
<td></td>
<td>B. Minor capacity improvements along the corridor</td>
<td>B. ✓</td>
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<td></td>
<td>C. Tuckahoe Bypass</td>
<td>C.</td>
</tr>
<tr>
<td>47/347 Corridor</td>
<td>A. Reversible lane on Rt. 47 from Rt. 55 to 47/347 split and reversible lane on Rt. 47 from 47/347 merge to Rt. 83, CR 657</td>
<td>A. 6 in favor *</td>
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<td></td>
<td>B. Key Intersection improvements</td>
<td>B. 3 in favor *</td>
</tr>
<tr>
<td></td>
<td>C. Rt. 47 to four lanes thru Port Elizabeth and Dennisville (alternative added: 6/24/98)</td>
<td>C.</td>
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<tr>
<td>550 Corridor</td>
<td>A. Middle Arterial - Two lane major arterial using new alignment from Rt. 47 to CR 550.</td>
<td>A. 5 in favor **</td>
</tr>
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<td>C. Sea Isle Blvd. Extension</td>
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<td>ACE/GSP Corridor</td>
<td>A. Improve ACE/GSP Interchange</td>
<td>A.</td>
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<td></td>
<td>B. GSP Interchanges Improvements</td>
<td>B.</td>
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<td>C. GSP Mainline Improvements</td>
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<td>D. ACE Mainline Improvements</td>
<td>D.</td>
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<td>A. Corridorwide traffic monitoring</td>
<td>A. ✓</td>
<td>A.</td>
</tr>
<tr>
<td>B. Managed Corridor strategies</td>
<td>B. ✓</td>
<td>B.</td>
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<tr>
<td>C. Signage program</td>
<td>C. ✓</td>
<td>C.</td>
</tr>
<tr>
<td>D. Motorist information/VMS</td>
<td>D. ✓</td>
<td>D.</td>
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<tr>
<td>E. Incident management/ESP</td>
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<td>E.</td>
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<td>F. Demand Management</td>
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<td>A. New four lane freeway from existing terminus to GSP</td>
<td>A. No</td>
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<td>A. 5 in favor, 3 to dismiss ***</td>
<td>A.</td>
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<td>A. Port Elizabeth &amp; Dennisville</td>
<td>A. No</td>
<td>A.</td>
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<td>Service between Millville and Cape May</td>
<td>As per SJTPO Plan Update #</td>
<td>As per SJTPO Plan Update #</td>
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<tr>
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</tr>
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</table>
Shore Connection Committee Meeting No. 10

NOTES FOR NEAR TERM AND LONG TERM PLANS TABLE

Footnotes

* 34/347 Corridor: SCC could not come to consensus. However, as a Committee decision, they chose to take a poll in which 6 were in favor of Near Term and 2 were in favor of Long Term.

** 550 Corridor A: SCC could not come to consensus. However, as a Committee decision, they polled that 5 were in favor of Near Term and 3 were in favor of Long Term.

*** Rt. 55 Freeway: SCC came to consensus that it was not a Near Term effort. However, as a committee decision, they polled that 5 were in favor of Long Term and 3 were in favor of dismissal.

# Rail Service: To be addressed in the SJTPO Regional Transportation Plan Update now being prepared.
SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
ROUTE 55 TRANSPORTATION STUDY
Shore Connection Committee

Meeting No. 9
May 20, 1998

AGENDA

Objective: To examine the reorganized alternatives as transportation improvement concepts; to identify those concepts which meet the project needs and should be given further consideration and to identify those concepts which should be dismissed or set aside for later consideration due to inability to meet the regional needs or are determined as not reasonable or feasible for further study at this time.

I. Welcome and Introductions
   - Approval of Meeting Report No. 8
   - SCC Information Update

II. Improvement Concepts
   - Presentation of Information
   - Group Discussion for Clarity

Break

III. Decision-making
   - Next Step in the Process
   - SCC Evaluation of Improvement Concepts

IV. Summary and Close
   - Recap / Action Items
   - Closing / Feedback
South Jersey Transportation Planning Organization
Route 55 Transportation Study

SHORE CONNECTION COMMITTEE

Meeting No. 9 Report

DATE: May 20, 1998
TIME: 7:00 p.m. - 9:00 p.m.
LOCATION: Dennis Township Municipal Building

ATTENDEES:

SCC Members:
The Honorable Dan Beyel
Don Kirchhoffer
Jay Laubengeyer
Hal Noon
Mayor Andrew McCrosson
Mayor James Pickering, Jr.
Mayor William Pikolycky

SCC Alternates:
Harry Ciabatoni
Jude Depko
Steve Kehs
Jim Smith

Invited Guests:
Chuck Horner
Berwyn Kirby
Ken Koscheck
Larry Schmidt
Bob Patterson

Project Study Team:
Dave Cox
Tim Chelius
Martine Culbertson
Tony DeJohn
Chet Ambler
Jim Parry

REPRESENTING:
Cape May County
NJ Conservation Foundation
The Nature Conservancy
Maurice River Township
Upper Township
Dennis Township
Woodbine Borough
Woodbine Borough
New Jersey Highway Authority-GSP
Cumberland County
Cape May County
Pinelands Commission
Citizens United
NJDEP - Office of Program Coordination
NJDEP - Office of Program Coordination
Cape May County Chamber of Commerce
NJDOT
SJTPO
M. A. Culbertson
Parsons Brinckerhoff
SJTPO
SJTPO
Visitors:

Leslie M. Ficcaglia  Port Elizabeth
John T. Turner  Ocean View
Douglas Turner  Ocean View
Fred A. Winkler  Winchester & Western Railroad

1. PURPOSE OF MEETING

Objective

To examine the reorganized alternatives as transportation improvement concepts; to identify those concepts which meet the project needs and should be given further consideration and to identify those concepts which should be dismissed or set aside for later consideration due to inability to meet the regional needs or determined as not reasonable or feasible for further study at this time. (See attached agenda.)

2. MEETING REPORT

Welcome and Introductions

Tim Chelius opened the meeting, and on motion, the Meeting No. 8 Report was approved. [Note: correct last name for visitors listed as "Turarc" is "Turner".] Martine Culbertson distributed items to update the SCC Handbooks. She emphasized that the Project Schedule summarized all meetings held to-date. Everyone present then introduced themselves.

Improvement Concepts

Tony DeJohn reviewed a handout that grouped the options into improvement corridor concepts (see attached matrix). He then answered the group’s questions and comments on the options.

Decision-making

At this point, Martine Culbertson reorganized the group with the core Members of the SCC around a central table and the Invited Guests of the SCC remaining at the surrounding tables. She asked the Members, as the decision-makers selected to provide broad representation, to identify the options that would be most viable and best meet regional needs. Tim Chelius explained that the goal was to pick a set of options to be considered for project development. This can range, depending on the alternatives, from a simple investigation leading to quick implementation to extensive studies of design and feasibility. The options selected would not be a final determination since much is unknown about them, but they would be the first options that SJTPO and NJDOT would launch into project development consideration and study.
Steve Kehs urged that everyone have the opportunity to report back and poll those they represent before any final decisions are made by the Committee. Chelius noted that a meeting was planned for June to review conclusions and that a report would present all the input provided through the Shore Connection Committee’s meetings.

Culbertson asked the core committee members to select the terminology they preferred to use in evaluating the corridor concepts. They chose the following modification of Option #1 from the terminology handout:

- Consideration
- Set aside
- Unlikely/dismiss

The members discussed each option and decided on the tentative direction for some of the concepts as shown on the matrix attachment to this report, including a new Alternative B.2 under the 550 Corridor Options and a new Alternative D under the ACE/GSP Corridor grouping. Some options remained unresolved by the end of the meeting. The group members decided to identify them as unresolved, as shown on the matrix.

3. CLOSING

During closing comments, some asked for additional information - clarification of the feasibility of the options, costs, identification of improvements now in process. Many said the Committee should prioritize or rank the options, and some expressed that the decision-making or evaluation method used should not require unanimity. Finally, it was widely agreed that the Committee should look at whether each option would be a short range or long range initiative.

4. ACTION PLANS

Tony DeJohn to provide additional information on the options within each corridor concept.

5. NEXT MEETING

Date: Wednesday, June 24, 1998
Time: 7:00 p.m. - 9:00 p.m.
Location: Dennis Township Municipal Building

Report prepared by:

SJTP0

Chet Ambler, SJTP0

a:rt55min.#9
SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
ROUTE 55 TRANSPORTATION STUDY

*Shore Connection Committee*

**Meeting No. 8**
April 8, 1998

**AGENDA**

Objective: To continue to present the descriptions and information on options and obtain comments from the SCC regarding benefits and concerns of each alternative presented; refine criteria for evaluation of options; and evaluate alternatives for transportation improvements in the study corridor.

I. Welcome and Introductions
   - Approval of Meeting Report No. 7
   - Shore Connection Committee Update

II. Evaluation of Options
   - Description of each Option and Information
   - Group Discussion/Feedback on Alternatives

Break

III. Other Issues
   - Refine Criteria
   - The Next Step in the Process

IV. Summary and Close
   - Recap / Feedback
   - Action Items and Meeting Schedule
   - Closing
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<th>DESCRIPTION</th>
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<th>ENVIRONMENTAL IMPACTS</th>
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<td><strong>CORRIDORS</strong></td>
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| **49/50 Corridor**                | Corridor primarily serves north Cape May County. Improves traffic flow in the 49/50 corridor and to north Cape May County. Would also need improvements in the 47/347 corridor to serve the south Cape May County. | Minor/Spot improvements will not likely generate significant environmental impacts. Tuckahoe bypass is partially on new alignment. Impacts localized but will likely include wetlands and others. | A. Consider  
B. Consider  
C. Set aside |
| A. Rt. 55/49 interchange improvements |                                                             |                                                                                       |           |
| B. Minor capacity improvements along the corridor |                                                             |                                                                                       |           |
| C. Tuckahoe Bypass                |                                                             |                                                                                       |           |
| **47/347 Corridor**               | Corridor primarily serves south Cape May County. Improves flow in the corridor and to south Cape May County. Increases traffic on 47, 347,55, decreases on CR 548, 550. Slight impact on 49,50, and 9. | Third lane as a reversible lane and spot improvements will generally require minor widenings. Environmental impact will likely be localized and could be minimized. | A. Consider/Set Aside  
B. Consider/Set Aside  
C. Consider |
| A. Reversible lane on Rt. 47 from Rt. 55 to 47/347 split and reversible lane on Rt. 47 from 47/347 merge to Rt. 83, CR 657 |                                                             |                                                                                       |           |
| B. Key Intersection improvements  |                                                             |                                                                                       |           |
| **550 Corridor**                  | Corridor could serve both north and south Cape May County. Decreases Rt. 47/347 and 49/50 traffic, decreases local N/S movements. Increases Rt. 55 and southern GSP traffic. Sea Isle Blvd. extension has independent benefits. | Minor widening/improvements to existing CR 550 should not generate substantial impacts. New alignments section to CR 550 may have significant impacts. Sea Isle Blvd. segments will have localized impacts that could be minimized. | A. Unresolved  
B1. Consider  
B2. Consider  
C. Consider |
| A. Middle Arterial - Two lane major arterial using new alignment from Rt. 47 to CR 550. |                                                             |                                                                                       |           |
| B1. Improvements to CR 550        |                                                             |                                                                                       |           |
| **B2. RL 49 to CR 557 to CR 550 improvements** |                                                             |                                                                                       |           |
| C. Sea Isle Blvd. Extension       |                                                             |                                                                                       |           |
| **ACE/GSP Corridor**              | ACE/GSP Interchange area is a problem area. GSP Interchanges have significant impact. Mainline capacity eases north/south corridor congestion, can attract traffic. | Environmental impacts may be an issue.                                                                 | A. Consider  
B. Consider  
C. Consider  
D. Consider |
| A. Improve ACE/GSP Interchange    |                                                             |                                                                                       |           |
| B. GSP Interchanges Improvements  |                                                             |                                                                                       |           |
| C. GSP Mainline Improvements      |                                                             |                                                                                       |           |
| D. ACE Mainline Improvements      |                                                             |                                                                                       |           |
| **TDM/ITS**                       |                                                             |                                                                                       |           |
| **Program Elements:**             |                                                             |                                                                                       |           |
| A. Corridorwide traffic monitoring| Individual elements have minor impact                        | Minimal, if any                                                                         | A. Consider  
B. Consider  
C. Consider  
D. Consider  
E. Consider  
F. Consider |
| B. Managed Corridor strategies    | A. N/A - Serves as Input to manage corridor                  |                                                                                       |           |
| C. Signage program                | B. ++ Maximize available capacity                           |                                                                                       |           |
| D. Motorist information/VMS       | C. + Efficient route utilization                            |                                                                                       |           |
| E. Incident management/ESP        | D. + Respond to changing conditions                         |                                                                                       |           |
| F. Demand Management              | E. ++ Minimize capacity loss                                |                                                                                       |           |
| **FREeway**                       |                                                             |                                                                                       |           |
| **Rt. 55 Freeway Completion**     | Provides significant new capacity in moving traffic east/west. GSP capacity will be strained to serve new flows. | Extreme environmental problems. May prove costly to mitigate problems and will be difficult to permit. | Unresolved |
| New four lane freeway from existing terminus to GSP |                                                             |                                                                                       |           |
| **Bypasses**                      | Bypasses improve localized flow. If built together will help serve the south Cape May market. Reduce traffic on more northern routes, such as 49/50. | Significant environmental impacts including substantial wetlands impacts. | Unresolved |
| Port Elizabeth & Dennisville      |                                                             |                                                                                       |           |
| **RAIL**                          | Low demand potential - little impact or relief to regional roadways. Railroad more of an attraction than an alternative | Upgrading system or providing service within existing ROWs may result in significant environmental impacts | Unresolved |
| **Service between Milville and Cape May** |                                                             |                                                                                       |           |
| **OTHER**                         |                                                             |                                                                                       |           |

* As tentatively determined by the Committee on May 20, 1998.  
NOTE: Changes since May 20, 1998 handout shown in bold.
Meeting No. 8
April 8, 1998

AGENDA

Objective: To continue to present the descriptions and information on options and obtain comments from the SCC regarding benefits and concerns of each alternative presented; refine criteria for evaluation of options; and evaluate alternatives for transportation improvements in the study corridor.

I. Welcome and Introductions
   • Approval of Meeting Report No. 7
   • Shore Connection Committee Update

II. Evaluation of Options
   • Description of each Option and Information
   • Group Discussion/Feedback on Alternatives

Break

III. Other Issues
   • Refine Criteria
   • The Next Step in the Process

IV. Summary and Close
   • Recap / Feedback
   • Action Items and Meeting Schedule
   • Closing
South Jersey Transportation Planning Organization
Route 55 Transportation Study

SHORE CONNECTION COMMITTEE

Meeting No. 8 Report

DATE: April 8, 1998
TIME: 7:00 p.m. - 9:00 p.m.
LOCATION: Maurice River Township Elementary School

ATTENDEES:

SCC Members:
The Honorable Dan Beyel
Don Kirchhoffer
Jay Laubengeyer
Hal Noon
Mayor James Pickering, Jr.
Mayor William Pikolycky
Mayor Mike Voll

SCC Alternates:
Tim Brill
Harry Ciabatoni
Lynda Pagliugh
James Smith

Invited Guests:
Chuck Horner
Berwyn Kirby
Ken Koschek
Bob Patterson

Project Study Team:
Dave Cox
Tim Chelius
Martine Culbertson
Tony DeJohn
Chet Ambler
Jim Parry

REPRESENTING:

Cape May County
NJ Conservation Foundation
The Nature Conservancy
Maurice River Township
Dennis Township
Woodbine Borough
Mayors of Cape May County

Cumberland County
Woodbine Borough
South Jersey Transportation Authority
Cape May County

Pinelands Commission
Citizens United
NJDEP - Office of Program Coordination
Cape May County Chamber of Commerce

NJDOT
SJTPO
M.A. Culbertson
Parsons Brinckerhoff
SJTPO
SJTPO
Visitors:
Bob & Marge Demyan
Leslie M. Ficaggia
Jean Jones
Donna L. Morley
John T. Turarc
Douglas Turarc
Fred A. Winkler

Dennisville
Port Elizabeth
Evening News
Daily Journal
Ocean View
Ocean View
Winchester & Western Railroad

1. PURPOSE OF MEETING

Objective

To continue to present the descriptions and information on options and obtain comments from the SCC regarding benefits and concerns of each alternative presented; refine criteria for evaluation of options; and evaluate alternatives for transportation improvements in the study corridor. (Agenda attached).

2. MEETING REPORT

Welcome and Introductions

Martine Culbertson opened the meeting with a group exercise. Tim Chelius then welcomed everyone and all present introduced themselves. On motion, the Meeting No. 7 Report was approved as distributed. Culbertson then led the group in updating their Handbooks, including the insertion of railroad history information provided by Fred Winkler.

Evaluation of Options

Tony DeJohn distributed a revised handout on the alternatives and continued the review of the alternatives begun at the last meeting. Alternatives #7-12 were extensively discussed by the Committee. Questions and comments were raised regarding regulations and permitting which were listed on newsprint as "Other Issues". The group agreed that further discussion on certain alternatives and issues was needed. (See attached list of comments).

Closing Comments

At Martine Culbertson’s request, members commented on the results of the meeting. Several observed that the Committee was now getting into the difficulties of finding a generally acceptable solution. Some expressed frustration at the lack of consensus, while others felt the Committee was still making good progress.
3. NEXT MEETING

Date: Wednesday, May 20, 1998
Time: 7:00 p.m. - 9:00 p.m.
Location: Dennis Township Municipal Building (directions available if needed)

Note: Different date than discussed on April 8.

Report prepared by:

SJTPO

[Signature]
Chet Ambler, SJTPO

a:rt55min.#8
COMMENTS ON ALTERNATIVES

Alternative 7
- Concern for residential area and impacts
- Historic property impacts
- Concern for "lane design" - the impact of additional capacity, not a 4 lane highway
- Look at Timed Signals

Alternative 8
- Same as Alternative 7, however less impact directly to residential
- Look at Timing Cycles

Alternative 9
- Design overpass for this intersection for 347
- Balance between roadways with the design - grade separation interchange or at grade intersection
- Could there be an alternative to Rt. 55 to the left through Millville using signage

Alternative 10 / 11 (Port Elizabeth Bypass, Dennisville Bypass)
- Use and support the use of existing road system is a better option
- Severe regulatory protection in this area
- If it can't be built without years of delay, it would be preferable to pursue other more viable options
- Regardless of regulations, impacts would be severe to the locality and environmental sensitive land
- Endangered species of snail exists only in this habitat
- Alternative 11 doesn't have Pinelands, but does have wetlands

FURTHER DISCUSSION NEEDED
Alternative 12

- Can the lanes be reduced to lessen the impact / right-of-way
- Concern that this would change the attraction of South Jersey
- Parkway issue
- Very (Extremely) difficult to permit given Pinelands regulations
- Negative to severe community impacts
- Not supported by local Townships

FURTHER DISCUSSION NEEDED

OTHER ISSUES

- Could legislation be created to impact the regulations
- Cannot remove 30 years of environmental protection laws at the Federal level
- Insurance liability

FURTHER DISCUSSION NEEDED
SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
ROUTE 55 TRANSPORTATION STUDY

Shore Connection Committee

Meeting No. 7
March 11, 1998

AGENDA

Objective: Present description and information on each option and obtain comments from SCC regarding benefits and concerns of each alternative; refine criteria for evaluation of options; and evaluate alternatives for transportation improvements in the study corridor.

I. Welcome and Introductions
   • Approval of Meeting Report No. 6
   • Shore Connection Committee Update

II. Evaluation of Options
   • Description of each Option and Information
   • Group Discussion/Feedback on Alternatives

Break

III. Other Issues
   • Refine Criteria
   • The Next Step in the Process

IV. Summary and Close
   • Recap / Feedback
   • Action Items and Meeting Schedule
   • Closing
South Jersey Transportation Planning Organization
Route 55 Transportation Study

SHORE CONNECTION COMMITTEE

Meeting No. 7 Report

DATE: March 11, 1998
TIME: 7:00 p.m. - 9:00 p.m.
LOCATION: Maurice River Township Elementary School

ATTENDEES:

SCC Members:
The Honorable Dan Beyel
The Honorable Douglas Fisher
Don Kirchhofer
Jay Laubengeyer
Roy Little
Hal Noon
Mayor James Pickering, Jr.
Mayor William Pikolycky
Chairman Douglas Rinear

REPRESENTING:
Cape May County
Cumberland County
NJ Conservation Foundation
The Nature Conservancy
NJ Highway Authority
Maurice River Township
Dennis Township
Woodbine Borough
Mayors of Cumberland County

SCC Alternates:
Harry Ciabatoni
John Hollington
Stephen Kehs
James Smith
Gloria VanDuyne

Woodbine Borough
City of Millville
Cumberland County
Cape May County
The Nature Conservancy

Invited Guests:
The Honorable Nicholas Asselta
Gordon Dahl
Chuck Horner
Berwyn Kirby
Ken Koschek
Bob Patterson
Brian Tomlin

NJ Assemblyman
SJ Economic Development Council
Pinelands Commission
Citizens United
NJDEP - Department of Planning
Cape May County Chamber of Commerce
Millville Chamber of Commerce
Project Study Team:

Dave Cox  NJDOT
Tim Chelius  SJTPO
Martine Culbertson  M.A. Culbertson
Tony DeJohn  Parsons Brinckerhoff
Chet Ambler  SJTPO
Jim Parry  SJTPO

Visitors:

Chris Betterelli  Legislative Aide, Assemblyman Assetta
Leslie M. Ficaggia  Port Elizabeth
Dick Gardella  Cumberland County
Barbara Hulls  Port Elizabeth
Jean Jones  Evening News
Joseph L. Lomax  Cape May County Chamber of Commerce
Donna L. Morley  Daily Journal
John T. Turarc  Ocean View
Douglas Turarc  Ocean View
Fred A. Winkler  Winchester & Western Railroad

1. PURPOSE OF MEETING

Objective

Present description and information on each option and obtain comments from SCC regarding benefits and concerns of each alternative; refine criteria for evaluation of options; and evaluate alternatives for transportation improvements in the study corridor (Agenda attached).

2. MEETING REPORT

Welcome and Introductions

Martine Culbertson opened the meeting with a collaborative problem-solving exercise. After a welcome from Tim Chelius, Martine reviewed the results of the previous meeting and the agenda for this one. All present then introduced themselves.

Revision to Meeting No. 6 Report

Culbertson asked for comments on the Meeting No. 6 Report. Steve Keis clarified that the northern route referred to under Options was Weatherby Road and the southern was Hunters Mill Road. With that correction, the report was accepted.
Evaluation of Options

Tony DeJohn discussed the strengths and weaknesses of the South Jersey Highway Model, which was used to analyze the alternatives. He also explained that environmental constraints were reviewed based on the information in the original Route 55 report.

DeJohn then reviewed the draft analysis of traffic impacts, environmental/historical constraints, and buildability for Alternatives 1-6 and 18 as listed in the meeting handout. The handout is a draft document and DeJohn asked that everyone write draft at the top of their copy. In response to his request for feedback on whether the alternatives were effective, the group briefly discussed the pros and cons for each of these alternatives (see Attachment).

It was the consensus that Alternative 1 by itself would not meet the project needs, but may be worth consideration in combination with other improvement options. The Committee also decided that Alternatives 5 and 6 should be dismissed because they did not resolve the traffic concerns and address the Committee's goals. To end on time, review of the remaining alternatives was postponed to the next meeting.

Closing Comments

Martine Culbertson asked for comments on the results of the meeting and the need for more meetings from all participants. It was generally agreed that the Committee should hold as many more meetings as needed to develop the refined list of alternatives.

Several members spoke positively on the detailed information provided at this meeting. Others expressed concern with the large number of alternatives now under discussion and the importance of a regional perspective. Several members asked for information on costs.

3. ACTION PLANS

- Committee members review information on Alternatives in the meeting handout.
- Tony DeJohn to provide maps of the alternatives for the SCC Handbooks.

4. NEXT MEETING

Date: Wednesday, April 8, 1998
Time: 7:00 p.m. - 9:00 p.m.
Location: Maurice River Township Elementary School

Report prepared by:

SJTPO

Chet Ambler, SJTPO

a:rt55min.#7
AGENDA

Objective: Present description and information on each option and obtain comments from SCC regarding benefits and concerns of each alternative; refine criteria for evaluation of options; and evaluate alternatives for transportation improvements in the study corridor.

I. Welcome and Introductions
   - Approval of Meeting Report No. 6
   - Shore Connection Committee Update

II. Evaluation of Options
   - Description of each Option and Information
   - Group Discussion/Feedback on Alternatives

Break

III. Other Issues
   - Refine Criteria
   - The Next Step in the Process

IV. Summary and Close
   - Recap/Feedback
   - Action Items and Meeting Schedule
   - Closing
COMMENTS ON ALTERNATIVES

Alternative 1

- Doable
- For the investment dollars, could it take a worthwhile percentage of the traffic off the congested routes
- Possible complimentary solution
- Millville to Woodbine
- Concern for whether people would take the train

Alternative 2 / Alternative 3 / Alternative 18

- Alternative 3 makes most sense from traffic standpoint
- Use of existing roadways
- Less impact by using railways, best option for investment dollars
- Mainly impacts Dennis Township community
- To the extent that it is an improvement, there is concern about the Pinelands regulations of (threshold) permitted use given an existing versus wooded right of way
- Two lanes into area could benefit local access and development

Alternative 4

- Dennis Township concern of right-of-way impacts
- Improvements on the Parkway
- Could help traffic concerns in that area, there are existing problems
- Concern regarding difficulties in previous studies of this area
- Need to re-examine this area and potential benefits versus impacts
- This improvement needs to happen if Alternative 2, 3 or 18 go forward

Alternative 5

- Parkway tie in at higher costs and difficult to achieve from design standpoint (better to tie in using Alternative 4)
- By itself it doesn't improve traffic situation

SCC agree to DISMISS

Alternative 6
• Intersection improvements are in program.
• Parkway studying improvements to ramps
SCC agree to DISMISS

Alternative 7 / Alternative 8 / Alternative 9
• Looking at intersections
• Looking at adding capacity at intersections
STAY TUNED - for further information and discussion
Meeting No. 6
January 21, 1998

AGENDA

Objective: Refine options for transportation improvements in the study corridor; confirm the list of needs and criteria, defining safety, quality of life and economic development; and determine public outreach.

I. Welcome and Introductions
   • Approval of Meeting Report No. 5
   • Shore Connection Committee Revisions

II. Options Discussion
   • Refine the Options List - Short and Long Term
     - Benefits and Concerns
   • Review Needs and Criteria

Break

III. Other Issues
   • Public Outreach
   • The Next Step in the Process

IV. Summary and Close
   • Recap / Feedback
   • Action Items and Meeting Schedule
   • Closing
AGENDA

Objective: To identify and discuss the traffic issues of the Route 55 transportation corridor in the study area; to specifically define the needs beyond traffic congestion such as safety, quality of life, and economic development issues; and to brainstorm options for transportation improvements.

I. Welcome and Introductions
   - Approval of Meeting Report No. 4
   - Shore Connection Committee Revisions

II. Traffic Issues
   - Group Maps and Discussion
   - Traffic Trends and Patterns

Break

III. Other Issues
   - Summarize Needs
   - Brainstorm Options
   - Public Outreach

V. Summary and Close
   - Recap / Feedback
   - Future Plans - Meeting Schedule for '98
   - Closing
Meeting No. 5 Report

DATE: December 3, 1997
TIME: 7:00 p.m. - 9:00 p.m.
LOCATION: Dennis Township Municipal Building

ATTENDEES:

SCC Members:
The Honorable Dan Beyel
The Honorable Douglas Fisher
Don Kirchhoff
Jay Laubeneyer
Vince Leonetti
Roy Little
Hal Noon
Mayor William Pikolycky
Mayor James Quinn
Mayor Douglas Rainear

SCC Alternates:
Harry Ciabatoni
Stephen Kehs
Don Mattiford
Lynda Pagliughi
James Smith
Gloria VanDuyne

Invited Guests:
The Honorable Nicholas Asselta
Gordon Dahl
Chuck Horner
Ken Koschek
Bob Patterson
Brian Tomlin

REPRESENTING:

Cape May County
Cumberland County
NJ Conservation Foundation
The Nature Conservancy
SJ Transportation Authority
NJ Highway Authority
Maurice River Township
Woodbine Borough
Millville City
Mayors of Cumberland County
Woodbine Borough
Cumberland County
Dennis Township
SJ Transportation Authority
Cape May County
The Nature Conservancy
NJ Assemblyman
SJ Economic Development District
Pinelands Commission
NJDEP - Department of Planning
Cape May County Chamber of Commerce
Millville Chamber of Commerce

SJTP0
South Jersey Transportation Planning Organization
Project Study Team:

Dave Cox  
Tim Chelius  
Martine Culbertson  
Tony DeJohn  

NJDOT  
SJTPO  
M.A. Culbertson  
Parsons Brinckerhoff

Visitors:

Chet Ambler  
Richard Gardella  
Jim Parry  

SJTPO  
Cumberland County  
SJTPO

1. PURPOSE OF MEETING

Objective

To identify and discuss the traffic issues of the Route 55 transportation corridor in the study area; to specifically define the needs beyond traffic congestion such as safety, quality of life, and economic development issues; and to brainstorm options for transportation improvements. (Agenda attached).

2. MEETING REPORT

Introduction

Tim Chelius, SJTPO Executive Director, welcomed everyone and announced that the presidents of the two Counties' conferences of mayors for Cumberland County and Cape May County have been added to the Committee. Martine Culbertson, facilitator, distributed pages with the membership revisions and a replacement Structure page. Chelius then asked for any comments on the report for Meeting No. 4. Given no comments, the report was approved as distributed.

At this point, all present introduced themselves. Culbertson next reviewed the meeting agenda and the group agreements on operating procedures.

Traffic Issues

The Committee split into groups to review the enlarged copies of the corridor map. When the full Committee reassembled, a spokesman for each group reported on the problem locations they had marked. The presentations indicated that the problem is on the weekends and that there was wide agreement on the choke points. Tony DeJohn of Parsons Brinckerhoff presented a map which combined the information from the group maps as they were marked at the last meeting. (Copies of an updated composite map will be provided).
DeJohn discussed his analysis of the traffic trends and patterns, which covered yearly, seasonal, and weekly variations. (A graph highlighting this information by route is attached). DeJohn emphasized that certain improvements have helped so that the overall level of service is the same despite the increased volume. However, the capacity of the improvements is being absorbed and will run out. He noted that recreational travel is by nature congested but that a representative of Skycomp Inc., which had done aerial traffic surveys of the region, said this corridor had the worst backup ever recorded. Intelligent Transportation System technologies may assist in relieving some traffic, but probably can not solve the problem. The Committee briefly discussed the possibility of achieving short term improvements using variable message signs and highway advisory radio.

Other Issues

Martine Culbertson then assisted the Committee in developing a list of needs**, and a list of criteria***, (see attachments).

**(defines the problems to be addressed)
*** (used to evaluate options later)

Summary and Close

In addressing the future meeting schedule, Martine Culbertson indicated that if April 1998 is the target for achieving a consensus on the preferred improvements it was suggested that there be a tentative meeting schedule of January 21, February 25 and March 25 for 1998. After arrangements for the next meeting were established, each member of the group offered their comments on the meeting. The consensus was that good progress was made. One significant question raised was "what's next after we have consensus on recommended options for improvements?"

3. ACTION PLANS

▼ Committee Members:

► Think about future public outreach arrangements needed for this study.
► Submit any other improvement options to Chelius, SJTPO.

▼ Tony DeJohn

► Prepare map of some of the options identified by the Committee.
► Provide map showing the historic rights-of-way, and more local detail.

▼ Dave Cox

► Provide information on options identified in previous reports.
4. NEXT MEETING

Date: Wednesday, January 21, 1998
Time: 7:00 p.m. - 9:00 p.m.
Location: Dennis Township Municipal Building

[Note: Different location than announced on December 3.]

Report prepared by:

SJTPO

Chet Ambler, SJTPO

a:rt55min.#5
NEEDS

- Insufficient capacity for seasonal travelers (tourists - weekends)
- Traffic congestion
- Lack of emergency vehicle access
- Vehicular accidents - due to congestion
- Emergency evacuation - flooding
- Quality of Life - Maurice River Township
- Opportunity for improved local access
- Managed growth and development
CRITERIA

- Environmental constraints - destruction of wetlands
- Quality of Life - Community Cohesion for Maurice River Township & Dennis Township
- Historic Preservation
- Growth patterns / economic development
- Impact on local access and secondary roads
Attachment to Meeting No. 5 Report

OPTIONS

- Trains: Millville to Tuckahoe (10 mi. @ $10 million) - connect to Cape May Seashore Line; stations at Millville, Woodbine, etc.

- Complete Rt. 55: 4 lane to Garden State Parkway - toll

- Demand management

- Rts. 49 & 50 connection to Garden State Parkway: jughandle and signal

- Northern route: Rt. 347 to Hunter's Mill Road to railroad Right of Way; CR 605 to 550 through Woodbine to Sea Isle Blvd. (2 lanes like Rt. 347)

- Northern route with earlier take off: Weatherby Rd. or Rt. 49

- Sea Isle Blvd. extension to Rt. 550

- Atlantic City Expressway & Garden State Parkway interchange capacity improvement

- Rt. 83 extension to Garden State Parkway

- Improve curves on existing roads - NJ 47

- Bypasses of Port Elizabeth, Dennisville

- HAR/ITS/VMS (Highway Advisory Radio/Intelligent Transportation Systems/Variable Message Signs)

- Reversible 3rd lane

- Use existing ROW's
SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
ROUTE 55 TRANSPORTATION STUDY

Shore Connection Committee

Meeting No. 4
November 5, 1997

AGENDA

Objective: To identify and understand the transportation needs and issues of each of the members of the Shore Connection Committee and who they represent. To gain a clear understanding of the specific transportation needs in the study area of the Route 55 transportation corridor and to define the problem from a regional basis.

I. Welcome and Introductions
   • Approval of Meeting Report No. 3
   • Shore Connection Committee Agreements

II. Project Issues
   • Needs and Issues of each SCC Representative
   • Restate Needs and Issues as a Regional Definition

Break

III. The Project Status
   • Technical Update
   • Project Information

IV. Alternatives
   • Brainstorming Options

V. Summary and Close
   • Recap / Feedback
   • Future Plans - Meeting Schedule
   • Closing
South Jersey Transportation Planning Organization
Route 55 Transportation Study
Shore Connection Committee

Meeting No. 4 Report

DATE: November 5, 1997
TIME: 7:00 p.m. - 9:00 p.m.
LOCATION: Dennis Township Municipal Building

ATTENDEES: REPRESENTING:

SCC Members:
The Honorable Dan Beyel Cape May County
The Honorable Douglas Fisher Cumberland County
Don Kirchhoffer NJ Conservation Foundation
Jay Laubengeyer The Nature Conservancy
Vince Leonetti SJ Transportation Authority
Roy Little NJ Highway Authority
Mayor James Pickering Dennis Township
Mayor William Pikolycky Woodbine Borough

SCC Alternates:
Harry Ciabatoni Woodbine Borough
Hal Noon Maurice River Township
John Hollings Millville City
Stephen Kehs Cumberland County
James Smith Cape May County
Gloria VanDuyne The Nature Conservancy

Invited Guests:
Peter Dunne New Jersey Audubon Society
Glenn Ewan Citizens United
Chuck Horner Pinelands Commission
George Henry Cape May County Chamber of Commerce
Berwin Kirby Citizens United
Ken Koscheck NJDEP - Department of Planning
Brian Tomlin Millville Chamber of Commerce
Project Study Team:

Dave Cox  
Tim Chelius  
Martine Culbertson  
Tony DeJohn  

NJDOT  
SJTPO  
M.A. Culbertson  
Parsons Brinckerhoff

Visitors:

Richard Gardella  
Jim Parry  
Chet Ambler  

Cumberland County  
SJTPO  
SJTPO

1. PURPOSE OF MEETING

Objective

To identify and understand the transportation needs and issues of each of the members of the Shore Connection Committee and who they represent. To gain a clear understanding of the specific transportation needs in the study area of the Route 55 transportation corridor and to define the problem from a regional basis. Agenda attached.

2. MEETING REPORT

Introduction

Tim Chelius, SJTPO Executive Director welcomed everyone and asked for any corrections to the report for Meeting No. 3. On motion, the report was approved as distributed.

Martine Culbertson, facilitator, distributed a revised list of Committee members. She then reviewed the Mission Statement, Goals, and Agreements on committee operating procedures that were prepared based on Meeting No. 3 discussion. After Culbertson outlined the meeting agenda, all present introduced themselves.

Project Issues

Each member and guest present discussed the needs and issues as perceived by the group they represent.

Culbertson next led the group in beginning to restate the needs and issues from a regional perspective. All agreed that there is a problem that needs to be solved. Members identified several specific locations of traffic back-ups, accidents, and speeding.

Project Status

Tony DeJohn of Parsons Brinckerhoff briefly outlined the work to gather and analyze traffic data. Specific traffic data will be provided at the next meeting, based upon the areas identified by the Committee.
Alternatives

(Brainstorming of options was carried over to the next meeting).

Summary and Close

Culbertson recapped what was accomplished at the meeting, requested that members identify problem locations on maps, and announced the next meeting. Members offered their comments on the meeting, then divided into groups to mark up enlarged copies of the corridor map. Reduced copies of the corridor map were distributed to members for their handbooks.

3. ACTION PLANS

▼ Committee Members - continue to mark problems on the corridor map and transmit to Tony DeJohn before the next meeting, or bring them to the next meeting.

▼ Tim Chelius - contact the State legislators to advise them of the Committee’s interest in their participation.

4. NEXT MEETING

Date:       Wednesday, December 3, 1997
Time:       7:00 p.m.
Location:   Dennis Township Municipal Building

Report prepared by:

SJTPO

[Signature]
Chet Ambler, SJTPO

a:rt55min.#4
SHORE CONNECTION COMMITTEE
November 5, 1997

Attachment to Meeting No. 4 Report

PROBLEMS AND ISSUES

- Back up southbound from Rts. 47/670 intersection, (Friday and Saturday)
- East of Dennisville (Sunday)
- Southbound from Port Elizabeth to Millville City Line
- Rt. 49 east of Rt. 55
- Quality of flow and increasing demand
- County roads in Dennis Township near Rt. 9 and Garden State Parkway, e.g., S. Seaville
- Promoting tourism, but with safe, sensible, and sensitive improvements, i.e., a win-win situation
- Needs of people are paramount
- Look for viable alternatives, e.g., railroad rights-of-way, eventual rail service, especially from Millville via Cape May Seashore Line
- Support alternative strategies, not intrusive and destructive solutions
- Barrier islands near saturation
- Secondary impacts need to be identified
- Look at traffic diffusion
- Solution should be for the whole county
- Get innovative (21st Century) solutions
- We're not settling on one solution
- Use of existing rights of way should be analyzed
- Need a way for shore visitors to travel quickly and effectively and enhance trip
- Rest stops
- Balance local and regional needs with environmental constraints
- Preserve environmental resources and rural community characteristics
- A freeway would divide community and cut access
- The corridor fails 3% of the time
- Congestion cuts access, affects emergency access and encourages traffic to filter through inappropriate areas
- Route 47 residents favor a solution
- Freeway alternative not likely to solve all economic development needs or be the panacea
- The freeway would have unintended consequences to visitors and bedroom communities
- Must recognize growth issues and the environment
- Costs and benefits are borne by different parties
- Recreational travel
- Focus on the problem and understand the exact causes
- Examine a wide range of alternatives
- Compatibility and consistency with Garden State Parkway options
- Local and personal options
- Tourism drives Cape May County economy, and Dennis Township welcomes and supports it
- Traffic impacts to quality of life
- Need a short-term fix for peak-period congestion (15-25 weekends per year)
AGENDA

Objective: To define the purpose, structure and goals of the Shore Connection Committee and agree on meeting procedures and schedule; to review the project history and current status; to identify and understand the transportation needs and issues within the study area.

I. Welcome and Introductions
   • Project Overview

II. Shore Connection Committee
   • Purpose and Goals
   • Structure and Operating Procedures
   • Participants Roles

III. The Project Status
   • Past and Current Improvement Projects
   • Project Information and Process

Break

IV. Project Issues
   • Brainstorming Ideas

V. Summary and Close
   • Recap / Feedback
   • Future Plans - Meeting Schedule
   • Closing
SHORE CONNECTION WORKING GROUP
Organizational Meeting

Wednesday, January 29, 1997 - 7:00 P.M.
Dennis Township Municipal Building

SUMMARY

The South Jersey Transportation Planning Organization hosted this meeting to establish a process for advancing a solution or solutions for travel between the current terminus of Route 55 and shore destinations. Attendance included area elected officials, planners, and engineers; representatives of the New Jersey Department of Transportation (NJDOT) and other agencies; and interested citizens (attendance list attached). Points of general agreement at the meeting were:

1. All interests should be involved throughout the process, including environmental interests and the general public. The New Jersey Department of Environmental Protection should be involved and affected Federal agencies, including Fish and Wildlife and Interior, should participate at key meetings. Groups involved should also include municipal environmental commissions and the Dennis Homeowners Association.

2. The process will start with a needs assessment, then determine what can and can’t be done, and generate a consensus on the alternative solution(s) to be implemented. It should not presume that extending the Route 55 Freeway will be the solution implemented.

3. The Group will utilize the services of a professional facilitator and a project manager funded by NJDOT. The NJDOT will also provide the consultant that performed the previous study to answer questions about that study, will fund a new consultant to address new questions, and will assign technical staff to assist on the project.

4. All involved should start off with an understanding of the prior study. The next meeting will therefore include a presentation on the Summary Report for that study. Also, copies will be provided to area libraries.

5. Other early activities will include identifying questions on the prior study, as well as gaps in its scope.

6. A simple two-level organizational structure will be used with 1) the full Working Group including elected officials, and 2) a supportive Technical Subcommittee to oversee investigation of technical questions. Additional committees will be avoided to prevent overlapping or uncoordinated efforts.
RESPONSE TO QUESTION RAISED BY THE SHORE CONNECTION COMMITTEE
AT THE MEETING HELD IN DENNIS TOWNSHIP ON APRIL 29, 1997

A series of questions were asked at the meeting. The Department is providing preliminary responses based on current information. Several questions have been grouped to facilitate response.

Questions were asked regarding the **travel forecasting process** including:
- What were the South Jersey Model results that fed into the Route 55 study
- Can the demand for a tolled Route 55 facility be modeled
- What impacts would a Route 55 facility have on Route 47 and the GSP
- How would a Route 55 facility impact travel time from Delaware River crossings to the southern part of Cape May County
- Is there a need to update the data used in the study?

Response:
There is a updated version of the South Jersey Travel Demand Model that was utilized to produce the Regional Transportation Plan. That model contained refinements made to the South Jersey model during recent years and utilized updated demographic forecasts. The model has the capability to assess the impact of a tolled facility. The model will be used to update the travel forecasting process and to answer the above questions.

Questions were asked regarding the definition of **level of service** (LOS) including:
- Better, layman's terms for definition of LOS
- Better representation of travel flow as it relates to LOS
- The need to identify what are acceptable/unacceptable LOS for this situation
- The need to qualify LOS below acceptable levels based on time and day
- The need to compare corridor LOS to other recreational corridors.

Response:
A better, understandable, definition of LOS and the differences in traffic flow represented by LOS will be prepared and distributed to the group. LOS data from other recreational corridors will be gathered. The Committee will need to develop a position on what LOS is acceptable / unacceptable for this corridor based on time and day. The assessment will include a look at both the levels of congestion and the exposure to the congested conditions. NJDOT/Consultant will assist in this effort.

Questions were asked regarding **travel demand management** strategies (TDM) including:
- The use of Smart Highway technologies (ITS)
- The use of directional signage
- The adjustment of shore rental periods

Response:
There has been some evaluation of the range of effectiveness of ITS and TDM measures on recreational facilities. There has also been limited use of ITS components in recent years relating to NJ shore travel, and a New Jersey Recreational Travel Committee exists. We will utilize these tools to gage the range of impacts that can be associated with such measures. We will review the State's draft ITS Master Plan to assess what strategies were viewed as applicable to this corridor. We will assess the impact that a package of TDM improvements may have on travel conditions as part of our technical work effort.
Questions were asked on the assessment of **air and water quality** impacts

Response:
Detailed air quality, water, and other environmental assessments would not take place at this stage. The reason is that detailed calculations are difficult to do at a systems level of analysis where final design parameters have not been set. If any project moves forward, the environmental issues would be detailed and assessed as part of the permitting process.

Question was asked on the system needs for summer weekend **evacuation**

Response:
There is a evacuation plan prepared to address summer weekend needs. Our recommendations cannot lessen the ability to implement that plan. We will provide an overview of proposed improvement’s ability to enable/enhance evacuation process as part of our technical work effort.

Questions were asked regarding the **impact** of a Route 55 facility on:

- **land use** changes
- **travel demand** changes
- **economic benefits**

Response:
The current travel demand model for South Jersey doesn’t alter overall travel demand and land use based on highway system improvements, and cannot be used to answer these questions. Techniques to provide insight into these issues will be explored as part of our technical work effort.

Question was asked on how long it would take to **permit and build** a Route 55 facility

Response:
Based on a well supported effort, it is estimated the project could be designed and permitted in about 3 years, with construction taking an additional 3 years. It should be noted, that the permitting process will be difficult, and might not result in an approval. The permitting process could add several years to the schedule.

Question was asked on the **schedule** for decisions from this effort

Response:
The Shore Connection Committee will drive the schedule for this effort. We anticipate a 6 to 9 month process to perform the work outlined to date.

Questions were asked on the **alternatives** including:
- What is the universe of solutions
- What are the practical solutions
- What about selected spot improvements verses a full Route 55 facility
- What about specific improvements to Routes 47, 49, and 347?

Response:
These issues will need to be addressed by the Shore Connection Committee.

Question was asked on the **public outreach** program

Response:
The public outreach process, including the need to survey residents, needs to be defined by the Shore Connection Committee and the SJTPO. The NJDOT is prepared to support the public outreach effort.
SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
ROUTE 55 TRANSPORTATION STUDY

SHORE CONNECTION COMMITTEE
Meeting No. 3 Report

DATE: September 17, 1997
TIME: 7:00 p.m. - 9:00 p.m.
LOCATION: Maurice River Township Municipal Building

ATTENDEES:

SCC Members:

Mayor John Feltes, Jr.
The Honorable Douglas Fisher
Jay Laubengeyer
Roy Little
Mayor James Pickering
Mayor William Pikolycky
Mayor James Quinn
James Smith

Invited Guests:

Gordon Dahl
Chuck Horner
Robert Patterson
Brian Tomlin

Project Study Team:

Dave Cox
Tim Chelius
Martine Culbertson
Tony DeJohn
Chet Ambler

REPRESENTING:

Maurice River Township
Cumberland County
The Nature Conservancy
NJ Highway Authority
Dennis Township
Woodbine Borough
Millville City
Cape May County

SJ Economic Development District
Pinelands Commission
Cape May County Chamber of Commerce
Millville Chamber of Commerce

NJDOT
SJTPO
M.A. Culbertson
Parsons Brinckerhoff
SJTPO
Visitors:
Tim Brill                      Cumberland County
Richard Gardella              Cumberland County
Leslie M. Ficaglia            Maurice River Township Planning Board
Dale M. Foster                Cape May County
Charles Haig                  Oceanview
John C. Hollington            City of Millville
Jean Jones                    Bridgeton News

1. PURPOSE OF MEETING

To define the purpose, structure and goals of the Shore Connection Committee and agree on meeting procedures and schedule; to review the project history and current status; to identify and understand the transportation needs and issues within the study area. Agenda attached.

2. MEETING REPORT

Tim Chelius, SJTPO Executive Director welcomed all and reported that the Committee now has several professionals available to support its mission of reviewing the alternatives and reaching consensus on how to solve the traffic problem. All present introduced themselves.

Martine Culbertson, facilitator, emphasized the need for a Committee structure with representation from all interests that will allow it to become a collaborative problem solver.

Committee Purpose and Goals

The group discussed its purposes and Culbertson distributed a prepared Purpose and Goals sheet for the Committee to review.

Committee Structure and Operating Procedures

Culbertson stressed that each government and interest group would have a primary representative and an alternate. The list was distributed to be inserted in members handbooks, which are to be shared. Visitors to the Committee meetings are welcome, but their level of participation is up to the Committee.

Culbertson conducted a listening exercise and distributed a sheet of listening do’s and don’ts. The group then discussed agreements it should have on operating procedures.

Participant Roles

Culbertson pointed out a sheet on roles in the handbook for consideration and discussed her role in making the Committee work and the available support from the study team. She then conducted an exercise showing how a group can reach a consensus.
Project Status

Dave Cox of NJDOT presented the responses to the questions raised at the last meeting of the Committee and reviewed a map of safety and operating improvements already under development in the 55/47 Corridor.

Tony DeJohn of Parsons Brinckerhoff outlined the technical study process which will help define the problem and solutions. The results of aerial and machine traffic counts during Summer 1997 were also presented.

Recap/Conclusions

The Committee is to review all information distributed, identify needed modifications, and call with any questions.

The Committee structure is still under development.

The handbook is public information, but is subject to revision.

The viability of Route 55 extension should be clarified.

State Legislators and the Governor should be contacted to assure consistency of direction and the empowerment of the Committee.

Future meeting locations will alternate between Dennis and Maurice River Townships.

Meetings will be about every six weeks. The next two meetings will be during the last week of October and the first week of December.

At the next meeting, each Committee member will present their perspective on the problem and why they are participating.

The meeting closed with each member offering their comments on the result of the meeting.

3. ACTION PLANS

- **Committee Members** review purpose and structure of SCC, fax revisions to Martine Culbertson (609-795-5254) or bring to the next SCC meeting.

- **Committee Members** prepare their definition of the problem and who they represent - to be presented at the next meeting.

- **Martine Culbertson** conduct follow-up telephone calls and confirm the next meeting date.

- **Tim Chelius** distribute meeting report and notice for next meeting.
4. NEXT MEETING

Date: To be scheduled - (first week of Nov.)
Time: 7:00 p.m. - 9:00 p.m.
Location: Dennis Township Municipal Building

Report prepared by:

SJTP0

[Signature]

Chet Ambler, SJTP0

a:rt55min.09a
SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
ROUTE 55 TRANSPORTATION STUDY

Shore Connection Committee

Meeting No. 3
September 17, 1997

AGENDA

Objective: To define the purpose, structure and goals of the Shore Connection Committee and agree on meeting procedures and schedule; to review the project history and current status; to identify and understand the transportation needs and issues within the study area.

I. Welcome and Introductions
   • Project Overview

II. Shore Connection Committee
   • Purpose and Goals
   • Structure and Operating Procedures
   • Participants Roles

III. The Project Status
   • Past and Current Improvement Projects
   • Project Information and Process

Break

IV. Project Issues
   • Brainstorming Ideas

V. Summary and Close
   • Recap / Feedback
   • Future Plans - Meeting Schedule
   • Closing

M. A. Culbertson - NJ 55 SCC - 9/17/97
SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
ROUTE 55 TRANSPORTATION STUDY
Shore Connection Committee

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               • ITS Primer

Meeting No. 9  • Chart of Corridor Improvement Alternatives - Draft

Meeting No. 8  • Revised Draft Description of Alternatives
               • Colored Alternatives Map - Draft

Meeting No. 7  • Description of Alternatives - Draft
               • Environmental Impacts of Alternatives - Draft

Meeting No. 5  • Chart of Traffic Volume Data
               • Volume Comparisons
               • Historic Comparisons

Meeting No. 3  • Study Process
               • Traffic Data Summer 1997
Alternative 1: Rail Line

• Description
  • Rail Line from Millville to Woodbine with Connection to Cape May Seashore Line
  • Stations at Millville, Woodbine, etc.
  • Uses Existing Rail Line ROW

• Segments
  • A: SR 55 - CR 548 (Existing)
  • B: CR 548 - CR 610 (Existing)
  • C: CR 610 - Avalon Blvd (Existing)

• Traffic Impacts
  • Low potential as a viable mode of travel
  • Little impact on relieving congestion
  • As an Intercept/Mode Transfer Station in Millville - Not likely to be attractive to recreational travelers
  • Could serve as complementary strategy - Build on for the Future

• Environmental/Historical Constraints
  • Project Overall:
    • 2 Segments pass through Parkland
    • passes through over 30 acres of wetlands
    • within Pinelands and CAFRA zone
    • endangered species known
    • passes by no Architectural Points of Interest, but does pass through the Historic Areas of Belleplain and Woodbine
  • Each Segment
    • each segment passes through parks
    • about 10 acres of wetlands affected per segment
    • endangered species known
    • Segment B passes through Historic Woodbine and Belleplain

• Buildability
  • Low Potential for Rail as a modal alternative in this corridor
  • Likely to be difficult to attract riders
  • Not cost effective

Alternative 2: Southern Arterial

• Description
  • North from Route 347 following existing Hunter’s Mill Road to Railroad ROW.
  • Continues easterly to connect with existing CR 550 at CR 607. Follows existing CR 550 on through Woodbine to connect with Sea Isle Boulevard.
  • Widening of Route 47 north to Route 55
  • Two Lane Major Arterial
  • Uses New and Existing Alignments
Route 55 Shore Connection Alternatives -- DRAFT

- **Segments**
  - A: Route 347 - Railroad ROW (Existing)
  - B: Hunter's Mill Rd - CR 605 (New)
  - C: CR 605 - CR 557 (Existing)
  - D: CR 557 - CR 638 (Existing)
  - E: CR 638 - CR 610 (Existing)
  - F: CR 610 - CR 628 (Existing)
  - G: Alternative 4: CR 628 - Rte 9 (New)
  - H: Alternative 4: Rte 9 - GSP (New Ramp)

- **Traffic Impacts**
  - Slight increase in Route 55 traffic
  - Decrease in Route 47 traffic
  - Decrease in Routes 49/50 traffic
  - Slight decrease in CR 557 traffic and less North/South movements on CR 610
  - Significant decrease in volume on western segment of CR 550
  - Increase in GSP volumes in vicinity of interchange, less volume on Rt. 83
  - Slight increase on GSP South of Route 83
  - Alignment would carry significant volume

- **Environmental/Historical Constraints**
  - **Project Overall:**
    - 4 Segments pass through Parkland
    - over 25 acres of wetlands affected
    - within Pinelands and CAFRA zone
    - endangered species known
    - passes by 6 Architectural Points of Interest and through the Historic Area of Belleplain and Woodbine
  - **Segments B & C**
    - most environmental constraints found in these segments
    - both segments pass through parks
    - over 15 acres of wetlands affected
    - endangered species known
    - passes through Historic Area of Belleplain and near 2 Architectural Points of Interest

- **Buildability**
  - New Alignment Segments at western end has significant environmental impacts
  - Much of route is an upgrade to CR 550 - requires evaluation of ability to improve capacity
  - Extension to Route 9 and GSP significant from a traffic perspective - No major environmental constraints
Alternative 3: Middle Arterial

- **Description**
  - Northeast from Route 47 following CR 548 then Easterly on Railroad ROW. Then connects with existing CR 550 at CR 607. Follows existing CR 550 on through Woodbine to connect with Sea Isle Boulevard.
  - Widening of Route 47 north to Route 55
  - Two Lane Major Arterial
  - Uses New and Existing Alignments

- **Segments**
  - A: Follows CR 548 from Route 47 (Ex.)
  - B: CR 548 - Hunter's Mill Rd (New)
  - C: Hunter's Mill Rd - CR 605 (New)
  - D: CR 605 - CR 557 (Existing)
  - E: CR 557 - CR 638 (Existing)
  - F: CR 638 - CR 610 (Existing)
  - G: CR 610 - CR 628 (Existing)
  - H: Alternative 4: CR 628 - Route 9 (New)
  - I: Alternative 4: Route 9 - GSP (New Ramp)

- **Traffic Impacts**
  - Similar impacts as Alternative 2
  - Slightly more overall traffic diversion influence than Alternative 2
  - Removes more traffic from Route 49/50 Corridor
  - Attracts Traffic to Route 55
  - Little change in corridor South of Route 83

- **Environmental/Historical Constraints**
  - **Project Overall:**
    - 5 Segments pass through Parkland
    - over 25 acres of wetlands affected
    - within Pinelands and CAFRA zone
    - endangered species known
    - passes by 6 Architectural Points of Interest and through the Historic Areas of Port Elizabeth, Belleplain and Woodbine
  
  - **Segments C & D:**
    - both segments pass through parks
    - over 15 acres of wetlands affected
    - endangered species known
    - passes through Historic Area of Belleplain and Woodbine

- **Buildability**
  - New alignment segments at western end has significant environmental impacts
  - Much of route is an upgrade to CR 550 - requires evaluation of ability to improve capacity
  - Extension to Route 9 and GSP significant from a traffic perspective - No major environmental constraints
Alternative 4: Sea Isle Blvd. Extension

- **Description**
  - Extension of Sea Isle Blvd. to Connect with Garden State Parkway, Route 9
  - Two Lane Major Arterial
  - Uses New Alignment

- **Segments**
  - A: CR 628 - Route 9 (New)
  - B: Route 9 - GSP (New Ramps)

- **Traffic Impacts**
  - Increases traffic on CR 550
  - Increases traffic on GSP and Rt. 9
  - Decreases traffic on CR 610 and CR 638
  - Decreases traffic on Route 50
  - Increases traffic on Route 47 South of Route 83

- **Environmental/Historical Constraints**
  - *Project Overall:*
    - does not pass through Parkland
    - approximately 5 acres of wetlands affected
    - within Pinelands and CAFRA zone
    - no endangered species known to be in area
    - passes by 2 Architectural Points of Interest

- **Buildability**
  - Extension to Route 9 and GSP significant from a traffic perspective - No major environmental constraints
  - Key element of Alternative 2, 3, and 18

Alternative 5: Route 83 Extension

- **Description**
  - Route 83 Extension to Garden State Parkway
  - Two Lane Major Arterial
  - New Alignment

- **Traffic Impacts**
  - Volumes on Rt. 83 significantly increase
  - Little or no impact on Rts. 55, 47, 49, 347, or 550
  - GSP north of interchange has a decrease in volume
  - GSP and Rt. 9 south of interchange has an increase in volume
Route 55 Shore Connection Alternatives -- DRAFT

- Environmental/Historical Constraints
  - Project Overall:
    - no impacts to Parklands, Wetlands, Endangered Species, or Architectural Points of Interest
    - within Pinelands and CAFRA zone

- Buildability
  - No major environmental constraints
  - May not prove effective given traffic impact because it serves same destination as CR 657 but without a toll (shorter and cheaper)
  - Difficult to tie-in with the Garden State Parkway

Alternative 6: Routes 49 & 50 Connection with GSP

- Description
  - Routes 49 & 50 connector with Garden State Parkway

- Improvement
  - Upgrade interchange from partial to full

- Traffic Impacts
  - Slight increase of traffic on GSP north of Interchange
  - Slight Decrease of traffic on GSP south of Interchange
  - Decrease of traffic on Route 9 north of Interchange
  - Slight Decrease of traffic on Northbound Route 9 traffic South of Interchange

- Environmental/Historical Constraints
  - Project Overall:
    - passes through Parkland
    - within Pinelands and CAFRA zone
    - no wetlands affected, no endangered species known, passes by no Architectural Points of Interest

- Buildability
  - Interchange improvement - should not have significant environmental barriers
  - Localized improvement that does not solve corridor problems

Alternative 7: Tyler Road Intersection

- Description
  - Tyler Road & Route 47 Intersection

- Improvement
  - Improve capacity on Route 47 via a major through lane

- Traffic Impacts
  - Existing Intersection Operation Fails
Route 55 Shore Connection Alternatives -- DRAFT

- Additional SB Route 47 Through Lane Analyzed
  - Results show intersection performance improves

- Environmental/Historical Constraints
  - Project Overall:
    - does not pass through Parkland, no wetlands affected
    - within Pinelands and CAFRA zone
    - endangered species known to be in area
    - passes by 1 Architectural Point of Interest

- Buildability
  - Interchange improvement - should not have significant environmental barriers
  - ROW may be an issue

Alternative 8: Routes 47 & 347 Intersection - South

- Description
  - Intersection of Route 47 & Route 347 - South

- Improvement
  - Improve Capacity on Route 347 via a minor through lane on Route 347

- Traffic Impacts
  - Existing Intersection Operation Fails
  - Additional Route 347 SB Through Lane Analyzed
  - Results show Intersection Performance Improves

- Environmental/Historical Constraints
  - Project Overall:
    - does not pass through Parkland
    - wetlands in area
    - within Pinelands and CAFRA zone
    - endangered species known to be in area
    - passes by 1 Architectural Point of Interest

- Buildability
  - Interchange improvement - should not have significant environmental barriers
  - ROW may be an issue

Alternative 9: Routes 47 & 347 Intersection - North

- Description
  - Route 47 & Route 347 Intersection - North

- Improvement
  - Improve capacity on Route 347 via a minor through lane
Route 55 Shore Connection Alternatives -- DRAFT

- Traffic Impacts
  - Existing Intersection Operation Fails
  - Analysis shows an Additional Right Turn Lane for NB Route 347 is Inadequate
  - Analyses shows that Intersection needs Additional Turn and Through Lanes for All Approaches to Operate Adequately

- Environmental/Historical Constraints
  - Project Overall:
    - does not pass through Parkland, no wetlands affected
    - within Pinelands and CAFRA zone
    - no endangered species known to be in area
    - passes by 1 Architectural Point of Interest

- Buildability
  - Interchange improvement - should not have significant environmental barriers
  - ROW may be an issue

Alternative 10: Port Elizabeth Bypass

- Description
  - Bypass of Port Elizabeth
  - Diverge southeasterly from Route 55 to connect with Route 347
  - Two Lane Major Arterial
  - Uses New Alignments

- Segments
  - A: Route 55 - CR 646 (New)
  - B: CR 646 - CR 548 (New)
  - C: CR 548 - Route 347 (New)

- Traffic Impacts
  - Bypass carries significant volume
  - Increases traffic on Route 55 and on Route 347
  - Reduces traffic on Route 49
  - Significantly reduces traffic on Route 47 in Bypass area
  - Generally localized impact

- Environmental/Historical Constraints
  - Project Overall:
    - does not pass through Parkland or Architectural Points of Interest
    - approximately 5 acres of wetlands affected
    - within Pinelands and CAFRA zone
    - endangered species known to be in area

- Buildability
  - Environmentally may prove difficult to build - Wetland Impacts
  - Serves localized problem, does not solve regional problems alone. Must be combined with Alternative 11
Alternative 11: Dennisville Bypass

- **Description**
  - Western Bypass of Route 47 around Dennisville
  - New Road south of CR 557 to join with Route 83
  - Two Lane Major Arterial

- **Traffic Impacts**
  - Bypass carries significant volume
  - Traffic Decreases on Route 49, Route 50, CR 550 and GSP
  - Less traffic filtering down from Routes 49/50 corridor
  - Increase in Traffic South of Bypass

- **Environmental/Historical Constraints**
  - **Project Overall:**
    - does not pass through Parkland
    - over 15 acres of wetlands affected
    - within Pinelands and CAFRA zone
    - endangered species known to be in area
    - passes by 2 Architectural Points of Interest and through Historic Dennisville

- **Buildability**
  - Environmentally may prove difficult to build - significant wetlands impact
  - Serves localized problem, does not solve regional problems alone. Must be combined with Alternative 10

Alternative 12: Route 55 Freeway

- **Description**
  - Extension of Route 55 Freeway - Four Lanes to GSP - not modelled as Toll Road
  - New Road to extend southeasterly from Route 55 to cross CR 548, Hunter’s Mill Road, CR 550, and CR 651 to Route 83. Then follow Route 83 to Route 9 and Garden State Parkway.
  - Uses New and Existing Alignments

- **Segments**
  - A: Route 55 - CR 646 (New)
  - B: CR 646 - CR 548 (New)
  - C: CR 548 - Hunter’s Mill Rd (New)
  - D: Hunter’s Mill Rd - CR 550 (New)
  - E: CR 550 - Route 347 (New)
  - F: Route 347 - CR 651 (New)
  - G: CR 651 - Route 47 (New)
  - H: Route 47 - Route 83 (New)
  - I: Segment of Route 83 (Existing)
  - J: Segment of Route 83 (Existing)
  - K: Alternative 5: Route 9 - GSP (New)
Route 55 Shore Connection Alternatives -- DRAFT

- **Traffic Impacts (Free Roadway)**
  - Existing Route 55 gains significant volume
  - New Route 55 carries significant volume
  - Draws major traffic from Route 47, Route 347, Route 49, and Route 50
  - Draws traffic from Route 83 and Route 47 south of new Route 55
  - Draws traffic from CR 610 and CR 638
  - Route 9 and GSP lose traffic to Route 55, then gain significant traffic after interchange
  - Minor shifting from Route 47 to GSP/Route 9 further south toward Cape May

- **Environmental/Historical Constraints**
  - **Project Overall:**
    - passes through Parkland
    - over 75 acres of wetlands affected
    - within Pinelands and CAFRA zone
    - endangered species known to be in area
    - passes by 13 Architectural Points of Interest and through Historic Area of Dennisville

  - **Segment A-E (Rte 55 - Rte 347):**
    - over 10 acres of wetlands affected
    - endangered species known to be in area

  - **Segment F & G (Rte 347 - Rte 47):**
    - passes through Parkland
    - over 25 acres of wetlands affected
    - endangered species known to be in area
    - passes by 2 Architectural Points of Interest

  - **Segment H (Rte 47 - Rte 83):**
    - passes through Parkland
    - over 30 acres of wetlands affected
    - endangered species known to be in area
    - passes by 3 Architectural Points of Interest and through Historic Area of Dennisville

  - **Segment I & J (Route 83):**
    - passes through Parkland
    - approximately 5 acres of wetlands affected
    - endangered species known to be in area
    - passes by 8 Architectural Points of Interest

- **Buildability**
  - Extreme Environmental Problems
  - Very cost to mitigate problems and very costly to build
  - Would serve as the Slam Dunk for traffic issues East - West
Route 55 Shore Connection Alternatives -- DRAFT

Alternative 13: Routes 55 & 47 Intersection Improvements
- This alternative was removed, because it was included in the no-build.

Alternative 14: Routes 49 & 50 Intersection Improvements
- This alternative was removed, because it was included in the no-build.

Alternative 15: CR 557 & CR 550 Intersection Improvements
- This alternative was removed because it was inconsequential as a traffic solution.

Alternative 16: Routes 9 & 47 & GSP Intersection Improvements
- This alternative was removed as a separate alternative it is included in the no-build alternative: Route 47, Section 1C Operational Improvements from Garden State Parkway to Railroad Avenue.

Alternative 17: Reversible Lane

- Description
  - Route 47 Capacity Improvement
  - Possibly Reversible Third Lane

- Improvement
  - Improve capacity from approximately Route 55 to Route 347 and from Route 347 to Route 657
  - Improve curves/geometry

- Segments
  - A: SR 55 - SR 347 (Existing)
  - B: SR 347 - CR 657 (Existing)

- Traffic Impacts
  - Increases on Route 55 and Route 47
  - Traffic shifts from GSP to Routes 55 & 47
  - Decreases on CR 548 and CR 550
  - Little change on Routes 347, 49, 50 and 9

- Environmental/Historical Constraints
  - Project Overall:
    - passes through Parkland
    - over 10 acres of wetlands affected (9 crossings)
    - within Pinelands and CAFRA zone
    - endangered species known to be in area
    - passes by 17 Architectural Points of Interest and through Historic Port Elizabeth and Dennisville

10
Route 55 Shore Connection Alternatives -- DRAFT

**Segment B:**
- has the most environmental constraints
- passes through Parkland
- over 5 acres of wetlands affected (4 crossings)
- within Pinelands and CAFRA zone
- endangered species known to be in area
- passes by 13 Architectural Points of Interest and through Historic Dennisville

**Buildability**
- Need to assess feasibility of construction
- Need to assess ROW impacts
- Possibility to utilize existing ROW to the extent it reduces environmental impacts
- Possible safety concerns
- Will require significant resources to operate and manage
- Must treat intersections

**Alternative 18: Northern Arterial**

**Location**
- T-Connector from Route 49 following County Line to CR 548 then southeasterly to CR 557. Follows existing CR 550 to connect with Sea Isle Boulevard Extension
- Widening of Route 47 north to Route 55
- Two Lane Major Arterial
- Uses New and Existing Alignments

**Segments**
- A: Route 49 - CR 557 (New)
- B: Segment of CR 557 (Existing)
- C: CR 557 - CR 638 (Existing)
- D: CR 638 - CR 610 (Existing)
- E: CR 610 - CR 628 (Existing)
- F: CR 628 - Route 9 (New)
- G: Route 9 - GSP (Existing)

**Traffic Impacts**
- Slight increase in Route 55 traffic
- Increase on traffic on CR 548
- Slight decrease in Route 47 traffic
- Decrease in Route 49 traffic east of new roadway
- Slight decrease in CR 557 traffic and less North/South movements on CR 610
- Decrease in volume on western segment of CR 550 (before new roadway)
- Increase in GSP volumes in vicinity of interchange
- Slight increase on GSP south of Route 83
Route 55 Shore Connection Alternatives -- DRAFT

- Environmental/Historical Constraints
  - Project Overall:
    - passes through Parkland
    - over 15 acres of wetlands affected
    - within Pinelands and CAFRA zone
    - endangered species known to be in area
    - passes by 4 Architectural Points of Interest and through Historic Woodbine
  - Segment A:
    - passes through Parkland
    - over 5 acres of wetlands affected
    - endangered species known to be in area
    - passes by no Architectural Points of Interest
  - Segment B-E (CR 557 - CR 628):
    - passes through Parkland
    - over 5 acres of wetlands affected
    - endangered species known to be in area
    - passes by 2 Architectural Points of Interest and through Historic Woodbine
  - Segment F (CR 628 - Route 9):
    - less than 5 acres of wetlands affected
    - endangered species known to be in area
    - passes by 2 Architectural Points of Interest
  - Segment G (Route 9 - GSP):
    - less than 5 acres of wetlands affected

- Buildability
  - New Alignment Segments at western end has significant environmental impacts

Alternative 19: Route 9 Intersections

- Planned Improvement
  - Grade Separation of three presently Signalized Intersections in Cape May Court
  - House Signals
    - Crest Haven Boulevard
    - Shell Bay Drive
    - Stone Harbor Boulevard

- Traffic Impacts

- Environmental/Historical Constraints

- Buildability
Route 55 Shore Connection Alternatives -- DRAFT

Alternative 20: ACE & GSP Interchange

• Description
  » Atlantic City Expressway & Garden State Parkway Interchange

• Improvement

• Traffic Impacts

• Environmental/Historical Constraints

Alternative 21: TDM Alternatives

• Description
  » Traffic Demand Management

• Traffic Impacts

• Environmental/Historical Constraints

• Buildability

Alternative 22: TSM Alternatives

• Description
  » Highway Advisory Radio
  » Intelligent Transportation Systems
  » Variable Message Signs

• Traffic Impacts

• Environmental/Historical Constraints

• Buildability
Study Process

● Shore Connection Committee/Public Outreach
  » M.A. Culbertson will lead this task

● Establish Background Parameters
  » Define performance measures in more laymen terms
  » Assess existing conditions within the study area
    – Focus on summer 1997
    – Compare to historical data
    – Compare corridor to others

● Re-Assess Project Need
  » Current and future travel conditions
  » Potential demand for travel
  » Divergence of traffic
  » Parallel roadway relief
Study Process

- Assist in the Identification of Options

- Develop wide range of alternatives as possible solutions
  - A full extension of the Route 55 freeway
  - Alternatives or improvement to existing parallel facilities
  - Transportation system management (TSM)
    - Signalization or intersection improvements
  - Travel demand management (TDM)
    - Alternative modes
    - Rental timings
  - Intelligent transportation system (ITS)
Study Process

- Technical Evaluation of Options
  » Assessment of benefits and order of magnitude costs
  » Assessment of the level of permitting difficulty
  » Explore the potential land use and economics impacts

- Develop Improvement Program
  » Package one or several alternatives into Corridor Improvement Program
  » Develop short term and long term programs
  » Advance improvement programs through concept development
  » Gain local project approval
Summer 1997

- Data collected June and August
  » Skycomp aerial survey
  » Automatic Traffic Counters (ATRs)
  » Historical data

- Peaks
  » Southbound/eastbound direction
    - Friday evening (5 to 10 PM)
    - Saturday morning (10 AM to 2 PM)
  » Northbound/westbound direction
    - Sunday evening (3 to 8 PM)
  » Other significant moves
    - Sunday morning SB/EB (daytrippers)
    - Saturday midday NB/WB (renters)

- HCM Highway Analysis for August
  » Level of service E / F during peaks
    - South of NJ 47/347 convergence
    - Between Tyler Road and NJ 83
  » Level of service D during peaks
    - NJ 47, south of split
    - NJ 347, south of split
August Saturday Skycomp aerial data

» Southbound/eastbound observations
  10:30 AM - 2:30 PM

» NJ49/50 corridor from NJ 55 to GSP/US 9
  - Queuing on NJ 55 at NJ 49
  - Congestion on Route 50 through Tuckahoe
  - No flow problems through to US 9

» US 9/GSP corridor from NJ 50 to MP 0
  - GSP congestion at Cape May Toll Plaza,
    Stone Harbor Blvd. signal
  - Severe NJ 9 congestion at Sea Isle Blvd.

» NJ 47/347 corridor from NJ 55 to Rio Grande
  - No flow problems at south end of NJ 55
  - Spotty congestion at NJ 47/347 split
  - Severe congestion at NJ 47/347 convergence
    - Queue 3-4 miles long
  - Congestion at Tyler Road
  - Congestion on NJ 47 at US 9 signal
Summer 1997

- August Sunday Skycomp aerial data
  - Northbound/westbound observations 3:00 - 7:00 PM
  - NJ49/50 corridor from GSP/US 9 to NJ 55
    - Continuous, steady flow through corridor
    - Heavy traffic on Route 50 through Tuckahoe
  - US 9/GSP corridor from MP 0 to NJ 50
    - Continuous, steady flow through corridor
    - Heavy traffic on US 9 in several areas
  - NJ 47/347 corridor from Rio Grande to NJ 55
    - Continuous, steady flow through corridor
    - Heavy traffic on NJ 47 at CR 585 and NJ 83
      - Queuing on NJ 47 in June observations
    - Heavy traffic between NJ 83 and Tyler Road
    - Minor congestion at NJ 47/347 convergence
    - Congestion on NJ 47 through Port Elizabeth central business district
### Saturday SB

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#### Summer 1997

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### Northbound

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<th>Thur</th>
<th>Sun</th>
<th>Wed</th>
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<td>1280</td>
<td>430</td>
<td>590</td>
<td>510</td>
<td>1390</td>
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<td>9770</td>
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<td>1-9</td>
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<td>NA</td>
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<td>NA</td>
<td>5700</td>
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### Northbound

#### Off-Season VS. Summer

**May 1996 VS. August 1997**

<table>
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<tr>
<th></th>
<th>Sunday</th>
<th>Wednesday</th>
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<tr>
<td>Peak Hour Volume</td>
<td>May-96</td>
<td>May-96</td>
</tr>
<tr>
<td>Peack Period Volume</td>
<td>Aug-97</td>
<td>Aug-97</td>
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<tr>
<td>Peak Period</td>
<td>10-9</td>
<td>1-6</td>
</tr>
<tr>
<td>Daily Total</td>
<td>7000</td>
<td>5310</td>
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Volume Comparisons

• Saturday SB volumes 45,100 daily
• Sunday NB volumes 49,000 daily
• Weekday - 1997 - SB
  » Rt. 49, Rt. 50, Rt. 347 peak hour about 1/2 of weekend
  » Rt. 47 about 3/4 of weekend
• Weekday - 1997 - NB
  » Rt. 49, Rt. 50, Rt. 347 peak hour about 1/3 of weekend
  » Rt. 47 about 3/4 of weekend
• Summer Vs Non-Summer
  » Weekend
    – Non-summer peak hour volume and daily volume about 1/2 of summer
  » Weekday
    – Non-summer peak hour and daily volume slightly lower than summer
Historic Comparisons

- Rt. 49
  » Peak traffic has grown considerably
  » Peak is spreading, longer period of congestion

- Rt. 50
  » Peak traffic volume has grown moderately
  » Peak is also moderately spreading, with congestion extending a longer period

- Rt. 347
  » Volumes much higher in 1997 than in 1991, reflect this roadway becoming a major travel route

- Rt. 47
  » Didn't show much change (limited data)

- Rt. 55
  » Minor overall volume growth
  » SB - Travel pattern hourly variation has changed, earlier, not as peaked
  » NB - Travel pattern hourly variation hasn't changed significantly

- Comparison of 1991 Skycomp to 1997
  » Problem areas remained generally the same
  » Improvements in the corridor positively impacted problems areas
COMMENTS ON ALTERNATIVES

Alternative 1

- Doable
- For the investment dollars, could it take a worthwhile percentage of the traffic off the congested routes
- Possible complimentary solution
- Millville to Woodbine
- Concern for whether people would take the train

Alternative 2 / Alternative 3 / Alternative 18

- Alternative 3 makes most sense from traffic standpoint
- Use of existing roadways
- Less impact by using railways, best option for investment dollars
- Mainly impacts Dennis Township community
- To the extent that it is an improvement, there is concern about the Pinelands regulations of (threshold) permitted use given an existing versus wooded right of way
- Two lanes into area could benefit local access and development

Alternative 4

- Dennis Township concern of right-of-way impacts
- Improvements on the Parkway
- Could help traffic concerns in that area, there are existing problems
- Concern regarding difficulties in previous studies of this area
- Need to re-examine this area and potential benefits versus impacts
- This improvement needs to happen if Alternative 2, 3 or 18 go forward

Alternative 5

- Parkway tie in at higher costs and difficult to achieve from design standpoint (better to tie in using Alternative 4)
- By itself it doesn't improve traffic situation

SCC agree to DISMISS
Alternative 6
- Intersection improvements are in program.
- Parkway studying improvements to ramps
SCC agree to DISMISS

Alternative 7 / Alternative 8 / Alternative 9
- Looking at intersections
- Looking at adding capacity at intersections
STAY TUNED - for further information and discussion
PROBLEM AREAS

1. RT. 55 & RT. 49
2. RT. 55 & RT. 47
3. RT. 47, RT. 347 & C 670 (C 670 IS ELIZABETH- DENNISVILLE RD. OR BUCKSHUTEM RD.)
4. RT. 50 & RT. 49
5. C 557 (WASHINGTON AVE.) & C 550 (DEHURSH AVE.)
6. RT. 47 & RT. 347
7. RT. 47 & C 611 (TYLER RD.)
8. RT. 47, RT. 83 & C 657 (COURTHOUSE- SOUTH DENNIS RD.)
9. RT. 50, RT. 9 & GSP
10. RT. 9 & C 550 (WOODBINE & OCEAN VIEW RD.)
11. GSP & C 625 (SEA ISLE BLVD.)
12. RT. 83 & RT. 9
13. RT. 9 & C 801 (AVON AVE.), GSP
14. INTERCHANGE 12577, RT. 9 TO GSP
15. C 657 (STONE HARBOR BLVD.) & RT. 9, GSP
16. RT. 47, RT. 9 & GSP

SHORE CONNECTION STUDY
PROBLEM AREAS
Six alternatives to Route 55 extension argued

By JEAN JONES
Staff Writer 4/9/98

MAURICE RIVER TWP. — The Shore Connection Committee met Wednesday at the Maurice River Township Elementary School, but members still failed to connect on alternatives for the extension of Route 55.

Only six of the alternatives were discussed during the session and almost all of them met with strong opposition from some members. Alternatives 1 through 22 still are officially on the table, although consultant Martine Culbertson said some need further discussion.

Stumbling blocks Wednesday were alternatives which called for a bypass around Port Elizabeth, adding more lanes at the southern end of Route 347, a Dennisville bypass and changes to the Tyler Road intersection in Dennis Township.

Charles Warner, of the Pinelands Commission, said all other alternatives would have to be explored before the commission would consider alternative 10, the Port Elizabeth bypass, and if it were to approve alternative 10, through an environmentally sensitive area of the Pinelands, it would be challenged in court.

Jay Laubengeyer, director of the Delaware Bayshores Office of the Nature Conservancy, said the area has some very rare species and federal designation. The bypass also would bisect the conservancy's Manumuskin Preserve.

Citizens United member Berwyn Kirby said thousands of people attended a meeting to protest the state's consideration of the same area for a hazardous waste dump because of the environment. The site later was delisted.

(See 55, Page A-5)

(Continued from Page A-1)

Township Committeeman Hal Noon said he didn't want to walk out of the meeting with something that would end up in 15 years of litigation. Dennis Township Mayor Jim Pickering agreed.

"Regardless of any regulations, I feel the value of this property outweighs any benefits," he said.

"Some of us are saying, even if there were no regulations, do we want to put a four-lane highway through an environmentally sensitive area."

"Take 10 off the list," Noon said, but others wanted it kept as an option.

Pickering also criticized several of the alternatives as adversely impacting residents of his township.

"It's ridiculous to say it's not going to impact the lives of people along the route," he said.

Middle Township Mayor Michael Voll said he didn't think the committee would ever reach consensus on an alternative that the state of New Jersey would accept, so they"had to"keep considering all the alternatives.

Voll and others argued for continuing to review all the alternatives until agreement was reached. Tony DeJohn, who conducted the review of alternatives 7 through 12, said there were many things that could be done to relieve traffic at "choke spots" along shore routes, but they would only be a temporary reprieve and no studies have been done on any of the alternatives.

The group will meet again on May 13, in Dennis Township.
Brief History of the
Winchester & Western Railroad

The original Winchester & Western Railroad was built during 1916 to serve the timber logging areas northwest of Winchester, VA. Eventually, the lumber traffic disappeared and was replaced by sand originating at the Virginia Glass Sand Co. and Shenandoah Silica Co., Gore, VA. These companies were purchased by Unimin Corporation, (New Canaan, CT) in 1970 and the W&W Railroad between Winchester and Gore, Va. was acquired by Unimin in 1977.

As a result of abandonment proceedings instituted by Conrail, in 1985, Unimin to protect the rail access to their mining properties at Gore, VA and Dividing Creek, NJ, in 1986, arranged for the purchase of the former Conrail lines with the result that Winchester and Western Railroad trackage quintupled and two railroad operating divisions were created. Both former Conrail lines were in need of extensive rehabilitation and programs were instituted and are still in progress to accomplish rehabilitation to Federal operating standards. The Winchester & Western Railroad also owns and leases over 1,100 freight cars.

The W&W Virginia Division is now approximately 60 miles long. It extends between Hagerstown, MD and Gore, VA via Martinsburg, WV and Winchester VA. Approximately 5,000 loaded cars are handled annually, of which about 3,000 are silica sand, representing 60% of the traffic. The remaining 40% is made up of food product, plastics, limestone, lumber, brick, scrap steel, paper and fabricated steel. Public Delivery (team tracks) are maintained at Williamsport, MD (Hagerstown), Martinsburg and Inwood, WV, Clearbrook, Winchester and Gore, VA. Regular service is five days a week with additional service available when required. Currently, five locomotives (GP 9, 1750 H.P.) are in operation. The Virginia Division connects with Conrail and Norfolk-Southern at Hagerstown, MD and with CSXT at Martinsburg, WV and Winchester, VA. The strategic location of the Virginia Division in the expanding economy of the Cumberland and Shenandoah Valleys places the railroad in an enviable position for further growth. Currently, the Virginia Divisions serves 29 customers with the recent addition of Guardian Fiberglass Co. Rail- truck freight transfer is available at Winchester, VA.

The W&W New Jersey Division has approximately 48 miles of track laid out in a large semi-circle in Cumberland County, NJ. Connection is made with Conrail at Millville, NJ. Approximately 7,500 cars are handled annually, of which about 2,700 are silica sand originating at five sand mines. Sand presently represents 36% of the traffic, the remaining 64% is made up of food product, refrigerant gases, glass makers minerals other than sand, grain and fabricated steel. Public Delivery (team tracks) are maintained at Millville, Rosenhayn and Bridgeton, NJ. Regular service is five days a week with additional service available when required. Currently, eight locomotives (GP 9, 1750 H.P. and GP 10, 1800 H.P.) are in operation. The non-sand traffic continues to grow. Cumberland County is low budget for warehousing and distribution in the middle Atlantic metropolitan area. The railroad continues to enjoy growth in traffic and further industrial development. Currently, the New Jersey Division serves 28 customers with the recent addition of Carmuse, who provide additional rail traffic of construction aggregates during the building and road construction seasons. Rail-Truck freight transfer is available at Bridgeton, NJ.

∽ PROGRESS ◇
Hon. Jack Collins, Speaker  
New Jersey Assembly  
63 East Avenue  
Woodstown, NJ 08098  

Attn: Mrs. Rebecca Facemyer:

December 15, 1997

Please refer to our earlier conversation concerning the proposed extension of New Jersey highway route 55, from Port Elizabeth (Cumberland County) to a connection with the Garden State Parkway near exit 13 (Cape May county).

As was mentioned during our conversation there has evolved locally, suggestions about using an alignment that could include our railroad where New Jersey highway route 55 crosses it, south of Millville to a point just north of Port Elizabeth and then onto the now abandoned railroad alignment between that point and the town of Woodbine. The distance is about 14 miles. There would be an extension from Woodbine to the Garden State Parkway. We have included a map which depicts the route of the proposed route 55 extension on the former railroad alignment which passes through the Belleplain State Forest.

You may be aware that there is more than a passing interest in restoring railroad passenger service between Cape May and Millville via Woodbine using existing and the abandoned railroad right of way. There is also interest in a bicycle trail along the same alignment. We would suggest that the route 55 highway extension railroad restoration and bicycle trail could be combined in the planning effort into a single multi-modal corridor. Historically, railroad rights of way in South Jersey have been at least 50' wide. Therefore, there would not have to be too much additional land to be acquired to enlarge the proposed corridor which passes mostly through undeveloped public lands.

The purpose of this letter is to provide some background information about the proposed corridor as well as general information that may be of interest as it relates to the proposal for the rebirth of local railroad passenger service between Cape May and Millville, NJ.
CC: Hon. Andrew R. Ciesla, Chairman, New Jersey Senate, Transportation Committee, 852 Highway Route 70, Brick Township, NJ 08724

Hon. Alex DeCroce, Chairman, New Jersey Assembly Transportation Committee, Suite 2-D, 101 Gibraltar Drive, Morris Plains, NJ 07950

Hon. Raymond J. Zane, Member, New Jersey Senate, 39 South Broad St., Woodbury, NJ 08096

Hon. Gary L. Stuhltrager, Member, New Jersey Assembly, 1045 Cooper St., Woodbury, NJ 08096

Hon. Nicholas Asselta, Member, New Jersey Assembly, 226 Landis Ave., Vineland, NJ 08360

Hon. Douglas H. Fisher, Director, Board of Chosen Freeholders Cumberland County, 790 E. Commerce St., Bridgeton, NJ 08302

Mr. T.H. Matthews, Mgr., Ports, Terminals and Freight Services, NJDOT, 1035 Parkway Ave., CN 600, Trenton, NJ 08625-0600

Mr. Tim Chelius, Exec. Dir., South Jersey Transportation Planning Authority, 640 E. Wood St., Vineland, NJ 08360

Mr. Vince Leonetti, Dir. of Operations, South Jersey Transportation Authority, PO Box 351, Hammonton, NJ 08037

Mr. S.L. Kehs, AICP, Exec. Dir., Cumberland County, Dept. of Planning and Development, 800 E. Commerce St., Bridgeton, NJ 08302

Mr. John W. Feltes, Director of Public Works, Cumberland County, 800 E. Commerce St., Bridgeton, NJ 08302
# SHORE CONNECTION COMMITTEE

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>NEAR TERM PLAN</th>
<th>LONG TERM PLAN</th>
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<td><strong>49/50 Corridor</strong></td>
<td>A. Rt. 55/49 interchange improvements B. Minor capacity improvements along the corridor C. Tuckahoe Bypass</td>
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<td><strong>47/347 Corridor</strong></td>
<td>A. Reversible lane on Rt. 47 from Rt. 55 to 47/347 split and reversible lane on Rt. 47 from 47/347 merge to Rt. 83, CR 657 B. Key Intersection improvements</td>
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<td><strong>Rt. 55 Freeway Completion</strong></td>
<td>A. New four lane freeway from existing terminus to GSP</td>
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<td><strong>Bypasses</strong></td>
<td>A. Port Elizabeth &amp; Dennisville</td>
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<td><strong>Service between Millville and Cape May</strong></td>
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<td><strong>Other</strong></td>
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Shore Connection Committee Report

prepared for
South Jersey Transportation Planning Organization
New Jersey Department of Transportation

prepared by
Parsons Brinckerhoff

submitted:
October 1998
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**ROUTES 55/47 TRANSPORTATION STUDY**  
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1 EXECUTIVE SUMMARY

The Shore Connection Committee (SCC) was established as a forum of vested state and local parties to evaluate the Rt. 55 and 47 corridor, come to agreement on the problems in the corridor, and come to an agreement on a solution or range of solutions that could advance in the project development process. Through a series of working meetings, the SCC approved of a core program of measures that begins to address congestion while minimizing environmental and community impacts.

Building on the results of the SCC process, an incremental improvement program for the corridor was developed based on traffic issues, environmental constraints, and community concerns. The program forms the basis of the identification, programming, and advancement of improvement projects through the SJTPO’s regional planning process.

The program focuses on two main areas: operational improvements, and capital improvements. The program areas are as follows:

Manage Recreational Travel - Operational based program to increase efficiency of existing system.
- Develop an annual deployment plan for Variable Message Signs (VMS)/Highway Advisory Radio (HAR) in the corridor
- Advocate 24 hour weekend coverage by the Southern Region Traffic Operations Center to monitor traffic activity throughout the summer
- Evaluate need for Emergency Service Patrol (ESP) coverage in the corridor
- Gauge annual corridor performance and report to the SJTPO. Monitor traffic growth and characteristics and report findings - including aerial surveillance every 3 years
- Review regional recreational travel signing. Update/modify sign system to take advantage of alternative routes with excess capacity, particularly where signing may encourage travel in areas where economic benefits may result
- Explore modifying shore property rental periods. Desirable to change a portion of the rentals from Saturday - Saturday to Sunday- Sunday.

Atlantic City Expressway and Garden State Parkway Corridor - Maintain and enhance the corridor’s role as a provider of service to the shore/recreational market.
- Support/Advocate Garden State Parkway improvements through Cape May Court House, Interchange 0, 6, and 25 improvements
- Support Garden State Parkway program/effort to widen GSP between the ACE and Interchange 30
- Reduce congestion on Rt. 9 by increasing access to GSP. Identify interchange capacity, accessibility, and operational deficiencies
- Investigate innovative toll structure/price incentives aimed at capturing more regional recreational market (possible discount to ACE/GSP link users, value pricing)
Capital Improvements – Short Term - Capital highway improvements that can be activated or advanced immediately.

- Advance intersection improvement studies in FY 99-01 at:
  1. Rt. 9/CR. 550/Sea Isle Blvd. at GSP
  2. Rts. 347/47 in Port Elizabeth
  3. Rts. 347/47 in Dennisville

Capital Improvements – Mid Term - Capital highway improvements that will require longer evaluation, scoping, and development time.

- Rt. 47 Corridor Reversible Third Lane
- Rts. 49/50 Corridor Capacity/Operational Improvements

Capital Improvements – Long Term - Capital highway improvements that may not be activated immediately, but can be drawn upon if needed following study or implementation of near and mid term programs.

- Rt. 550 Corridor
- Rt. 55 Freeway
2 BACKGROUND

The New Jersey Shore has a long history of attracting thousand of in-state and out-of-state visitors to its many beaches and recreational attractions. During the peak summer season, roadways leading to the shore communities are often very congested, resulting in delays to both visiting motorist and local residents.

Cape May County is located in the southeast corner of the State, and is the home to many of New Jersey’s most popular beaches. This shore areas draw traffic from the entire region, including many Pennsylvania, New York, and southern New Jersey motorists. Most of these motorist rely on major highways to complete a portion of their trip, including the Atlantic City Expressway, the Garden State Parkway, and Rt. 55.

The existing Rt. 55 Freeway serves as the predominate north-south highway in Gloucester and Cumberland Counties. With the completion of segments of Rt. 55 in the fall of 1989, the highway quickly became a principal route for summer traffic headed to and from Cape May County shore points. Rt. 55 freeway ends in Maurice River Township, Cumberland County, New Jersey, where it flows into Rt. 47. From this point, about 20 miles from the Cape May shore, two-lane roadways including Rt. 47, Rt. 347, Rt. 49, and Rt. 50, are utilized to reach the shore. These local roads are highly congested during the summer peak period.

A feasibility study was completed in 1994 on constructing a twenty-mile southern extension of Rt. 55 as a new four lane freeway from Maurice River Township into Cape May County. The report concluded that it would be very difficult to advance a freeway option in light of overwhelming environmental constraints and major project costs.

The Rt. 55/47 Corridor does experience severe traffic conditions in the summer months, and therefore a program to improve traffic flow in the area is needed. As there are many diverse objectives and interests in the region, it has been difficult to formulate an improvement program that posses a broad base of support. To address this problem, the South Jersey Transportation Planning Organization (SJTPO) decided to brings representatives of the area’s interest groups together in a cooperative fashion in an attempt to develop a “home grown” program that would enjoy a broad base of local support.

The Shore Connection Committee (SCC) was established as a forum of vested state and local parties to evaluate the corridor, come to agreement on the problems in the corridor, and come to an agreement on a solution or range of solutions that could advance in the project development process. The New Jersey Department of Transportation supported the SCC by working with the committee to examine options and by providing consultant assistance to evaluate the options and facilitate the SCC’s meetings.

The study began in the summer of 1997 and concluded in the summer of 1998. This report summarizes the work of the Shore Connection Committee. It includes an overview of the study process and the development and evaluation of improvement concepts conducted by the SCC. It also presents improvement programs built upon the spirit and results of the SCC process. The program areas form the basis of a near term and a longer range plan for the identification, programming, and advancement of improvement projects through the SJTPO’s regional planning process.
3 SCC COMMITTEE

3.1 Composition
The SCC was composed of over twenty individuals organized as members, invited guests, and the project support team. Groups represented as members, with direct participation and decision making power, included:

- Cape May County
- Cumberland County
- Maurice River Township
- Upper Township
- Dennis Township
- Woodbine Borough
- Millville City
- Council of Mayors for Cape May County
- Council of Mayors for Cumberland County
- The Nature Conservancy
- New Jersey Conservation Foundation
- New Jersey Highway Authority
- South Jersey Transportation Authority.

Groups represented as invited guests, and participants in the discussion process, included:

- New Jersey State Assembly and Senate
- Pinelands Commission
- South Jersey Economic Development Council
- New Jersey Department of Environmental Protection (NJDEP)
- Citizens United
- New Jersey Audubon Society
- Cape May County Chamber of Commerce
- Vineland Chamber of Commerce
- Millville Chamber of Commerce

The project support team consisted of staff from the SJTPO, the NJDOT, and consultants assisting in the technical evaluation process and meeting facilitation.

3.2 Committee Purpose & Goals
The purpose of the Shore Connection Committee was to discuss the issues and concerns of local municipalities and interest groups regarding the problems faced in the Rt. 55/47 Corridor and to help shape a range of options that could be advanced to improve conditions in the corridor. The SCC members provided input, feedback, and pertinent information to the Project Support team regarding the transportation needs, environmental issues, and infrastructure improvements needed in study area.

The goals of the SCC were to:

- Convey the interests and concerns of local residents, organizations, municipalities and businesses in the study area.
SHORE CONNECTION COMMITTEE REPORT

DRAFT

- Actively participate in developing transportation solutions that maximized safety and traffic efficiency while minimizing environmental impacts, historic and community disruption, and costs
- Provide input to the Project Support Team in a collaborative fashion utilizing consensus to reach agreement
- Assist in communications with the community in order to enhance the project understanding
- and maximize broad-based public participation in the transportation planning process.

4 PROJECT NEED

The Rt. 55/47 Corridor experiences significant seasonal variation due to the influence of recreational travel. Average daily traffic during summer weekends increases approximately 70 percent over non-summer periods. At present, the existing routes provide a satisfactory Level of Service (LOS) for an average day, but summer weekend traffic experiences heavy spot congestion. Year 2005 traffic estimates generated by previous transportation studies predict limited spot congestion for an average day, but severe, wide-spread congestion during summer weekend periods.

4.1 Routes to the Shore - How Visitors Get to Cape May

There are a limited number of primary travel corridors serving Cape May County. Evidence is that the selection of a travel corridor depends mainly on the origin of a trip, the destination of a trip, and sensitivity to tolls. From the northern part of New Jersey, most motorists reach Cape May County via the Garden State Parkway (GSP), a toll road. US 9 roughly parallels the GSP down to Cape May, and some motorist use of this non-tolled roadway to complete a portion of their trip.

A portion of motorist from central New Jersey and parts of southeastern Pennsylvania use the Atlantic City Expressway (ACE) to access the GSP. The ACE is also a toll facility. Motorists from southern New Jersey and a portion from southeastern Pennsylvania utilize Rt. 55 to gain access into Port Elizabeth. From there, Rt. 49, Rt. 50, Rt. 47, and Rt. 347, along with a number of county roads, are used to complete the trip into Cape May, via mainly Rt. 47, US 9, or the GSP.

These combinations of roadways form the primary corridors for accessing Cape May County, and are depicted in Figure 1:
- Rt. 49 and 50 - serve primarily northern and central Cape May County
- ACE to GSP - serve all of Cape May County
- US 9 and GSP - serve all of Cape May County
- Rt. 47 and 347 - serve mainly southern Cape May County
- CR. 550 - serves mainly central and southern Cape May County.

Motorist travel patterns in this corridor are well established. Re-occurring delays are found on many routes even though there are some less direct alternatives, indicating a percentage of motorist who are not likely to divert from their selected route. This is important, as it indicates that improvements concepts should target corridors where problems are known to exist. It doesn't diminish, however, the need to explore alternative routings for a portion of motorist who may alter their selection of route given clearly signed options.
Figure 1 – Map of the Primary Roadways
4.2 *Historic, Weekly, and Seasonal Variation*

A review of changes in traffic volumes over time was made along Rts. 49, 50, 47, 347, and 55. Limited data was available for the years 1991 and 1997. In general, peak hour volumes have grown, and the peak period is spreading, with overall longer periods of congestion in 1997. Highlights follow.

- Rt. 49 peak traffic has grown more than 50 percent in both the EB and WB directions
- Rt. 50 traffic has grown, but moderately
- Rt. 347 peak traffic has grown significantly, with volumes more than three times higher in 1997 than in 1991.
- Rt. 55 peak period traffic has grown and spread, while peak hour volumes have remained flat or decreased slightly.

A review of weekly variation revealed that:

- Rts. 49, 50, and 347 weekday peak hour volumes are about 1/2 to 1/3 of the weekend peak hour volumes
- Rt. 47 peak hour volume is about 3/4 of weekend peak hour volume.

Limited data was available to gauge seasonal variation. It indicated that non-summer peak period and daily volumes were about one-half of the summer volumes for a weekend. Weekday non-summer volumes were only slightly less than summer volumes, indicating most of the seasonal variation occurs during the weekend periods.

4.3 *Issues and Problems in the Corridor*

An early charge of the SCC was to define the problems and issues facing the corridor. The group reached agreement that traffic congestion, safety concerns, and the resulting impact on the local quality of life were problems that must be addressed. There was also a strong desire to preserve the quality of the environment of the area and the rural character of the area. Many wanted to balance the scope of the solution with the perceived scope of the problem and its environmental impacts. The need for a major highway project with year round impacts to address problems that occur during the limited summer season was questioned. All recognized the importance of tourism to the local economy, and some noted the need to plan for future growth, as the land is already over burdened in the shore areas.

4.3.1 *Problem locations*

The peak movement of travel toward the shore occurs on a Saturday from mid morning to early afternoon. The predominate directions of travel in this period are southbound (SB) and eastbound (EB). Saturday existing conditions and problem locations grouped by travel corridors follow.

**Rt. 49/50 Corridor from Rt. 55 to GSP/US 9**
- Queuing on Rt. 55 at Rt. 49
- Congestion on Rt. 50 through Tuckahoe, and at times at Rt. 49 signals
- No flow problems through to US 9

**US 9/GSP Corridor from Rt. 50 to Cape May**
- GSP congestion at Cape May Toll Plaza, Sea Isle Blvd. exit ramps, and Stone Harbor Blvd. Intersection (CR 550)
- Severe Rt. 9 congestion at Sea Isle Blvd. and at Stone Harbor Blvd./GSP
Rt. 47/347 Corridor from Rt. 55 to Rio Grande
- No flow problems at south end of Rt. 55
- Spotty congestion at Rt. 47/347 split (SB)
- Severe congestion at Rt. 47/347 convergence (SB) - Queue 3-4 miles long
- Congestion at Tyler Road intersection
- Congestion on Rt. 47 at US 9 signal

The peak movement of travel back from the shore occurs on a Sunday from afternoon to early evening. The predominate directions of travel in this period are northbound (NB) and westbound (WB). Sunday existing conditions and problem locations grouped by travel corridors follow.

Rt. 49/50 Corridor from GSP/US 9 to Rt. 55
- Continuous, steady flow through corridor
- Heavy traffic on Rt. 50 through Tuckahoe

US 9/GSP Corridor from Cape May to Rt. 50
- Continuous, steady flow through corridor
- Heavy traffic on US 9 in several areas
- Congestion at US 9 and Sea Isle Blvd.

Rt. 47/347 Corridor from Rio Grande to Rt. 55
- Continuous, steady flow through corridor
- Heavy traffic on Rt. 47 at CR. 585 and Rt. 83
- Heavy traffic between Rt. 83 and Tyler Road
- Congestion at Rt. 47/347 convergence (NB)
- Congestion on Rt. 47 through Port Elizabeth central business district
- Heavy traffic on Rt. 47 westbound between GSP and US 9

Figures 2 and 3 depict the problem locations.
During the first flyover at 10:50 a.m., the exit ramp from southbound NJ 50 to NJ 49 was congested; the stop sign at the end of the ramp caused this queue (vehicles had to wait for gaps in traffic from both directions). When photographed at 10:50 a.m., approximately 80 vehicles (single lane) were queued on the ramp and shoulder of southbound NJ 55. Estimated travel time through this queue was approximately 15 minutes.

Throughout this hour, steady flow at average speeds of approximately 30 mph were consistently found through Port Elizabeth. At the signal at NJ 47/347, a significant queue was only found during the first flyover at 10:47 a.m. Thereafter, congestion was not found at this signal during any flyover.

During the first flyover at 11:00 a.m., severe southbound congestion was found on US Rte 9 approaching the signal at Sea Isle Blvd; this queue extended approx. 1.5 miles upstream (this constituted extended delays for southbound travelers). Eastbound congestion was also found on NJ 550 approaching the signal at US Rte 9; approx. 50 vehicles were queued (one lane).

At 11:00 a.m., southbound congestion was found on NJ 49 approaching the signal at NJ 50, approximately 30 vehicles were queued (one lane). South of the signal, traffic flowed on NJ 50 with few gaps up to the signal at Tuckahoe Rd (the observer estimated speeds at approx. 30 mph). Beyond this signalized intersection, large platoons flowed smoothly to the junction at US Rte 9. (See photos at 11:00 a.m.)

During the first flyover at 11:00 a.m., northbound congestion was found on NJ 50 between Tuckahoe Rd and NJ 49; approx. 50-60 vehicles (one lane) were queued at the signal at NJ 49. Thereafter, congestion was not found at this signal during any flyover.

South of Tyler Rd, heavy southbound traffic (near-continuous flow at approx. 30 mph) was found to the split at NJ 83.

At 11:08 a.m., eastbound congestion was found on Stone Harbor Blvd (right thru-lane) approaching the signal at the GSP; the queue extended back to the vicinity of the upstream signal at US Rte 9 (approximately 35-40 vehicles were queued; one lane).

During this hour, severe southbound congestion was found on NJ 47 approaching the central business district in Rio Grande; the head of this queue was at the signalized intersection at US Rte 9. This queue was approximately 1-2 miles long and generated significant delays for travelers.

At 11:14 a.m., southbound congestion was found on Seashore Rd approaching the signal at Ferry Rd; this queue extended back through an upstream signal (approx. 45-50 vehicles were queued; one lane).

At 11:15 a.m., southbound congestion was found on NJ Rte 109 at the merge to one lane for the road into Cape May; approximately 65-70 vehicles per lane (two lanes) were queued.

At 11:03 a.m., southbound congestion was found on the exit ramp from the GSP to Sea Isle Blvd; approximately 30 vehicles were queued on the ramp. Vehicles at the head of the queue had to wait for gaps in eastbound traffic on Sea Isle Blvd before merging.

During the flyover at 11:08 a.m., congestion was found in both directions on the GSP approaching the signal at Stone Harbor Blvd. It did not appear all southbound vehicles would clear during the green phase (approx. 50-60 vehicles per lane (three lanes) were queued. In the northbound direction, approximately 25-30 vehicles per lane (three lanes) were queued; all queued northbound vehicles cleared the signal during the green phase.
Significant congestion was not found along NJ 49 during any observation. Traffic flow was characterized by large platoons moving at steady speeds estimated at approximately 50 mph. At 5:00 p.m., the observer measured an estimated flow rate of 850 vehicles per hour on northbound NJ 49.

Throughout the survey period, northbound traffic flowed in large platoons along NJ 347 approaching Port Elizabeth; average speeds were estimated at 40-50 mph (gaps were found in front of slower-moving vehicles). (See photos at 3:22 p.m.)

During the first observation at 3:20 p.m., stop-and-go northbound congestion was found on NJ 47 through Port Elizabeth; thereafter, during all observations through 6:00 p.m., only steady northbound flow (continuous - no gaps) was found through the town. Heavy traffic flow was also found approaching Port Elizabeth; average speeds were estimated at 30 mph. (See highlight photos)

At 3:37 p.m., a small queue was found on northbound US Rte 9 approaching the signal at NJ 550; significant delays were not found.

During this hour, nearly continuous flow (some gaps in traffic) was found on northbound NJ 47 in the vicinity of Tyler Rd; vehicles progressed steadily through this zone without incurring significant delay.

At 3:47 p.m., heavy traffic was found on westbound NJ 47 between the GSP and US Rte 9; significant delays were not found.

TRAFFIC QUALITY RATING SCALES

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NJ 55 / 47 Corridor Survey
DATE: Sunday, August 17, 1997
PERIOD: 3:00 p.m. to 7:00 p.m.

FIRST HOUR:
3:00 to 4:00 p.m.

During this hour, heavy northbound traffic moved at reduced speeds through Tuckahoe between Tuckahoe Rd and NJ 49; nearly continuous flow was found (some small gaps in traffic) with estimated speeds approximately 30-40 mph.
5 STUDY PROCESS

The study process was comprised of four main components:

- Establishment of background parameters
- Re-Assessment of project need
- Identification and evaluation of possible solutions
- Development of near and long term planning options

The primary study area was defined as portions of Cumberland and Cape May counties lying along the Rts. 55/47 corridor extending from Port Elizabeth to Cape May. Arterial roadways serving as shores routes to Cape May County were the focus of the study. These roadways include Rt. 49, Rt. 50, CR. 550, the Garden State Parkway, the Atlantic City Expressway, US 9, Rt. 47, and Rt. 347.

The study process first solicited information from the SCC on the scope and magnitude of the transportation problems found in the corridor. Existing conditions in the study area were used to establish background parameters on the transportation system’s performance. The analysis focused on data collected from the summer of 1997. It included an assessment of historic data from the corridor based on traffic counts and aerial surveillance. The Project Support team used the information to portray existing conditions in the corridor, how those conditions have changed over time, and to define the problem locations. Based on input and feedback from the committee, the transportation needs for the area were defined.

The committee recognized that the transportation problems in the corridor need mitigation. As such, the group identified a wide range of improvement concepts to address the traffic flow conditions and satisfy the overall goals of the study. The concepts included improvements to existing roadways within existing right-of-way, construction of new roadways or improvements to existing roadways on new right-of-way, improved management of existing transportation infrastructure to maximize efficiency, and management of transportation demand to spread or lessen the peak period traffic loads or encourage the use of alternative modes.

The improvement concepts were evaluated based on their ability to meet the transportation needs of the corridor, their community and social impacts, and their environmental impacts. The study utilized a modified version of the South Jersey Highway model to assess the ability of the existing system to serve summer peak travel demand. The model was used to evaluate, at a screening level, the traffic impact of each improvement concept on the highway system. This information, along with a screening level summary of possible environmental and historical constraints, and an assessment on the buildability of each concept was presented to the SCC.

The SCC, through a series of meetings, debated the merit of each improvement concept. After all were reviewed, the concepts were reorganized to facilitate their grouping into an improvement program. The concepts were then assessed by the SCC to identify those that meet the project’s needs and should be given further consideration and to identify those that should be dismissed or set aside for later consideration. During this process, new or modified improvement concepts were introduced by SCC members for consideration by the group.

Building on the results of the SCC process, an improvement plan for the corridor is proposed. An incremental improvement program was developed based on traffic issues, environmental constraints, and community concerns. The program focuses on two main areas: operational improvements and capital improvements. The program areas form the basis of a near term and
a longer range plan for the identification, programming, and advancement of improvement projects through the SJTPO’s regional planning process.

6 INITIAL IMPROVEMENT CONCEPTS

The formulation of improvement concepts for the corridor was guided by the goals established by the SCC. These goals included improving traffic flow, improving safety, improving the local quality of life, and preserving the quality of the environment of the area and its rural characteristics. A wide range of concepts were initially developed as possible solutions including improvement to existing parallel facilities, transportation system management (TSM) and intelligent transportation system (ITS) options, travel demand management (TDM) options, a full extension of the Rt. 55 freeway, and the utilization of alternative modes, such as rail.

Initially, over 20 concepts were identified and evaluated. The concepts are defined in Appendix A and listed below. Some are also depicted in Figure 3 - Improvement Concepts:

Rail - New passenger rail line from Millville to Woodbine

CR. 550 Northern Arterial - Two lane arterial roadway using new and existing alignments from Rt. 49 and near CR. 548 or CR 557, to CR. 550, to Sea Isle Boulevard Extension to the GSP

CR. 550 Southern Arterial - Two lane arterial using new and existing alignments from Rt. 347 to CR. 550 to Sea Isle Boulevard, including a widening of Rt. 47 north to Rt. 55 and the Sea Isle Blvd. Extension to the GSP

CR. 550 Middle Arterial - Two lane arterial using new and existing alignment from Rt. 47 and CR. 548 to CR. 550 to Sea Isle Boulevard, including a widening of Rt. 47 north to Rt. 55 and the Sea Isle Blvd. Extension to the GSP

Sea Isle Blvd. Extension - Two lane arterial roadway on new alignment to extend Sea Isle Blvd. to connect CR. 550 with US 9 and the GSP.

Rt. 83 Extension - Two lane arterial on new alignment to extend Rt. 83 to the GSP

Rts. 49 & 50 Connection with GSP - Upgrade interchange with GSP from partial to a full

Tyler Road Intersection - Improvements to increase capacity on Rt. 47

Rts. 47 & 347 Intersection - North and South Merge - Improvements to increase capacity

Port Elizabeth Bypass - Two lane arterial roadway on new alignment from Rt. 55 to Rt. 347

Dennisville Bypass - Two lane arterial roadway on new alignment from CR. 557 to Rt. 83

Tuckahoe Bypass - Two lane arterial roadway on new alignment from Rt. 49 to Rt. 50

Rt. 55 Freeway - Four lane roadway on new alignment to the GSP

CR. 557 & CR. 550 Intersection - Capacity improvements

Rt. 47: Reversible Lane - Provide additional, reversible lane in the peak travel direction on summer weekends from Rt. 55 to Rt. 347 and from Rt. 347 to Rt. 657

Rt. 9 Intersections - Grade separate signalized intersections in Cape May Court House at: Crest Haven Boulevard, Shell Bay Drive, Stone Harbor Boulevard (CR 550)

ACE & GSP Interchange - Improvements to interchange area
Traffic Demand Management (TDM) – Create better balance between system supply and demand to improve traffic flow conditions.

Intelligent Transportation Systems/Transportation System Management (ITS/TSM) – Employ technology to increase capacity through increasing efficiency. ITS systems include Highway Advisory Radio, Variable Message Signs, and Incident Management.
7 SCREENING OF THE IMPROVEMENT CONCEPTS

The improvement concepts were evaluated based on their ability to improve current travel conditions, their impact on the environment, and on community issues. For each concept, an assessment of the traffic impact, a screening level summary of possible environmental and historical constraints, and an assessment on the buildability of each concept was presented to the SCC. The evaluation process at this level was geared to eliminate fatally flawed concepts, or concepts that did not achieve the study's goals and objectives.

The SCC debated the merit of each concept. Some were dismissed as not meeting the transportation objectives of the study, including:

- **Rt. 83 Extension** - Dismissed as it wouldn't serve traffic needs. It would serve same destination as existing CR. 657 and would prove difficult to tie-in with the GSP toll plaza. CR. 657 offers a comparable travel benefit, is shorter, and doesn't have a toll.

- **Rts. 49 & 50 Northbound Connection with GSP** - Dismissed as it would only serve localized movements and would provide minimal help to the corridor.

- **CR. 557 & CR. 550 Intersection** - Dismissed as it was inconsequential as a traffic solution.

- **Rail - New passenger rail line from Millville to Woodbine** - Dismissed as it was inconsequential as a traffic solution. This concept has low potential to capture original recreational travel in the corridor and would likely have little impact on roadway flow conditions. It is not likely to be attractive to recreational travelers as an intercept/mode transfer station in Millville, and therefore would have little impact on relieving congestion in the corridor. As a tourist attraction, it's possible, but such a system would have little impact on the regional highway system.

An outgrowth of this concept was the development of a new concept of Regional Rail service in the corridor.

The remaining concepts were reorganized to facilitate grouping one or several concepts into an improvement program. The concepts were then assessed by the SCC to identify those that meet the project's needs and should be given further consideration and to identify concepts that should be dismissed or set aside for later consideration. The resulting transportation improvement concepts were categorized into five groups depicted below.

- Corridors
- TDM/ITS Concepts
- Freeways
- Bypasses
- Regional Rail

### 7.1 Corridors

This group of transportation improvement concepts consisted of new or upgraded arterial roadways that would primarily follow existing or former road or rail right-of-ways (ROW). The primary objective of these concepts was to provide additional roadway capacity to better serve overall travel demand.
7.1.1 Rt. 49/50 Corridor

Improvements proposed in this corridor include the upgrading of the Rt. 49 and Rt. 55 interchange, minor capacity improvements along the corridor utilizing mainly existing ROW, and a bypass of Tuckahoe partially built on new alignment. The improvements were proposed as a means of decreasing the overall travel time associated with this route, thereby making it more attractive for motorists to divert from Rt. 55 and use the Rt. 49/50 corridor to access Cape May County.

The traffic advantages of this concept are that motorist diverting from Rt. 55 before the Port Elizabeth area would reduce congestion on Rt. 47 and Rt. 347 in the southwestern portion of the study area. (The number of such motorist who are destined for southern Cape May County that would use this route is likely low, as it would be a longer trip, likely involve a portion of travel on the tolled GSP, and may not reduce overall travel time.) Therefore, this concept may offer limited benefit to the overall study area. However, as this route is currently under-utilized, it is a candidate for signing and VMS/HAR treatment to allow motorist the opportunity to better utilize this alternative route.

The upgrade of the existing interchange and the existing Rt. 49 and Rt. 50 corridor should not pose any significant environmental difficulties. The bypass of Tuckahoe was not fully explored, as it was added to the evaluation process at a late date. However, any roadway constructed on new alignment would likely pose environmental difficulties. There was also concerns expressed about bypassing a small urban center and its potential negative impacts on the commerce of Tuckahoe.

7.1.2 Rt. 47/347 Corridor

This concept consisted of developing a reversible lane on Rt. 47 from Rt. 55 to the Rts. 47/347 split and a reversible lane on Rt. 47 from the Rts. 47/347 merge to Rt. 83 and CR. 657. As proposed, the reversible lane would operate in the peak travel direction on summer weekends. Included would be key intersection improvements to increase capacity, including the intersection of Rt. 47 and 347 at the northern and southern merge points and at Tyler Road and Rt. 47.

The traffic advantages of this concept is to provide additional capacity on Rt. 47 in highly congested areas when it is needed the most - during the peak summer weekends. The additional roadway and intersection capacity should improve traffic flow through these bottleneck areas, thereby benefitting the overall Rt. 47/347 corridor. As this is a major route for (Rt. 55) travelers destined to southern Cape May County, it would have significant transportation benefits.

The difficulties with this concept is that a reversible lane would require the need for some ROW and also the need for an advanced traffic operations control system. New lane control technology must serve to limit safety concerns, and the lane would operate only on a limited schedule. The minor widening associated with the third lane and the proposed intersection improvements could pose environmental constraints. However, these may not prove to be major environmental barriers.

7.1.3 Rt. 550 Corridor

This concept evolved from a number of options that would use a new roadway to link Rt. 55/47 to existing CR. 550, then upgrading existing CR. 550 to US 9, and construct of a new roadway link to Sea Isle Blvd. with US 9 and the GSP. One concept would run northeast from Route 47 following CR. 548, then easterly on new alignment following railroad ROW, then connect with
existing CR. 550 at CH. 60/. It would then follow existing CR. 550 on through Woodbine to connect with Sea Isle Boulevard. It would also include a widening of Route 47 north to Route 55 and an extension of Sea Isle Blvd. to connect with US 9 and the GSP on new alignment.

A northerly variation would start as a T-connector from Route 49 following the county line to CR. 548, then southeasterly to CR. 557, then following existing CR. 550 to connect with Sea Isle Boulevard, again extending to connect with a US 9 and the GSP.

This concept is divided into three pieces, the first connecting either Rt. 47 or Rt. 49 to CR. 550, the second upgrading capacity on existing CR. 550, and the third extending Sea Isle Blvd.

From a traffic perspective, the CR. 550 Corridor concept would improve flow in the region by helping absorb a portion of traffic from the Rts. 49/50 and Rts. 47/347 corridors. The northern alignment has less impact on Rt. 47 and 347, as it serves as more of an alternative to Rt. 49 and 50, and therefore lower utility potential.

The proposed improvements to CR. 550 including a new access roadway from Rt. 55 would upgrade the function of this roadway. If the connection to Rt. 55 and US 9/GSP is included, the roadway would likely carry significant traffic volumes, on par with existing arterials in the area. The key to generating high traffic demand is the Sea Isle Blvd. extension.

The Sea Isle Blvd. extension connecting CR. 550 to US 9 and the GSP has significant independent value. This connector would facilitate movements among the local roadways and the major arterials, and improve overall traffic flow in the area.

The new alignment segment at western end of the corridor, proposed to follow an old rail ROW, has significant environmental impacts associated with its development as a new roadway link. Much of the route is an upgrade to CR. 550, which would require an evaluation of the ability to improve capacity within its ROW and the environmental impacts of a widening. The extension to Rt. 9 and the GSP is significant from a traffic perspective. It would require new alignment for a small distance. The identification of environmental impacts is a key task to advancing this concept.

### 7.1.4 ACE/GSP Corridor

This concept would improve traffic flow conditions in the ACE/GSP Corridor, thereby increasing its attractiveness to regional travelers. It is believed that an improved ACE/GSP route would attract traffic from Rt. 55 and out of the Rts. 55/47 corridor. Major components include improvements to the ACE/GSP interchange area, the GSP just south of the interchange area, the ACE mainline, and the GSP in the Cape May County area.

The benefits and constraints of this concept were not fully evaluated because it was outside of the primary study area. From a traffic perspective, the concept has merit. Further study is needed to evaluate the benefits of the EZPass system on both the ACE and the GSP. Methods of making these roadways more attractive should also be explored. A disadvantage of this concept is that the roadways are tolled facilities, which may discourage a portion of motorists from utilizing them.
7.2 TDM/ITS Concepts

This group of transportation improvement concepts consisted of strategies whose goal was to reduce, or manage travel demand to better match it to existing capacity (TDM), and strategies aimed to increase the efficiency of the existing system, thereby increasing capacity without major capital projects (ITS).

Intelligent Transportation Systems (ITS) make use of existing and evolving technology to improve the movement of people and goods to provide safer and quicker travel. Essentially, ITS is about providing the right people with the right information at the right time, and using that information to improve the transportation system. ITS solutions supply travelers with real-time information about the transportation system, and can increase the efficiency of all modes of transportation.

A central part of this concept is to gain a better understand of the travel demand in the area. A corridor-wide traffic monitoring program to gather data on the summer peak conditions would be included in this concept. A better understanding of the system can lead to the development and implementation of managed corridor strategies to improve traffic flow. Also included in this concept are signage programs, motorist information programs, and incident management programs including emergency service patrols (ESP).

Travel demand management (TDM) strategies focus on altering or reducing travel during the peak periods. Two such concepts are incentive or disincentive pricing programs (tolls) or altering the rental start/stop day from a Saturday to a Sunday.

The transportation merits of ITS/TDM are that they increase the efficiency of the existing system, thereby moving more traffic.

7.3 Freeways

This transportation improvement concept consisted of the completion of the Rt. 55 Freeway from its present terminus to the GSP. This would be a four lane, limited access freeway built mainly as new road extending southeasterly from Rt. 55 to cross CR. 548, Hunter's Mill Road, CR. 550, and CR. 651 to Rt. 83, then follow Rt. 83 (on existing, upgraded alignment) to US 9 and Garden State Parkway.

From a traffic perspective, existing segments of Rt. 55 gain significant volume and the new segment of Rt. 55 is forecast to carry a significant summer traffic volume. This roadway would draw major traffic from Route 47, Route 347, Route 49, and Route 50, and other county and local roads in the area, providing significant traffic relief to the local roadway system. It would, however, increase volume on the GSP, taxing the ability of the roadway to serve its existing demand and the new demand resulting from the completion of Rt. 55. It would likely require a widening of the GSP to accommodate increased demand.

This project would involve the construction of new roadway through environmentally sensitive areas and public lands. It would face extreme environmental problems, particularly wetland impacts, which would make it difficult to permit and costly to mitigate. It would also be very costly to build.

7.4 Bypasses - Port Elizabeth, Dennisville, Tuckahoe

This group of transportation improvement concepts consisted of building bypasses around some of the more heavily congested segments of Rt. 47 and Rts. 49/50 that pass through local.
communities. The concept is that a bypass alone would divert traffic away from the local communities.

All were proposed as two lane major arterials that would require new alignment to build. Two were proposed for the heavily congested segments of Rt. 47 that pass through Port Elizabeth and Dennisville. A third was proposed to bypass Rts. 49/50 through Tuckahoe, and is discussed in the Rts. 49/50 Corridor section above.

The Port Elizabeth bypass would diverge southeasterly from Route 55 to connect with Route 347, thereby bypassing Rt. 47 through Port Elizabeth. This roadway would carry significant traffic volume and provide relief to Rt. 47 in the bypass area. However, its traffic impact is generally localized, and corridor benefits would not be maximized without the addition of the Dennisville Bypass. It would be not practical to build one bypass without the other, as they function best as a pair.

Environmentally, it may prove very difficult to build, as it has significant wetland impacts.

The Dennisville bypass would diverge from Rt. 47 south of CR. 557 and join with Route 83. This roadway would carry significant volume and decreases traffic filtering down from the Routes 49/50 corridor. Its impact would be less localized than the Port Elizabeth bypass, but it would still need to be combined with the Port Elizabeth bypass to achieve corridorwide improvements.

Environmentally, it may prove very difficult to build, as it has significant wetland impacts.

7.5 Regional Rail

This concept is to improve regional rail serving the area, making it a stronger alternative to the automobile. An example would be a new linkage of Atlantic City with Ocean City and Cape May. It was decided that the best approach to evaluating the potential of regional rail service enhancements in the corridor, as well as the region, would be through the SJTPO as part of their long range transportation planning assessments.

8 CANDIDATE IMPROVEMENTS

The last work effort of the SCC was to develop recommendations for near and long term improvement plans.

Each transportation improvement concept was debated by the SCC to determine what action, if any, should follow for the concept. To facilitate the process, three "action levels" were defined: Near Term Plan, Long Term Plan, and Unresolved. Each is described below:

**Near Term Plan – Tier 1**: Signifies improvement concepts that can be acted upon immediately. Activation may include implementation (e.g. for simple operational improvements) or may mean advancement to further study and development.

**Long Term Plan - Tier 2**: Signifies improvement concepts that may not be activated immediately, but can be drawn upon if needed following study or implementation of Near-Term Plan components.

**Unresolved**: Signifies improvement concepts that the SCC did not directly address.
or only partially addressed the issues associated with the concept

8.1 Near Term Plan – Tier 1

This signifies improvement concepts that can be activated or advanced immediately. Concepts that were placed into the Near Term Plan in general provided traffic benefits and those that were believed to be the most immediately buildable, regarding environmental and community impacts and project costs. The SCC agreed that the following should be near term plan components:

RT. 49/50 CORRIDOR
A. Rt. 55/49 Interchange improvements
B. Minor capacity improvements along the corridor

RT. 550 CORRIDOR
A. Improvements to CR. 550
B. Rt. 49 to CR. 557 to CR. 550 improvements
C. Sea Isle Blvd. Extension

ACE/GSP CORRIDOR
A. Improve ACE/GSP Interchange
B. GSP Interchanges Improvements
C. GSP Mainline Improvements
D. ACE Mainline Improvements

TSM/ITS STRATEGIES
A. Corridorwide traffic monitoring
B. Managed Corridor strategies
C. Signage program
D. Motorist information/VMS
E. Incident management/ESP
F. Demand Management

Due to environmental and community concerns, the SCC had a split decision on the following concepts, although a majority of those indicated a preference for placement of these concepts in the Near Term Plan:

RT. 47/347 CORRIDOR
A. Reversible lane on Rt. 47 from Rt. 55 to 47/347 split and 47/347 merge to Rt. 83, CR. 657
B. Key Intersection improvements

RT. 550 CORRIDOR
A. Middle Arterial - Two lane major arterial using new alignment from Rt. 47 to CR. 550.

8.2 Long Term Plan – Tier 2

This group signifies concepts that may not be activated immediately, but can be drawn upon if needed following study or implementation of Near-Term Plan components.

RAIL
A. Regional Rail

This concept will be addressed as part of the SJTPO’s Regional Transportation Plan Update. It will focus on a wider basis of need than recreational travel, however, rail service
improvements may also offer benefits to recreational travel issues.

FREeway

  A. New four lane freeway from existing terminus to GSP

The SCC had a split decision on this, although a majority placed this concept in the Long Range Plan as future traffic needs may warrant its re-examination.

8.3 Dismissed or Unresolved

The SCC agreed that the Port Elizabeth and Dennisville bypasses should be dismissed from further consideration. The group did not directly address or only partially addressed the issues associated with the concept of the Tuckahoe Bypass and widening Rt. 47 to four lanes through Port Elizabeth and Dennisville, therefore these concepts were unresolved.

9 CORRIDOR IMPROVEMENT PROGRAM

A corridor improvement program was developed based on the outcome of the SCC study process. The SCC approved of a core program of measures that would provide some congestion relief while minimizing environmental and community impacts. More effective, yet more extensive improvements were supported by most, as it was recognized that the magnitude of the congestion problem warranted some larger scale projects. Major capital improvement concepts gathered the least overall support. It was clear, however, that the group strongly desired to advance projects to mitigate the congestion problems in the corridor.

Building on the results of the SCC, an improvement program has been formulated for the corridor. An incremental improvement program is proposed based on traffic issues, environmental constraints, and community concerns. The program focuses on two main areas: operational improvements, and capital improvements.

Operational improvements are proposed to better manage the existing resources in the corridor and maximize capacity to improve traffic flows. Capital improvements are proposed that will incrementally add system capacity starting with improvements within existing ROWs to minimize adverse impacts.

Improvements proposed to build roadways on new alignments are part of a longer term program. The need for those improvements will be further evaluated after the early term improvements are advanced. As the support for high capital projects is limited, those types of investment, both financially and environmentally, will require a more thorough assessment of overall corridor need beyond the summer season.

9.1 Program Areas

A. MANAGE RECREATIONAL TRAVEL

Operational based program to increase efficiency of existing system.
Action Items:

- Develop an annual deployment plan for Variable Message Signs (VMS) Highway Advisory Radio (HAR) in the corridor
  Lead Unit: NJDOT - Traffic Operations South
- Advocate 24 hour weekend coverage by the Southern Region Traffic Operations Center to monitor traffic activity throughout the summer season
  Lead Unit: SJTPO
- Evaluate need for Emergency Service Patrol (ESP) coverage in the corridor
  Lead Unit: SJTPO
- Gauge annual corridor performance and report to the SJTPO. Monitor traffic growth and characteristics and report findings - including aerial surveillance every 3 years
  Lead Unit: NJDOT, Cape May and Cumberland Counties
- Review regional recreational travel signing. Update/modify sign system to take advantage of alternative routes with excess capacity, particularly where signing may encourage travel in areas where economic benefits may result
  Lead Unit: Cape May and Cumberland Counties
- Explore modifying shore property rental periods. Desirable to change a portion of the rentals from Saturday - Saturday to Sunday - Sunday.
  Lead Unit: SJTPO and Cape May County

B. Atlantic City Expressway and Garden State Parkway Corridor

Maintain and enhance the corridor's role as a provider of service to the shore/recreational market.

Action Items:

- Support/Advocate Garden State Parkway improvements through Cape May Court House including Interchange 0, 6, and 25 improvements
  Lead Unit: SJTPO
- Support Garden State Parkway program/effort to widen GSP between the ACE and Interchange 30
  Lead Unit: SJTPO
- Reduce congestion on Route 9 by increasing access to GSP. Identify interchange capacity, accessibility, and operational deficiencies
  Lead Unit: NJDOT, GSP, Cape May, Atlantic Counties
- Investigate innovative toll structure/price incentives aimed at capturing more regional recreational market (possible discounts to ACE/GSP link users, value pricing)
  Lead Unit: SJTPO
C. Capital Improvements – Short Term
Capital highway improvements that can be activated or advanced immediately. Address existing problem areas where immediate benefit can be achieved.

Action Items:
- Advance intersection improvement studies in FY 99-01 at:
  1. Rt. 9/CR. 550/Sea Isle Blvd. at GSP
  2. Rts. 347/47 Port Elizabeth
  3. Rts. 347/47 in Dennisville
     Lead Unit: SJTPO/NJDOT

D. Capital Improvements – Mid Term
Capital highway improvements that will require longer evaluation, scoping, and development time.

Action Items:
- Rt. 47 Corridor Reversible Third Lane
  Lead Unit: SJTPO
- Rts. 49/50 Corridor Capacity/Operational Improvements
  Lead Unit: SJTPO

E. Capital Improvements – Long Term
Capital highway improvements that may not be activated immediately, but can be drawn upon if needed following study or implementation of near and mid term programs
- Rt. 550 Corridor
  Lead Unit: SJTPO
- Rt. 55 Freeway
  Lead Unit: SJTPO
APPENDIX A

Transportation Improvement Concepts

Concept 1: Rail Line
New passenger rail line from Millville to Woodbine with connections to the Cape May Seashore Line and stations at Millville, Woodbine, etc. The line would follow existing rail line ROW

Concept 2: Southern Arterial
Two Lane Major Arterial using new and existing alignments. The road would run north from Rt. 347 following existing Hunter’s Mill Road to railroad ROW, continuing easterly to connect with existing CR. 550 at CR. 607, then following existing CR. 550 on through Woodbine to connect with Sea Isle Boulevard. This concept would include a widening of Rt. 47 north to Rt. 55 and the Sea Isle Blvd. Extension listed as concept 4.

Concept 3: Middle Arterial
Two Lane Major Arterial using new and existing alignments. The road would run northeast from Rt. 47 following CR. 548, then easterly on railroad ROW, then connect with existing CR. 550 at CR. 607. It would follow existing CR. 550 on through Woodbine to connect with Sea Isle Boulevard. This concept would include a widening of Rt. 47 north to Rt. 55 and the Sea Isle Blvd. Extension listed as concept 4.

Concept 4: Sea Isle Blvd. Extension
Two Lane Major Arterial roadway that would require new alignment to extend Sea Isle Blvd. to connect with US 9 and the Garden State Parkway.

Concept 5: Rt. 83 Extension
This is a Two Lane Major Arterial that would require new alignment to extend Rt. 83 to the Garden State Parkway.

Concept 6: Rts. 49 & 50 Connection with GSP
Upgrade Rts. 49 & 50 interchange with Garden State Parkway from partial to a full connection.

Concept 7: Tyler Road Intersection
Tyler Road & Rt. 47 Intersection improvements to improve capacity on Rt. 47

Concept 8: Rts. 47 & 347 Intersection - South
Intersection of Rt. 47 & Rt. 347 - South. Improve capacity on Rt. 347 via a minor through lane on Rt. 347

Concept 9: Rts. 47 & 347 Intersection - North
Rt. 47 & Rt. 347 Intersection - North. Improve capacity on Rt. 347 via a minor through lane

Concept 10: Port Elizabeth Bypass
Two Lane Major Arterial roadway that would require new alignment to bypass Rt. 47 through Port Elizabeth. The bypass would diverge southeasterly from Rt. 55 to connect with Rt. 347
Concept 11: Dennisville Bypass
Two Lane Major Arterial roadway that would require new alignment to bypass Rt. 47 through Dennisville. The bypass would diverge south of CR. 557 and join with Rt. 83.

Concept 12: Rt. 55 Freeway
Extension of Rt. 55 Freeway - Four Lanes to the GSP. This would be mainly a new road to extend southeasterly from Rt. 55 to cross CR. 548, Hunter’s Mill Road, CR. 550, and CR. 651 to Rt. 83, then follow Rt. 83 (on existing alignment) to Rt. 9 and Garden State Parkway.

Concept 13: Rts. 55 & 47 Intersection
Capacity improvements

Concept 14: Rts. 49 & 50 Intersection
Capacity improvements

Concept 15: CR. 557 & CR. 550 Intersection
Capacity improvements

Concept 16: Rts. 9 & 47 & GSP Intersection
Capacity improvements

Concept 17: Reversible Lane
Rt. 47 capacity improvement utilizing a reversible third lane on Rt. 47 in two segments from approximately Rt. 55 to Rt. 347 and from Rt. 347 to Rt. 657. Reversible lane would operate in the peak travel direction on summer weekends.

Concept 18: Northern Arterial
Two Lane Major Arterial roadway that would use new and existing alignments. It would start as a T-Connector from Rt. 49 following the county line to CR. 548, then southeasterly to CR. 557, then following existing CR. 550 to connect with Sea Isle Boulevard Extension. It would include a widening of Rt. 47 north to Rt. 55 and the Sea Isle Blvd. Extension listed as concept 4.

Concept 19: Rt. 9 Intersections
Grade Separation of three presently signalized Intersections in Cape May Court House at: Crest Haven Boulevard, Shell Bay Drive, Stone Harbor Boulevard.

Concept 20: ACE & GSP Interchange
Atlantic City Expressway & Garden State Parkway Interchange

Concept 21: TDM Concepts
Traffic Demand Management. The concept of deducing, or controlling demand to improve traffic flow conditions.

Concept 22: ITS/TSM Concepts
Intelligent Transportation Systems/Transportation System Management. The concept of increasing capacity through increasing the efficiency of the existing system rather than making major capital improvements. ITS systems include Highway Advisory Radio, Variable Message Signs, and Incident Management.
Transportation Planning Needs Assessments

ROUTE 47 / 55 CORRIDOR STUDY
ITS Primer

Prepared for:
New Jersey Department of Transportation

Prepared by:
Parsons Brinckerhoff

June 1998
INTRODUCTION

Intelligent Transportation Systems (ITS) make use of existing and evolving technology to improve the movement of people and goods to provide safer and quicker travel. Essentially, ITS is about providing the right people with the right information at the right time, and using that information to improve the transportation system. ITS solutions supply travelers with real-time information about the transportation system, and can increase the efficiency of all modes of transportation.

Many areas around the county are experiencing a number of competing pressures and demands. Traffic is increasing, along with the resulting need for transportation construction and increased maintenance. At the same time, funding levels are remaining static or are shrinking. Roadway capacity improvement in the form of physical construction is difficult and in not likely to serve as a permanent solution to accommodate steadily increasing traffic. Therefore, ITS technology is being adopted nationwide to manage existing facilities more efficiently.

In reality, ITS is not new, many areas around the country have been using some form of ITS for many years now. Perhaps the new concept for these regions is using ITS to connect the existing systems, and taking ITS into consideration when upgrading or replacing existing systems. New Jersey is already successfully using ITS to improve transportation all over the state. New Jersey ITS activities include advanced signal control, electronic toll collection, variable message signs, highway advisory radio, and transit operations.

BENEFITS OF ITS

The benefits of ITS on the overall transportation system will relieve some of the demand for new highway rights-of-way and lane construction. As a result, fewer wetlands, parklands, historical sites, and other sensitive areas will be adversely affected. In addition, improving traffic flow through better traffic signalization, traffic management systems, and electronic toll collection has the potential to reduce harmful emissions associated with frequent vehicle acceleration and deceleration and to distribute traffic more evenly to eliminate hotspots. Other benefits include:

- **Better travel information**: At home, at work, or on the road, travelers have access to real-time, up-to-date information and transit schedules, schedule adherence, roadway conditions, and other travel information.
- **Quicker emergency response**: Automated incident detection allows trained operators to locate, then judge, the nature of an accident and quickly dispatch and guide the right emergency personnel and equipment to the scene.
- **Easier, safer travel**: In-vehicle navigation systems tell car, truck, and transit drivers how to best reach their destinations and provide alternate routing during congestion or incidents.
- **Improved traffic flow**: Electronic toll tags allow travelers to drive through toll plazas without stopping. Electronic fare payment allows transit users to board the bus without fumbling for change.
- **Fewer traffic jams**: Traffic management strategies reduce congestion by continuously monitoring traffic conditions, freeway operations, and traffic signal operation and respond quickly to incidents.
- **Improved fleet management**: Bus, freight, and emergency vehicle tracking systems allow supervisors to track vehicles and communicate directly with drivers.
- **Faster freight deliveries**: Electronic weighing and inspection of commercial vehicles, and electronic administrative processes such as permits and licensing allow faster freight delivery.
- **Fewer accidents**: Effective traveler information and incident management reduces the number of secondary accidents following a major incident by providing travelers with alternate routes and reducing the incident clearance time.
- **Reduced vehicle hours of delay/Fuel savings**: Advanced signal control allows for progression along arterials thereby reducing the number of vehicle hours of delay to travelers and the amount of fuel used.
- **Reduced driver frustration and stress**: Variable message signs tell drives what is happening on the roadway ahead so that drivers may make their own informed decisions as to which route to choose.

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ITS STRATEGIES

In order to understand how the various technologies can be used to help improve the transportation network, ITS can be broken into the following strategies. This section will describe each of the following strategies in further detail. Benefit information was based on ITS Benefits: Continuing Successes and Operational Test Results, Federal Highway Administration, October 1997.

- Traveler Information
- Public Transportation Management
- Emergency Management
- Traffic Management
- Commercial Vehicle Operations
- Electronic Payment
- Advanced Vehicle Control and Safety Systems

Traveler Information

Traveler Information can be provided in a number of ways, some are new high-tech methods, and others are methods that have been in use for a number of years. For example, Highway Advisory Radio (HAR) is considered “ITS”, and has been around for many years. More recent methods of providing traveler information include variable message signs (VMS), the Internet, traffic channels on cable TV, and in-vehicle signing.

Useful traveler information depends upon the availability of reliable real-time data. In most areas, public agencies collect transportation data and provide it to the public free of charge. However, there has been an increasing number of private companies interested in getting into the business of selling traffic information. This presents a great opportunity for public/private partnerships and great benefit to the public. Travelers can use this information to make better informed decisions as to what is the best mode of choice, route, and time of day to make their trip.

Some ITS technologies used to collect and distribute transportation information are listed below:

- Monitoring
  - Detectors (inductive loop, magnetic loop, microwave, acoustic, and radar)
  - Closed circuit television (CCTV)
  - Pavement and Weather sensors
  - Automated vehicle location (AVL) and identification (AVI)

- Dissemination
  - Highway Advisory Radio (HAR)
  - Variable Message Signs (VMS)
  - The Internet
  - In-vehicle displays
  - Personal devices (beepers, e-mail, portable computing devices)
  - Telephone
  - Kiosks
  - Commercial radio, TV

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<tr>
<th>TECHNOLOGY</th>
<th>MEASURE OF EFFECTIVENESS</th>
<th>POTENTIAL BENEFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Vehicle Navigation</td>
<td>Travel Time</td>
<td>Decrease 4-20%</td>
</tr>
<tr>
<td>In-Vehicle Traffic Information</td>
<td>Route Diversion Rate</td>
<td>40-42%</td>
</tr>
<tr>
<td>Automated Transit Information</td>
<td># of Callers</td>
<td>Increase 80%</td>
</tr>
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</table>

Public Transportation Management

Convenience, cost, and reliability are among the key factors in a traveler’s choice of mode. ITS technologies such as transit vehicle tracking, advanced voice and data communications, automatic passenger counting, driver information, vehicle diagnostics, and computer aided dispatching are some of the available technologies
that can be used to provide public transportation management. ITS can be used to automate operations, planning, and management functions of public transit systems, and enhance transit operations. This strategy can be combined with traveler information to provide travelers information about transit options, schedules, and fares both pre-trip and while en-route. Personalized public transit technology can be used to route transit vehicles on a more flexible path, which provides more efficient service for para-transit, as well as transit in rural areas.

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<tr>
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<th>MEASURE OF EFFECTIVENESS</th>
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<tbody>
<tr>
<td>Transit Management</td>
<td>Travel Time</td>
<td>Decrease 15-18%</td>
</tr>
<tr>
<td></td>
<td>Fleet Size</td>
<td>Decrease 4-13%</td>
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<td></td>
<td>On-time Performance</td>
<td>Increase 12-28%</td>
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<tr>
<td></td>
<td>Incident Response Time</td>
<td>Decrease 40-50%</td>
</tr>
<tr>
<td>Transit Signal Priority</td>
<td>Travel Time</td>
<td>Decrease 5-8%</td>
</tr>
</tbody>
</table>

**Emergency Management**

Quick and effective response to incidents is a key factor in saving lives and reducing travel delay due to loss of capacity. Incident and Emergency management is generally provided by police, fire and rescue, and transportation agencies. These agencies all use some form of vehicle monitoring, navigation, communications, response, and control to provide emergency services.

ITS can be used to coordinate incident management across jurisdictional boundaries to ensure efficient and appropriate response, to improve incident response times, and to reduce traveler delays due to incidents. More specifically:

- Improved monitoring, augmented by rapid and accurate reporting of incidents, allows the rapid dispatch of appropriate equipment and personnel to the incident scene.
- Availability of accurate and timely incident information to the traveling public will further help reduce delays for drivers and transit riders.
- Use of a common regional digital mapping system by the various traffic and emergency management organizations will allow the incident management team to better locate the reported incident, and will facilitate communication among the various agencies.

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<tr>
<th>TECHNOLOGY</th>
<th>MEASURE OF EFFECTIVENESS</th>
<th>POTENTIAL BENEFIT</th>
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</thead>
<tbody>
<tr>
<td>Incident Management</td>
<td>Incident Clearance Time</td>
<td>Decrease 5-8 minutes</td>
</tr>
<tr>
<td></td>
<td>Travel Time</td>
<td>Decrease 10-42%</td>
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</table>

**Traffic Management**

As with traveler information, effective traffic management is dependent upon collecting real-time traffic data. Advanced traffic signal systems can coordinate signals to provide quick and efficient movement through the arterial network. In addition, benefits to emergency vehicle can be realized from using signal priority and preemption. Examples of traffic management strategies include:

- **Adaptive signal control**: Signal systems that have the capability of changing or adapting signal timing based on current traffic conditions.
- **Lane use sign systems**: Systems used in conjunction with reversible lanes that can be used for traffic in either direction based upon the traffic needs or time of day.
- **Ramp metering systems**: Used to control freeway access based on freeway volumes and headway.
- **Electronic variable speed limit signs**: Used to vary the speed limit in areas where weather or other adverse conditions warrant reductions in vehicle speeds.
- **Signal priority**: Primarily used for transit vehicles, signal priority is used to either shorten a red light or prolong a green light for a transit vehicle (equipped with a transponder) running behind schedule.
- **Signal pre-emption:** Primarily used for emergency vehicles, signal pre-emption is used to change a signal from red to green when prompted by a transponder from an emergency vehicle such as an ambulance, fire truck, or police car.

- **Reversible Lane Signal System:** Maximize traffic flow by managing the direction of traffic on given lanes. Lane direction may vary depending on the time or day of the week.

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<th>MEASURE OF EFFECTIVENESS</th>
<th>POTENTIAL BENEFIT</th>
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<tbody>
<tr>
<td>Traffic Signal System</td>
<td>Travel Time</td>
<td>Decrease 8-10%</td>
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<td></td>
<td>Travel Speed</td>
<td>Increase 14-20%</td>
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<tr>
<td></td>
<td>Delay</td>
<td>Decrease 17-37%</td>
</tr>
<tr>
<td></td>
<td>Number of Stops</td>
<td>Decrease 1-35%</td>
</tr>
<tr>
<td></td>
<td>HC Emissions</td>
<td>Decrease 4-10%</td>
</tr>
<tr>
<td></td>
<td>CO Emissions</td>
<td>Decrease 5-13%</td>
</tr>
<tr>
<td></td>
<td>Nox Emissions</td>
<td>Degradation 4%</td>
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<tr>
<td></td>
<td>Fuel Consumption</td>
<td>Decrease 6-12%</td>
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<tr>
<td>Transit Signal Priority</td>
<td>Travel Time</td>
<td>Decrease 5-8%</td>
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**Commercial Vehicle Operations**

These services improve the efficiency and safety of commercial fleet operation, benefiting both the state and the motor carrier industry. CVO strategies use advanced computer and communications technologies to improve safety and productivity.

ITS technology can provide electronic access to national and state databases with information on a motor carrier's safety and performance records and allow for "one stop shopping" for motor carrier credentials. Violations by carriers in other states are electronically made available to agencies in other states for administrative and enforcement purposes. State agencies can coordinate operating requirements and data files to allow carriers to supply information in a single format for multiple purposes.

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<tbody>
<tr>
<td>Automated Administrative</td>
<td>Benefit Cost ratio</td>
<td>4:1 for medium-sized carriers</td>
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<tr>
<td>Processes</td>
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**Electronic Payment**

Electronic Payment allows the user to pay for transportation services such as tolls or transit fares using electronic means. Electronic toll collection reduces delays at toll plazas and operating costs of toll agencies. Electronic toll collection systems are in operation in numerous locations across the county. These systems include hardware and software for roadside and in-vehicle use, including payment cards or tags, and a communications system between the vehicle and the roadside. Toll payment is processed as the vehicle passes the toll station at a safe speed, thereby decreasing delay and improving system productivity.

Electronic payment systems may include and combination of debit, credit, or stored value fare cards and can be installed in various configurations. Fares may be paid for in transit stations as well as on board the vehicle.
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<th>MEASURE OF EFFECTIVENESS</th>
<th>POTENTIAL BENEFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Toll Collection</td>
<td>Toll Capacity</td>
<td>Increase 200 to 300% compared to attended lanes</td>
</tr>
<tr>
<td>Electronic Fare Payment</td>
<td>Revenue</td>
<td>Increased 3 to 30% due to fewer evasions</td>
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</table>

### Advanced Vehicle Control and Safety Systems

Most services in this category are provided through the automobile industry, and many involve technology that is still being developed. These systems are located within the vehicle and allow for automated route guidance, collision avoidance, and mayday features. For example, a vehicle may be equipped with sensors to recognize whether the vehicle is too close to another vehicle or object in front or next to it and alert the driver to avoid a collision.

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<tbody>
<tr>
<td>In-Vehicle Collision Avoidance Systems</td>
<td>Collisions</td>
<td>Decrease 1.1 million per year</td>
</tr>
<tr>
<td>Lane-keeping Collision Avoidance Systems</td>
<td>Collisions</td>
<td>Decrease 52,000 per year in Urban Areas</td>
</tr>
<tr>
<td></td>
<td>Collision</td>
<td>Decrease 19,000 per year in Rural Areas</td>
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HOW CAN ITS HELP THE ROUTE 47/55 STUDY AREA?

Corridor-wide Traffic Monitoring
A corridor-wide traffic monitoring program could greatly benefit the Route 47/55 study area. Sensors, detectors, cameras, and other monitoring devices could collect information about congestion, incidents, transit ridership, transit schedule adherence, weather conditions, seasonal traffic problems, special event transportation problems, and other information. This information will be used to determine appropriate control strategies necessary to optimize system performance. System monitoring is especially important for incidents, seasonal and recreational periods and special event situations, when transportation patterns and volumes are unpredictable and significantly disrupted. The data collected in the corridor-wide traffic monitoring program could be used to provide traffic and transit information, incident management, and managed corridor strategies.

Managed Corridor Strategies
Corridor-wide traffic management are used to optimize the effective capacity of existing facilities. Examples of management strategies applicable to the Route 47/55 study area include a reversible lane on Route 47, advanced signal control systems, signal priority and signal pre-emption.

Signage Program
Improved signage within the study area will benefit travelers. This program should be implemented in conjunction with the traveler information program. When travelers are informed about traffic conditions on the road ahead, via a VMS or HAR, it is up to the traveler to chose an alternate route. If the corridor has better static signs directing travelers, they will be more willing to take an alternate route because they will be less likely to get lost.

Traveler Information
Real-time information is critical to effective transportation management. Motorist information can be provided to travelers through a variety of methods. The types of information to be collected and distributed include real time travel schedules and transit schedule adherence, traffic accident/incident information, special event information, traffic volume and congestion information, travel time information, and tourist information.

A network of Variable Message signs strategically located at decision points and prior to services (gas, food, services) would be helpful. This information is less effective if the alternate routes are not available, are also congested, or if routes are poorly marked. The motorist information program should be implemented in conjunction with the Signage program.

HAR can also be used in conjunction with the VMS signs. In case of an extreme emergency where an entire roadway is shut down, VMS signs can advise travelers to tune into the HAR. HAR has the advantage of providing a much longer message that can be provided on a VMS sign. HAR and VMS can also be used for non-traffic emergencies such as an emergency evacuations.

Other methods of dissemination may include the telephone, broadcast and cable television, the Internet, and other wireless technologies such as in-vehicle devices and hand-held computers.

Incident Management/ESP
This strategy is aimed at maintaining existing capacity. The Incident management program will utilize the monitoring program data to provide incident management. When an incident is detected by the equipment, a trained operator will send that information to the appropriate response personnel. This will greatly reduce incident management time, reduce delay, and increase safety. Signal priority or pre-emption can also be used to provide effective incident and emergency management.

Demand Management
Demand management can be mitigated through a variety of strategies. For example, companies in the study area could be urged to give their employees the option of flex hours during the summer months. Another strategy is to promote rental agencies to change weekly rental agreements so that half of the rentals are from Saturday to Saturday and the other half are Sunday to Sunday thereby reducing Saturday's traffic demand.

PARSONS BRINCKERHOFF
Theory of Operations

This section will provide a brief example of how ITS can benefit the following transportation users in the Route 47/55 Study Area:

- Route 47/55 Area Resident/Local Commuter
- Emergency Service Provider
- Fire and Rescue Provider
- Transit Rider
- Shore Traveler

Route 47/55 Area Resident/Local Commuter

Living so close to the shore has both its advantages and disadvantages. During the summer months, the communities in the Route 47/55 Study area are bombarded with people cutting through their communities on the way to the shore. Local residents going home from work Friday night have to sit in the same traffic as all the other vacationers.

The Jones family has lived in Port Elizabeth for many years and have recently noticed improvements in the summer traffic congestion. The new reversible lane system has been a major improvement. On Fridays and Saturdays there are now two lanes traveling south/east along route 47 and one lane traveling north/west. On Sunday the lane goes the other direction so that there are two lanes traveling away from the shore. This improvement has greatly reduced the congestion along route 47 due to the shore traffic.

The Jones family have also enjoyed the new traffic signal system that changes the signal timings based on how many cars are on the road at that point in time. For example, during rush hour on weekdays, the signals give extra green time to residents commuting to work. The signals automatically go back to “normal” mode once the traffic has cleared.

Emergency Service Provider

Tom was proud of the job he did as an ambulance driver, one that had a direct impact on people’s lives. The one part of the job that he found to be very frustrating was getting to an emergency scene through the traffic and locating the exact place where he was needed. Many times in the past, he had wasted valuable minutes fighting his way through traffic jams and searching for an obscure address. Tom knows that there is a direct relationship between the delay in getting to an emergency scene and the chances of survival of the victims.

Tom is happy with the new ITS system they are now using. The new system not only tracks Tom’s ambulance through the road network, but also provides him with directions to the scene based upon real-time traffic conditions. So when there is a backup on Route 55 the system will automatically tell Tom to use an alternate route. Tom’s ambulance is also linked to the traffic signal system in the area so that the lights turn green as he approaches an intersection; again avoiding any unnecessary delay.

Fire and Rescue Provider

Pat is a volunteer fireman in Cumberland County, and like Tom, is directly responsible for saving people’s lives. In the past, they have had some problems with inter-county coordination of emergencies, which is detrimental to response times and public safety. Pat’s fire company has recently been integrated with the Emergency Service Provider in Gloucester County; they now use the same computer system to track emergencies. So now one system can dispatch the appropriate fire, police, and emergency personnel to a scene.

Transit Rider

Jamie depends on the bus to get back and forth to work every day. Jamie uses the new 1-800-TRANSIT number to check on the bus schedule. NJ Transit uses a computerized system to keep track of where the buses are and updates the schedules throughout the day. Jamie can use the automated telephone system to find out
information on a particular route. Most days the bus is on-time, however, this service especially comes in handy on rainy days when waiting inside for an extra ten minutes can make all the difference in the world.

**Shore Traveler**

The Davis family vacationed in Cape May almost every weekend for the past 10 summers. They have seen the traffic along this corridor grow and have spent countless hours in the car stuck in traffic headed for the shore. They really like the new VMS signs and HAR stations that have popped up along their route this summer. These signs let them know what the traffic conditions are on their route ahead. They now know that in a case of extreme congestion the VMS sign will tell them to tune into 1610AM to get more information. The HAR will then tell them detailed information about the problem ahead. This has more than once saved them from running out of gas while stuck in traffic on Route 55. They now know when this happens they can stop and get gas, take a break, or eat dinner while everyone else is stuck in traffic.
GLOSSARY

**Adaptive Control Systems:** Signal systems that have the capability of changing or adapting signal timing based on current traffic conditions.

**Arterial:** A major thoroughfare, used primarily for through traffic rather than for access to adjacent land, that is characterized by high vehicular capacity and continuity of movement.

**AVI:** Automatic Vehicle Identification, a system that transmits signals from an on-board tag or transponder to a roadside receiver for the automated identification of vehicles. AVI systems are used for electronic toll collection, stolen vehicle recovery, and other applications.

**AVL:** Automated Vehicle Location, a computerized system that tracks the current location of fleet vehicles to assist in dispatching, scheduling, and answering specific customer inquiries, better enabling fleets to function more efficiently.

**Carpool:** An arrangement where two or more people share the use and cost of privately owned automobiles in traveling to and from pre-arranged destinations together.

**CCTV:** Closed Circuit Television, television in which the signal is transmitted by wire.

**CVO:** Commercial Vehicle Operations, the application of ITS technology to commercial vehicles.

**DMS:** Dynamic Message Sign, an electronic sign that can change the message it displays. Used with traffic management signs. Also called variable message sign (VMS).

**ETC:** Electronic Toll Collection, the use of automatic vehicle identification (AVI) for non-stop toll collection.

**GPS:** Global Positioning System, a system that determines the real-time position of vehicles using satellite communications.

**HAR:** Highway Advisory Radio, the transmission of localized traffic advisory messages using 520 AM and 1610 AM frequencies.

**HOV:** High Occupancy Vehicle, any vehicle containing two or more persons. Examples include buses, carpools, and vanpools.

**HOV lane:** An exclusive road or traffic lane limited to buses, vanpools, carpools, and emergency vehicles.

**Intermodal:** Those issues or activities which involve or affect more than one mode of transportation, including transportation connections, choices, cooperation and coordination of various modes. Also known as "multimodal."

**ITS:** Intelligent Transportation Systems, the application of advanced technologies to improve the efficiency and safety of transportation systems.

**Kiosk:** An interactive computer center for traffic or travel-related information. Usually located in shopping malls, hotels, airports, businesses, and transit terminals. Kiosks provide pre-recorded and real-time information using text, sound, graphics, and video clips.
**Loop Detectors:** Sensors embedded below the surface of roads and highways that monitor the flow of vehicles and help authorities manage traffic and incidents. Loop detectors sense a change in inductance of its inductive loop sensor caused by the passage or presence of a vehicle near the sensor.

**Para-transit:** Comparable transportation service required by the Americans with Disabilities Act (ADA) of 1990 for individuals with disabilities who are unable to use fixed-route transportation systems.

**Park and Ride Lot:** Designated parking areas for automobile drivers who then board transit vehicles from these locations.

**Ramp Metering:** Control of access to highways by limiting the number and pace with which vehicle enter the highway. Most systems limit access using signals that allow only one vehicle per green light.

**Real-time:** A term used to describe up-to-date, minute-by-minute, traffic data, conditions or information.

**Ridesharing:** A form of transportation, other than public transit, in which more than one person shares the use of the vehicle, such as a van or car, to make the trip. Also known as “carpooling” or “vanpooling”.

**Roadway Characteristics:** Examples of roadway characteristics could be volumes, capacities, travel times, or origin/destination surveys.

**Signal Pre-emption:** Primarily used for emergency vehicles, signal pre-emption is used to change a signal from red to green when prompted by a transponder from an emergency vehicle such as an ambulance or police car.

**Signal Priority:** Primarily used for transit vehicles, signal priority is used to either shorten a red light or prolong a green light for a transit vehicle (equipped with a transponder) running behind schedule.

**Smart Card:** An electronic card with a computer chip embedded in its plastic used to make automatic payments, e.g., at toll facilities or for transit. It can be a pre-paid charge cars, an account holder card, or a direct debit card.

**SOV:** Single Occupancy Vehicle, a vehicle occupied by only one person.

**Traffic Counters:** Equipment that is capable of measuring and recording traffic characteristics such as vehicle volume, classification, speed, and or weight.

**Vanpool:** An arrangement in which a group of passengers share the use and cost of a car in traveling to and from pre-arranged destinations together.

**VMS:** Variable Message Signs, highway signs which can change the message they display. Also called dynamic message sign (DMS).

**Weather/Environmental Sensors:** Sensors that are used to monitor weather and environmental conditions such as air quality, precipitation, and temperature.