1 Introduction

The Transportation Strategy Board (TSB) and the Connecticut Department of Transportation (ConnDOT) have identified the need to evaluate existing and future transportation deficiencies and define the long-term transportation improvements needed along the I-95 corridor from Exit 54 in Branford to the Connecticut/Rhode Island border. This study was prepared as part of Public Act 01-5, Section 16, a project endorsed and funded by the TSB, in cooperation with the Federal Highway Administration (FHWA).

This report presents an assessment of the existing transportation and environmental conditions, an analysis of future transportation conditions (projected to the year 2025), recommended improvement concepts and an implementation plan of action for the I-95 corridor improvements.

The complete report consists of three individually bound documents. This document consists of the report text divided into six chapters. The second document consists of the report figures. These are graphical representations of the geometric, safety, operational and environmental elements of the I-95 study corridor, as well as the near and long term corridor improvement recommendations. The third document consists of the report appendices which are referenced throughout the text.

1.1 Project Background

The *Southeastern Connecticut Corridor Study*, completed in 1999 by ConnDOT Bureau of Policy and Planning, Office of Inventory and Forecasting, was prepared in response to Public Act 97-214 which required the Commissioner of Transportation to conduct a study of the transportation demands and needs of the southeast corridor of the state. The study analyzed existing and future transportation conditions on I-95 and US Route 1. The study also inventoried and evaluated ridership data for the Shore Line East rail line and other transit services operating in the I-95 study corridor.

The 1999 study identified the need for additional capacity on I-95. It also recommended that a more detailed study including environmental and financial analysis be performed to assess the feasibility of providing a third travel lane in all two lane sections of I-95 between the Town of Branford and the Rhode Island state line. The study found that the most severe congestion occurs Friday through Sunday in the summer months on I-95 and as such, “traditional transportation demand management strategies that can be successful in relieving congestion

for urban commuter peak period problems will not succeed in this corridor". Traffic in the peak period along this corridor is a combination of commuter traffic and traffic heading to and from recreational attractions in the southeastern Connecticut region and Rhode Island including Hammonasset State Beach, Mystic Marine Life Aquarium, Mystic Seaport, Rocky Neck State Park, Harkness Memorial, Mohegan Sun Casino, Foxwoods Resort Casino, Rhode Island beaches and Cape Cod.

This feasibility study provides an assessment of the transportation-related deficiencies and needs in the corridor, an evaluation of potential improvement concepts, and an evaluation of various transportation modes that currently exist and could potentially serve travel demand along I-95 including rail, bus and rideshare options.

The evaluation of potential improvement concepts considers environmental sensitivity and social factors. Environmental documentation requirements have been identified and are presented in subsequent sections of this report. A schedule for completion has also been developed. The documentation requirements are consistent with National Environmental Policy Act (NEPA) and Connecticut Environmental Policy Act (CEPA) procedures.

The study identifies existing and future capacity and operational needs within the study area including the I-95 mainline from Exit 54 in Branford to the Rhode Island state line, interchange ramps and selected intersections along local and state roads in the corridor, including US Route 1. I-95 mainline, interchange and intersection improvement concepts have been developed to address the identified operational and capacity deficiencies, as well as other safety-related issues in the corridor. The direction of this study was guided with the help of a steering committee; and ConnDOT maintained close coordination with the TSB. A public outreach program was also conducted to obtain public input through an on-going process during the study.

1.2 Study Goals and Objectives

Preserve/improve the capacity of I-95:
The study will review the mainline I-95 capacity issues that exist today and those anticipated for the future. It is essential, and required by FHWA policy, that the improvement alternatives identified for the I-95 interchanges also preserve the capacity of the mainline. This requires careful consideration of changes to ramp merge and diverge locations and weave conditions within the corridor.

Address each interchange's unique operating conditions and placement in the overall system:
Each interchange under study will be considered individually and in the context of the overall I-95 transportation system. The study will examine opportunities to improve safety conditions within the interchanges and eliminate and/or consolidate traffic movements through them while maintaining access to the local communities and major attractions. Particular attention will be paid to intersections and signals at the base of ramps and queuing distances to determine how they affect the ramp and interchange operation.

Enhance arterial street system operations:
The tight geometry of the interchanges and close proximity of adjacent intersections have constrained operations and affected safety along both the arterial street system and the Interstate.

Provide for future growth:
The I-95 system is tremendously important to provide access to existing and developing land uses. Future improvements will consider the options for development and the need to accommodate growth in traffic flow, both regionally and locally.

1.3 Study Area

The I-95 study corridor includes the I-95 mainline between Exit 54 in Branford and the Connecticut/Rhode Island border and the existing transit operations serving the corridor within these limits. The I-95 freeway within the study area is approximately 58 miles long and there are 38 interchanges which provide access to local and regional roadways. Figure 1-1 presents a map of the I-95 study area.

1.4 Study Process

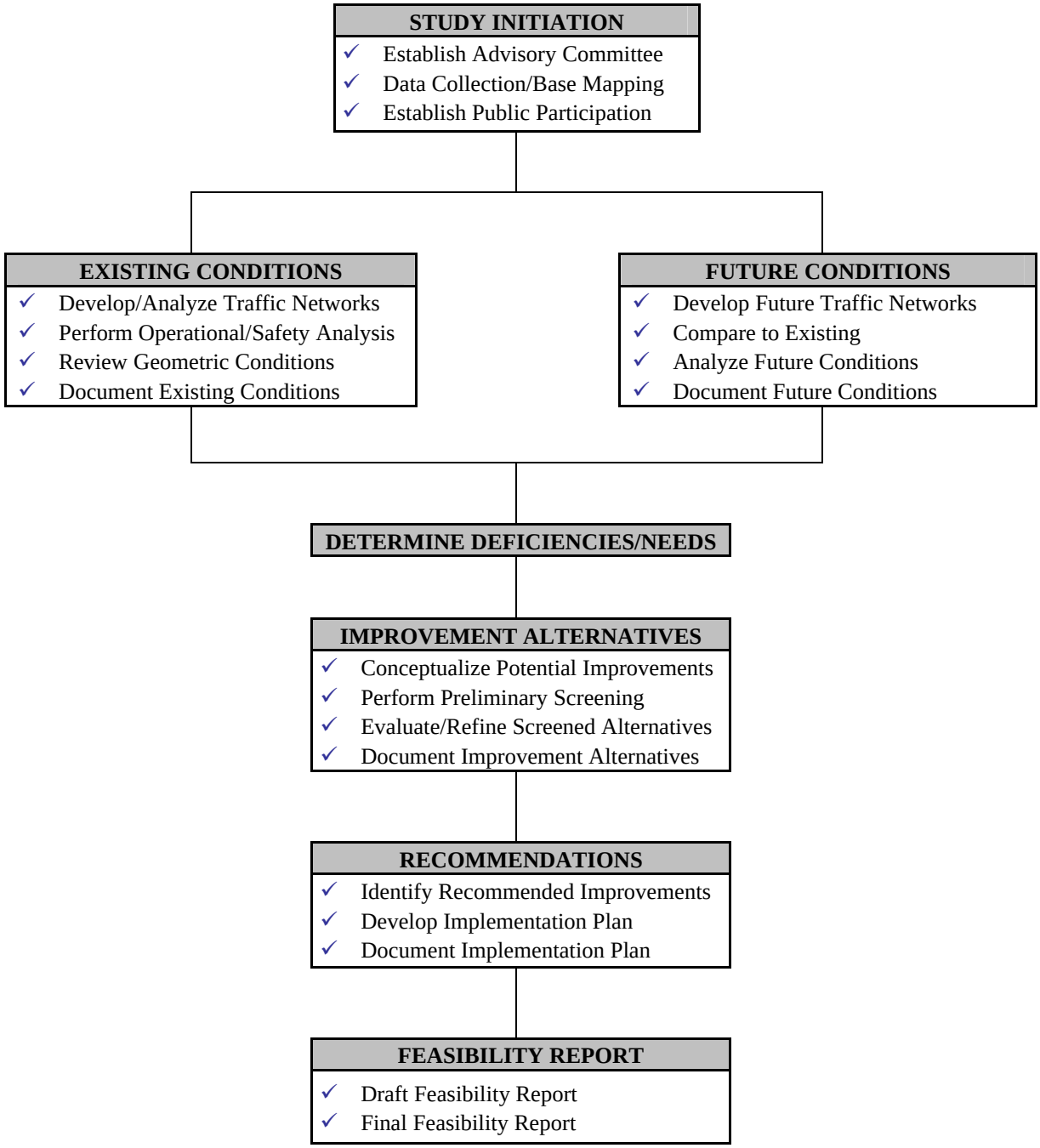
Similar to most engineering and planning studies, a structure or "process" was established at the onset for the development of this study. This process, which is depicted in Figure 1-2, provides a detailed overview of the project, task sequences and deliverables.

A general overview of the study mileposts is as follows:

1 – Study Management/Public Participation	**6** – Development of Recommendations
2 – Analysis of Existing Conditions	**7** – Implementation Plan
3 – Analysis of Future Conditions	**8** – Draft Feasibility Report
4 – Identification of Improvement Alternatives	**9** – Final Feasibility Report
5 – Refinement of Alternatives	

The initial stages of this study involved the establishment of an Advisory Committee (AC). The AC was comprised of transportation stakeholders in the shoreline region who were invited by ConnDOT to participate in the study process. A *stakeholder* was defined as a representative from a municipality, government agency, business, or other group with interest in the corridor. The purpose of the AC was to help guide the study process, review all technical documents, and provide direct input regarding improvement recommendations. Most importantly, the AC helped foster regional cooperation and consensus for the study. AC meetings were held throughout the course of the study to provide members with technical information and to solicit input from the members at critical decision points. A list of AC members who participated in the study is provided in the appendix.

Figure 1-2
Study Process



1.5 Public Participation

Public participation was a major component of this study. In addition to the involvement of the Advisory Committee, public input was solicited through local outreach meetings and public informational meetings. Local outreach meetings were targeted meetings with key stakeholders to identify specific issues in the I-95 study corridor and to develop potential solutions that will benefit the traveling public. Public informational meetings were informal "open-house" meetings where input was solicited from the general public for consideration in the development of the study recommendations.

Public informational meetings were scheduled in the early evenings to accommodate work schedules and to encourage attendance. These meetings were publicized extensively well in advance to provide early notice to the public. Public informational meetings coincided with the completion of the existing and future conditions analysis, and again with the completion of the *Draft Final Report*, to present the proposed improvement concepts prior to developing the final study recommendations.

In total, the public participation component of this study consisted of six AC meetings, 34 local outreach meetings and six public informational meetings. In addition, a website (http://www.i95southeastct.org) was developed to allow the general public to view relevant information and provide comments. A toll-free telephone number (800-236-0794) was also established allowing the public to provide comments.

1.6 Project Team

The "Project Team" involved in the completion of this study consisted of staff from ConnDOT, the Clough, Harbour & Associates LLP (CHA) consultant team, and the TSB. The CHA consultant team included staff from Parsons Transportation Group (PTG), Fitzgerald & Halliday, Inc. (FHI), and VN Engineers, Inc. (VN). Key project staff included:

ConnDOT – *Lead Agency*

- Edgar Hurle, Director of Policy and Planning
- Carmine Trotta, Assistant Director of Intermodal Project Planning
- James Andrini, Project Manager
- James Morrin, Transportation Planner

CHA – *Project Management, Improvement Concept Development, Final Report Preparation*

- Rodney Bascom, P.E., Project Manager
- Peter Perkins, P.E., Project Coordinator
- Raymond Rumanowski, P.E., Senior Transportation Engineer
- Robert Faulkner, P.E., Senior Highway Engineer
- Jeffrey Parker, P.E., Project Engineer
- David Sousa, R.L.A., A.I.C.P., Senior Planner
- David Kahlbaugh, A.I.C.P., Senior Traffic Planner

PTG – *Environmental Conditions Assessment, Transit Services Analysis*

- Kevin Slattery, Principal Environmental Planner
- Eugene Kennedy, A.I.C.P., Principal Environmental Planner
- Duncan W. Allen, P.E., Senior Technical Consultant

FHI – *Public Outreach Facilitation, Website Administration*

- A. Ruth Fitzgerald, A.I.C.P., Principal-in-Charge
- Jill Barrett, Principal Planner

VN – *Traffic Analysis*

- Michael Dion, Project Engineer