ROUTE 110 & 113 METHUEN ROTARY INTERCHANGE STUDY

Methuen, Massachusetts

The Executive Office of Transportation & Public Works

April 2008

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION

Governor Deval Patrick
Lieutenant Governor Timothy P. Murray
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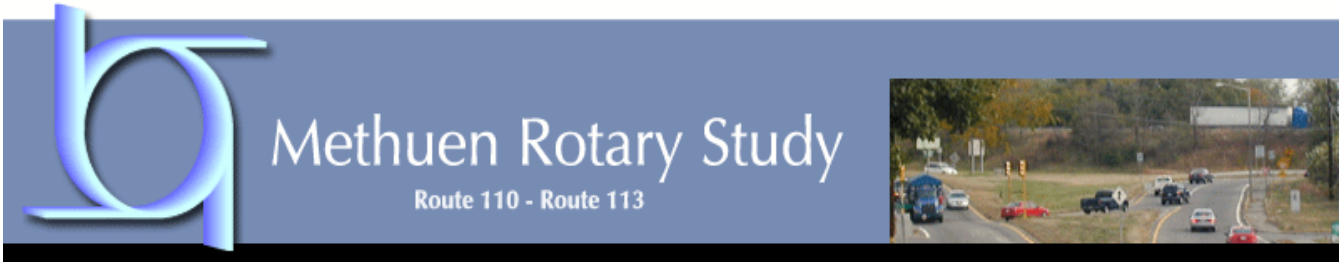


Chapter 1: Study Framework

1.0 Introduction

The following chapter describes and documents how the study was conducted or structured, including project purpose, goals and objectives, evaluation criteria, study area, and the public involvement plan. Subsequent chapters document the evaluation of existing conditions, problem identification, alternatives development, alternatives analysis, and recommendations.

1.1 Project Purpose

The Executive Office of Transportation & Public Works initiated this study in order to evaluate and address transportation issues at the Route 110 & 113 rotary interchange at I-93 in the City of Methuen. The Route I-93 Corridor Study conducted in 2003 for the Merrimack Valley Planning Commission, developed and briefly analyzed seven (7) transportation alternatives for the Exit 46: Route 110 & 113 rotary interchange. However, due to the size of the study area and lack of local public involvement, the recommendation of the prior study was to examine the rotary and interchange in more detail and with additional public involvement, thus initiating the current study.

This study reviewed those prior alternatives, created new alternatives, and also considered transportation issues related to industrial development along Route 113 in Dracut. Specifically, this study's intent was to assess the existing infrastructure, traffic, safety, environmental, socio-economic, land use, and planned development data against a forecast year of 2025 for comparative analysis. Based on the alternatives analysis and extensive public involvement, a plan of recommendations for transportation improvements (immediate, short-term, and long-term) is a major product of the study.

1.2 Study Goals and Objectives

The intent of the Goals and Objectives task was to define a meaningful mission statement for the overall study in cooperation with a Study Advisory Committee (SAC). The primary goals were defined as the following:

- ***To increase mobility, reduce congestion, and improve safety at the Exit 46: Route 110 & 113 Rotary on I-93 and surrounding arterials***

Specific objectives were also developed in order to achieve the goals of the study. These objectives included the reduction of traffic congestion and delay at the interchange and on Routes 110 and 113; reduction of traffic queuing on the off-ramps back onto the mainline of I-

93; improvement of air quality through better traffic flow and idle reduction; reduction of the potential for vehicle crash occurrence; minimize right-of-way (ROW) impacts during the development of alternatives; development of cost-effective alternatives; development of alternatives that are supported by the SAC and the general public; and the development of alternatives that can readily proceed into the project development phase.

1.3 Evaluation Criteria

Evaluation criteria are specific considerations, or measures of effectiveness, used to assess the benefits and impacts of the alternatives. More specifically, the evaluation criteria were determined based on the defined goals and objectives; they were applied during the alternatives development and alternatives analysis tasks of the study; and they were ultimately used to recommend the best solutions based on the defined goals and objectives. They were developed in cooperation with the SAC and were modified on an as-needed basis. Table 1-1 below contains the evaluation criteria developed for the study:

Table 1-1 Evaluation Criteria

Criteria	Measure
Mobility	Vehicle Delays; Level of Service; Vehicle Miles Traveled; Vehicle Hours Traveled; Demand Shifts
Safety	Crash Rates/High Crash Locations; Public Safety; Pedestrian and Bicycle Access; School Bus Safety
Environmental Effects	Air Quality; Wetlands; Hazardous Material Sites; Archaeological and Historic Sites; Parks and Open Space; Farmland
Land Use and Economic Development	Access to Existing Parcels and Those Planned for Development; Right-of-Way; Parking
Community Cohesion	Neighborhood Identification; Pedestrian and Bicycle Access
Cost and Schedule	Construction Costs; Short-range feasibility; Permitting and Construction Timeframe

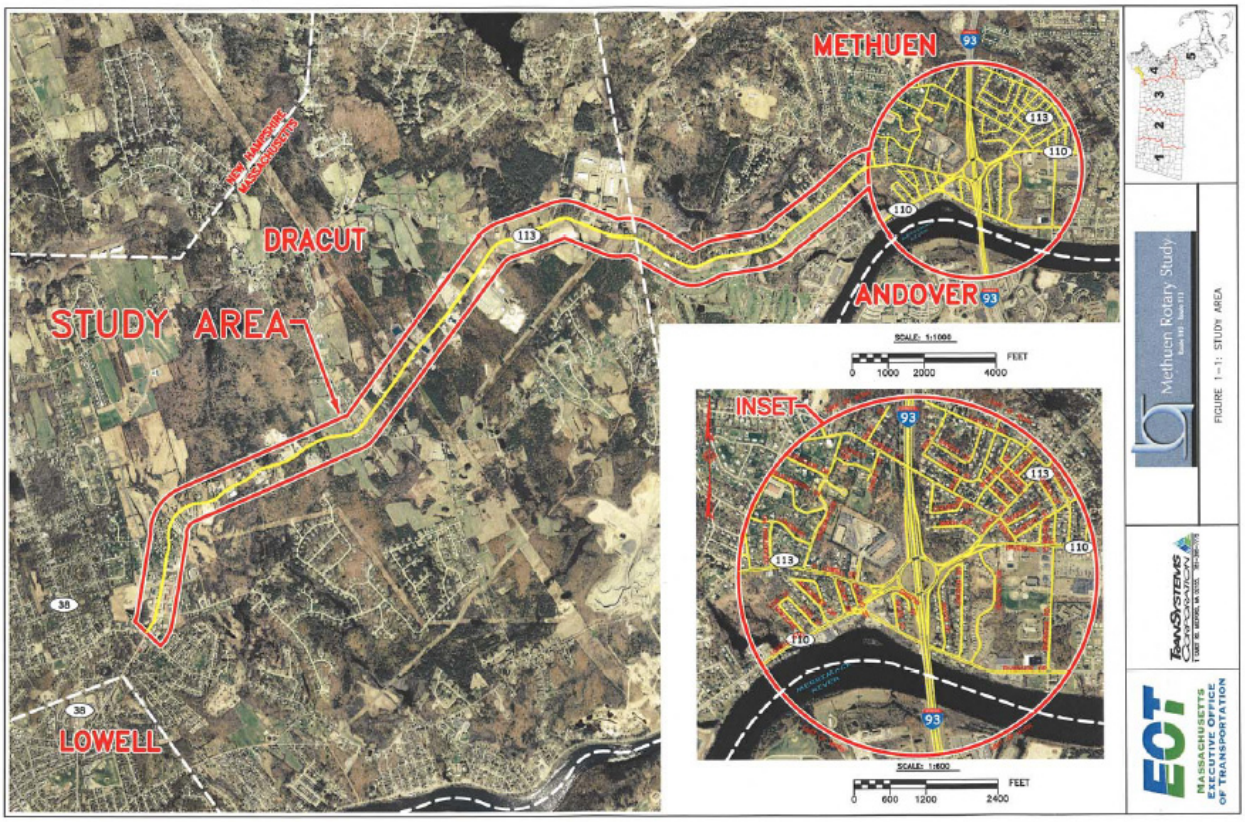
1.4 Study Area

The overall study area, shown in Figure 1-1, included the Exit 46 rotary interchange on I-93 in Methuen at the convergence of Routes 110 and 113, and extended one-half mile in each direction east and west of the rotary. Route 113 was also included as part of the study area, west of the rotary to the intersection of Route 38 in the Town of Dracut. The study area was defined in this way in an effort to understand and consider existing and future growth pressures and traffic needs for the Exit 46 interchange, Routes 110 and 113 at the rotary, and the Route 113 corridor in Dracut. However, the Route 113 corridor in Dracut was not examined at the same level of detail as the immediate vicinity of the rotary interchange. Instead, Route 113 was considered in terms of the economic potential of industrial development, and how traffic levels at the rotary and intersections in the immediate vicinity would be impacted.

1.5 Public Involvement Plan

While the deficiencies of the study area may be widely recognized by the traveling public, nearby residents and local businesses, a plan to address the deficiencies that would gain public understanding and acceptance required a comprehensive public participation process. Many approaches were used to keep the public involved and informed throughout the study process, including numerous opportunities for discussion and comment. All public comments were documented and submitted for consideration in the development of recommendations for improvements to the study area.

Figure 1-1: Study Area and Limits of Work



1.5.0 Public Participation

The public involvement plan was developed to support civic engagement in the study by emphasizing the following principles:

- Access to information: A record of all public informational meetings will be documented. Technical documents will be placed in locations readily available to the community.
- Responsiveness: All questions by the public will be answered in a timely manner.
- Multi-level communication: A variety of methods will be used to reach out to the public including community meetings, a study website, articles in the local newspapers and community newsletters, and the formation of a Study Advisory Committee (SAC).

- Timeliness: The public will receive adequate notice of meetings. Meetings will be scheduled at a time and place that is convenient and comfortable. Adequate time to review materials will be provided.

1.5.1 Elements of the Plan

The public involvement plan had many elements to involve and inform the public in a meaningful way. The study team was accessible to the public, shared information in a complete and understandable manner, and recorded and responded to public comments and concerns. Specific elements of the plan included:

- **Study Advisory Committee**
  Municipal officials, state legislators, regional entities, state agencies, and affected residents were invited to serve on the Study Advisory Committee (SAC). Some members of the SAC were involved in the previous study of the interchange, either as members of the SAC or as individuals who had shown interest in the study area. A full listing of the SAC is included in the Appendix.

  A collaborative approach was taken with the SAC in terms of openly sharing study documents as they were developed. Materials were sent to the committee in advance of the meetings to allow time for review. SAC members were asked to bring concerns and insights to the meetings for discussion by the committee and consultant team. Alternatives and impacts were examined as the study progressed. SAC members were asked to assist the consultant in conducting community outreach by identifying issues, inviting key individuals, and attending public meetings. Ultimately, the SAC assisted in the recommendation of improvements for the study area.

  The SAC was convened for a total of six (6) meetings that were scheduled at key project milestones. Meeting summaries for all of these meetings are included in the Appendix.

- **Public Meetings**
  Two (2) public informational meetings (PIM) were held during the course of the study. The first PIM was held after the study area, goals, objectives, and evaluation criteria for the project were finalized by the SAC, and the existing and future conditions had been evaluated and documented. A second meeting was held after a range of alternatives had been narrowed and refined, and a substantial evaluation of the impacts had been completed.

  The format of the PIM's allowed for public review of documents; opportunities for one-on-one discussion with members of the study team and EOTPW officials; a formal presentation of the study's purpose, findings, and proposed improvements; followed by a question and answer period. The consultant prepared display materials that were graphically rich, written in clear language, and easy for the public to understand.

- **Project Website**
  Project websites are a very effective way to support public participation efforts for transportation projects and studies of this type. The following project website was developed and maintained throughout the study process: www.methuenrotarystudy.org. This site documented the progress of the study, advertised public meetings, provided access to meeting summaries and documents, and allowed the general public and local

citizens to submit comments and ask questions. The website was linked to a database of area residents and organizations that received notices of the open public meeting announcements.

- **Media Coordination**
  Media outlets were contacted in advance of public meetings to publicize notice of the upcoming meetings. Whenever feasible, briefing materials were provided to create a better understanding of the study's progress. Figure 1-2 shows the various communication contacts that were employed as part of the public participation plan.

- **Document Repositories**
  The Final Report was delivered to and can be reviewed at the Dracut Town Hall and Library, Methuen City Hall and Library, the Northern Middlesex Council of Governments, the Merrimack Valley Planning Commission, and at the study website: www.methuenrotarystudy.org.

Figure 1-2: Communication Contacts

PRINT - Newspapers
Lowell Sun
Lawrence Eagle Tribune
The Valley Dispatch
Andover Townsman
Salem (NH) Observer
CABLE - Public Access Television
Methuen – MCTV Channel 22
Lowell - (LTC Channels 8 & 10 – local community and municipal access)
MediaOne Dracut Public Access
RADIO
WUML (formerly WJUL - University of Massachusetts Radio station in Lowell)
WCAP Lowell
WEBSITES
Municipalities
http://www.ci.methuen.ma.us
http://www.dracut-ma.us
http://www.ci.lawrence.ma.us
http://www.lowellma.gov
http://www.townofsalemnh.org
Regional business organizations
http://www.merrimackvalleychamber.com
http://www.merrimackvalley.info
info@methuenboardoftrade.org(Methuen Board of Trade)
http://www.glcc.biz/ (Greater Lowell Chamber of Commerce)
Regional Planning Agencies
http://www.mvpc.org/ (Merrimack Valley Planning Commission)
http://www.nmcog.org/ (Northern Middlesex Council of Governments)