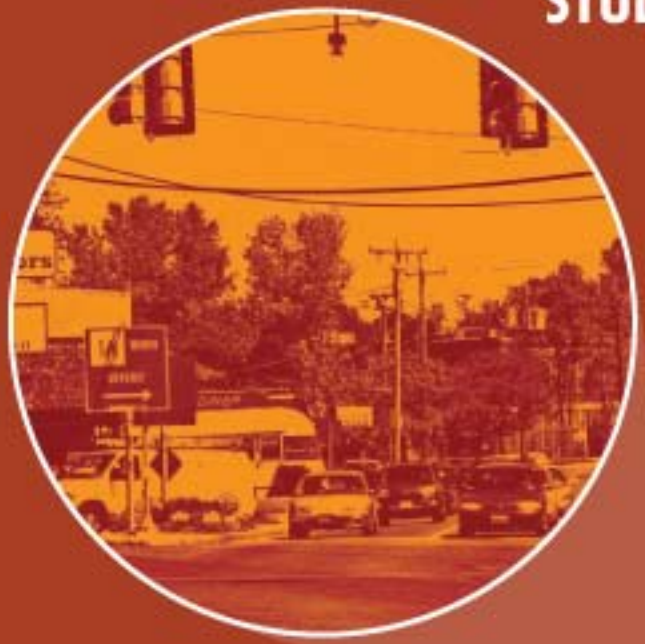
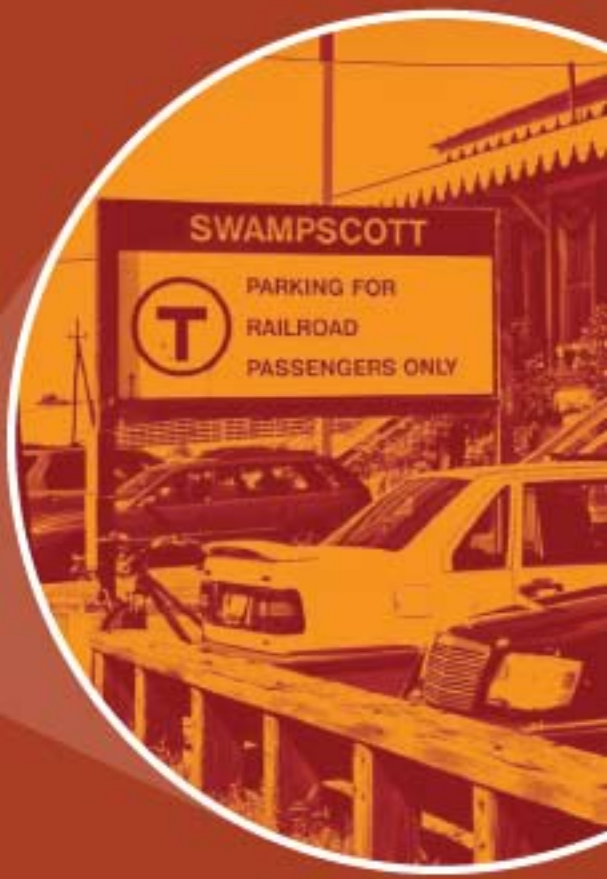
MID–NORTH SHORE SUBREGIONAL TRANSPORTATION STUDY





BOSTON REGION
METROPOLITAN
PLANNING
ORGANIZATION

Mid–North Shore Subregional Transportation Study

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Central Transportation Planning Staff

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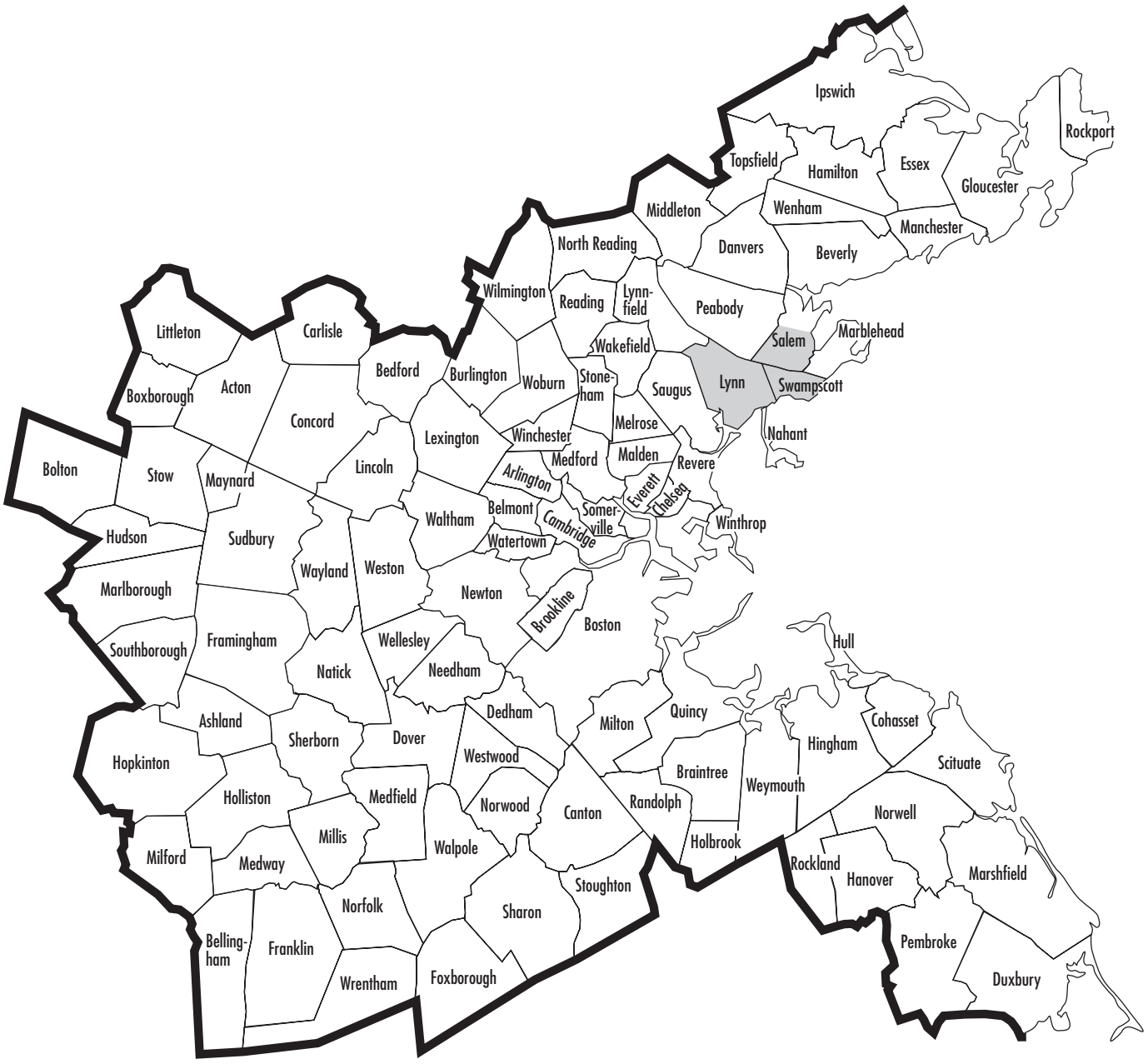
October 2006



The Cities and Towns of the Boston Region Metropolitan Planning Organization Area

Study area

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INTRODUCTION

The Mid–North Shore Subregional Transportation Study was prompted by findings in the 2004 Congestion Management System (CMS) report.[1] In that report, a number of instances of mobility problems were identified in the study area, which consists of the city of Lynn, the town of Swampscott, and the southern half of the city of Salem (see Figure 1).[2] The goal of the study was to develop recommendations that reduce congestion, improve traffic safety, and increase overall mobility in the study area.

CTPS met with city/town officials of the three study area communities at the study's outset. The purpose of these meetings was to introduce the study and to solicit information on transportation concerns and issues. Three sets of concerns were identified, one set for each community. CTPS subsequently analyzed these and developed appropriate improvement measures. The concerns identified and analyzed fall into the following categories:

- Congestion
- Traffic operations
- Vehicle crashes
- Parking
- Public transportation
- Bicycles
- Pedestrians

The recommended transportation improvements are multimodal in nature and include new traffic signals, exclusive turning lanes, extended raised medians, crosswalks, and optimized traffic signal timings to improve vehicle operations. Other recommended improvements include added automobile and bicycle parking spaces at commuter rail stations and increased and improved public transportation services.

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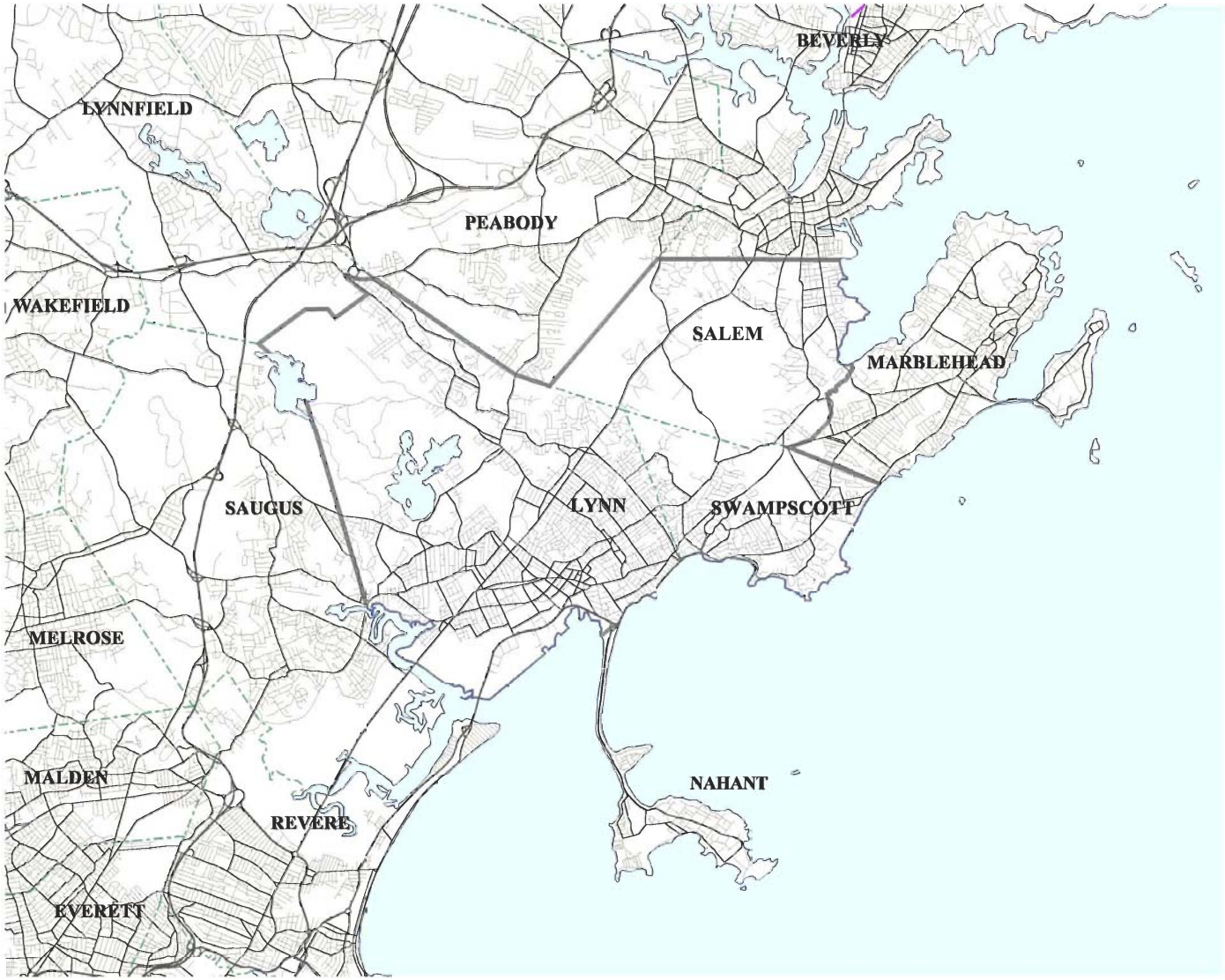
[1] Central Transportation Planning Staff, *Mobility in the Boston Region: Existing Conditions and Next Steps: The 2004 Congestion Management System Report*, December 2004.

[2] Only the southern half of Salem was included in the study area. The approximate dividing line runs east–west, just north of the Route 1A (Loring Avenue)/Route 114 (Lafayette Street)/West Avenue intersection, and just north of the Route 107 (Highland Avenue)/Willson Street intersection. A recent CTPS study analyzed transportation issues and developed improvements for the northern part of Salem (C. Wang, *Transportation Improvement Study for Routes 1A, 114, and 107, and Other Major Roadways in Downtown Salem*, November 2005).



CTPS

Mid–North Shore Subregional Transportation Study

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FIGURE 1
Study Area

This report first summarizes the data collected for the study, the concerns identified, and the improvements recommended, and presents information on the processes for implementing improvements. The appendices then provide additional detail. Each appendix pertains to one of the study's tasks, which were: to establish an Advisory Group (Task 1; Appendix A), to create an inventory of transportation concerns in the study area (Task 2; Appendix B), to create an inventory of land use developments and transportation improvements in the study area (Task 3; Appendix C), to summarize transportation-related data in the study area and on the North Shore (Task 4; Appendix D), and to present recommended transportation improvements for the study area (Task 5; Appendix E). All of the appendices except Appendix A are materials originally produced as memoranda during the course of the study; they have been revised and updated where appropriate.

The summary of recommended improvements in Table 2 (pp. 11–13) includes an estimated cost range for each, tells which state agency or other political entity would have jurisdiction over each, and indicates a suggested sequencing of the improvements.

The study was conducted with the participation of the Mid–North Shore Subregional Transportation Study Advisory Group, whose members included local officials, representatives of transportation and planning agencies, and state legislators. Appendix A lists the members of the group and provides additional information on their participation.

DATA COLLECTION

Transportation in the Mid–North Shore study area was analyzed primarily through the interpretation of many forms of travel data. Data were collected in the field by CTPS and the Massachusetts Highway Department (MassHighway) and were gleaned from previous traffic studies conducted in the corridor. Traffic simulation modeling was not deemed necessary, because it was anticipated at the outset that the study area's transportation concerns would not call for improvement measures of a very diversionary nature.

The collected data formed the basis for analyzing traffic operations at intersections, both signalized and unsignalized. They were also used in identifying locations where crashes tend to occur, as well as areas where public transportation and bicycle and pedestrian facilities could be enhanced.

The types of data collected are summarized below.

Traffic Counts and Projections

Manual turning movement counts (MTMCs) collected in the AM and PM peak periods at signalized and unsignalized intersections in the study area were important data used. By means of these counts, it was possible to determine, for key intersections in the study area, both the magnitude of congestion, through measurement of queues, and the levels of service of traffic operations. The MTMCs were also helpful in determining the percentage of trucks in the traffic stream at many locations (these percentages are given in Appendix D-2).

MTMCs were obtained from traffic studies by private consultants and were also collected in the field by CTPS. In addition, 24-hour automatic traffic recorder (ATR) counts were obtained, mainly from MassHighway and also from traffic studies performed for specific developments in the study area. The various counts obtained and used in this study are shown in Appendix D, p. D-5, and in Appendix D-1.

Traffic volume projections were created for the year 2015 for use in the level-of-service (LOS) analyses that were conducted to estimate the operational merits of suggested roadway improvements. The projections were based on trends in AM and PM peak period traffic growth at numerous locations in the corridor, roughly between 1985 and the present, and on population and employment forecasts produced by the Metropolitan Area Planning Council (MAPC). For more details, see Appendix D-1.

Trucks

The primary source of information on the level of truck traffic in the study area was MTMCs. Table D-2-1 in Appendix D-2 summarizes, by community, the percentage of trucks in the traffic stream in the AM and PM peak periods.

Crash Data/Diagrams

It was vital to gather data on vehicle crashes at key intersections for use in achieving a better understanding of both the patterns and the causes of crashes at the various locations. Once this understanding was reached, it was possible to develop improvement strategies that reduce the likelihood of crashes.

Two sources of data were utilized. CTPS geographic information systems personnel provided information on collisions in the corridor as summarized by the Massachusetts Registry of Motor Vehicles. Data for some key intersections were also sought from the local police departments. Summaries, and in some cases, collision diagrams, were created for such characteristics as crash type (for example, rear-end, head-on, angle); crash severity (property damage, personal injury, fatality); time of day; day of week; and pavement, light, and weather conditions. The crash data are shown in Appendix D, p. D-11, and in Appendix D-3.

Other Data

Numerous other types of transportation data were collected in the study area and used in the analysis of traffic conditions. These include:

Travel times. These were obtained from CTPS's Congestion Management System database for 2004 (they are presented in Appendix D, p. D-5).

Signalized intersection characteristics. For key signalized intersections in the study area, the following data were compiled through field observation: cycle length; phasings; green, yellow, and red time by approach; pedestrian buttons and phasings; queue lengths. The intersections were analyzed for LOS according to the criteria in Table 1 (see Appendix D, pp. D-13 to D-28):

TABLE 1
Level of Service (LOS) Criteria at Intersections

Level of Service (LOS)	Delay, Seconds per Vehicle	
	Unsignalized Intersections	Signalized Intersections
A	Less than 10.0	Less than 10.0
B	10.1 to 15.0	10.1 to 20.0
C	15.1 to 25.0	20.1 to 35.0
D	25.1 to 35.0	35.1 to 55.0
E	35.1 to 50.0	55.1 to 80.0
F	Greater than 50.0	Greater than 80.0

Source: Transportation Research Board, *Highway Capacity Manual 2000*, Exhibits 16-2 and 17-2.

Public transportation. Data on commuter rail boardings, and on load and on-time adherence standards, are presented for the North Shore commuter rail lines that run through the study area. Also included are data on study area local and express bus service, ridership, and performance standards. In addition, there is a discussion on utilization rates and origins of vehicles at park-and-ride facilities in and near the study area (see Appendix D, pp. D-28 to D-43).

Bicycle/pedestrian facilities. Information is presented on study area bicycle/pedestrian facilities as well as on bicycle parking facilities at park-and-ride locations. Data are also given on exclusive and concurrent pedestrian signal phasings at selected study area intersections (see Appendix D, pp. D-44 to D-46).

Town-of-origin data. From a number of license plate surveys of vehicles in and near the study area, it was possible to determine the origin-town profile of the following:

- Parked vehicles at Lynn Central Square Station parking garage (Appendix D-4)
- Parked vehicles at Swampscott Station parking lots (Appendix D-4)
- Parked vehicles at Salem Depot parking lots (Appendix D-4)
- Parked vehicles at Wonderland Station parking lots (Appendix D-4)
- Presumed "cut-through" vehicles between Route 129 (Humphrey Street) and Route 1A (Paradise Road) in Swampscott, using Monument Avenue to either Farragut Road or Walker Road (AM peak period only; Appendix E, pp. E-29 to E-31)

IDENTIFIED CONCERNS AND RECOMMENDED IMPROVEMENTS

IDENTIFIED CONCERNS

A series of transportation concerns were identified early in the study based on discussions with local officials. These are summarized below for each study area community.

Lynn

Concern A: *"There is congestion in the Route 129 (Broadway/Lynnfield Street) corridor between Parkland Avenue and Boston Street."*

Concern B: *"There is congestion in the Routes 1A/129 (Broad Street/Lewis Street) corridor. This may affect access to downtown Lynn and thereby discourage commuter rail riders from neighboring towns from using the Lynn Station parking garage."*

Concern C: *"There are perceived dangers and poor aesthetics in the Lynn Station parking garage. This discourages spillover commuter rail riders/parkers from neighboring towns from using this underutilized garage."*

Lynn and Swampscott

Concern D: *"Traffic backs up on Lynn Shore Drive in Lynn onto Humphrey Street in Swampscott." According to Swampscott officials, "the cause may be traffic operations at the signal at Lynn Shore Drive at Nahant Street in Lynn."*

Swampscott

Concern E: *"There is substantial congestion and excessive truck traffic on Essex Street. Essex Street is the only officially designated truck route in Swampscott." According to town officials, "most of the trucks travel to/from the Aggregate Industries quarry on Danvers Road/Swampscott Road on the Swampscott/Salem border."*

Concern F: *"There appear to be high levels of cut-through traffic between Route 1A (Paradise Road) and Route 129 (Humphrey Street). The affected residential neighborhoods are along Walker Road and Farragut Road."*

Concern G: *"There are not enough parking spaces at the Swampscott commuter rail station." Current capacity is 153 parking spaces and the daily utilization rate is 100%.*

Salem

Concern H: *"Changes/improvements may be needed at Vinnin Square. This location underwent major geometric and signal improvements in 2002." Some problems may still remain in terms of queuing, congestion, crashes, signal timing, and pedestrian operations.*

Concern I: *"There is congestion at the Route 1A (Loring Avenue)/Route 114 (Lafayette Street) intersection." This location is at the northern end of the Salem State College campus.*

Concern J: *"Congestion and problematic traffic operations exist at the Jefferson Avenue/Willson Street intersection." This intersection is located in the vicinity of Salem High School and Salem Hospital.*

Concern K: *"There are safety concerns at the Route 1A (Loring Avenue)/Canal Street/Jefferson Avenue intersection." A traffic study by Vanasse Hangen Brustlin, Inc. (VHB), of Watertown, is under way for this area since "a new CVS drug store is planned nearby."*

Multiple Communities

Concern L**:** *Local officials and private residents perceive a general need for improvements to public transportation service in addition to the needs under C and G above.*

Concern M**:** *Local officials and private residents perceive a general need for improvements to bicycle/pedestrian facilities in addition to the needs at several of the locations specified above.*

RECOMMENDED IMPROVEMENTS

Based on analysis of the data collected pertaining to the communities' transportation concerns, CTPS identified potential measures for addressing the concerns. Also, the study's Advisory Group members were asked for input on potential measures, to supplement CTPS's analyses. CTPS summarized the recommended improvement measures in a technical memorandum, which was distributed to the Advisory Group for comment. Taking into consideration the comments received, CTPS adjusted some of the improvement measures and developed a final set of recommendations. The recommendations are presented in detail in Appendix E and are summarized below.

The recommended improvements consist of one or more measures of the following types:

Aesthetic improvements
Bicycle improvements
Crash reduction
Congestion reduction
Curb cut improvements
Intersection geometry improvements
Park-and-ride improvements
Pedestrian improvements
Public transportation improvements
Reallocation of existing lanes
Restriction of traffic
Roadway resurfacing
Signal installation/upgrading
Signal timing improvements
Turning lane/travel lane added

For each of the 13 identified concerns, A through M, listed in the preceding subsection, one or more recommendations were developed. Concerns A through K each correspond to a particular location in the study area; concerns L and M pertain to multiple and generalized locations. Each recommendation or set of recommendations will also be referred to by the letter that designates the concern it addresses.

Figure 2 summarizes the recommended improvement or set of improvements associated with each concern and shows their location. Table 2 also summarizes each concern's improvement(s), and it also indicates estimated cost range (low–medium–high), approximate priority for implementation (low–medium–high), and agency jurisdiction. The descriptions of improvements in Table 2 cross-reference the more complete discussions of each improvement in Appendix E.

RECOMMENDED TRANSPORTATION IMPROVEMENTS

A *Route 129 between Parkland Ave and Boston St:*
Optimize signal timings at three intersections. Resurface roadway. Fix pedestrian buttons. Restripe crosswalks.

B *Routes 1/129 between Market St and Eastern Ave:*
Optimize signal timings at four intersections. Resurface roadway. Fix pedestrian buttons. Restripe crosswalks.

C *Lynn Central Square Station parking garage:*
Renovate, keep garage clean. Add police presence. Support public/community events in lobby area. Make parking free. Use variable-message signs to announce train schedules, ample/free parking.

D *Lynn Shore Dr at Nahant St, south of the Swampscott line:*
Reconstruct the Lynn Shore Dr/Nahant St intersection in Lynn.

E *Essex St corridor:*
Corridor may become less desirable for trucks with addition of new signals, new high school. Optimize signal timing at Essex St/Danvers Rd and restripe crosswalks.

F *Farragut Rd and Walker Rd:*
Farragut Rd does not appear to be a cut-through road. Walker Rd does appear to have some cut-through traffic.

G *At and near Swampscott commuter rail station:*
Increase bicycle/pedestrian access to station. Increase on-street parking. Reroute MBTA buses to serve station. Implement shuttle system to station. Encourage the use of Lynn Central Square Station garage, where ample parking exists.

H *Vinnin Square area:*
Implement results from signal timing coordination. Consider moving Starbucks driveway. Fix pedestrian buttons. Add second westbound left-turn lane at Vinnin St/Loring Ave. Restripe eastbound approach at Rt 1A/Loring Ave to add more left-turn capacity.

I *At Routes 1A/114/West Ave intersection:*
Optimize signal timings. Restripe crosswalks.

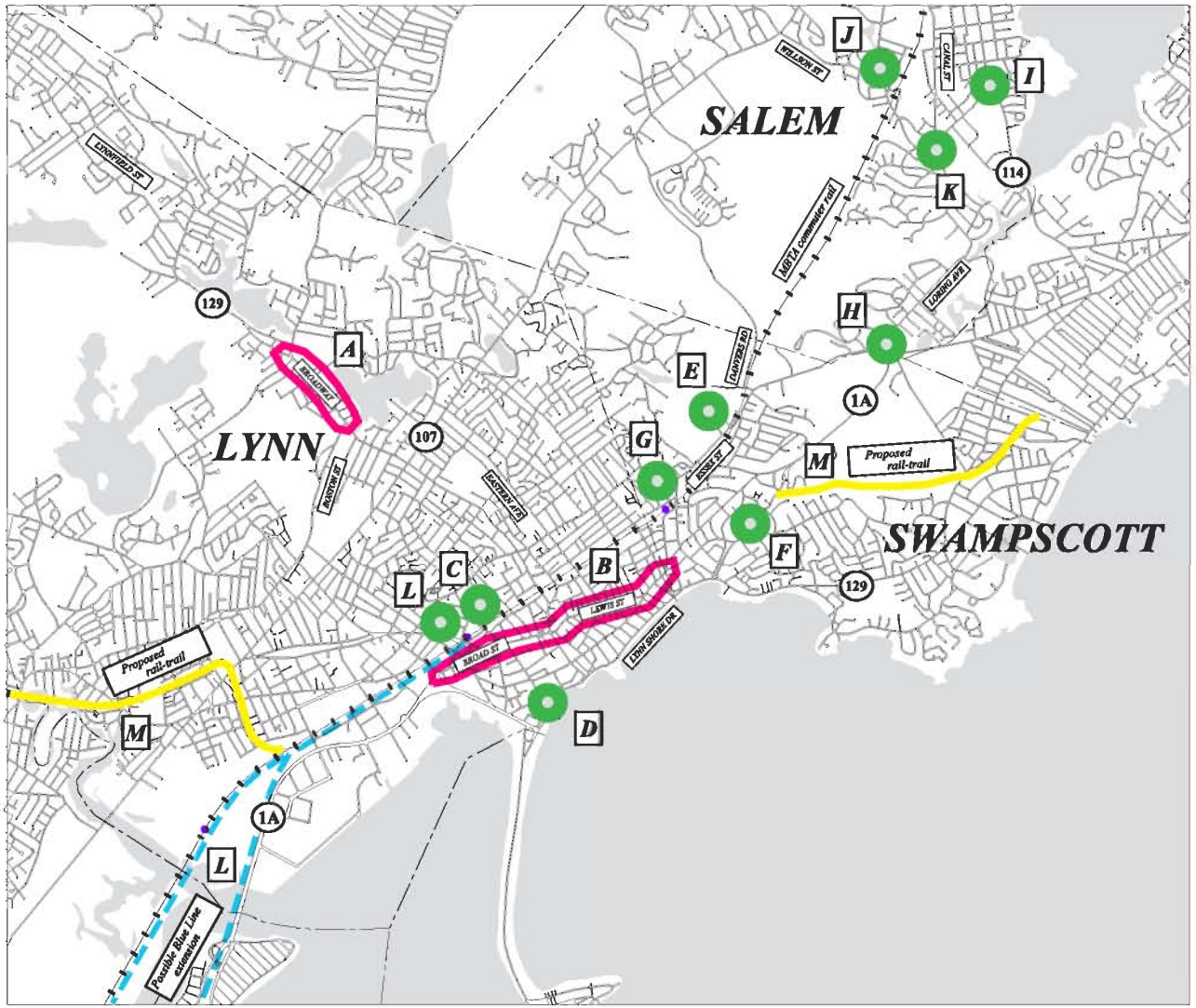
J *At Jefferson Ave/Willson St intersection:*
Install new traffic signal. Restripe and add new crosswalks.

K *At Route 1A/Canal St/Jefferson Ave intersection:*
Increase capacity by adding a second eastbound left-turn lane. Optimize signal timings.

L *Public transportation improvements:**
Coordinate commuter rail/bus schedules. Improve express bus service to Boston, Wonderland, Logan. Improve local bus service. Continue to evaluate extending Blue Line rapid transit to Lynn.

M *Bicycle/pedestrian facilities:**
Support rail-trails where feasible. Support other bicycle measures to help reduce single-occupancy auto use.

*Some public transportation and bicycle/pedestrian improvements could apply to locations beyond those designated on this map.



CTPS

Mid–North Shore Subregional Transportation Study

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FIGURE 2
Locations with Recommended Transportation Improvements
(For additional information, refer to Table 2)

TABLE 2
Recommended Transportation Improvements
Mid–North Shore Subregional Transportation Study

City/Town	Improvement (refer to Figure 2)[1]	Improvement Type(s)	*Location/* Description *Complete description is in Appendix E on page cited.*	Estimated Cost[2]	Priority[3]	Jurisdiction
Lynn	A	Congestion reduction Pedestrian improvements Roadway resurfacing Signal timing improvements	*Route 129 between Parkland Ave and Boston St* Optimize signal timings at three intersections. Resurface roadway. Fix pedestrian buttons. Restripe crosswalks. *Page E-3*	High	Medium	Lynn
	B	Congestion reduction Pedestrian improvements Roadway resurfacing Signal timing improvements	*Routes 1A/129 between Market St and Eastern Ave* Optimize signal timings at four intersections. Resurface roadway. Fix pedestrian buttons. Restripe crosswalks. *Page E-10*	High	Medium	Lynn
	C	Aesthetic improvements Park-and-ride improvements	*Lynn Central Square Station parking garage* Renovate, keep garage clean. Add police presence. Support public/community events in station area/lobby. Make parking free. Use variable-message signs and advertising to announce train schedules and publicize ample/free parking. *Page E-21*	Medium–High	High	MBTA Lynn
Lynn and Swampscott	D	Congestion reduction Restriction of traffic Signal timing improvements	*Lynn Shore Dr at Nahant St, south of the Swampscott line* Reconstruct the Lynn Shore Dr/Nahant St intersection in Lynn. *Page E-22*	Low	High	DCR Lynn
Swampscott	E	Roadway resurfacing Signal timing improvements	*Essex St corridor* Corridor may become less desirable for trucks with addition of new signals, new high school. Optimize signal timing at Essex St/Danvers Rd and restripe crosswalks. *Page E-25*	Low	Medium	Swampscott

[1]These letters also correspond to the designations of the transportation concerns listed on pages 7 and 8.

[2]As estimated by CTPS, using the following cost ranges: Low = < $50,000; Medium = $50,000–$150,000; High = > $150,000.

[3]As prioritized by CTPS, based on this study.

TABLE 2 (cont.)
Recommended Transportation Improvements
Mid–North Shore Subregional Transportation Study

City/Town	Improvement (refer to Figure 2)[1]	Improvement Type(s)	*Location/* Description *Complete description is in Appendix E on page cited.*	Estimated Cost[2]	Priority[3]	Jurisdiction
Swampscott (cont.)	F	None. Additional study of traffic in the opposite direction and in the PM peak is necessary before recommending specific improvements.	*Farragut Rd and Walker Rd* Farragut Rd does not appear to be a cut-through road. Walker Rd does appear to have some cut-through traffic. *Page E-29*	Not applicable	Not applicable	Swampscott
	G	Bicycle improvements Park-and-ride improvements Pedestrian improvements Public transportation improvements	*At and near Swampscott commuter rail station* Improve bicycle/pedestrian access to station. Increase on-street parking. Reroute MBTA buses to serve station. Implement shuttle system to station. Encourage the use of Lynn Central Square Station garage, where ample parking exists. *Page E-33*	Low–Medium	Low–Medium	Swampscott MBTA
Salem	H	Crash reduction Congestion reduction Curb cut improvements Intersection geometry improvements Pedestrian improvements Reallocation of existing lanes Signal timing improvements Turning lane/travel lane added	*Vinnin Square area* Implement results from signal timing coordination. Consider moving Starbucks driveway. Fix pedestrian buttons. Add second westbound left-turn lane at Vinnin St/ Loring Ave. Restripe eastbound approach at Rte 1A/ Loring Ave to add more left-turn capacity. *Page E-34*	Medium	Medium	MassHighway
	I	Crash reduction Congestion reduction Pedestrian improvements Signal timing improvements	*At Routes 1A/114/West Ave intersection* Optimize signal timings. Restripe crosswalks. *Page E-41*	Low	Medium	MassHighway

[1]These letters also correspond to the designations of the transportation concerns listed on pages 7 and 8.

[2]As estimated by CTPS, using the following cost ranges: Low = < $50,000; Medium = $50,000–$150,000; High = > $150,000.

[3]As prioritized by CTPS, based on this study.

TABLE 2 (cont.)
Recommended Transportation Improvements
Mid–North Shore Subregional Transportation Study

City/Town	Improvement (refer to Figure 2)[1]	Improvement Type(s)	*Location/* Description *Complete description is in Appendix E on page cited.*	Estimated Cost[2]	Priority[3]	Jurisdiction
Salem (cont.)	J	Crash reduction Congestion reduction Pedestrian improvements Signal installation/upgrading	*At Jefferson Ave/Willson St intersection* Install new traffic signal. Restripe and add new crosswalks. *Page E-44*	Medium	High	Salem
	K	Crash reduction Congestion reduction Intersection geometry improvements Signal timing improvements Turning lane/travel lane added	*At Route 1A/Canal St/Jefferson Ave intersection* Increase capacity by adding a second eastbound left-turn lane. Optimize signal timings. *Page E-45*	Medium	High	MassHighway Salem
Multiple and generalized locations	L	Public transportation improvements	*Multiple and generalized locations* Coordinate commuter rail/bus schedules. Improve express bus service to Boston, Wonderland, Logan Airport. Improve local bus service. Continue to evaluate extending Blue Line rapid transit to Lynn. *Page E-47*	Medium–High	Medium	MBTA
	M	Aesthetic improvements Bicycle improvements Pedestrian improvements	*Multiple and generalized locations* Support rail-trails where feasible. Support other bicycle measures to help reduce single-occupancy auto use. *Page E-50*	Low–Medium	Low	Lynn Salem Swampscott

[1]These letters also correspond to the designations of the transportation concerns listed on pages 7 and 8.

[2]As estimated by CTPS, using the following cost ranges: Low = < $50,000; Medium = $50,000–$150,000; High = > $150,000.

[3]As prioritized by CTPS, based on this study.

IMPLEMENTATION PROCESS

Brief outlines of the processes by which proposed roadway and public transportation improvements may be implemented are given below. These outlines are intended to help community officials and residents understand the steps which the community needs to follow in order to initiate and further the processes.

Transportation Projects for Facilities under Local Jurisdiction

Some of the recommended improvements are located on roadways and other facilities administered by Lynn, Swampscott, or Salem. These improvements could be implemented with private, city/town, state, or federal funds. Implementation with private funds could occur in cases where developments may impact locations where improvement recommendations were made in this study and the city/town would require that development impacts be mitigated.

Massachusetts Highway Department Projects

Some of the recommended improvements are located on roadways administered by MassHighway. MassHighway is responsible for the implementation of any of these improvements. It would follow a standard process, outlined below, that any proponent of a roadway improvement is required to follow. As described, the process provides for the participation of the general public, community representatives, and other agencies. The projects would be eligible to be paid for with state or federal funds.

The following process description is based on Chapter 2 of the 2005 MassHighway Design Guidebook. The text borrows heavily from that document.

Need Identification

For each of the locations at which an improvement is to be implemented MassHighway will lead an effort to define the problem, establish project goals and objectives, and define the scope of the planning needed towards implementation. To that end, it will have to complete a Project Need Form (PNF), which states in general terms the deficiencies or needs related to the transportation facility or location. The PNF will document the problems and explain why corrective action is needed. The information defining the need for the project will be drawn primarily, perhaps exclusively, from the present report. Also at this point in the process,

MassHighway will meet with potential participants, such as the Boston Region Metropolitan Planning Organization (MPO) and community members, to allow for a proactive, informal review of the project.

The PNF will be reviewed by MassHighway's Project Review Committee (PRC) and the MPO. The PRC includes the Chief Engineer, each District Highway Director, and representatives of the Project Management, Environmental, Planning, Right-of-Way, Traffic, and Bridge departments and the Capital Expenditure Program Office (CEPO). The outcome of this step is a determination of whether the project requires further planning, whether it is already well supported by prior planning studies and, therefore, able to move forward into design, or whether it should be dismissed from further consideration.

Planning

This phase will likely not be required for the implementation of the improvements proposed under this planning study, as this planning report should actually constitute the outcome of this step. However, in general, the purpose of this implementation step is for the project proponent to identify issues, impacts, and approvals that may need to be obtained, so that the subsequent design and permitting processes are understood.

The level of planning needed will vary widely, based on the complexity of the project. Typical tasks include: define existing context, confirm project need, establish goals and objectives, initiate public outreach, define project, collect data, develop and analyze alternatives, make recommendations, and provide documentation. Likely outcomes include consensus on project definition to enable it to move forward into environmental documentation (if needed) and design, or a recommendation to hold off on the project or to dismiss it from further consideration.

Project Initiation

At this point, the proponent, MassHighway, fills out for each improvement a Project Initiation Form (PIF). The PIF documents the project type and description, summarizes the project planning process, identifies likely funding and project management responsibility, and defines a plan for interagency and public participation. First the PRC reviews and evaluates the PIF based on the Executive Office of Transportation's statewide priorities and criteria. If the result is positive, MassHighway moves the project forward into design and programming review by the MPO. The PRC may provide a Project Management Plan to define roles and responsibilities for subsequent steps. The MPO review includes project evaluation based on the MPO's regional priorities and criteria. The MPO may assign the project an evaluation-criteria score, a possible Transportation Improvement Program (TIP) year, a tentative project category, and a tentative funding category.

Environmental, Design, and Right-of-Way Process

This step has four distinct but closely integrated elements: public outreach, environmental documentation and permitting (if required), design, and right-of-way acquisition (if required).

The outcome of this step is a fully designed and permitted project ready for construction. However, a project does not have to be fully designed in order for the MPO to program it in the TIP.

Programming

Programming, which typically begins during design, can actually occur at any time during the process from planning to design. In this step, which is distinct from project initiation, where the MPO receives preliminary information on the proposed project, the proponent requests that the MPO place the project in the region's TIP. The MPO considers the project in terms of regional needs, evaluation criteria, and compliance with the regional Transportation Plan and decides whether to place it in the draft TIP for public review and then in the final TIP.

Procurement

Following project design and programming, MassHighway publishes a request for proposals. It reviews the bids and awards the contract to the lowest qualified bidder.

Construction

After a construction contract is awarded, MassHighway and the contractor develop a public participation plan and a management plan for the construction process.

Project Assessment

The purpose of this step is to receive constituents' comments on the project development process and the project's design elements. MassHighway can apply what is learned to future projects.

Massachusetts Bay Transportation Authority Projects

The MBTA's Service Delivery Policy provides a consistent procedure for the allocation of MBTA transit services within the Authority's service area. In the case of proposals for new service and for service changes, there is a review-and-approval process that must be followed to ensure that they are consistent with the service guidelines and MBTA Board of Directors initiatives and that they can be implemented within the adopted budget. The process is described below:

1. Proposals for service changes or new service can be made by anyone—private citizens, elected officials, MBTA employees, representatives of neighborhood groups, business organizations, etc. Upon receipt by the MBTA, a proposal will be reviewed by the Manager of Service Planning. If the proposal appears to be consistent with the MBTA's service guidelines and policies, it will be assigned to a service planner for analysis. If it is not consistent, the Planning Department will inform the party making the proposal, in writing, of why the proposal is not being pursued.

2. All analysis of service proposals will be done by the Service Planning unit. This analysis will be based on the factors described in the "Evaluation Criteria" section of the Service Delivery Policy. In conducting the analysis, Service Planning will coordinate with other MBTA departments that would be involved in the proposed change, as well as the proponent of the service change. The Service Planning unit will summarize the resources necessary to accommodate the proposal, along with expected impacts on the existing system in terms of frequency, span of service, and geographical coverage.

3. Following the analysis, the service proposal will be reviewed by the Service Planning Committee. The Service Planning unit will recommend to that committee that either (a) the proposal be implemented, (b) a variation of the proposal be implemented, (c) the proposal be deferred, or (d) the proposal be denied. A summary of the analysis and final decision will be forwarded to the party that made the proposal.

4. If it is decided that a proposal or a variation of it should be implemented, the timing of implementation will depend on the significance of the change and whether or not capital expenditures are required:

    - In general, minor changes that can be made within the adopted budget will be implemented as quickly as possible. Minor changes that would increase costs will be held until they can be "bundled" with other changes that would reduce operating costs by an equal amount. Minor changes are implemented based upon the final recommendation of the Service Planning unit.

    - The implementation of moderate changes will be handled similarly to that of minor changes. If the change does not involve an increase in operating costs, it will be implemented as quickly as possible. Moderate changes that would increase costs will be held until they can be bundled with other changes that would reduce operating costs by an equal amount. Moderate changes must be approved by the Executive Service Oversight Committee.

    - Major changes will be evaluated within the context of a "comparative evaluation" and the development of periodic Service Plans. The comparative evaluation will weigh all of the potential major changes proposed and evaluated since the preceding Service Plan and determine which would represent the best allocation of resources. Major changes must be endorsed by the Executive Service Oversight Committee and approved by the General Manager or the MBTA Board of Directors. In most cases, the MBTA Board's approval will occur in the form of approval of a new Service Plan.

Note: The MBTA is updating its Service Plan during 2006; the process described above is therefore subject to revision.