REGIONAL BUS STUDY

Massachusetts Regional Bus Study

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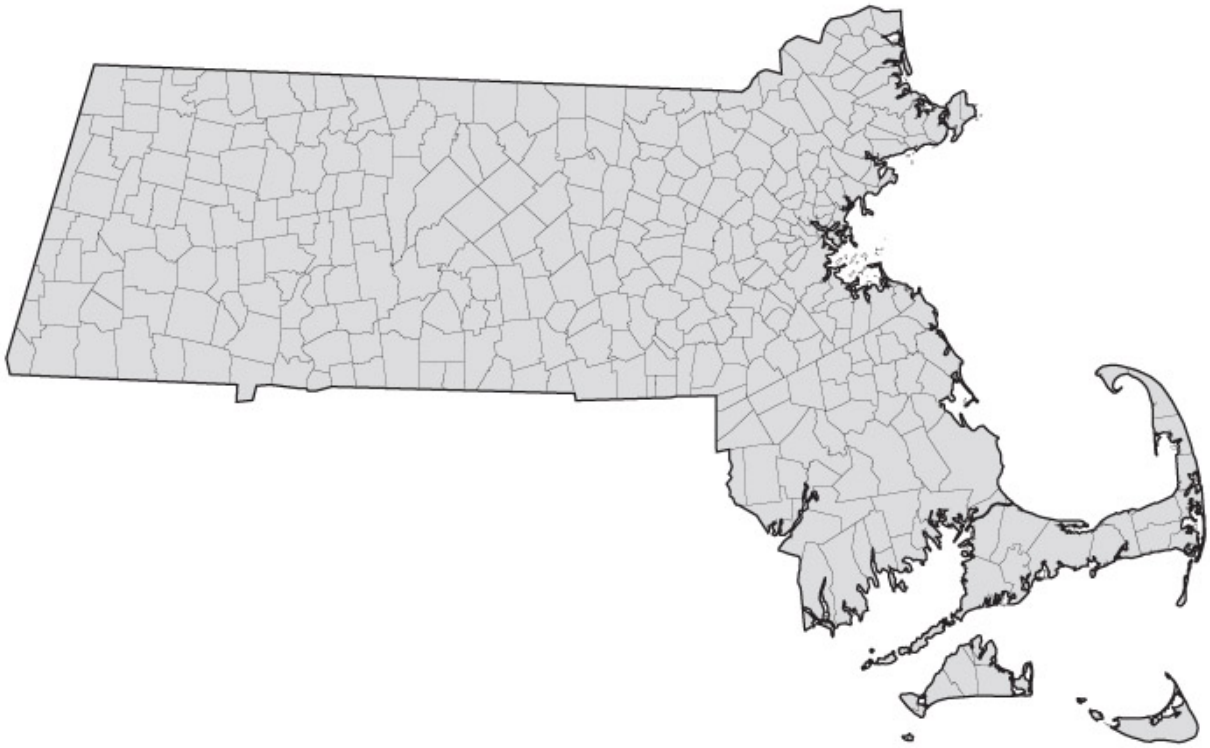
Study Area



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Keywords

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Executive Summary

S.1 Context

Over the past 30 years, the private carrier regional bus network in Massachusetts has seen a reduction in locations served within the state. This coverage contraction, often accompanied by reductions in service frequencies, has occurred in both intercity and commuter bus services. There has also been a decrease in the number of carriers. While these changes reflect to some extent development patterns and car ownership trends, they have been exacerbated by reductions in state-administered subsidy and vehicle finance programs. Continued reductions in service and attrition of regional carriers in the future remain distinct possibilities.

S.2 Study Purpose and Approach

The fundamental purpose of this study is threefold: to gain an increased understanding of regional bus service and its market in Massachusetts, identify issues that have historically prevented the retention or expansion of important services, and suggest measures for making the service better meet the Commonwealth's needs.

Owing to the large number of carriers and diversity of services, study of the regional bus industry presents unique challenges. In order to create a reasonably complete picture, the present analysis includes three broad areas of investigation:

- Inventory of currently operating commuter and intercity bus services and their terminals and stops, both intra- and interstate, and of the relationships of these services to rail and local bus services
- Review of changes in regional bus service since 1980
- Survey of passengers on most intrastate regional bus services

The trends in travel markets and service strategies examined in this study shed light on today's service offerings, and they point to possible viable expansions of intrastate regional bus services to reach under- and unserved markets. This study also considers opportunities for improving service in other

ways and for retaining valuable routes. In addition, it reviews the potential for regional transit authorities to provide services that feed the intercity bus network, discusses the potential use of the MBTA CharlieCard on intercity and commuter bus services, considers the capital needs of an improved and expanded intercity bus network, including requirements for vehicles, stops, stations, and parking facilities, and discusses funding support.

S.3 Summary of Findings

S.3.1 Coverage

Despite a contraction of the service network over the last 30 years, overall fixed-route coverage in Massachusetts remains good. All urban areas in Massachusetts have direct bus or rail service to Boston, and many also have direct service to New York City. Outside of these two large travel markets, service offerings are less convenient. Trips between many pairs of urban areas (even including New York City and Boston in a few cases) require indirect journeys with multiple trip segments and in some cases different carriers. For example, most trips between Worcester and New York City require changing buses in Hartford, Connecticut. Similarly, the less frequent service between the Berkshire region and eastern Massachusetts limits viable departure time windows available to travelers.

Several communities in the state with reasonable population density presently do not have any fixed-route transit available, notably Clinton, Hudson, Northbridge, and Uxbridge. In the Route 2 corridor between Fitchburg and North Adams, service to Boston can involve multiple transfers, and there is no service at all crossing the Berkshires from Greenfield to North Adams.

The intrastate services operating to and from Boston that have retained the strongest ridership and service frequencies share several key characteristics. They operate primarily along limited-access highways, make a limited number of stops along the route, provide service to both downtown Boston and Logan Airport, make use of parking facilities at the outer end of the route, and operate an extensive schedule, giving riders a large selection of trip choices. Even in corridors with rail service available, bus services with these characteristics have been able to retain and build ridership.

Services discontinued since 1980 in many instances operated along non-limited-access roadways, made multiple local stops, had limited parking available for riders, operated a limited schedule, and did not attract a diverse customer mix that could include commuters, Logan Airport passengers, or travelers connecting with other long distance bus services. Services with these weaknesses that were also near new or expanded rail service were especially vulnerable to ridership loss.

The total average daily ridership on intrastate private carrier bus routes in Massachusetts was over 5,700 in 2011, based on surveys conducted by the Central Transportation Planning Staff (CTPS). On intrastate and interstate routes together, over 400 round-trips per day operate to or from locations in Massachusetts. That is enough scheduled capacity to carry over 43,000 passengers. Regular route service is one part of the larger motor coach industry, which also operates charters and tours. The American Bus Association estimates that in Massachusetts in 2009 the motor coach tourism industry employed 9,820 workers with a payroll of $371 million.

S.3.2 Equipment

The state is presently acquiring 30 buses, obtained through a competitive FTA program, which will be made available to private carriers on advantageous terms. This bus procurement will both reduce the average age of the private regional bus fleet and make possible the addition of selected services.

The acquisition of 30 buses can be placed in perspective by considering the optimal replacement cycle for coach-type buses. Buses are considered depreciated after 12 years of service. An appropriate average age for a fleet's buses is six years. If 1/12 of the buses in a fleet are retired (replaced) each year, the average age of its buses will eventually stabilize at six years. The fleet size required to maintain the existing regional bus service in Massachusetts is 95 buses; therefore, reaching and sustaining an average age of about six years would require a replacement rate of approximately eight buses annually.

Bus emissions standards began to tighten significantly in 1994 and have been tightened further periodically since then. The new buses will be appreciably cleaner than most buses now operating, especially those few still operating that are over 20 years in age. Also, all will be accessible to passengers using wheelchairs, a feature becoming prevalent on coach-type buses.

S.3.3 Facilities

A CTPS review of bus stops at commuter park-and-ride facilities found that signage and schedule information identifying the service available was frequently not in place, especially at smaller facilities. Most of the larger parking facilities had schedules and some form of on-site ticketing; however, very few had actual station buildings, and most only had shelters. Many smaller facilities do not have shelters. Park-and-ride facilities at several locations are near or at capacity on typical weekdays.

The Boston end of regional bus trips is either at the intercity bus terminal located at the South Station Transportation Center (commonly referred to as South Station) or at one or more curbside locations. A review of regional

commuter bus curbside boarding locations in Boston found that none of them have any signs identifying the service and some did not even have signage identifying the location as a bus stop.

S.3.4 Coordination with Regional Transit Authorities

Regional private carrier buses and regional transit authorities (RTAs) share terminals and service hubs in a number of municipalities, including Barnstable (Hyannis), Fall River, Greenfield, Holyoke, Lowell, New Bedford, Pittsfield, Springfield, Taunton, and Worcester (as of mid-2013). The common facilities facilitate transfers between the different services. RTA routes also connect with regional private carriers at stops in Framingham and Plymouth.

In the cases of the Berkshire Regional Transit Authority (BRTA), Cape Cod Regional Transit Authority (CCRTA), Pioneer Valley Regional Transit Authority (PVTA), and Southeastern Regional Transit Authority (SRTA), private carrier regional service can be used to make local trips entirely within the boundaries of the transit authority service area. While RTA websites frequently have links to the websites of regional carriers that provide service within the RTA service areas, they typically do not provide specific information about those services, despite the fact that they can be utilized for local journeys.

S.3.5 Marketing

Much of the traveling public is unfamiliar with the many regional bus services operating in the commonwealth; an opportunity therefore exists to expand use of this mode through marketing. The widespread use of new Internet and smartphone technologies should be fully exploited to bring passengers into regional buses.

Almost all the regional bus companies have their own websites, and these are accessible through the MassDOT website. However, the powerful, widely used Internet trip-planning application Google Transit currently utilizes the schedule of only one Massachusetts regional carrier.

The sale of MBTA commuter rail tickets via smartphone has proved very popular since its initiation late in 2012. Regional carriers presently do not have smartphone ticketing available, which in addition to selling tickets can support marketing and potential synergies with other bus or rail services.

Bus carriers presently offer deep discounts to riders using multi-ride fare media. On services with large numbers of commuters, the majority of riders utilize discount tickets.

S.3.6 Coordination with Commuter Rail Fare System

There are several communities that have both regional private carrier bus service and MBTA commuter rail service operating to and from Boston. CTPS passenger surveys show that the greatest amount of mixed usage (travelers alternating between the two types of service) takes place between Boston and Worcester. This is also the one corridor where both modes use the same terminal facility at the non-Boston end of the route (Union Station in Worcester), where many commuters park-and-ride or make connections from local transit. A joint-ticketing system (in which a purchased ticket could be used for either bus or rail) would provide more trip choices for riders traveling between the two urban areas. The smartphone ticketing system recently implemented by the MBTA could be a potential method for implementing a joint-ticketing system with private-carrier buses. .

S.3.7 Coordination with the National Bus Network

Greyhound, Peter Pan, and Plymouth & Brockton are part of the National Bus Traffic Association (NBTA) ticketing network and can sell through-tickets to any location in the national bus network. Acquiring through-ticketing capability is also possible for smaller regional carriers and RTAs.

S.3.8 Funding Available

Massachusetts receives federal §5311(f) funds that are expended exclusively to support intercity bus service. Currently, Plymouth & Brockton receives an operating subsidy for off-season service on outer Cape Cod, and Peter Pan has received capital funds for terminal modernization and vehicles. Other federal grant programs that are also available for other transportation modes might be utilized for regional bus service. An example of using these broader funding programs to support regional bus service is the use of Congestion Mitigation and Air Quality Improvement (CMAQ) Program funding by New Hampshire to build new regional bus facilities and partially fund the startup of new commuter bus services.

S.3.9 Peer Comparison

Most states now provide §5311(f) operating subsidies to at least one intercity regional carrier in their state. Most private carrier commuter bus operations are in the Northeast, and levels of state support of these services vary greatly, ranging from no support to both capital and operating subsidies.

Massachusetts eliminated operating subsidies for private commuter bus service several years ago. However, capital support is being provided; 30 new buses are being acquired which will be allocated to both commuter routes and longer-distance regional routes.

S.3.10 Boston Terminal Issues

The South Station bus terminal operates close to capacity during peak hours; the available capacity varies by carrier. In most cases, additional commuter trips could only be accommodated during the earlier and later parts of the peak period, but not during the busiest half-hour. Available off-peak capacity at South Station also varies by carrier.

S.3.11 Regulations

Interstate service that crosses state lines has been largely deregulated at the federal level (except for issues of safety and insurance) since 1982. The state still has in place a requirement for carriers to hold Certificates of Public Convenience and Necessity (CPCNs) for services operating entirely within the state; it has no such requirement for a service that crosses a state line, even if the route provides significant service within the state. There appear to have been very low levels of CPCN requests for new or changed intrastate services in recent years.

Local municipalities can regulate the use of their sidewalks and parking locations, and this has had an impact on curbside boarding in Boston. The City has continued to allow curbside boarding only for commuter routes, which, by their nature, have very short dwell times, and it has taken legal action against intercity carriers attempting to use curbside stops as terminals with longer dwell times.

S.4 Summary of Recommendations

Based on review of existing conditions, trends in travel markets and service strategies, and practices in other states, this study identified possible action items for the Commonwealth to consider for maintaining, improving, and possibly expanding the services constituting the regional bus system:

- The average age of the bus fleet should be brought down to six years. The 30 new buses being procured by the Commonwealth are a first step toward that objective. Given a fleet of 95 buses (the number required to provide the existing level of service within the state), maintaining an average age of six years would require replacing vehicles at the rate of eight per year. The Commonwealth should work with carriers on developing an annual equipment procurement plan.
- Prominent signage, along with route and schedule information, should be in place at all bus stops.
- Park-and-ride lots that regularly reach capacity should be considered for possible expansion.

- Passenger amenities at park-and-ride lots should be improved. While central stops in most urban areas in the state are made at RTA intermodal centers, which provide shelter, restrooms, and some food options for waiting passengers, the Newburyport park-and-ride facility is the only large park-and-ride facility with such amenities. Building similar facilities at other park-and-ride stops with frequent service and good ridership should be a goal for the state.
- Peak-period capacity at South Station should be expanded by increasing the number of direct trips operated to Logan Airport and by operating additional commuter trips to the Back Bay or perhaps new trips to the Longwood Medical Area. Transporting airport and Back Bay customers on their own peak-period buses would free up capacity for buses that continue to serve South Station.
- Construction of a midday layover storage yard in Boston, which would simplify operations for existing services and reduce deadhead moves to carrier facilities outside of Boston, should be considered.
- Regional bus routes entirely within RTA service areas should be promoted by RTAs on their websites and trip planners.
- Google Transit's trip planner should include schedule data for all Massachusetts regional bus carriers. MassDOT should take the lead in making these data available to Google in the required format. MassDOT should also include regional bus service in any new statewide initiatives to facilitate trip planning by travelers.
- Carriers should consider supporting smartphone ticketing. Coordination with the MBTA's smartphone ticketing initiative should be encouraged.
- A trial program of joint ticketing for regional bus and commuter rail services should be encouraged. It would benefit the most customers in the Boston–Worcester corridor. If this were successful, other markets such as Kingston/Plymouth–Boston and Newburyport–Boston could be explored for possible joint ticketing.
- Offering introductory, discounted single tickets with a price similar to the per-ride price of multi-ride tickets should be considered as a way to attract new riders to low-profile services. These single tickets could be offered as part of short-term promotional efforts and should be considered as a method to market and increase ridership on some services.
- Surveys of passengers on the Boston-based routes suggest that users of the New Bedford–Boston service could benefit from NBTA through-ticketing with other carriers. NBTA has a program that allows rural RTAs

to join the NBTA network; through-ticketing with the mostly rural Franklin Regional Transit Authority (FRTA) and Berkshire Regional Transit Authority (BRTA) services in western Massachusetts may have the greatest potential.