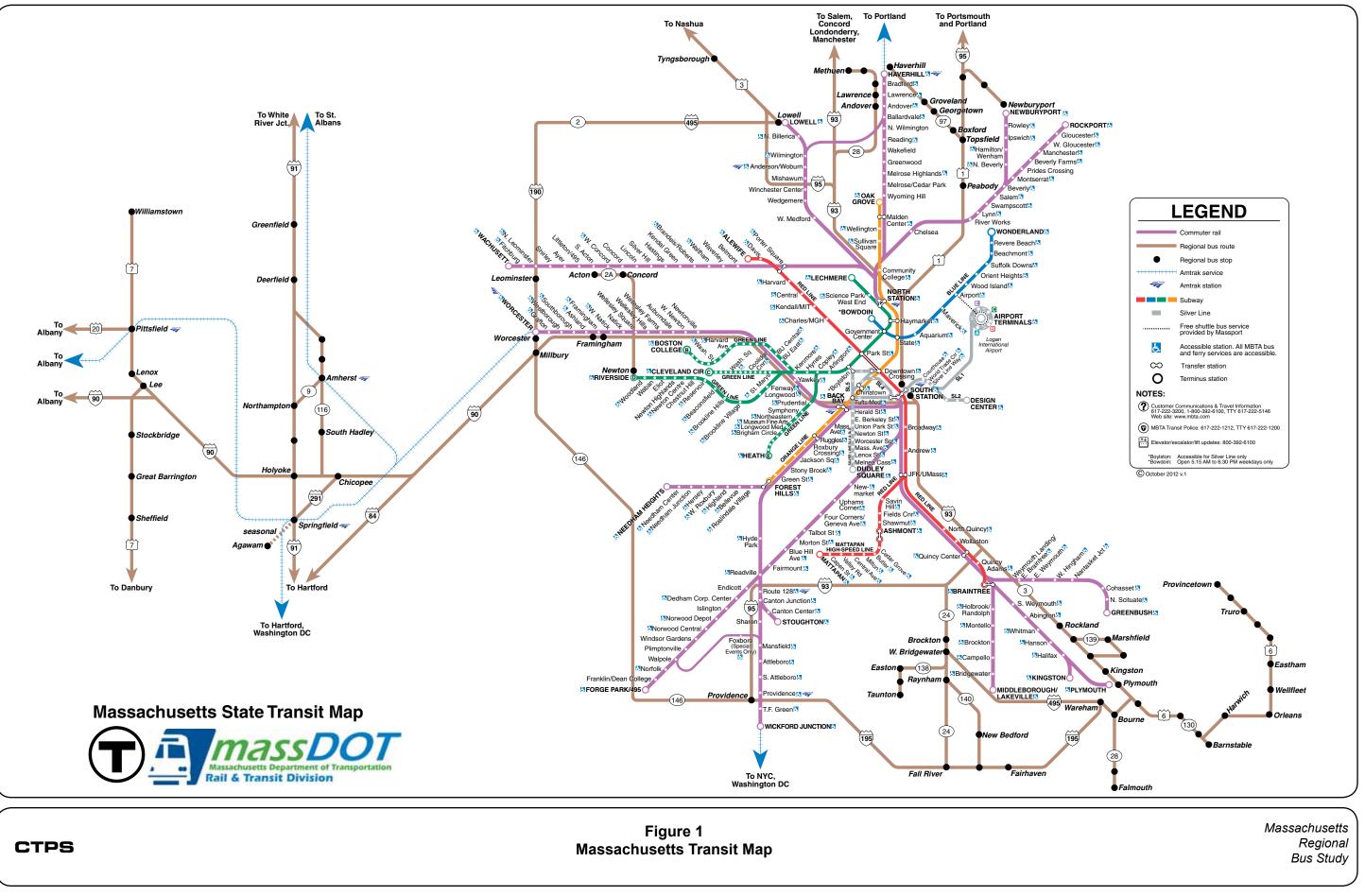
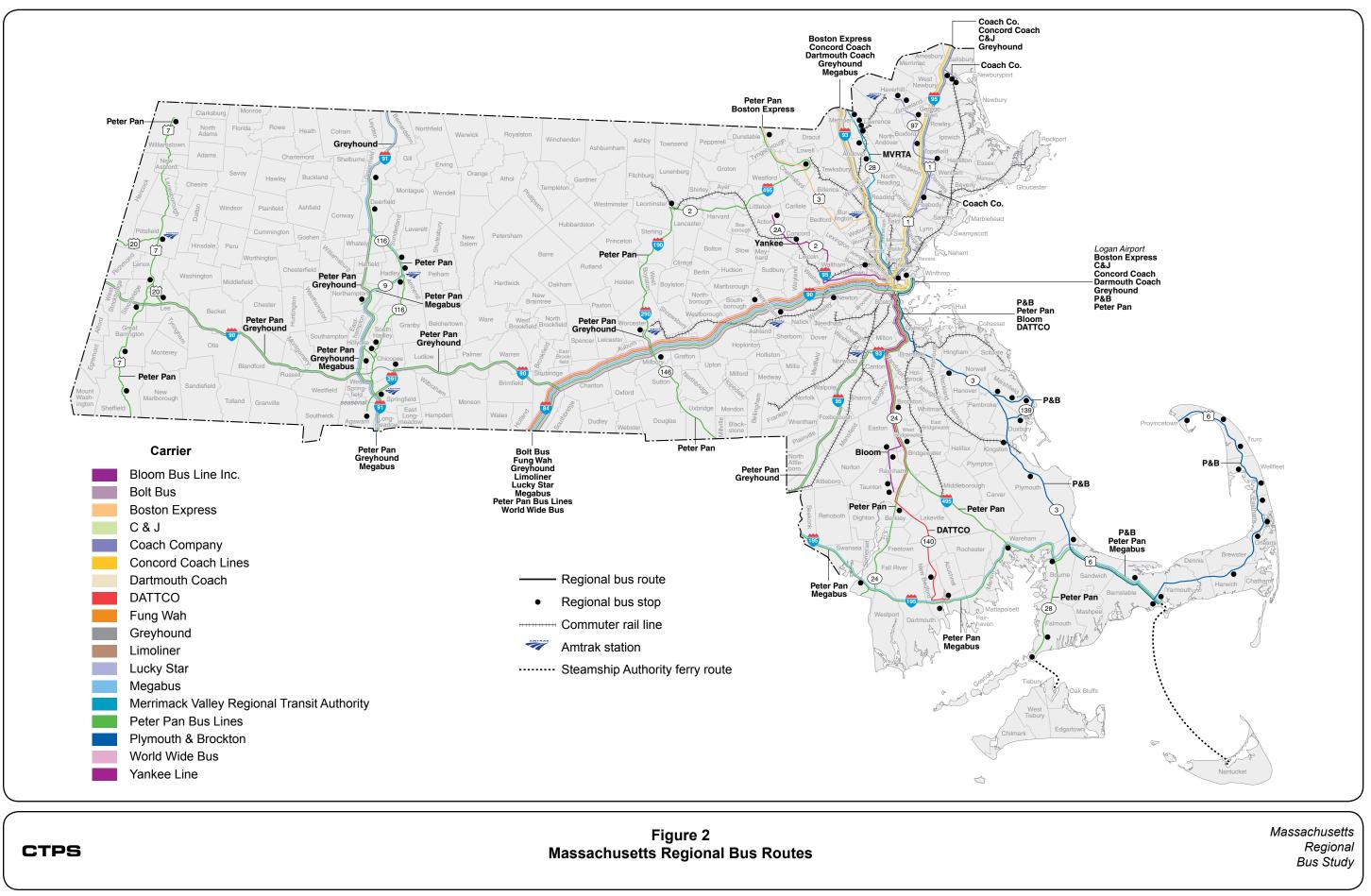
The Regional Bus Network: Recent Evolution and Its Interactions with RTA Services

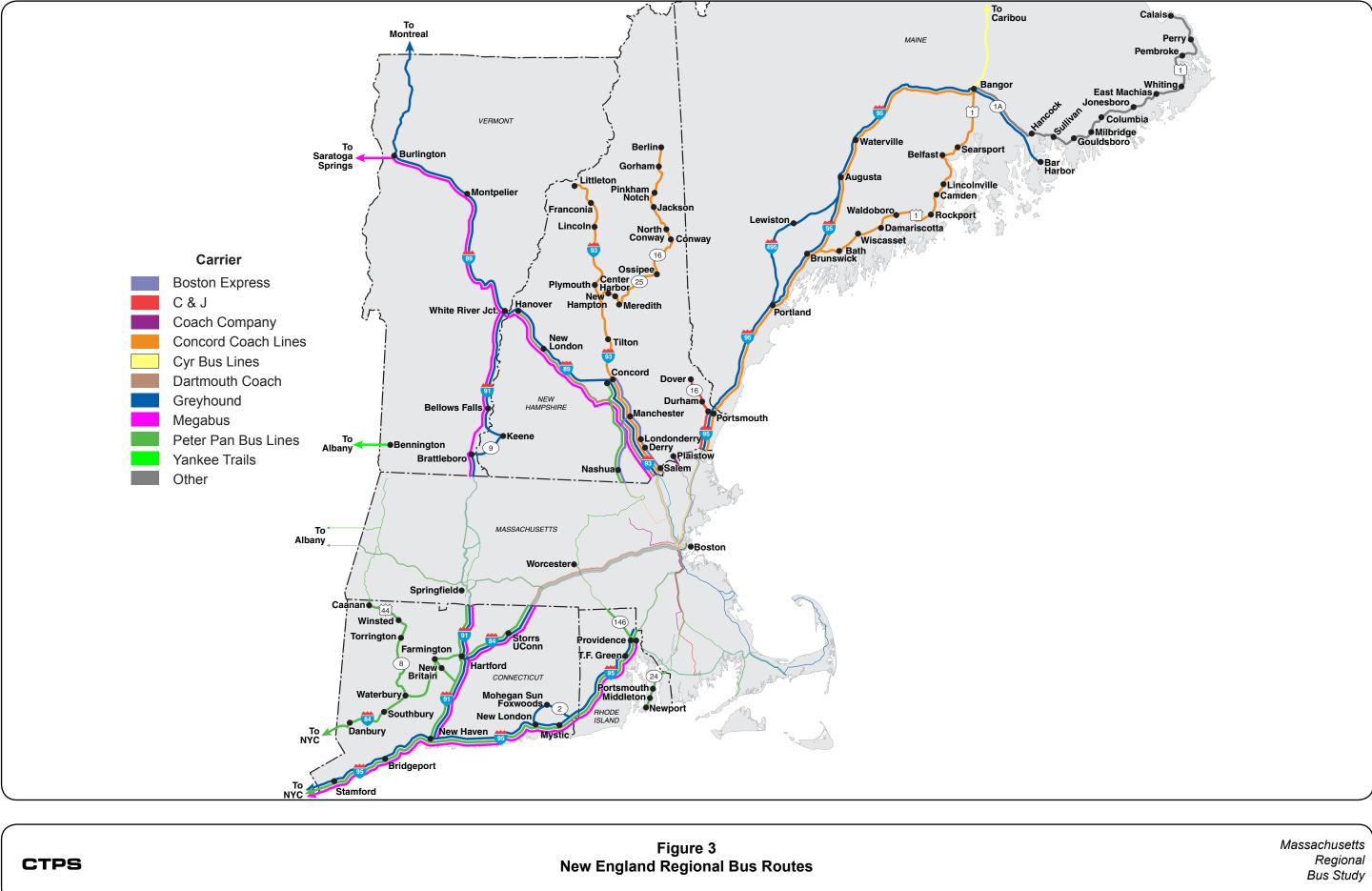
This chapter provides a review of the Massachusetts regional bus network and of other, related components of the regional transportation network. The regional network includes intercity services connecting urban areas throughout the state, intercity services that continue into adjacent states, and commuter express bus services. The chapter begins with a description of the existing regional bus network, including ridership, and brief overviews of local fixedroute transit service and passenger rail service. It then describes the changes that have taken place since 1980 in the regional bus network, in RTA services in response to the changes in the regional bus network, and in the passenger rail network. It then identifies the communities where both regional bus and commuter rail service to Boston continue to operate even after the service changes previously described. Following the service descriptions is a summary of the interactions between regional private carrier and RTA bus services and facilities and of local and regional service connections between RTAs. The next sections discuss parking facilities and potential use of a standard mobile-device-based fare payment media that could be shared by the regional bus carriers and potentially be used to integrate fare payment with the MBTA's fare payment system.

2.1 Existing Regional Network

There are presently 18 private carriers providing fixed-route regional bus service in Massachusetts. Much of the route network is focused on service to Boston, with additional services centered on Springfield, Worcester, and Cape Cod. Carriers range from large national and regional operators which own hundreds of vehicles to small operators with fleets of fewer than 20 buses. Services range from routes operating 20 or more daily round-trips to routes with only a single round-trip during peak commute hours. The services provided by these 18 private carriers in Massachusetts and New England are depicted graphically in Figures 1, 2, and 3, and these services are summarized in Tables 1 and 2.







Several of the larger carriers are members of the National Bus Traffic Association (NBTA) and can sell through-tickets to locations throughout the United States and Canada. Smaller carriers in the state are typically not part of this group and operate service primarily focused on commuters; in some cases service is limited to one city-pair.

In addition to these private carrier services, the Merrimack Valley Regional Transit Authority (MVRTA) operates a Methuen–Boston commuter bus service, and this MVRTA route is shown in Figure 2. Also, the Massachusetts Port Authority (Massport) sponsors operation of the Logan Express service to Logan Airport from parking facilities in Peabody, Woburn, Framingham, and Braintree. Both MVRTA and Massport utilize contractors to deliver these services. These MVRTA and Massport services are the only public agency bus services in Massachusetts that utilize over-the-road coaches, which are characteristic of intercity service.

Regional bus routes serve 61 cities and towns in the commonwealth. Stop locations in these communities range in size from the major intercity bus terminal at South Station in Boston to simple flag stops alongside roadways with little identification. Park-and-ride facilities are provided at many stop locations, but the size of these lots and the amenities offered vary greatly. The municipalities served are: Acton, Agawam (seasonal service), Amherst, Andover, Barnstable, Boston, Bourne, Boxford, Brockton, Cambridge, Chicopee, Concord, Deerfield, Duxbury, Eastham, Easton, Fairhaven, Fall River, Falmouth, Framingham, Georgetown, Great Barrington, Greenfield, Groveland, Harwich, Haverhill, Holyoke, Kingston, Lawrence, Lee, Lenox, Leominster, Lowell, Marshfield, Methuen, Millbury, New Bedford, Newburyport, Newton, Northampton, Orleans, Peabody, Pittsfield, Plymouth, Provincetown, Raynham, Rockland, Sheffield, South Hadley, Southborough, Springfield , Stockbridge, Taunton, Topsfield, Truro, Tyngsborough, Wareham, Wellfleet, West Bridgewater, Williamstown, and Worcester.

In most of these communities fixed-route local bus service is also provided by an RTA. In six of these communities—Boxford, Georgetown, Groveland, Sheffield, Topsfield, and West Bridgewater—the RTA offers only demandresponse service. The only fixed-route service in these six communities is offered by the private regional carrier.

Passenger rail service in Massachusetts includes the extensive MBTA commuter rail network as well as several Amtrak routes. Amtrak has station stops in Boston, Westwood, Woburn, Haverhill, Framingham, Worcester, Springfield, and Pittsfield. Amtrak also serves Amherst at this time, but the Knowledge Corridor project currently under construction will replace service to Amherst with restored service to Northampton and Greenfield.

| Carrier/Route | Monday– Thursday Round- Trips | Friday Round- Trips | Saturday Round- Trips | Sunday Round- Trips | National Bus Ticketing? |
|--|--|---------------------------|-----------------------------|---------------------------|-------------------------------|
| Bloom | | | | | |
| Boston–West Bridgewater– Raynham–Taunton | 13 | 13 | 2 | 2 | No |
| Bolt | | | | | |
| Boston–New York, NY | 14 | 24 | 19 | 19 | No |
| Boston–Philadelphia, PA | 2 | 2 | 2 | 2 | No |
| Boston Express | | | | | |
| Boston–Tyngsborough– Nashua, NH–Manchester, NH Boston–Salem, NH– | 12 | 12 | 9 | 9 | Yes |
| Londonderry, NH | 26 | 26 | 17 | 17 | Yes |
| C & J | | | | | |
| Boston–Newburyport– Portsmouth, NH–Dover, NH | 30 | 30 | 21 | 21 | Yes |
| Coach Company Boston–Newburyport–Plaistow, NH Boston–Peabody–Topsfield– Boxford–Georgetown–Haverhill | 6 2 | 6 | None | None None | No No |
| Concord Coach Boston–Concord, NH Boston–Portland, ME Dartmouth Coach | 11 22 | 11 22 | 11 22 | 11 22 | Yes Yes |
| Boston–Hanover, NH | 8 | 8 | 8 | 7 | No |
| DATTCO Boston–Taunton–New Bedford– Fairhaven | 12 | 12 | 6 | 6 | No |
| | | | | | (Cont.) |

Table 1Intercity and Commuter Bus Routes Operating to the Boston Area

| Intercity and Commuter Bus Routes Operating to the Boston Area | | | | | | |
|--|--|-----------------------------------|-----------------------------|-----------------------------------|-------------------------------|--|
| Carrier/Route | Monday– Thursday Round- Trips | Friday Round- Trips | Saturday Round- Trips | Sunday Round- Trips | National Bus Ticketing? | |
| Fung Wah | | | | | | |
| Boston–New York, NY | 19 | 27 | 19 | 27 | No | |
| Greyhound Boston–Worcester–Springfield– Albany, NY Boston–New York, NY, local via | 3 | 4 | 3 | 4 | Yes | |
| RI/CT Boston–Burlington, VT– | 4 | 6 | 4 | 4 | Yes | |
| Montreal, QE Boston–Portsmouth, NH– | 4 | 4 | 4 | 4 | Yes | |
| Portland, ME–Bangor, ME | 3 | 3 | 3 | 3 | Yes | |
| Hampton Jitney Boston–Hamptons, NY (seasonal, limited service) | None | 1, at school breaks only | None | 1, at school breaks only | No | |
| Limoliner Boston–Framingham–New York, NY | 3 | 3 | 2 | 3 | No | |
| Lucky Star Boston–New York, NY | 16 | 20 | 18 | 22 | No | |
| Megabus/DATTCO Boston–New York, NY | 10 | 16 | 16 | 17 | No | |
| Boston–Philadelphia– Washington, D.C. | 2 | 2 | 2 | 2 | No | |
| Boston–Burlington, VT | 1 | 3 | 3 | 3 | No | |
| Boston–Hartford, CT–New Haven, CT | 4 | 4 | 4 | 4 | No | |
| Plymouth & Brockton Boston–Rockland–Plymouth– Bourne–-Hyannis | 24.5 | 24.5 | 15 | 15 | Yes | |
| Boston–Rockland–Kingston– Plymouth | 7 | 7 | None | None | Yes | |

 Table 1 (Cont.)

 Intercity and Commuter Bus Routes Operating to the Boston Area

| Intercity and Commuter Bus Routes Operating to the Boston Area | | | | | |
|--|--|---------------------------|-----------------------------|---------------------------|-------------------------------|
| Carrier/Route | Monday– Thursday Round- Trips | Friday Round- Trips | Saturday Round- Trips | Sunday Round- Trips | National Bus Ticketing? |
| Boston–Rockland– Marshfield–Duxbury | 2 | 2 | None | None | Yes |
| Peter Pan-Providence Division | | | | | |
| Boston Providence, RI | 8 | 8 | 8 | 8 | Yes |
| Boston–Wareham–Bourne– Falmouth–Woods Hole | 11 | 11 | 11 | 11 | Yes |
| Boston–Fall River–Newport, RI | 6 | 6 | 4 | 4 | Yes |
| Peter Pan | 8 (plus 1 | 8 (plus 1 | | | |
| Boston–Framingham– Worcester–Springfield | Worcester trip) | Worcester trip) | 7 | 7 | Yes |
| Boston–Amherst (seasonal) | None | 4 | 0 | 4 | Yes |
| Peter Pan/Greyhound | | | | | |
| Boston–New York, NY, nonstop | 10 | 16 | 16 | 16 | Yes |
| Boston–Framingham– Worcester–Hartford, CT–New York, NY | 14 | 20 | 14 | 20 | Yes |
| World Wide Bus | | | | | |
| Cambridge–Newton–New York, NY | 3 | 6 | 3 | 8 | No |
| Yankee Line | | | | | |
| Boston–Concord–Acton | 1 | 1 | None | None | No |

| Table 2 |
|--|
| Intercity Bus Routes in Massachusetts Not Directly Serving the Boston Area |

| Carrier/Route | Weekday Round-Trips | Saturday Round-Trips | Sunday Round-Trips | National Bus Ticketing? |
|---|------------------------------------|-------------------------------------|------------------------------------|----------------------------|
| Greyhound Springfield–Greenfield–White River Junction, VT | 1 | 1 | 1 | Yes |
| Megabus/DATTCO Burlington, VT–Amherst–New York, NY | 2 | 2 | 2 | No |
| Hyannis–New York, NY (summer only) | 2 | 2 | 2 | No |
| Peter Pan Springfield–Holyoke– Northampton–South Hadley– Amherst–Deerfield–Greenfield Concord, NH–Manchester, NH–Nashua, NH–Lowell– Leominster–Worcester– | 6 to Amherst,1 to Greenfield | 5 to Amherst, 1 to Greenfield | 5 to Amherst,1 to Greenfield | Yes |
| Foxwoods Casino Springfield–Six Flags Agawam | 1 4 (summer | 1 | 1 | Yes |
| (seasonal) | only) | | | Yes |
| Peter Pan/Greyhound Springfield–Hartford, CT–New York, NY | 13 (15 on Friday) | 15 | 15 | Yes |
| Peter Pan-Providence Division Hyannis–New Bedford–Fall River–Providence | 6 | 6 | 6 | Yes |
| Albany, NY–Pittsfield–Lenox– Lee–Springfield–Worcester– Providence | 2 | 2 | 2 | Yes |
| New York, NY–Sheffield–Great Barrington–Lee–Lenox– Pittsfield–Williamstown | 2 | 2 | 2 | Yes |
| Plymouth & Brockton Hyannis–Provincetown local | 2 (4 in summer) | 2 (4 in summer) | 2 (4 in summer) | Yes |

As part of this study, CTPS staff surveyed passengers between September 2011 and July 2012 on routes that operate mostly within Massachusetts, as well as the intrastate passengers of several interstate routes. The results of the surveys are included in Chapter 7. Ridership was also counted as part of the survey effort. See Table 3. Based on these CTPS counts, the total average daily ridership on these mostly intrastate routes was over 5,700.

Passengers were surveyed in only one direction, usually outbound trips from Boston, in a one-day sample; two-way ridership was estimated by doubling the observed one-way ridership. Providence, Rhode Island, was the only non-Massachusetts destination included in this analysis. It should be noted that CTPS surveyed passengers on routes to Cape Cod during the non-tourist season, and summer ridership would be higher than shown in Table 3. CTPS also did not count or survey passengers on seasonal direct service operated by Peter Pan on Sundays and Fridays between Amherst and Boston during the school year.

| Carrier/Route | One-Way Passengers Counted | Two-Way Estimated Ridership | Surveys Returned | Response Rate | | |
|--------------------------------------|----------------------------------|-----------------------------------|---------------------|------------------|--|--|
| | Counted | Ridership | Returned | Nate | | |
| Bloom | | | | | | |
| Boston–West Bridgewater–Raynham– | | | | | | |
| Taunton | 160 | 320 | 101 | 63.13% | | |
| C&J | | | | | | |
| Boston–Newburyport (MA portion of | | | | | | |
| Boston–Portsmouth NH service) | 200 | 400 | 107 | 53.50% | | |
| Coach Company | | | | | | |
| Boston-Peabody-Newburyport | 159 | 318 | 94 | 59.12% | | |
| Boston-Topsfield-Boxford-Georgetown- | | | | | | |
| Groveland–Haverhill | 49 | 98 | 28 | 57.14% | | |
| DATTCO | | | | | | |
| Boston–Taunton–New Bedford– | | | | | | |
| Fairhaven | 234 | 468 | 161 | 68.80% | | |
| MVRTA | | | | | | |
| Boston-Andover-Lawrence-Methuen | 96 | 192 | 66 | 68.75% | | |
| | | | | | | |

| Table 3 |
|---|
| Ridership and Survey Response Rates on Routes |
| Primarily Operating within Massachusetts |

| Primarily Operating within Massachusetts | | | | | |
|--|----------------------------------|-----------------------------------|---------------------|------------------|--|
| Carrier/Route | One-Way Passengers Counted | Two-Way Estimated Ridership | Surveys Returned | Response Rate | |
| P&B | | | | | |
| Boston–Rockland–Marshfield–Kingston– Plymouth | 343 | 686 | 162 | 47.23% | |
| Boston–Rockland–Plymouth–Bourne– Hyannis | 792 | 1,584 | 383 | 48.36% | |
| Hyannis-Provincetown | two-way survey | 70 | 39 | 55.71% | |
| Peter Pan | | | | | |
| Boston–Bourne–Falmouth–Woods Hole | 113 | 226 | 45 | 39.82% | |
| Boston–Fall River–Newport | 85 | 170 | 36 | 42.35% | |
| Boston–Framingham–Worcester– Springfield | 178 | 356 | 36 | 20.22% | |
| Boston–Providence | 121 | 242 | 38 | 31.40% | |
| Boston–Flutie Pass–Worcester commuter service | 26 | 52 | 22 | 84.62% | |
| Boston–Worcester (portion of Boston– Hartford service, in-state passengers only) | 48 | 96 | 11 | 22.92% | |
| Hyannis–Providence | 40 70 | 90 140 | 20 | 28.57% | |
| Providence–Worcester–Springfield– Pittsfield–Albany | 40 | 80 | 15 | 37.50% | |
| Springfield–Amherst (includes one trip to Greenfield) | 92 | 184 | 42 | 45.65% | |
| Worcester–Concord NH (does not include Foxwoods passengers) | 4 | 8 | 0 | 0.00% | |
| Yankee | | | | | |
| Boston–Concord–Acton | 18 | 36 | 10 | 55.56% | |

Table 3 (Cont.)Ridership and Survey Response Rates on RoutesPrimarily Operating within Massachusetts

2.2 Changes to Regional Bus Service between 1980 and 2012

Although the private carrier regional bus network in Massachusetts remains fairly extensive, its community coverage has been substantially reduced since 1980. Several carriers have completely eliminated service, and surviving carriers have eliminated routes entirely and/or eliminated stops along the routes that remain in operation. The 1980 regional bus network and subsequent service reductions are depicted graphically in Figure 4.

2.2.1 Changes in Community Coverage

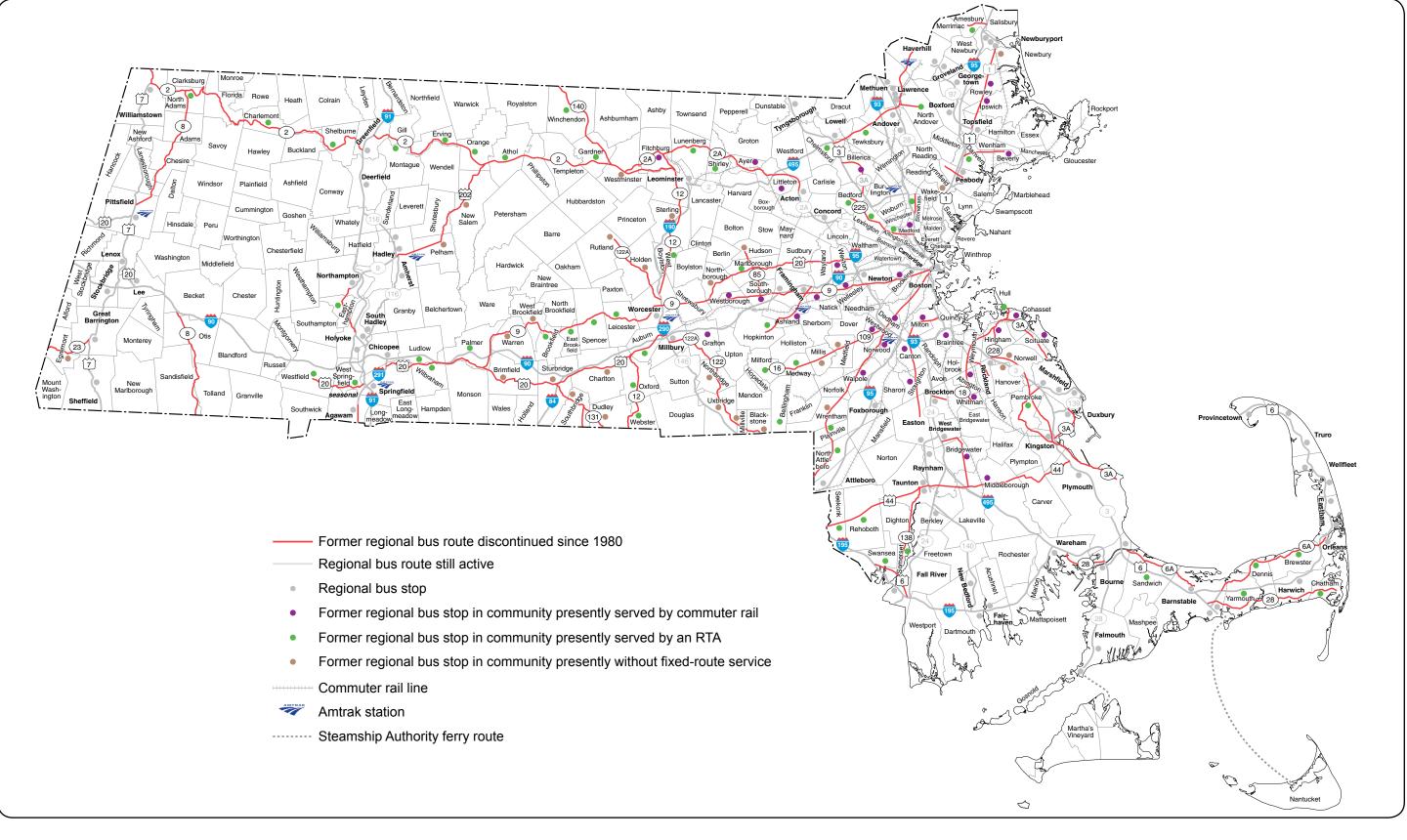
A total of 117 Massachusetts communities have lost all private carrier regional bus service since 1980. Of these 117 communities, 34 presently have MBTA commuter rail or rapid transit service—rail service to 13 of which has been initiated since 1980.

The 34 communities which lost regional bus service but presently have rail service include: Abington, Ashland, Attleboro, Ayer, Beverly, Billerica, Braintree, Bridgewater, Brookline, Canton, Cohasset, Dedham, Fitchburg, Grafton, Hingham, Ipswich, Littleton, Medford, Middleborough, Milton, Natick, Norwood, Rowley, Scituate, Shirley, Southborough, Stoughton, Walpole, Wellesley, Westborough, Weston, Westwood, Weymouth, and Whitman.

Since 1980, Brockton, Lowell, and Leominster have lost private carrier bus service to Boston, though private carrier bus service continues in these communities to other locations. Peter Pan's Concord New Hampshire– Worcester route serves Lowell and Leominster, and Bloom Bus provides limited service between Brockton and Taunton.

Of the 117 communities that lost private carrier regional bus service, 55 lack rail service but still have local fixed-route bus service provided by an RTA. These 55 communities, grouped by RTA, are:

- Berkshire Regional Transit Authority (BRTA) North Adams (1 community)
- Cape Cod Regional Transit Authority (CCRTA) Brewster, Chatham, Dennis, Sandwich, and Yarmouth (5 communities)
- Franklin Regional Transit Authority (FRTA) Athol, Charlemont, Erving, Montague, Orange, Oxford, Shelburne (7 communities)



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- Greater Attleboro–Taunton Regional Transit Authority (GATRA) Bellingham, Dighton, Foxborough, Medway, North Attleboro, Pembroke, Plainville, Rehoboth, Seekonk (9 communities)
- Lowell Regional Transit Authority (LRTA) Chelmsford, Tewksbury (2 communities)
- Montachusett Regional Transit Authority (MART) Gardner, Lunenburg, Winchendon (3 communities)
- Massachusetts Bay Transportation Authority (MBTA) Arlington, Bedford, Danvers, Hull, Lexington, Stoneham (6 communities)
- Merrimack Valley Regional Transit Authority (MVRTA) Amesbury, North Andover (2 communities) In addition, MVRTA directly operates regional bus service from Methuen, Lawrence, and Andover to Boston which replaced a former private carrier service.
- MetroWest Regional Transit Authority (MWRTA) Hopkinton, Marlborough, Milford, Wayland (4 communities) Milford has limited MWRTA service, although the community is not a member of MWRTA.
- Pioneer Valley Regional Transit Authority (PVTA)
 Easthampton, Ludlow, Palmer, Westfield, Wilbraham (5 communities)
- Southeastern Regional Transit Authority (SRTA) Somerset, Swansea (2 communities)
- Worcester Regional Transit Authority (WRTA) Auburn, Brookfield, East Brookfield, Leicester, Oxford, Shrewsbury, Spencer, Webster, West Boylston (9communities)

Another 28 of the 117 communities that lost private carrier regional bus service since 1980 have been left without any fixed-route service, either rail or local RTA bus service: Blackstone, Brimfield, Charlton, Dudley, Egremont, Hanover, Holden, Hudson, Lynnfield, Medfield, Millis, Millville, New Salem, Newbury, Northborough, Northbridge, Norwell, Pelham, Rutland, Southbridge, Sterling, Sturbridge, Sudbury, Uxbridge, Warren, West Brookfield, Westminster, and Wrentham. Of these 28 communities, 22 are members of an RTA and presently receive at least some demand-response service for the elderly and disabled. WRTA plans to introduce new fixed-route service to Charlton and Southbridge in 2013. However, Blackstone, Hudson, Millville, and Uxbridge are presently not members of any transit authority, and both Norwell and Northbridge are within the MBTA district but do not receive any type of service from the MBTA.

2.2.2 Changes in Levels of Service

Table 4 shows the changes in Massachusetts regional bus service between 1980 and 2011 in weekday round-trips by route, including routes which are no longer operated. These comparisons are based upon off-season frequencies, and seasonal (peak) service would be higher than shown in Table 4 for both 1980 and 2011.

By far the greatest expansion of regional bus service in Massachusetts since 1980 has been between Boston and New York City. The number of trips operated has more than tripled since 1980, and the number of carriers serving the route has increased from two, Greyhound and Trailways, to a current roster of eight carriers. With the demise of the Trailways franchise, Peter Pan extended its service to New York City and later entered into an operating agreement with Greyhound to jointly operate service between Boston and New York and between Boston and Hartford. In addition, six new private bus carriers have initiated service between Boston and New York City, including Fung Wah and Lucky Star (service began by 1999), Limoliner (2003), Bolt and Megabus (2008), and World Wide Bus (2010). A ninth carrier, Boston Deluxe, briefly operated prior to discontinuing service in the spring of 2012. It should be noted that Bolt Bus is a joint operation of Greyhound and Peter Pan, although it is marketed to the public as a fully independent operation.

There has also been considerable expansion of service between Boston and southern New Hampshire since 1980. The number of daily round-trips serving New Hampshire locations from Boston has expanded from 52 in 1980 to 92 in 2012. Most of this expansion can be attributed to C&J Bus and Concord Coach with its affiliated carriers Dartmouth Coach and Boston Express. Greyhound Lines and its former subsidiary Vermont Transit have, however, reduced service to New Hampshire over the last 30 years.

The State of New Hampshire has provided capital support in the form of bus purchases on behalf of New Hampshire–based operators. The State has also funded the construction of park-and-ride lots and bus stations. There was minimal parking available at New Hampshire locations in 1980, and the expansion of commuter parking reflects the importance of the expanding Boston commuting region to private regional bus carriers.

The most recent expansion of regional service in Massachusetts is the growth of the Megabus network. Megabus is owned by Coach USA, which itself is owned by British bus operator Stagecoach. In New England, however, portions of the Megabus-branded service are operated jointly with DATTCO as an affiliate of Megabus. The initial Megabus entry into Massachusetts was Boston–New York City service, which began in 2008. Since 2010, Megabus has added the following routes:

- Boston-Burlington, Vermont
- · Boston-Hartford and New Haven, Connecticut
- Boston–Philadelphia, Pennsylvania, and Washington, D.C.

- Hyannis–New York City
- Burlington, Vermont–New York City via Amherst, Massachusetts.

Table 4Corridor Comparison of Massachusetts Regional Bus Routes 1980 to 2011
(listed in decreasing order by change in trips)

| Route | 1980 Weekday Round-Trips | 2011 Weekday Round-Trips | Change in Trips |
|---|--------------------------------|--------------------------------|--------------------|
| Boston–New York, NY | 26.5 | 87.0 | 60.5 |
| Boston–Newburyport (includes New | 4.0 | 30.0 | 26.0 |
| Boston–Salem, NH | 3.0 | 19.0 | 16.0 |
| Boston–Portsmouth, NH | 14.0 | 24.0 | 10.0 |
| Boston–Nashua, NH | 4.0 | 12.0 | 8.0 |
| Boston–Concord, NH | 4.0 | 11.0 | 7.0 |
| Boston–Londonderry, NH | 1.0 | 7.0 | 6.0 |
| Boston- New York, NY, via RI/CT local | 0 | 4.0 | 4.0 |
| Boston-Philadelphia, PA, direct express | 0 | 4.0 | 4.0 |
| Boston–Portland, ME | 14.0 | 17.0 | 3.0 |
| Boston–Taunton | 10.0 | 13.0 | 3.0 |
| Boston–Hanover, NH | 9.0 | 11.0 | 2.0 |
| Boston–New Bedford | 9.0 | 11.0 | 2.0 |
| Boston-Washington, DC, direct express | 0 | 2.0 | 2.0 |
| Boston–Acton | 1.0 | 1.0 | 0 |
| Hyannis–Provincetown | 2.0 | 2.0 | 0 |
| Worcester–Concord, NH | 1.0 | 1.0 | 0 |
| Boston–Albany, NY | 4.0 | 3.0 | -1.0 |
| Boston-Falmouth/Woods Hole | 12.0 | 11.0 | -1.0 |
| Pittsfield–New York, NY | 3.0 | 2.0 | -1.0 |

| Route | Weekday Round-Trips | Weekday Round-Trips | Change in Trips |
|-------------------------------|------------------------|------------------------|--------------------|
| Noule | Round-mps | Round-Trips | |
| Boston–Hingham | 1.0 | 0 | -1.0 |
| Gardner–Fitchburg | 1.0 | 0 | -1.0 |
| Springfield-Haverhill | 1.0 | 0 | -1.0 |
| Worcester–Springfield local | 1.0 | 0 | -1.0 |
| Boston–Hyannis | 23.0 | 21.5 | -1.5 |
| Springfield–Providence, RI | 4.0 | 2.5 | -1.5 |
| Boston–Canton | 2.0 | 0 | -2.0 |
| Boston–Weymouth | 2.0 | 0 | -2.0 |
| Taunton–Fall River | 2.0 | 0 | -2.0 |
| Boston-Fall River/Newport | 9.0 | 6.0 | -3.0 |
| Boston–Marlborough | 3.0 | 0 | -3.0 |
| Boston–Rutland, VT, via NH | 3.0 | 0 | -3.0 |
| Boston–Springvale ME, via NH | 3.0 | 0 | -3.0 |
| Boston–Whitman | 3.0 | 0 | -3.0 |
| Haverhill-Worcester | 3.0 | 0 | -3.0 |
| Lowell-Lawrence | 3.0 | 0 | -3.0 |
| Providence RI–Worcester local | 3.0 | 0 | -3.0 |
| Worcester-Rutland | 3.0 | 0 | -3.0 |
| Springfield–New York, NY | 20.0 | 16.0 | -4.0 |
| Boston–Peabody | 4.0 | 0 | -4.0 |
| Boston-Rockland | 4.0 | 0 | -4.0 |
| Boston-Williamstown | 4.0 | 0 | -4.0 |
| Hyannis-Chatham | 4.0 | 0 | -4.0 |

Table 4 (Cont.)Corridor Comparison of Massachusetts Regional Bus Routes 1980 to 2011(listed in decreasing order by change in trips)

| (listed in decreasing order by change in trips) | | | | | |
|--|--------------------------------|--------------------------------|--------------------|--|--|
| Route | 1980 Weekday Round-Trips | 2011 Weekday Round-Trips | Change in Trips | | |
| Springfield–Albany NY | 7.0 | 2.5 | -4.5 | | |
| Boston–Concord, NH–Burlington, VT– Montreal, QC | 9.0 | 4.0 | -5.0 | | |
| Boston–Haverhill | 7.0 | 2.0 | -5.0 | | |
| Boston–Marshfield | 7.0 | 2.0 | -5.0 | | |
| Boston–Brockton | 5.0 | 0 | -5.0 | | |
| Worcester-Southbridge | 5.0 | 0 | -5.0 | | |
| Cape Cod–Providence, RI | 12.0 | 6 | -6 | | |
| Boston–Easton | 6.0 | 0 | -6 | | |
| Boston–Lexington | 6.0 | 0 | -6.0 | | |
| Boston–Middleboro | 6.0 | 0 | -6.0 | | |
| Springfield–Palmer local | 6.0 | 0 | -6.0 | | |
| Springfield–White River Junction, VT | 8.0 | 1.0 | -7.0 | | |
| Boston–Providence, RI, local | 7.0 | 0 | -7.0 | | |
| Boston–Worcester | 19.0 | 11.0 | -8.0 | | |
| Boston–Fitchburg | 8.0 | 0 | -8.0 | | |
| Boston–Milford | 8.0 | 0 | -8.0 | | |
| Boston–Hartford | 23.0 | 14.0 | -9.0 | | |
| Boston–Lowell | 9.0 | 0 | -9.0 | | |
| Providence-Taunton | 9.0 | 0 | -9.0 | | |
| Boston–Springfield | 18.0 | 8.0 | -10.0 | | |
| Boston–Framingham express | 12.0 | 1.0 | -11.0 | | |
| Springfield–Agawam | 15.0 | 4.0 | -11.0 | | |
| Springfield–Amherst | 17.0 | 6.0 | -11.0 | | |

 Table 4 (Cont.)

 Corridor Comparison of Massachusetts Regional Bus Routes 1980 to 2011

 (listed in decreasing order by change in trips)

| | 1980 | 2011 | |
|---------------------------------|------------------------|------------------------|--------------------|
| Route | Weekday Round-Trips | Weekday Round-Trips | Change in Trips |
| Boston-Stoneham | 11.0 | 0 | -11.0 |
| Springfield–Bradley Airport, CT | 15.0 | 0 | -15.0 |
| Boston–Framingham local | 18.0 | 0 | -18.0 |
| Boston-Lawrence | 23.0 | 4.0 | -19.0 |
| Boston–Plymouth | 25.0 | 6.0 | -19.0 |
| Boston–Worcester local | 19.0 | 0 | -19.0 |
| Boston-Scituate | 22.0 | 0 | -22.0 |
| Boston–Providence, RI | 36.0 | 12.0 | -24.0 |
| Albany NY–Winstead, CT | weekend only | 0 | |
| Springfield–New London, CT | weekend only | 0 | |
| Springfield–Woods Hole | weekend only | 0 | |

Table 4 (Cont.)Corridor Comparison of Massachusetts Regional Bus Routes 1980 to 2011
(listed in decreasing order by change in trips)

While bus service between Massachusetts and New York and New Hampshire has increased over the last 30 years, round-trips serving locations exclusively in Massachusetts has declined. Commuter routes and short-distance regional routes which have been completely discontinued since 1980 include service between Boston and:

- Canton via Milton
- Hingham, Weymouth, Rockland, Abington, and Whitman
- Northborough via Marlborough, Sudbury, Wayland, and Weston
- Hudson via Marlborough and Southborough
- Fitchburg via Shirley and Ayer
- Williamstown via Charlemont, Greenfield, Orange, Athol, Gardner, and Fitchburg
- Brockton

- Easton via Stoughton
- Bedford via Lexington, Arlington, and Medford
- Middleborough via Bridgewater
- Providence local via Route 1 including stops in Dedham, Westwood, Norwood, Walpole, Wrentham, Plainville, and North Attenborough
- Milford via Route 109 including stops in Medway, Millis, Medfield, Dover, and Westwood
- · Lowell via Chelmsford, Tewksbury, and Billerica
- Stoneham via Medford
- Worcester via Route 9 local including stops in Brookline, Newton, Wellesley, Natick, Framingham, Southborough, Westborough, and Shrewsbury
- Scituate via Cohasset and Hingham

2.2.3 Characteristics of Reduced or Discontinued Services

Some of the most significant reductions in scheduled trips on routes operating within Massachusetts have occurred in those corridors which have seen an expansion or reintroduction of rail service since 1980. Commuter bus service has been eliminated on routes to Abington, Ayer, Billerica, Brockton, Bridgewater, Cohasset, Dedham, Fitchburg, Hingham, Lowell, Middleborough, Natick, Norwood, Rockland, Scituate, Shirley, Stoughton, Southborough, Walpole, Wellesley, Westborough, Westwood, Weymouth, and Whitman.

Regional commuter bus service to Boston that operated mostly over noninterstate highways and local roadways or served communities without dedicated parking facilities has also been vulnerable to reductions even when not in direct competition with an expanding commuter rail network. Discontinued service over such routes includes:

- Northborough–Boston via Route 20
- Milford–Boston via Route 109 west of I-95/ Route 128
- Williamstown–Fitchburg–Boston via Route 2

Since 1980, long-distance regional bus service between Boston and New Hampshire and Maine has increased overall; however, long-distance service between Boston and Rutland, Vermont, via Keene, New Hampshire, and between Boston and Springvale, Maine, has been discontinued. These services share some characteristics with discontinued regional commuter routes in that they were operated over local roadways rather than interstate highways over much of their routes outside of Massachusetts. A number of routes not operating directly to Boston have also lost all service since 1980. Private carrier regional routes not serving Boston and operating within Massachusetts or short distances into neighboring states that have been discontinued since 1980 include:

- Gardner-Fitchburg
- Hyannis-Chatham
- Lowell–Lawrence
- Taunton–Fall River
- Taunton-Providence, Rhode Island
- Springfield–Bradley Airport, Connecticut
- Springfield-Haverhill
- Springfield–Palmer local
- Worcester-Haverhill
- · Worcester-Providence, Rhode Island local
- Worcester-Rutland
- Worcester-Southbridge
- Worcester-Springfield local

It is notable that five of the discontinued non-Boston routes listed served Worcester. In the cases of four of these 13 non-Boston routes, after the private carrier discontinued service, the local RTA initiated service on the route: Gardner–Fitchburg, Hyannis–Chatham, Lowell–Lawrence, and Providence– Taunton (no longer operating). Section 2.3 presents more information on RTA responses to reductions in private carrier regional service.

The elimination of most routes that did not operate primarily on limited-access highways has meant a loss of service for many communities. These communities can only be reached by local roads and do not generate enough ridership to make it profitable to either operate a separate route exclusively via local roads or divert a service from a limited-access highway onto connecting local roads to reach a stop at a town center.

While bus service remains between Worcester and Springfield as part of the regional Boston–Springfield route operated by Peter Pan, service has been discontinued at all local stops between the two cities, resulting in the elimination of private carrier bus service to Auburn, Brimfield, Brookfield, Charlton, East Brookfield, Leicester, Ludlow, Palmer, Southbridge, Sturbridge, Spencer, Wilbraham, and West Brookfield. PVTA local bus service to Springfield is available in Ludlow, Wilbraham, and Palmer, and WRTA service to Worcester is available in Auburn, Brookfield, East Brookfield, Leicester, and Spencer. WRTA will introduce new fixed-route service from Auburn to Charlton and Southbridge in 2013. There is, however, no fixed-route bus service of any type in Brimfield or Sturbridge.

Not all services operating within Massachusetts have seen reductions since 1980. Several intrastate routes serving Boston have retained similar numbers of trips over the 30-year period. Scheduled service between Boston and Hyannis has remained strong, while services between Boston and New Bedford and Taunton have improved when compared with 1980, but are slightly lower than the service levels that were reached in the 1990s.

The Commonwealth for many years provided operating subsidies to Boston commuter bus carriers through the Inter-district subsidy program. The program was overseen by the MBTA between 1987 and 2009. These subsidies were level-funded for many years before being completely eliminated in 2009.

2.3 Changes in RTA Service in Response to Changes in Regional Bus Service

Some of the regional bus services that were discontinued by private carriers have been replaced by new or expanded local RTA services.

- GATRA took over service between Taunton and Providence, Rhode Island, from Brander Bus, but the GATRA service was discontinued in May 2008 because of low ridership. There is presently no direct service between Taunton and Providence.
- After several years without service along Route 2 between Gardner and Greenfield, MART and FRTA jointly introduced new service. MART operates between Gardner and Orange while FRTA operates between Athol and Greenfield. The two services overlap between Athol and Orange. FRTA also operates service between Greenfield and Charlemont along Route 2 to the west of Greenfield. This FRTA service west of Greenfield was already in place prior to the discontinuance of the longer-route private carrier regional service.
- MWRTA reintroduced local service along Route 9 in Natick and Framingham in 2009. This new route between Woodland Station on the MBTA Green Line and Framingham restored service on a segment that had lost regional bus service in 2006.
- MVRTA and LRTA jointly introduced service between Lowell and Lawrence after Trombly Bus Lines discontinued its local service connecting the communities in 1980. MVRTA later took over full operating responsibility for this service.
- WRTA introduced service to Webster and Oxford from Worcester after a private carrier had discontinued service on a longer route between Worcester and Southbridge.

- Although not a direct reaction to the elimination of private carrier service, GATRA has established shuttles connecting to commuter rail stations in two communities, Pembroke and Medway, both of which at one time had direct commuter bus service to Boston. GATRA has also established local service in Plymouth, Kingston, Duxbury, and Marshfield along segments where commuter bus service to Boston has either been eliminated or greatly reduced. The GATRA service provides some connection to commuter rail service in Kingston and Plymouth and to the remaining P&B bus service in Marshfield and Plymouth.
- The MBTA established local bus service between Malden and Stoneham after Hudson Bus Lines discontinued its Boston–Stoneham service in 1992. Discontinued Hudson Bus Lines service between Boston and Lexington was not replaced; there was already MBTA service in the communities served by the discontinued route.

2.4 Changes to the Passenger Rail Network in Massachusetts between 1980 and 2012

While the coverage of the regional intercity and commuter bus network in Massachusetts has shrunk since 1980, the passenger rail network has expanded significantly. Major milestones in commuter rail service expansion include:

- In late 1979, service was extended beyond Reading to Andover, Lawrence, and Haverhill. Service to these communities had been greatly reduced in 1965 and eliminated in 1976.
- In 1980, service was extended beyond South Acton to Littleton, Ayer, Shirley, Leominster, and Fitchburg. Service to Fitchburg had last operated in 1965.
- In 1988, service was restored to Providence, Rhode Island, after having been cut back to Attleboro in 1981. Amtrak intercity service was the only rail service between Boston and Providence during this period.
- In 1988, the Franklin commuter rail line was extended a short distance to a new station at Forge Park, still within Franklin. The new station is convenient to I-495 and has a large park-and-ride lot.
- In 1994, service was extended beyond Framingham to Worcester. Commuter rail service to Worcester had been discontinued in 1975.
- In 1997, a major expansion of the commuter rail network took place with the restoration of two branches of Old Colony service, last operated in 1959. One of these branches, the Plymouth/Kingston Line, also serves Braintree, Weymouth, Abington, Whitman, Hanson, and Halifax. The

other branch, the Middleborough /Lakeville Line, also serves Braintree, Holbrook, Randolph, Brockton, and Bridgewater.

- In 1998, service was extended beyond Ipswich to Newburyport and Rowley. Service to Newburyport had last operated in 1976.
- Between 2000 and 2002, intermediate stations were opened on the Worcester commuter rail line in Ashland, Grafton, Southborough, and Westborough. The new station locations had large park-and-ride lots, which the old stations, closed in 1960, had lacked.
- In 2007, the third Old Colony branch, the Greenbush Line, opened. This line serves Braintree, Weymouth, Hingham, Cohasset, and Scituate.
- In 2010 and 2012, service on the Providence Line was extended further into Rhode Island with the opening of T. F. Green Airport and Wickford Junction stations.

Some service retrenchment has taken place in the MBTA commuter rail network since 1980.

- A trial extension of service beyond Lowell to Concord, New Hampshire, with stops in Nashua, Merrimack, and Manchester was operated between January 1980 and March 1981. Rail service beyond Lowell to New Hampshire had last been operated in 1967.
- The short Woburn branch serving two stops in Woburn was abandoned in 1981. The MBTA subsequently expanded express bus service to Woburn, opened the Mishawum stop in Woburn on the Lowell Line in 1984, and constructed the massive Anderson Regional Transportation Center, also in Woburn, in 2001.
- The service restored to Fitchburg in 1980 initially extended to Gardner but was cut back to Fitchburg in 1986.

In addition to network expansion, there has been an increase in the total number of trains operated on each commuter rail line. Table 5 summarizes changes in weekday round-trips by line between 1980 and 2011. The largest increases in scheduled trains along already-existing MBTA commuter rail routes were seen on the Framingham/Worcester Line and on the Stoughton branch of the Providence Line.

| Round-Trips per Day on the Commuter Rail Network by Line | | | | |
|--|---------------------------|---------------------------|--|--|
| Commuter Rail Line | 1980 Daily Round-Trips | 2011 Daily Round-Trips | | |
| Rockport | 12 | 13 | | |
| Ipswich (extended to Newburyport (after 1998) | 13 | 19 | | |
| Reading/Haverhill | 23 | 24 | | |
| Lowell | 18 | 26 | | |
| Woburn | 21 | 0 | | |
| South Acton/Fitchburg | 11 | 17 | | |
| Framingham (extended to Worcester (after 1994) | 5 | 21 | | |
| Needham | Line under reconstruction | 16 | | |
| Franklin | 8 | 19 | | |
| Attleboro/Providence | 15 | 17 | | |
| Stoughton | 6 | 19 | | |
| Readville (initiated 1987) | n/a | 14 | | |
| Kingston/Plymouth (opened 1998) | n/a | 12 | | |
| Middleborough (opened 1998) | n/a | 12 | | |
| Greenbush (opened 2007) | n/a | 12 | | |
| Total | 132 | 241 | | |

Table 5

Source: MBTA public timetables

Amtrak service in Massachusetts has also expanded in the same time period.

• In 2000, Amtrak completed the electrification of the Northeast Corridor between Boston and New Haven and introduced faster service along the Boston-New York City section of the corridor.

• In 2001, Downeaster service was initiated between Boston and Portland, Maine, with seven intermediate stops. Passenger rail service between these cities had last operated in 1965.

There have, however, been some contractions in the Amtrak network in Massachusetts since 1980.

- "Inland Route" service operating between Boston and New York via Worcester, Springfield, and Hartford was discontinued in 2004.
- Seasonal service that operated between New York City and Cape Cod was initiated in 1986 but was discontinued in 1996.
- Amtrak's Montrealer service between Washington and Montreal, making stops in Massachusetts in Springfield, Northampton, and Greenfield, was suspended in 1987. Service to Montreal was restored in 1989 over an alternate route via Amherst, and in 1995 the train was re-branded as "The Vermonter," as service into Canada was eliminated. The Knowledge Corridor project, presently under construction, will return this service to its original route through Greenfield and Northampton.

Most Amtrak ridership (measured as the sum of boardings and alightings) within the state takes place in Boston. Recent Amtrak ridership is presented in Table 6 and shows that 2,089,058 (79%) of the 2,646,461 boardings and alightings in Massachusetts in 2009 took place at South, North, and Back Bay stations in Boston. The busiest stop outside of Boston was Route 128 Station in Westwood, serving 366,649 passengers. Springfield is the only other community in Massachusetts served by Amtrak with annual ridership greater than 100,000.

All of the communities served by Amtrak in Massachusetts are also served by either regional bus service or the MBTA's commuter rail service. Amtrak stations at Boston (South Station), Pittsfield, and Worcester are shared with or immediately adjacent to the regional bus station. The Amtrak station in Springfield is a short distance away from the regional bus station.

| Annual Boardings and Alightings in Massachusetts | | |
|--|---------------------|--|
| Station | Annual Ridership | |
| Amherst | 13,581 | |
| Boston–Back Bay | 398,240 | |
| Boston–North Station | 403,203 | |
| Boston–South Station | 1,287,615 | |
| Framingham | 1,778 | |
| Haverhill | 36,159 | |
| Pittsfield | 6,700 | |
| Route 128 | 366,649 | |
| Springfield | 111,215 | |
| Woburn | 14,620 | |
| Worcester | 6,701 | |
| Total Boardings & Alightings | 2,646,461 | |

Table 6 2009 Amtrak Station Annual Boardings and Alightings in Massachusetts

Source: Amtrak.com

2.5 Communities with Both Regional Bus and Commuter Rail Service to Boston

Many communities through the 1970s and 1980s had both regional bus and commuter rail service to Boston, but regional bus operations in a number of these communities have since been discontinued. There remain 10 cities and towns in Massachusetts, however, where the two modes continue to operate, serving Boston. Half of these communities are at the ends of the commuter rail line, reflecting in some instances regional commuting patterns and in one instance bus company storage locations. The 10 communities are:

• Newburyport: Newburyport Line rail service

Newburyport is served by two regional bus carriers: the Coach Company and C&J Bus. The Coach Company operates exclusively during the peak periods, offering six inbound trips each weekday morning and six outbound trips weekday afternoons. All 12 of these trips serve the parkand-ride lot near I-95, and two of the morning and three of the afternoon trips also serve downtown Newburyport and Newburyport High School. In Boston, the Coach Company stops on Congress Street near Haymarket Square and on Arlington Street in the Back Bay.

C&J Bus offers an extensive daily schedule with 30 round-trips on weekdays and 21 on weekends. The stop at Newburyport is near the midpoint of the service C&J runs between Dover, New Hampshire, and Boston. C&J serves the park-and-ride lot in Newburyport and, in Boston, the intercity bus terminal at South Station and Logan Airport.

· Kingston and Plymouth: Plymouth/Kingston Line rail service

Plymouth and Brockton offers service in both Kingston and Plymouth. The Kingston service is peak period only, with six inbound trips in the morning and seven outbound trips in the evening. The Kingston stop is at the Kingsbury Plaza shopping mall.

All Plymouth service is provided at the park-and-ride lot off Route 3. Trips to Boston via Kingston begin at this location. At other times, Plymouth is served by a stop near the midpoint of the regular Boston– Hyannis service.

• Worcester: Worcester Line rail service

Most trips between Boston and Worcester are outside of commuting hours. Peter Pan operates only one inbound peak-period trip to Boston weekday mornings and one outbound peak-period trip weekday afternoons. Except for the one rush hour round-trip, Boston–Worcester service offered by Peter Pan and Greyhound represents easterly segments of longer-distance services between Boston and Springfield, Hartford, or Albany. The Worcester intercity bus station is located at Union Station, which is also served by commuter rail and Amtrak.

• Haverhill: Haverhill Line rail service

The Coach Company serves Haverhill with two morning inbound trips to Boston and two afternoon trips from Boston. Passenger surveys indicate, however, that most Coach Company patrons board at stops south of Haverhill. Service to Haverhill is facilitated by the bus garage location in nearby Plaistow, New Hampshire.

• Framingham: Worcester Line rail service

Peter Pan serves the Shoppers World mall in Framingham. There are two inbound trips during the morning peak and one outbound trip during the afternoon peak, which stop at the Flutie Pass commuter lot. Other trips between Boston and Framingham are outside of commuting hours. Except for the three peak-period trips, Boston–Framingham service offered by Peter Pan represents the east-most segments of longerdistance services between Boston and Springfield, Hartford, or New York City.

· Andover and Lawrence: Haverhill Line rail service

The Merrimack Valley RTA operates four inbound trips weekday mornings and four outbound trips weekday afternoons during peak commute hours. The service includes a stop at the McGovern Transportation Center in Lawrence, which is also the location of the Lawrence commuter rail station.

· Acton and Concord: Fitchburg Line rail service

Yankee Line operates a very limited schedule between Acton and Concord and Copley Square in Boston. There is one inbound trip to Boston weekday mornings, and one outbound trip weekday afternoons. The commuter lot used by Yankee in Concord is also used by commuter rail passengers.

Of the Massachusetts locations served by both regional bus and commuter rail, Newburyport has the greatest number of scheduled regional bus roundtrips, followed by Kingston and Plymouth. The characteristics of the strong Newburyport and Plymouth/Kingston service corridors are similar:

- Large parking facilities are available for bus passengers.
- Stops in Newburyport and Plymouth are intermediate stops of longer routes (from Portsmouth, New Hampshire, and Hyannis) serving more distant areas not served by commuter rail. The viability of the service is not dependent entirely on demand from the stops in commuter rail territory.
- · Bus service is operated all day, not just during peak periods.
- The buses operate via limited-access highways and make few if any stops between the origin and Boston.
- Service is also provided to Logan Airport, with off-peak buses stopping both in Boston and the airport, while separate trips are operated to Boston and Logan during the peak commuting times.

In both cases, buses also distribute riders to downtown or Back Bay locations that require a transfer to rapid transit for commuter rail riders to reach. During the peak commuting time periods, Coach Company buses operate from Newburyport direct to Back Bay, C&J buses operate from Newburyport direct to the financial district and South Station, and P&B buses operate from Plymouth direct to Park Square.

Worcester and Providence, Rhode Island are the second- and third-largest cities in New England. While Providence is not in the study area, it is an important origin for commuters. Peter Pan and Greyhound both operate express bus service between Providence and Boston, a corridor that is also well served by commuter rail and Amtrak. In Worcester, although the number of weekday commuters to Boston is small, there is a reasonable amount of offpeak regional bus ridership, particularly at times when commuter rail departures are infrequent.

Yankee Line service from Acton and Concord to Boston and MVRTA service from Andover and Lawrence to Boston have been able to generate sufficient ridership to support peak-period commuter service with a small number of trips. MVRTA Boston commuter service has actually increased the number of round-trips operated, and operates more service than the predecessor private operation, because of growing demand. CTPS surveys show that the low fares of the MVRTA service are a significant reason why it is the preferred mode by some riders.

In recent years, longer-distance, interstate regional service has been able to thrive in corridors that also have Amtrak intercity rail service. Bus ridership between Boston and New York City, as is reflected by the large amount of service provided by multiple competing carriers, has grown dramatically, even as Amtrak has increased the speed and frequency of service in this corridor since the completion of electrification.

Bus service between Boston and Portland, Maine, has been strong even since Amtrak Downeaster rail service was introduced. New Hampshire carriers Concord Coach and C&J Bus both offer through-ticketing with Amtrak as part of Amtrak's "Thruway" bus connection program.

It should also be noted that there are a few communities that have both commuter rail service and regional bus service on routes that do not operate to Boston. Lowell and Leominster are both served by Peter Pan's Worcester– Concord, New Hampshire, route, though these cities lack regional bus service to Boston. Bloom Bus serves the Westgate Mall in Brockton with one morning inbound trip and one afternoon outbound trip along its Boston–Taunton route. The stop in Brockton is intended to provide access to the Westgate Mall for employees or customers traveling from Taunton and is not scheduled for Boston commuting.

2.6 Interaction between Regional Private Carriers and Regional Transit Authorities: Services and Facilities

All Massachusetts communities presently served by private regional bus are also members of an RTA. Regional carriers and RTAs share facilities in most urban areas where they both provide service. In Greenfield, Holyoke, Hyannis, Lowell, New Bedford, Pittsfield, and Taunton, regional carriers utilize RTA intermodal facilities as their terminals. The regional carriers contributed to the construction of the Holyoke and Taunton intermodal centers.

RTAs and regional carriers are combining terminals in three major Massachusetts cities. In Fall River, the RTA and the regional bus carrier are jointly utilizing a temporary facility while a new intermodal center is built. At Union Station in Worcester, bus facilities are being expanded to allow RTA buses to join the regional bus, commuter rail, and Amtrak service now serving that location. In Springfield, the RTA presently uses the intercity bus terminal, while both RTA and regional service will ultimately relocate a short distance to a new facility at the railroad station. This station is currently used by Amtrak, and it will be a central location within the emerging Knowledge Corridor.

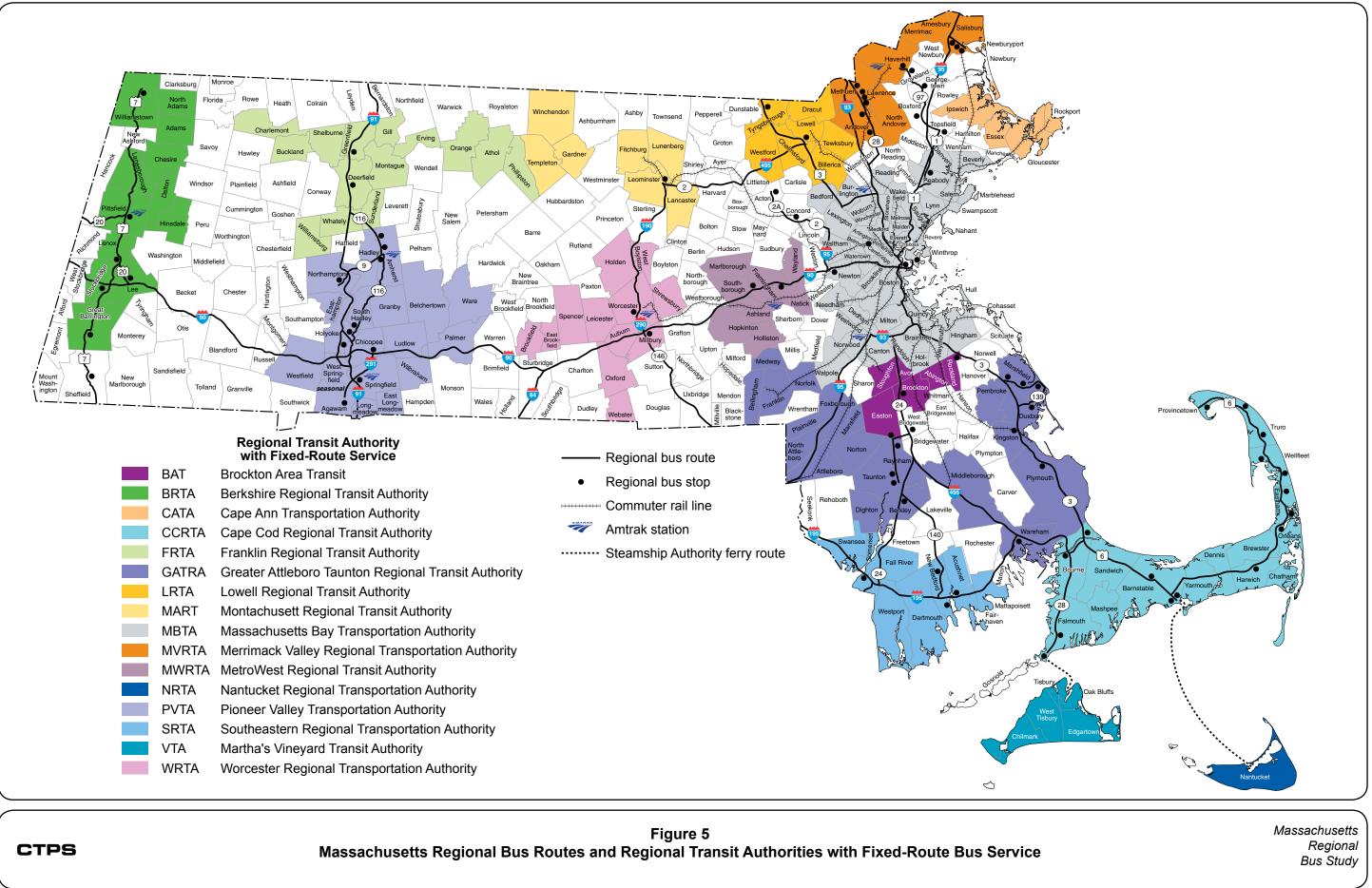
Development of intermodal terminals by RTAs represents material support for regional bus carriers. Massachusetts RTAs have also purchased buses to lease to regional carriers operating in their service areas, sometimes utilizing some of their FTA capital assistance as part of the finance package.

Figure 5 shows the municipalities in Massachusetts with fixed-route bus service provided by the 15 local RTAs and the MBTA. All RTA districts are also served by regional bus routes except for three: Cape Ann Transportation Authority (CATA), Nantucket Regional Transportation Authority (NRTA), and Martha's Vineyard Transit Authority (VTA). CATA structures its service to some extent around the two commuter rail lines in its service area. NRTA and VTA understandably center their service on their respective ferry terminals.

2.6.1 Regional Bus Services Operating in Each Regional Transit Authority District and Connecting Local Services

This section describes the private carrier¹ regional bus services that operate in the member communities of each of the RTAs. For each RTA, a table provides a summary of the services by community and is followed by additional information about the services, including any connections with local bus service. The RTAs are presented in alphabetical order by agency abbreviation.

¹ One RTA, the MVRTA, operates regional bus service itself.



Brockton Area Transit (BAT)

As shown in Table 7, two carriers provide service to communities that are members of Brockton Area Transit (BAT): Plymouth & Brockton (P&B) and Bloom Bus Lines. P&B offers regular daily service at the MassDOT park-and-ride lot at Exit 14 off Route 3 in Rockland. Frequent daily trips between Cape Cod and Plymouth and the intercity bus terminal at South Station and Logan Airport stop at this location. This service is supplemented on weekdays with peak-period service that also stops in the Back Bay. BAT has supported P&B in the past with bus purchases, and two BAT-owned buses built in 1989 are still operating.

| City/Town | Stop Address | Carrier | Weekday Round-Trips at Stop | Facility |
|------------------|---------------------|---------|-----------------------------------|--------------------------|
| • | • | | • | , |
| Brockton | Westgate Mall | Bloom | 1.0 | Bus stop |
| Easton | Routes 138 & 106 | Bloom | 13.0 | Flag stop |
| Rockland | Route 228 @ Route 3 | P&B | 24.5 | MassDOT Park-and-Ride |
| West Bridgewater | Routes 106 & 24 | Bloom | 13.0 | MassDOT Park-and-Ride |

Table 7 Regional Bus Service in the Brockton Area Transit (BAT) District

Bloom Bus Lines serves three BAT-district member communities with its service between Taunton and Boston: West Bridgewater, Easton, and Brockton. Bloom serves West Bridgewater at a MassDOT park-and-ride lot; BAT provides only demand-responsive service in West Bridgewater, so this is the only fixed-route service there. The Bloom stop in Easton is a roadside flag stop without available parking. Analysis of passenger surveys by CTPS indicates very little use of the Easton stop. The Easton and West Bridgewater stops are served by all trips on the route, which operates seven days a week between Taunton and stops at Lincoln Street and Park Square in Boston.

The Bloom stop at Westgate Mall in Brockton is on the same Boston–Taunton route but is only served by one trip from Taunton in the morning and a return trip in the evening. The trips are scheduled to provide service to workers or shoppers traveling from Taunton to Westgate Mall and are not scheduled for Boston commuting.

Westgate Mall is also served by a local BAT route from downtown Brockton and is the only location where a local BAT bus route makes connections to a

private carrier service. BAT introduced local service in Rockland in 2010, but their route does not serve the park-and-ride lot where P&B stops.

Berkshire Regional Transit Authority (BRTA)

As shown in Table 8, Peter Pan is the only private bus carrier serving Berkshire Regional Transit Authority (BRTA) member communities. Peter Pan's Providence–Springfield–Albany and New York–Williamstown routes both stop in Lee, Lenox, and Pittsfield. Both routes operate two round-trips per day, and connections can be made between the two routes in Pittsfield. The Pittsfield stop is located at the BRTA intermodal center, served by BRTA's local Pittsfield routes as well as Amtrak. The Williamstown stop is located at the Williamstown Inn. Sheffield, Great Barrington, Stockbridge, Lee, and Lenox have roadside bus stops.

| City/Town | Stop Address | Carrier | Weekday Round- Trips at Stop | Facility |
|------------------|-------------------------------|-----------|---------------------------------------|------------------------------------|
| Great Barrington | 362 Main St. | Peter Pan | 2 | Bus stop |
| Lee | 241 Main St. | Peter Pan | 4 | Bus stop |
| Lenox | 5 Walker St. | Peter Pan | 4 | Bus stop with ticket agency |
| Pittsfield | 1 Columbus Ave. | Peter Pan | 4 | RTA intermodal, includes Amtrak |
| Sheffield | Route 7 | Peter Pan | 2 | Bus stop |
| Stockbridge | Main St. | Peter Pan | 2 | Bus stop with ticket agency |
| Williamstown | Williamstown Inn, Main St. | Peter Pan | 2 | Bus stop with ticket agency |

Table 8Regional Bus Service in theBerkshire Regional Transit Authority (BRTA) District

Both Peter Pan and BRTA serve the Great Barrington, Lee, Pittsfield, and Williamstown corridor. BRTA's service in this corridor is a series of shorter, local routes, compared to Peter Pan's limited-stop, regional service. Peter Pan service from Great Barrington to Pittsfield costs \$17 and takes 40 minutes, whereas BRTA service costs \$5, takes two hours, and requires a transfer.

The Green Mountain Community Network, a nonprofit rural transit provider in Vermont, operates fixed-route service from Bennington, Vermont, to Williamstown, where connections can be made to Peter Pan or BRTA.

Cape Cod Regional Transit Authority (CCRTA)

As shown in Table 9, Plymouth & Brockton (P&B), Peter Pan, and Megabus provide service to communities within the Cape Cod Regional Transit Authority (CCRTA) district. Hyannis, the urban core of the town of Barnstable, is the transportation nexus for all Cape Cod. CCRTA operates an intermodal center in Hyannis, from which most of its local routes, as well as most P&B and Peter Pan routes, originate. The intermodal center also has a railroad platform from which local tourist-oriented services operate. Rail services from Hyannis that cross the canal have operated in the past and could potentially be restored in the future.

| | Cape Cou Regional Tra | | Weekday Round-Trips | |
|------------|--------------------------------|-------------------|-------------------------------|---|
| City/Town | Stop Address | Carrier(s) | at Stop | Facility |
| Barnstable | Hyannis, 2155 Iyannough Rd | P&B, Peter Pan | 31 | RTA intermodal |
| Barnstable | Hyannis, 220 Ocean St. | Megabus | 2 (Friday and Sunday only) | Ferry terminal |
| Barnstable | Route 6 @ 132 | P&B, Peter Pan | 26 | MassDOT P&R |
| Bourne | 105 Trowbridge | Peter Pan | 17 | Bus stop with ticket agency and parking |
| Bourne | Sagamore, 1 Canal St. | P&B | 24 | MassDOT P&R |
| Eastham | North Eastham–Village Green | P&B | 2 (4 in summer) | Bus stop |
| Eastham | Town Hall | P&B | 2 (4 in summer) | Bus Stop |
| Falmouth | Depot Ave. | Peter Pan | 11 | MassDOT-owned |
| Falmouth | Woods Hole, Steamship Pier | Peter Pan | 10 | Ferry dock |
| Harwich | Route 6 @ 124 | P&B | 2 (4 in summer) | Bus stop |

Table 9Regional Bus Service in theCape Cod Regional Transit Authority (CCRTA) District

| City/Town | Stop Address | Carrier(s) | Weekday Round-Trips at Stop | Facility |
|--------------|---------------------------------|------------|-----------------------------------|----------|
| Orleans | Main St. @ 6A | P&B | 2 (4 in summer) | Bus stop |
| Provincetown | MacMillian Wharf | P&B | 2 (4 in summer) | Bus stop |
| Truro | North Truro, Dutra's Store | P&B | 2 (4 in summer) | Bus stop |
| Truro | Post Office | P&B | 2 (4 in summer) | Bus stop |
| Wellfleet | Bank @ Commercial | P&B | 2 (4 in summer) | Bus stop |
| Wellfleet | South Wellfleet, Marconi Rd. | P&B | 2 (4 in summer) | Bus stop |

Table 9 (Cont.)

P&B operates frequent service between Hyannis and Boston's South Station and Logan Airport. Within the CCRTA district, P&B operates a service between Hyannis and Provincetown. Except for terminals at Hyannis and Provincetown, all of the stops along the P&B Provincetown route are roadside stops. The travel time for P&B from Hyannis to Harwich is 30 minutes, and another hour is required to reach Provincetown. P&B fares on the route range from \$3.00 to \$10.00 one-way depending on distance traveled.

CCRTA also provides local service in the Hyannis–Provincetown corridor. A conventional fixed-route service is operated from Hyannis to Harwich and Orleans (the H2O route). The H2O route requires an hour to cover the Hyannis-to-Harwich section. CCRTA also offers service between Harwich and Provincetown (The Flex), and one hour and forty-five minutes is required to take this service end to end. CCRTA fares are \$2.00 for one ride per route or \$6.00 for a day pass.

For passengers traveling between Hyannis and Provincetown, the P&B service is more expensive (\$10 versus \$4) but is also significantly faster (1¹/₂ hours versus 2³/₄ hours) than the CCRTA service. CTPS surveys of P&B passengers show that some riders traveling a shorter distance within this corridor will utilize P&B in one direction and a CCRTA service in the other. CCRTA and P&B services are more complementary than competitive, and CCRTA

supports P&B both through use of an intermodal center and lease of two buses, purchased in 2010.

Peter Pan operates several trips between Hyannis and Providence, Rhode Island, via New Bedford and Fall River, with both through and connecting service to New York City available at Providence. Peter Pan also provides service from Woods Hole and Falmouth to Boston's South Station and Logan Airport. Timed connections to the Hyannis–Providence/New York City route are made in Bourne.

Peter Pan stops directly at the Steamship Authority dock in Woods Hole, where direct connections can be made to the Martha's Vineyard ferry. Peter Pan utilizes a small depot in Falmouth owned by MassDOT, which has some parking available. The stop in Bourne is in the parking lot of a small commercial area next to the rotary east of the Bourne Bridge.

The Bourne bus stop location is also a central service point for recently initiated fixed-route CCRTA service in Bourne and Sandwich, and in addition is served by the Greater Attleboro Regional Transit Authority (GATRA). The CCRTA service is anchored at its north end at the Sagamore park-and-ride facility. The Sagamore lot, just west of Sagamore Bridge, is regularly served by P&B.

Megabus operates a limited Friday and Sunday schedule between Hyannis and Fairhaven, Providence, and New York City. Megabus does not use the Hyannis Intermodal Center but instead stops at the Hy-Line fast ferry wharf, allowing a convenient transfer for passengers bound for Nantucket.

Franklin Regional Transit Authority (FRTA)

As shown in Table 10, Peter Pan and Greyhound provide service to two communities within the Franklin Regional Transit Authority (FRTA) district, Greenfield and Deerfield. Peter Pan operates one round-trip between Greenfield and Springfield with a stop in Deerfield, while Greyhound operates one round-trip between White River Junction, Vermont, and New York City with Massachusetts stops in Greenfield and Springfield, south of the FRTA district. In June 2012 Greyhound proposed discontinuing this route, but it has continued service to date. Both regional carriers began utilizing the new Greenfield intermodal station in mid-2012.

| | | Weekday Round-Trips | | |
|------------|--------------------|-------------------------|---------|-----------------------------|
| City/Town | Stop Address | Carrier(s) | at Stop | Facility |
| Deerfield | 470 Greenfield Rd. | Peter Pan | 1 | Bus stop with ticket agency |
| Greenfield | 355 Main St. | Peter Pan, Greyhound | 2 | RTA Intermodal |

Table 10Regional Bus Service in the Franklin Regional Transit Authority (FRTA) District

There is no direct regional bus service between the FRTA district and Boston. Boston-bound passengers must travel via Springfield and transfer to Peter Pan's Springfield–Boston route.

Northbound regional buses arrive in Greenfield at 10:35 AM (Greyhound) and 8:35 PM (Peter Pan). Within a half hour of the Greyhound arrival, passengers can transfer to FRTA buses to Montague, Athol, or Charlemont, or to a Greenfield community circulator. Unfortunately, the last FRTA departure is at 6:30 PM, so these local bus services are not available to passengers arriving on Peter Pan later in the evening.

Southbound regional buses depart Greenfield at 8:25 AM (Peter Pan) and 10:50 AM (Greyhound). All FRTA routes offer a timely connection to the later Greyhound departure, but only some local routes arrive in Greenfield early enough to allow a connection to the earlier Peter Pan departure. Furthermore, some routes just miss the Peter Pan departure and require a one- or two-hour layover before the Greyhound departure.

Greater Attleboro Taunton Regional Transit Authority (GATRA)

The Greater Attleboro Taunton Regional Transit Authority (GATRA) provides fixed-route bus service to 21 member communities extending in a contiguous arc through south suburban Boston from Bellingham in the southwest to Marshfield in the southeast. As shown in Table 11, seven of these member communities are also served by one or more of four private regional bus carriers: Bloom, DATTCO, Plymouth & Brockton (P&B), and Peter Pan.

| Greater Attleboro Taunton Regional Transit Authority (GATRA) District | | | | |
|--|---------------------------------------|------------|-----------------------------------|---|
| City/Town | Stop Address | Carrier(s) | Weekday Round-Trips at Stop | Facility |
| Duxbury | Route 3A @ Route 139 | P&B | 1.5 | Bus stop |
| Kingston | Kingsbury Plaza | P&B | 7.5 | Bus stop at P&R lot |
| Marshfield | Brant Rock | P&B | 1.5 | Bus stop |
| Marshfield | CVS | P&B | 1.5 | Bus stop |
| Marshfield | Roche Brothers | P&B | 2.0 | Bus stop with parking |
| Plymouth | Long Pond Rd. @ Route 3 Exit 5 | P&B | 23.0 | MassDOT P&R with ticket sales at visitor center |
| Raynham | Route 138 Dog Track | Bloom | 13.0 | MassDOT P&R |
| Taunton | 10 Oak St. | Bloom | 13.0 | RTA/Bloom intermodal terminal |
| Taunton | Broadway (Liberty and Union Plaza) | Bloom | 13.0 | Bus stop, limited parking |
| Taunton | Galleria Mall | DATTCO | 11.0 | MassDOT P&R |
| Wareham | Mill Pond Diner | Peter Pan | 1.0 | Bus stop, limited parking |

| Table 11 |
|--|
| Regional Bus Service in the |
| Greater Attleboro Taunton Regional Transit Authority |
| (GATRA) District |

Bloom operates daily service between Taunton and Boston, with frequent peak-period service. Bloom serves three locations within the GATRA district: the Taunton Transit Center, a second stop in Taunton, and a stop in Raynham. Parking is available at the Taunton Transit Center and at Raynham. The Taunton Transit Center is the end of the route.

Bloom and GATRA jointly operate the Taunton Transit Center, which is served by all GATRA local routes in Taunton. The last GATRA buses depart from the Taunton Transit Center at 6:00 PM. The last Bloom bus that can connect with the last GATRA buses leaves Park Square at 4:55 PM and Lincoln Street at

5:05 PM. This bus is scheduled to arrive at the Taunton Transit Center at 5:50 PM, and connections to the 6:00 PM GATRA buses are not guaranteed.

DATTCO operates daily service between Fairhaven, New Bedford, and Boston, including frequent peak-period service. DATTCO buses serve one location in the GATRA district, the Galleria Mall in Taunton at the junction of Routes 24 and 140. A MassDOT park-and-ride lot is located adjacent to the mall parking, and DATTCO buses make two stops at this location, one near the mall entrance and one at the MassDOT lot.

One GATRA route, Route 8, serves the Galleria Mall, about a 30-minute ride from the Taunton Transit Center. Riders from downtown Taunton might use this route to connect with the DATTCO service to reach New Bedford and Fairhaven. It is unlikely that riders would use Route 8 to connect to a Bostonbound bus at the Galleria, given the availability of Bloom service in downtown Taunton. The Route 8 buses offer reasonable connections to DATTCO New Bedford buses, especially in the morning. The hourly DATTCO buses from New Bedford, however, are scheduled to arrive at the Galleria 52 minutes before the hourly Route 8 bus to downtown Taunton, a problematic connection for a mere 30-minute trip.

P&B serves the GATRA communities of Plymouth, Kingston, Duxbury, and Marshfield. The Plymouth stop is located at the MassDOT park-and-ride lot at Exit 5 on Route 3. P&B service to Plymouth includes the Boston–Hyannis route, with frequent service to Boston's South Station and Logan Airport to the north, and Hyannis to the south.

Additional peak-period service is provided between Plymouth and Boston's South Station and Boston's Park Square. The Plymouth peak-period buses also stop at a park-and-ride facility at Kingsbury Plaza in Kingston. Two of these peak-period round-trips leave Route 3 to make multiple stops in Duxbury and Marshfield before returning to Route 3 and continuing to Boston. Commuter parking is available at the Roche Brothers supermarket parking lot stop in Marshfield.

One of GATRA's local Plymouth routes, the "Mayflower Link," serves the Exit 5 bus stop on its route between Plymouth Center and the Manomet section of Plymouth. The Mayflower Link utilizes two buses to provide hourly service.

Given that both P&B and GATRA offer only hourly service in each direction, lengthy transfer times are inevitable. The required wait time between P&B service and the GATRA service at the stop varies by origin and destination of travel. There are a total of eight paths that would involve a transfer between GATRA and P&B. These eight paths can be paired to represent four distinct round-trips, and the combined two-way wait time can be calculated:

| Minutes <u>Wait</u> | Origin-Destination Pair | Two-Way Wait Time |
|------------------------|--|--------------------------|
| 49 39 | Plymouth Center to Boston Boston to Plymouth Center | 1 hour, 28 minutes total |
| 41 11 | Manomet to Boston Boston to Manomet | 52 minutes total |
| 49 19 | Plymouth Center to Hyannis Hyannis to Plymouth Center | 1 hour, 8 minutes total |
| 21 51 | Manomet to Hyannis Hyannis to Manomet | 1 hour, 12 minutes total |

The P&B departure times are established for the convenience of passengers boarding at Boston and Hyannis, and modifying the P&B schedule to meet GATRA buses is not practical. The Mayflower Link is schedule-coordinated with other GATRA services. If GATRA were to operate every half hour, all transfer times greater than 30 minutes would be reduced by half an hour. It is not clear that ridership over the entire route would justify this frequency. Though not investigated here, some of the connections between P&B and GATRA may be closer during the peak periods.

GATRA operates weekday local bus service between Kingston, Marshfield, and Duxbury. The GATRA route overlaps with a portion of the P&B route within Marshfield, and a transfer to a P&B bus to Boston is possible at Millbrook Motors in Duxbury. This transfer requires a half hour wait in the morning, and it is not possible in the evening because the P&B buses arrive at Duxbury after the last GATRA bus trip.

P&B presently is the contract operator for GATRA's local Plymouth bus network. At the present time, P&B is the only regional bus fixed-route carrier in the state that also has a contract to operate local service for an RTA.

Peter Pan provides limited service to the GATRA community of Wareham as part of its Boston–Woods Hole route. One northbound trip and two southbound trips stop in Wareham. The 5:50 AM departure to Boston and the 6:00 PM arrival, the earlier of the two from Boston, are both outside GATRA's hours of service. GATRA supports the daily commute from Wareham to Boston by operating a route that extends from Wareham to the Middleborough/Lakeville commuter rail station.

Peter Pan's connection with GATRA is actually somewhat stronger at the bus stop near the rotary east of the Bourne Bridge in the CCRTA service area. One of the GATRA local routes extends over the Bourne Bridge to this stop, allowing connections with all Peter Pan Cape Cod services, including frequent buses between Woods Hole and Boston and between Hyannis and Providence, Rhode Island, Transfer wait times between Peter Pan and GATRA buses at Bourne can range between five and 55 minutes.

Peter Pan's Providence–Boston-Logan route made intermediate stops at two GATRA communities, Foxborough and South Attleboro, on some trips until June 2012, when service at these stops was discontinued. Foxborough, served since 1972, had mostly off-peak service to Logan Airport. In 2011 Peter Pan added a stop to peak-period trips at the South Attleboro commuter rail station. The stop was unsuccessful and discontinued after one year of service.

Peter Pan's fleet includes one 2006-built bus leased from GATRA.

Lowell Regional Transit Authority (LRTA)

As shown in Table 12, Peter Pan, Yankee Line, and Boston Express provide service to Lowell, Acton, and Tyngsborough in the Lowell Regional Transit Authority (LRTA) service area.

| | Regional Bus Service in the Lowell Regional Transit Authority (LRTA) District | | | | |
|--------------|--|-------------------|----|--|--|
| City/Town | Weekday Round-Trips Stop Address Carrier at Stop Facility | | | | |
| Acton | 87 Great Road | Yankee | 1 | Bus stop with limited parking | |
| Lowell | 101 Thorndike St. | Peter Pan | 1 | RTA intermodal including commuter rail | |
| Tyngsborough | 99 Kendall Rd. | Boston Express | 12 | MassDOT P&R | |

Table 12

Boston Express began service between Nashua, New Hampshire, and Boston, in 2007. In 2010 it added a stop at a MassDOT park-and-ride lot near U.S. 3 Exit 35, and today it offers daily service at this stop to Boston and Logan Airport.

Yankee Line operates one morning inbound and one evening outbound trip between Acton and Copley Square in Boston, with a stop in Concord. Parking is available at the Acton stop at a commercial business parking lot.

Peter Pan serves Lowell as a stop on its route between Concord, New Hampshire, and Foxwoods Casino in Connecticut. This route also stops in Manchester and Nashua, New Hampshire, Leominster, and Worcester. A single round-trip is operated each day, which stops at the LRTA's Gallagher Terminal. Gallagher Terminal hosts both Peter Pan and commuter rail, has a large parking garage, and is the hub for the LRTA bus network.

Montachusett Regional Transit Authority (MART)

As shown in Table 13, Peter Pan offers the only private carrier regional bus service within the Montachusett Regional Transit Authority (MART) service area: a single daily round-trip between Concord, New Hampshire, and Foxwoods Casino in Connecticut. The stop in the MART service area is at a gas station in Leominster. The route also has stops in Manchester and Nashua, New Hampshire, Lowell, and Worcester. Local MART bus service (MART Route #2) between Fitchburg and Leominster stops at the same gas station in Leominster, allowing a transfer between the MART and Peter Pan services.

| Montachusett Regional Transit Authority (MART) District | | | | |
|---|--------------------|-----------|---------|----------|
| Weekday Round-Trips | | | | |
| City/Town | Stop Address | Carrier | at Stop | Facility |
| Leominster | 528 North Main St. | Peter Pan | 1 | Bus stop |

Table 13 Regional Bus Service in the Iontachusett Regional Transit Authority (MART) District

Massachusetts Bay Transportation Authority (MBTA)

Excluding regional bus service from other RTA districts terminating in the Boston core, there are five Massachusetts Bay Transportation Authority (MBTA) communities where the MBTA and not an RTA is the local service provider that are also served by regional bus carriers. The carriers serving these communities are Yankee Line in Concord, World Wide Bus in Cambridge and Newton, and Coach Company in Topsfield and Peabody; Table 14 provides details.

| Local Bus Service Area Weekday Round- | | | | |
|--|--------------------------------|------------------|---------------|--------------------------|
| City/Town | Stop Address | Carrier(s) | Trips at Stop | Facility |
| Cambridge | Alewife Station | World Wide | 3.0 | MBTA-owned station |
| Concord | Sudbury Rd. (Crosby Market) | Yankee | 1.0 | Bus stop with parking |
| Newton | 335 Grove St. | World Wide | 3.0 | MBTA-owned depot |
| Peabody | 535 Lowell St. | Coach Company | 3.5 | Bus stop with parking |
| Topsfield | 1 Park St. | Coach Company | 2.0 | Bus stop with parking |

Table 14

Yankee Line operates one daily round-trip between Acton and Boston. Buses stop near the Concord commuter rail station, and bus and commuter rail passengers share parking allocated for commuters at a local shopping area.

World Wide Bus operates between Alewife Station in Cambridge and New York City, with a stop at Riverside Station in Newton. World Wide Bus does not sell tickets for trips between Alewife and Riverside, and all World Wide Bus passengers using the Riverside stop are traveling to or from New York City. Peter Pan and Greyhound formerly offered service at Riverside to New York City and other locations.

Peabody and Topsfield are both served by the Coach Company's two weekday commuter round-trips between Haverhill and Boston via Georgetown, Groveland, Boxford, Topsfield, and Peabody. Additionally, one morning and two evening Coach Company trips between Boston and Newburyport stop at Peabody. Commuter parking is available in Peabody at the McVann Hockey Rink, and municipal parking is available in Topsfield. Massport's Logan Express service operates from a different location in Peabody, as well as from two other MBTA communities: Braintree and Woburn.

Merrimack Valley Regional Transit Authority (MVRTA)

Three carriers provide eight of the Merrimack Valley Regional Transit Authority (MVRTA) member communities with regional services: C&J, Coach Company, and the MVRTA itself; see Table 15. MVRTA operates fixed-route local bus service in nine of its member communities (including five of the eight

communities that have regional service) and utilizes the same contractor for both local and regional services. MVRTA has operated its regional service since 2003, when regional service was discontinued by Trombly Commuter Lines.

| Merrimack Valley Regional Transit Authority (MVRTA) District | | | | |
|--|-----------------------------------|--------------------------|----------------|--|
| O:tu/Tours | Cton Address | 0 | Weekday Round- | |
| City/Town | Stop Address | | Trips at Stop | Facility |
| Andover | Andover Center | MVRTA | 4.0 | Bus stop |
| Andover | Faith Lutheran Church | MVRTA | 4.0 | Bus stop, with parking |
| Boxford | 7 Elm St. | Coach Company | 2.0 | Bus stop, with parking |
| Georgetown | 29 E. Main | Coach Company | 2.0 | Bus stop with parking |
| Groveland | 904 Salem St. | Coach Company | 2.0 | Bus stop |
| Haverhill | 219 Lincoln Ave. | Coach Company | 2.0 | Bus stop |
| Lawrence | Broadway @ Bowdoin | MVRTA | 4.0 | Bus stop |
| Lawrence | Broadway @ Mt. Vernon | MVRTA | 4.0 | Bus stop |
| Lawrence | McGovern Transportation Center | MVRTA | 4.0 | RTA intermodal including commuter rail |
| Lawrence | Shawsheen Sq. | MVRTA | 4.0 | Bus stop |
| Methuen | Pelham St. | MVRTA | 4.0 | MassDOT P&R |
| Newburyport | 241 High St. | Coach Company | 2.5 | Bus stop |
| Newburyport | 50 Water St. | Coach Company | 2.5 | Bus stop |
| Newburyport | 90 Storey Ave. | C&J, Coach Company | 36.0 | MassDOT P&R with station |

| Table 15 |
|--|
| Regional Bus Service in the |
| Merrimack Valley Regional Transit Authority (MVRTA) District |

The MVRTA regional service operates between Methuen and Boston with intermediate stops in Lawrence and Andover. Passengers can flag down the bus anywhere along the route in Methuen, Lawrence, and Andover, although only major stops are listed in the timetable for the route. The route begins at the MassDOT park-and-ride lot on Pelham Street just east of I-93 at Exit 47. It stops at the McGovern Transportation Center in Lawrence, which is also served by commuter rail and MVRTA local service. Important stops in Andover are at a municipal parking lot and at a church parking lot that are available for use by MVRTA commuter bus customers.

C&J operates buses between Portsmouth, New Hampshire, and downtown Boston and Logan Airport. All C&J buses stop at the MassDOT park-and-ride lot east of I-95 at Exit 57 in Newburyport. C&J maintains a bus station at the lot which is staffed during all hours that buses operate.

Coach Company serves the same Exit 57 lot with its service between Newburyport and Boston. Coach offers only peak-period service and makes two local stops in Newburyport, one downtown and one near Newburyport High School. Two stops are made in Boston, one near Haymarket Square and one in the Back Bay.

Coach Company also operates a Haverhill–Boston route, providing two peakperiod round-trips each weekday. The route begins at a shopping plaza in Haverhill, stops in Groveland, Georgetown, and Boxford in the MVRTA area, and makes two additional stops in Topsfield and Peabody before traveling express to Boston. There is a MassDOT park-and-ride lot at the Georgetown stop and a municipal lot at the Boxford stop. No MVRTA fixed-route bus service is offered in Groveland, Georgetown, or Boxford.

Local MVRTA Route 54, Amesbury–Newburyport–Salisbury, serves the same MassDOT Exit 57 park-and-ride lot as Coach Company and C&J, the commuter rail station, and downtown Newburyport. Weekday service operates every 70 minutes, with the last evening trips departing about 6:00 PM, making use by evening commuters difficult.

MetroWest Regional Transit Authority (MWRTA)

As shown in Table 16, the MetroWest Regional Transit Authority (MWRTA) district is served by three regional bus carriers, LimoLiner, Peter Pan, and Greyhound, all stopping at Framingham. There are three regional bus stop locations in the city, the most important of which is Massport's Logan Express terminal near the Shoppers World mall, with 38 daily trips to Logan Airport. The Massport terminal has secure, long-term, paid parking. Regional carriers Peter Pan and Greyhound use the Massport terminal for their pooled Boston–New York and Boston–Hartford services. Several trips on Peter Pan's Boston–Springfield route also stop in Framingham.

| MetroWest Regional Transit Authority (MWRTA) District | | | | |
|---|--------------------------------|---|-------------------------------|----------------------|
| | | | Weekday Round-Trips | |
| City/Town | Stop Address | Carrier(s) | at Stop | Facility |
| Framingham | 1 Worcester Rd | Peter Pan, Greyhound, Logan Express (Fox Bus, contract operator) | 7 regional and 38 Massport | Massport terminal |
| Framingham | Flutie Pass | Peter Pan | 1.5 | MassDOT P&R |
| Framingham | Route 9 Park & Ride Exit 12 | LimoLiner | 3.0 | MassDOT P&R |

| Table 16 |
|--|
| Regional Bus Service in the |
| MetroWest Regional Transit Authority (MWRTA) Distric |

Peter Pan also operates two AM inbound and one PM outbound commuter trips that stop at the MassDOT Flutie Pass park-and-ride lot, located near the Massport lot. These commuter buses make stops at Copley and Park Squares, and also at the State House. The other long-distance Peter Pan and Greyhound buses stopping in Framingham serve only the intercity bus terminal at South Station.

The Massport terminal is located near the Framingham-Natick town line, and the local MWRTA fixed-route services in both cities make stops convenient to both the Massport terminal and the Flutie Pass park-and-ride lot. These local MWRTA routes operate early and late enough on weekdays that it is possible for users of Peter Pan's commuter buses to utilize the MWRTA service as part of their commute. However, the CTPS survey of Peter Pan riders did not show any passengers transferring to or from MWRTA service. In the case of MWRTA's service between Framingham and Woodland Station on the Riverside branch of the Green Line, the buses actually pull into the Flutie Pass lot to pick up riders.

On the MWRTA's Framingham–Woodland Station route, inbound buses depart from Flutie Pass every 30 minutes between 6:00 AM and 9:00 AM, and outbound buses depart Woodland at 3:05 PM and then every 30 minutes between 4:15 and 7:15 PM. With the good frequency of operations on the Riverside Green Line branch, Flutie Pass commuter bus riders can utilize MWRTA service as a back-up if they miss the Peter Pan service or need to depart at an earlier or later time than the Peter Pan schedule allows.

LimoLiner buses operating between Boston and New York City stop at the Exit 12 park-and-ride lot near the western edge of Framingham. LimoLiner does not sell tickets between Boston and Framingham, and all LimoLiner

passengers using this stop are traveling to or from New York City. No other scheduled bus services stop at this location.

More extensive commuter service has been offered in MWRTA communities in the recent past by Cavalier Coach. Its service from Boston to Framingham, Southborough, Marlborough, Sudbury, Wayland, and Weston (which included service that Cavalier Coach took over from Gulbankian Bus Lines several years earlier, as well as service operated by Cavalier Coach for decades) was discontinued in October 2011.

Pioneer Valley Regional Transit Authority (PVRTA)

As shown in Table 17, three regional bus carriers serve the Pioneer Valley Regional Transit Authority (PVTA) member communities: Peter Pan, Greyhound, and Megabus. PVTA also operates fixed-route local bus service centered on Springfield and extending to19 of its member communities.

| Pioneer Valley Regional Transit Authority (PVTA) District | | | | |
|---|-------------------------------------|------------|-----------------------------------|-------------------------------|
| City/Town | Stop Address | Carrier(s) | Weekday Round-Trips at Stop | Facility |
| Amherst | 367 Russell St. (Hampshire Mall) | Megabus | 2 | Bus stop, with ticket agency |
| Amherst | 8 Main St. | Peter Pan | 7 | Bus stop, with ticket agency |
| Amherst | UMass | Peter Pan | 7 | Bus stop, with ticket agency |
| Amherst | Hampshire College | Peter Pan | 1 | Bus stop, with ticket agency |
| Chicopee | 363 Burnett Rd. | Peter Pan | 1 | Bus stop with limited parking |

Table 17 Regional Bus Service in the

| City/Town | Stop Address | Carrier(s) | Weekday Round-Trips at Stop | Facility |
|--------------|--------------------------------------|-------------------------|-----------------------------------|---|
| Holyoke | Holyoke Mall | Peter Pan | 4 | Bus stop |
| Holyoke | Transportation Center, 206 Maple St. | Peter Pan | 3 | RTA and carrier intermodal facility |
| Northampton | 1 Roundhouse Plaza | Peter Pan, Greyhound | 7 | Carrier-owned depot |
| South Hadley | 21 College St. | Peter Pan | 1 | Bus stop, with ticket agency |
| Springfield | 1776 Main | Peter Pan, Greyhound | 31 | Carrier-owned depot, also used by RTA, near Amtrak |

Table 17 (cont.)Regional Bus Service in thePioneer Valley Regional Transit Authority (PVTA) District

Peter Pan

Springfield is the hub for Peter Pan's western Massachusetts network. Peter Pan routes and services emanating from Springfield include the following:

- Eight round-trips operate between Springfield and Boston. Some trips stop in Worcester or Framingham, and one trip in each direction stops in Chicopee, a PVTA community.
- Peter Pan and Greyhound operate a pooled service offering 12 daily round-trips over the Springfield–New York City route and two additional trips Fridays and Sundays. All trips on this route stop in Hartford, Connecticut, and the Connecticut cities of New Britain, New Haven, Bridgeport, and Stamford also receive some service.
- Two daily round-trips stop in Springfield on a route between Providence and Albany. This route stops in Worcester, as well as in Lee, Lenox, and Pittsfield in the Berkshires.
- Seven daily round-trips operate between Springfield and Amherst, six via Northampton and one via South Hadley. All trips stop in Holyoke, four at the Holyoke Mall and the other three at the Holyoke Transportation

Center in downtown Holyoke. Stops in Amherst are made both in Amherst Center and at the University of Massachusetts transportation center. One trip continues beyond Amherst and stops at Deerfield and Greenfield.

- Summer-only seasonal service is operated between Springfield and the Six Flags amusement park in Agawam. Through-tickets to Six Flags are sold from Boston, Framingham, Worcester, and Hartford, with passengers transferring in Springfield. Peter Pan offers a discount ticket price to Six Flags employees. The entire route is within the PVTA district.
- From September to May, Peter Pan operates direct service from Northampton, Hampshire College, Amherst Center, and the University of Massachusetts transportation center to Boston on Fridays and returning on Sundays, bypassing Springfield.

The Springfield–Amherst route operates entirely within the PVTA district, and connections can be made to PVTA service at the endpoints as well as both Holyoke stop locations. It is possible to use PVTA service to travel the entire distance between Springfield and Amherst, boarding three separate PVTA buses and taking three hours. The cost would be \$1.75 comprising a \$1.25 base fare and two 25-cent transfers. The same trip using Peter Pan takes one hour and costs \$16, though Peter Pan does offer a 10-ride ticket for \$60 and a 20-ride ticket for \$110.

The majority of passengers utilizing the Amherst–Springfield route are transferring to or from Boston or New York buses. The CTPS survey of Peter Pan riders shows a small number of local riders on the route.

PVTA utilizes Peter Pan's Springfield Bus Terminal as its downtown hub, leasing multiple bus bays from Peter Pan for this purpose. In addition, the Amtrak station in Springfield is within walking distance of the bus station. There are plans to redevelop Springfield's Union Station into a multimodal facility for use by regional buses, PVTA, and Amtrak. This would ultimately replace the existing Peter Pan facility.

Peter Pan stops at the Holyoke Transportation Center in downtown Holyoke, which is PVTA's hub for local Holyoke routes. Peter Pan was a partner with PVTA and other agencies in the development of the center. Peter Pan's other Holyoke stop, at the Holyoke Mall, is also served by PVTA.

Peter Pan stops at three locations in Amherst. These three stops, Amherst Center, Hampshire College, and the U Mass transportation center, are also served by PVTA routes. The CTPS survey of Peter Pan Springfield–Amherst passengers found that over 20% of riders alighting at Amherst were transferring to a local PVTA route to complete their journey.

Peter Pan operates a small bus station in Northampton which is within walking distance of local PVTA service. In South Hadley, Peter Pan and PVTA share a stop which is served by one daily Peter Pan trip in each direction.

Clearly, Peter Pan's services within the PVTA district are extensive, and the regional and local carriers collaborate in terminal development and operations. Additionally, Peter Pan's fleet includes three 1998-built buses leased from PVTA.

Greyhound and Megabus

Greyhound operates a round-trip between Springfield and White River Junction, Vermont, with intermediate stops in Northampton and Greenfield, Massachusetts, Brattleboro and Bellows Falls, Vermont, and Keene, New Hampshire. This trip operates through to New York City from Springfield. Greyhound had proposed to discontinue this service in June 2012 but has retained service at least through the end of 2012. Greyhound also partners with Peter Pan in the pooled service between Springfield and New York, making possible the 12-round-trip schedule.

Megabus initiated a new service in 2011 between Amherst and New York City with a stop in Hartford. This service was extended north to Burlington, Vermont, in 2012. The Megabus stop is at the Hampshire Mall in Hadley, near the Amherst town line. A PVTA bus route also serves this location.

Southeastern Regional Transit Authority (SRTA)

As shown in Table 18, regional carriers Peter Pan and DATTCO provide service to three communities in the Southeastern Regional Transit Authority (SRTA) service area: Fairhaven, Fall River, and New Bedford. SRTA operates fixed-route bus service in those three member communities and six others.

| S | Southeastern Regional Transit Authority (SRTA) District | | | | | |
|-------------|---|------------|---------|-----------------|--|--|
| City/Town | Stop Address | Carrier(s) | Weekday | Facility | | |
| Fairhaven | 72 Sycamore | DATTCO | 11 | Bus garage with | | |
| Fall River | 221 Second St. | Peter Pan | 12 | Temporary RTA | | |
| New Bedford | Elm St. & Pleasant | DATTCO, | 17 | RTA intermodal | | |
| New Bedford | Mt. Pleasant St. | DATTCO | 11 | MassDOT P&R | | |

Table 18Regional Bus Service in theSoutheastern Regional Transit Authority (SRTA) District

DATTCO trips originate at its garage and parking lot in Fairhaven and make two stops in New Bedford and a stop in Taunton (a GATRA community) on trips to Boston's South Station. The two stops in New Bedford are at the SRTA terminal in downtown New Bedford and at a MassDOT park-and-ride lot just west of Route 140 at Exit 4. DATTCO offers daily service including extra trips during weekday peaks.

Peter Pan serves Fall River as an intermediate stop on its route between Newport, Rhode Island, and Boston. On weekdays, Peter Pan operates five round-trips from Newport and one between Fall River and Boston. There are four round-trips from Newport on weekends.

New Bedford and Fall River are also intermediate stops on Peter Pan's route between Hyannis and Providence, where it connects with New York City buses. A stop is also made at Bourne on Cape Cod, where connections can be made with Peter Pan's Falmouth and Woods Hole buses. This route has five daily round-trips with additional service in the summer.

Peter Pan stops at both SRTA's New Bedford and Fall River hubs. SRTA and Peter Pan currently share a temporary facility in Fall River, but will relocate to a new intermodal facility that SRTA is constructing. A Peter Pan one-way fare between New Bedford and Fall River costs \$13, and the nonstop trip takes 25 minutes. SRTA has a local route connecting the two cities that costs \$2.50 and takes 55 minutes.

CTPS surveys of bus riders from Boston show a number of riders transferring to SRTA from DATTCO at New Bedford and Peter Pan at Fall River. Since the final SRTA departure for most routes is 5:45 PM, these transferring riders had to leave Boston no later than 4:00 PM to make a connection to SRTA. For riders leaving Boston during the peak 5:00–6:00 PM time period, a transfer to SRTA is not an option.

Schedules on the Peter Pan Hyannis–Providence route facilitate commuting to Providence from Fall River or New Bedford, as the first westbound trip arrives at Providence at 8:15 AM, and there are departures from Providence at 5:45 and 7:45 PM. The scheduled travel time from the Providence Peter Pan bus station to Fall River is 25 minutes, with the next leg to New Bedford requiring another 25 minutes.

The Providence Peter Pan station is not convenient to the Providence downtown business district. Passengers bound for downtown Providence must either wait through a layover there or transfer to another Peter Pan bus to reach Kennedy Plaza, the local Rhode Island Public Transit Authority (RIPTA) bus hub in downtown Providence. This connection to downtown requires an additional 30 minutes, and none of the respondents to the CTPS surveys of Hyannis–Providence passengers identified themselves as Providence commuters.

Worcester Regional Transit Authority (WRTA)

Table 19 presents the regional bus service in the Worcester Regional Transit Authority (WRTA) district. Worcester is an important intermediate stop for a number of regional services that cross New England. About half of Peter Pan's trips between Boston and Springfield and between Providence, Rhode Island, and Albany, New York, stop in Worcester. A daily Peter Pan round-trip between Concord, New Hampshire, and Foxwoods Casino in Connecticut also stops in Worcester. Greyhound operates three daily round-trips between Albany and Boston, all of which stop in Worcester. Greyhound and Peter Pan have a pooled bus service between Boston and Hartford, Connecticut, with connections to New York City, and many of these trips stop in Worcester.

| City/Town | Stop Address | Carriers | Weekday Round-Trips at Stop | Facility |
|-----------|---|-------------------------|---|--|
| Worcester | 2 Washington Sq. | Peter Pan, Greyhound | 17 | Union Station intermodal facility, including commuter rail and Amtrak, RTA to be added |
| Millbury | Route 146/U.S. 20 at Turnpike Exit 10A | Peter Pan, Greyhound | 2 trips to Boston, 9 drop-offs from Boston on request | MassDOT P&R |

Table 19Regional Bus Service in theWorcester Regional Transit Authority (WRTA) District

Worcester Union Station was extensively refurbished in 2000. Prior to 1994 only a few Amtrak long-distance trains served this location, stopping at a small station structure near the intermodal freight yard east of I-290. Limited MBTA service to Boston began in 1994, and both stations and scheduled trains have been added on the Worcester Line in subsequent years. In 2006 regional bus operations relocated to Union Station, and in 2013 WRTA will relocate its local bus hub to Union Station from City Hall.

Peter Pan continues to operate a single commuter trip between Worcester and Boston, stopping in Framingham at the MassDOT Flutie Pass park-and-ride lot.

This commuter trip and one additional trip are scheduled to stop at the MassDOT park-and-ride lot near Turnpike Exit 10A. Nine scheduled departures from Boston will drop off passengers at a park-and-ride lot in Millbury at the rider's request.

The connection between regional buses and local WRTA service is at or near Union Station, and there are no overlapping routes between these two classes of providers. WRTA does not serve the Millbury park-and-ride lot.

2.6.2 Connections between Regional Transit Authority Districts

This section reviews the RTA-to-RTA connections currently available in Massachusetts, looking first at RTA bus services and then at regional bus and rail services.

All but six adjacent RTA pairs are connected by at least one local service, at least one regional service, or both. The six exceptions are:

- BRTA (Pittsfield area) and FRTA (Greenfield area)
- MART (Fitchburg area) and LRTA (Lowell area)
- MWRTA (Framingham area) and MART (Fitchburg area)
- MWRTA (Framingham area) and LRTA (Lowell area)
- MWRTA (Framingham area) and GATRA (Attleboro/Taunton/Plymouth area)
- MVRTA (Haverhill/Lawrence/Newburyport area) and CATA (Gloucester area)

RTA Bus Services

The local RTA fixed-route services tend to be focused on the urban centers within the RTA district. Some of the longer RTA local routes, however, do extend into or connect with services of neighboring RTAs.

FRTA and PVTA

FRTA operates service between Greenfield (an FRTA community) and Northampton as well as a peak-period service between Greenfield and Amherst. PVTA operates a route between Amherst and South Deerfield (an FRTA community). Connections can be made with other FRTA routes at Greenfield and other PVTA routes at Northampton and Amherst.

FRTA and MART

FRTA operates service between Greenfield and Athol, just east of Orange; all three are FRTA communities. MART operates a route between Gardner (a MART community) and Orange. The two services overlap between Orange and Athol, providing opportunities for convenient transfers between the FRTA and MART services.

MART and WRTA

MART operates three weekday round-trips between Fitchburg and Worcester. In addition to stops at Union Station and City Hall in Worcester, this van or minibus service makes several stops at hospitals and senior centers. The primary clientele for this service are seniors and passengers with disabilities, but the service is open to the general public on a spaceavailable basis.

MVRTA and LRTA

MVRTA operates service between Lawrence and Lowell. This service was at one time operated as a joint service by the two agencies, but it has been operated as an exclusive MVRTA service for many years.

GATRA and CCRTA

GATRA's local Wareham service includes a route that crosses the Bourne Bridge to a stop in the CCRTA district. This connects to recently initiated CCRTA fixed-route service in Bourne and Sandwich.

CATA and MBTA

CATA operates a Saturdays-only service between Gloucester and the North Shore and Liberty Tree malls in Danvers and Peabody. Connections can be made to MBTA bus service at the two malls.

LRTA and MBTA

LRTA operates two routes between Lowell and Burlington. These two routes end at two different locations in Burlington, both of which allow a connection to MBTA bus service.

MWRTA and MBTA

MWRTA operates service between Framingham (an MWRTA community) and the Woodland Station of the Riverside Green Line branch in Newton (an MBTA community). This route stops on Route 9 in Natick (an MWRTA member) and Wellesley (an MBTA member).

BAT and MBTA

BAT operates service between Brockton and the Ashmont Red Line station in the Dorchester neighborhood of Boston. MBTA bus Route #230 operates between Quincy (an MBTA community) and Montello Station in Brockton. **Regional Bus and Rail Services**

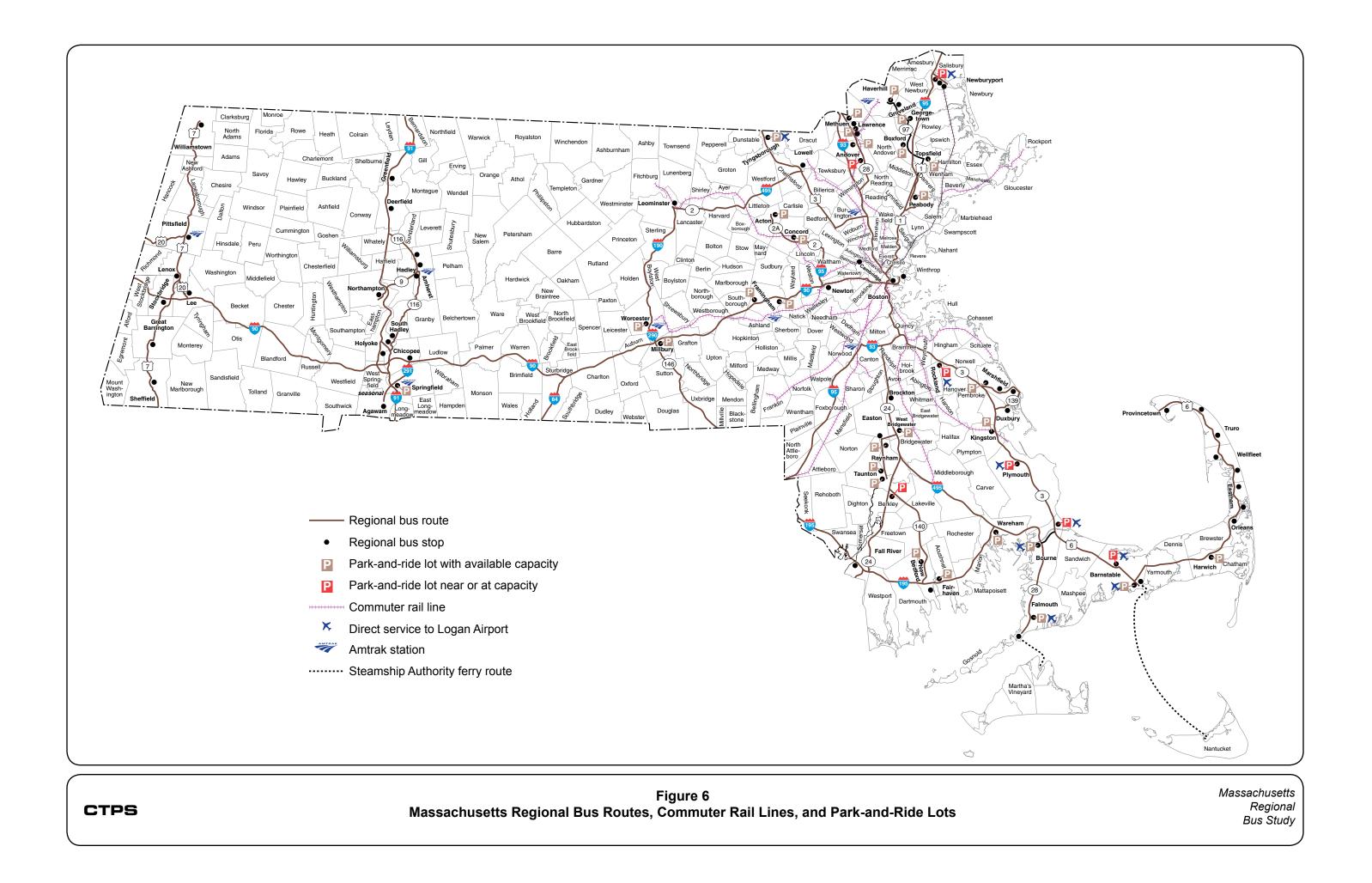
Almost all regional bus routes and many commuter rail lines have stops in more than one RTA district. Whether the route end point is at Boston or some other city, riders are able to use these services to go from one RTA to another. In many instances, they may utilize a local RTA service for a portion of the trip.

There are a number of adjacent RTA districts where the RTAs do not presently operate routes that connect the two districts. For four of these RTA pairs, listed below, however, there are regional bus or rail services connecting the RTA districts. The connections between these four adjacent RTA pairs are achieved with various combinations of regional intercity and commuter modes, supported in many instances by local connecting buses.

- The PVTA (Springfield area) and WRTA (Worcester area) districts are connected by both Peter Pan and Amtrak services between Springfield and Worcester without intermediate stops. PVTA and WRTA local buses serve the Springfield and Worcester terminals respectively.
- The WRTA and MWRTA (Framingham area) districts are connected by both MBTA Worcester commuter rail service and Peter Pan. Worcester, Grafton, and Westborough are in the WRTA district, and Southborough, Ashland, Framingham, and Natick are in the MWRTA district, all of which are served by commuter rail. The Peter Pan service connects only Worcester and Framingham.
- The GATRA (Attleboro/Taunton/Plymouth area) and BAT (Brockton area) districts are connected by MBTA commuter rail, Bloom, and P&B. Bloom operates one round-trip between Taunton (a GATRA community) and the Westgate Mall in Brockton (a BAT community). P&B operates service between Plymouth (a GATRA community) and Rockland (a BAT community). P&B's Rockland stop is not served by BAT local service. The MBTA Middleborough and Plymouth commuter rail lines also connect several BAT and GATRA communities.
- The GATRA and SRTA districts are connected by DATTCO service between Taunton (a GATRA community) and New Bedford (a SRTA community). GATRA and SRTA (Fall River/New Bedford) local buses serve the Taunton and New Bedford stops respectively.

2.7 Parking Facilities

There are 36 parking facilities within Massachusetts that are served by one or more regional bus carriers. This total includes MassDOT-owned park-and-ride lots, RTA-owned intermodal facilities, municipal parking lots, lots owned by local establishments that allow some use by bus passengers, and a few facilities directly owned by regional bus companies. Most of the regional bus routes serving these lots provide commuter service to Boston, and several lots also offer direct service to Logan Airport. These park-and-ride locations are summarized in Table 20, and their locations are shown in Figure 6.



2.7.1 Review of Park-and-Ride Lot Conditions

Park-and-Ride Facilities with Private Carrier Bus Service

Table 20 lists the park-and-ride lots that are currently served by private bus carriers. All of the stops listed have direct bus service to Boston except the Harwich and the Framingham–Exit 12 lots, which have direct service to Hyannis and New York City, respectively. Regional bus services also stop at MBTA commuter rail and rapid transit stations in Lowell, Newton (Riverside on the Green Line), Cambridge (Alewife on the Red Line), and Boston (South Station), but these facilities are not shown in Table 20 and are not reviewed in this section. Massport's Logan Express service also operates routes between Peabody, Woburn, Framingham, and Braintree and Logan Airport. The Massport service offers long-term paid parking at each location, and also is not reviewed in this section.

| | | | MassDOT |
|-----------------------------|--------------------------------|--------|--------------|
| Municipality/ Stop Address | Station Facility? | Spaces | Park-&-Ride? |
| Acton | | | |
| Routes 2A & 119 | No | 25 | No |
| Andover | | | |
| Faith Lutheran Church | No | 60 | Yes |
| Shawsheen Square parking | No | 34 | No |
| Barnstable | | | |
| Hyannis, 2155 Iyannough Rd | CCRTA intermodal | 182 | No |
| Route 6 @ 132 | Nearby store with ticket sales | 365 | Yes |
| Bourne | | | |
| 105 Trowbridge (Tedeschi's) | Nearby store with ticket sales | 35 | No |
| Sagamore, 1 Canal St. | Nearby store with ticket sales | 377 | Yes |
| | | | |

Table 20 Existing Park-and-Ride Facilities with Private Carrier Bus Service

| | | | MassDOT |
|--------------------------------|--------------------------|----------------------|--------------|
| Municipality/ Stop Address | Station Facility? | Spaces | Park-&-Ride? |
| Boxford | | | |
| 7 Elm St. | No | 15 | No |
| Concord | | | |
| Sudbury Road (Crosby Market) | No | 56 | No |
| Fairhaven | | | |
| 72 Sycamore | DATTCO garage | 80 | Yes |
| Falmouth | | | |
| Depot Ave. | MassDOT depot | 51 | No |
| Framingham | | | |
| 1 Worcester Road, Flutie Pass | No | 114 | Yes |
| Route 9 Park & Ride Exit 12 | No | 120 | Yes |
| Georgetown | | | |
| 29 East Main | No | 110 | Yes |
| Harwich | | | |
| Route 6 @ 124 | No | 75 | Yes |
| Haverhill | | Part of | |
| 219 Lincoln Ave. | No | shopping | No |
| Kingston | | plaza | |
| Kingsbury Plaza | No | 100 | No |
| Lawrence | NO | Shared with | NO |
| McGovern Transportation Center | MVRTA garage and station | commuter rail | No |
| Marshfield | | Part of | |
| Roche Brothers | No | super- market lot | No |

 Table 20 (Cont.)

 Existing Park-and-Ride Facilities with Private Carrier Bus Service

| | | | MassDOT |
|---------------------------------------|---------------------------------------|-------------------|--------------|
| Municipality/ Stop Address | Station Facility? | Spaces | Park-&-Ride? |
| Methuen | | | |
| Pellham St. | No | 189 | Yes |
| Millbury | | | |
| Route 146/Mass Pike #10A | No | 446 | Yes |
| New Bedford | | | |
| Mt. Pleasant St. | No | 201 | Yes |
| Newburyport | | | |
| 90 Storey Ave. | C&J Bus station | 605 | Yes |
| Peabody | | | |
| 535 Lowell St. | No | 100 | No |
| Plymouth | Ticket sales at visitor | | |
| Long Pond Rd. @ Route 3 Exit 5 | center | 200 | Yes |
| Raynham | | | |
| Rte. 138 Dog Track | No | 150 | Yes |
| Rockland | No, trailer for ticket | | |
| Route 228 @ Route 3 | sales | 440 | Yes |
| Springfield | | Adjacent to | |
| 1776 Main | Peter Pan | bus terminal | No |
| Taunton | | | |
| 10 Oak St. | GATRA/Bloom intermodal | 160 | No |
| Broadway (Liberty and Union Plaza) | Broadway (Liberty and Union Plaza) | Restaurant lot | No |
| Galleria Mall | No | 187 | Yes |

Table 20 (Cont.)Existing Park-and-Ride Facilities with Private Carrier Bus Service

| | | | MassDOT |
|----------------------------|---------------------|------------------|--------------|
| Municipality/ Stop Address | Station Facility? | Spaces | Park-&-Ride? |
| Topsfield | | | |
| 1 Park St. | No | 60 | No |
| Tyngsborough | No, ticket sales at | | |
| 99 Kendall Rd. | trailer | 250 | Yes |
| Wareham | | | |
| Mill Pond Diner | No | 25 | No |
| West Bridgewater | | | |
| Rtes. 106 & 24 | No | 185 | Yes |
| Worcester | | Shared with | |
| 2 Washington Sq. | Union Station | commuter rail | No |

Table 20 (Cont.)Existing Park-and-Ride Facilities with Private Carrier Bus Service

CTPS Observations of Park-and-Ride Facilities

CTPS staff visited the majority of the regional bus park-and-ride locations in the spring and summer of 2012. Facility utilization and conditions were observed directly and are summarized in this section. While there is an understandable range in the physical presence of these facilities, a bare minimum condition should be expected at even the most utilitarian lot. While most locations have shelters and benches available, very few have schedule information or even signage clearly identifying the bus service or services available. The facilities shown in Table 20 are summarized below roughly in order from those that are most complete to those which could be described as minimal or deficient.

The best-equipped park-and-ride locations are at major intermodal terminals. The RTA terminals in Barnstable-Hyannis and in Taunton offer regional bus riders ticket sales, restrooms, and vending machines. The regional bus terminal in Springfield, shared with the RTA, and Union Station in Worcester, shared with commuter rail, offer the same high level of amenities. The Newburyport facility also provides a complete set of amenities but is served only by regional carriers and a nearby RTA service. Ticket sales counters and accompanying posted schedules are important amenities and provide a meaningful carrier presence. Regional bus tickets are sold at company-owned offices in Fairhaven, a MassDOT-owned depot in Falmouth, and trailers at the Rockland and Tyngsborough park-and-ride lots. Tickets are also sold during peak periods at the visitors' center at the Plymouth park-and-ride lot; tickets must be purchased from drivers at other times.

Tickets can be purchased at local retail establishments at three of the locations listed in Table 20: the stop on Route 6 in Barnstable and the two stops in Bourne near the Bourne and Sagamore Bridges. Bus schedules were also posted at these three locations. No posted schedules were observed at any facilities in Table 20 not offering ticket sales.

Nine of the 12 locations with on-site or local ticket sales have direct service to Logan Airport. These are the five stops on Cape Cod (two in Barnstable, two in Bourne, and one in Falmouth), stops in Plymouth and Rockland south of Boston, and park-and-ride facilities at Tyngsborough and Newburyport north of Boston.

A shelter is an important amenity, since even the most closely timed bus connection will require some amount of outdoor waiting. The larger park-andride facilities have shelters, including the two MassDOT lots in Framingham; the McGovern Transportation Center in Lawrence; the MassDOT lots in Methuen, Millbury, and New Bedford; the lot at the Raynham dog track; the lot at the Galleria Mall in Taunton; and the MassDOT lot in West Bridgewater. It should be noted that a schedule display could easily be affixed to a standard bus shelter.

Lots without shelters or benches tend to be the smaller lots, such as those in Acton, Andover, Boxford, Concord, Georgetown, Kingston, Marshfield, Peabody, Taunton (Friendly's stop), Topsfield, and Wareham. Most of these locations are non-MassDOT facilities and either are owned by an adjacent commercial enterprise or are general-purpose municipal lots that allow commuters to park.

Pavement and pedestrian paths were in generally good condition throughout the system of park-and-ride lots. There were a few exceptions: lots in Framingham, Georgetown, and Raynham showed some signs of deterioration of the roadway surface. The lot at the Mill Pond Diner in Wareham was in very poor condition, as was the associated pedestrian path. Shelters at the lots in New Bedford, Raynham, and Rockland appeared to have been vandalized.

Eight of the park-and-ride lots listed in Table 20 were observed by MassDOT staff to be at least 90% occupied during field surveys in September 2011. CTPS staff visited these lots again in the spring and summer of 2012 and observed continued high usage at these locations. These highly utilized facilities are the

Barnstable lot on Route 6, the Bourne lot at the Sagamore Bridge, the Taunton Galleria Mall lot, the Andover Lutheran Church lot, and lots in Kingston, Newburyport, Rockland, and Plymouth. Passengers boarding in Barnstable and Bourne made note of parking lot capacity constraints in the comments section of the CTPS surveys.

MassDOT Park-and-Ride Facilities without Bus Service

There are 16 additional MassDOT park-and-ride lots in the state which are not served by any regional bus service. Eight of these are located in communities that have either fixed-route RTA service or regional service at a different location in the community, as summarized in Table 21 below. It is noteworthy that the unserved lot in Plymouth is much larger than the 200-space lot at the visitors' center, which is the current regional stop in Plymouth.

2.7.2 Importance of Parking

For most regional bus services that provide commuter service to Boston, CTPS surveys show that driving to the bus stop and parking is the primary way passengers reach the bus. Table 22 summarizes how surveyed passengers reached the bus when boarding outside of Boston. Almost all of the stops served by existing Boston commuter regional bus services offer parking. In contrast, many of the Boston commuter bus services which have been discontinued since 1980 offered little if any parking.

The few remaining commuter bus stops without parking include several stops in Lawrence and Andover along MVRTA's Methuen–Boston route, some stops in Marshfield on P&B's Marshfield–Boston route, and stops in Groveland, in downtown Newburyport, and at the high school in Newburyport on the Coach Company's two commuter routes to Boston. Parking is available at other regional bus stops within a five-mile drive of these stops.

Peter Pan's route between Newport, Rhode Island, Fall River, and Boston lacks extensive free parking facilities. Only 36% of riders drive and park at a bus stop, and all these must either use paid commercial parking or hunt for an on-street space. With 25% of riders walking and 30% of riders being dropped-off, this service represents a surviving example of the older system of city center–to–city center regional bus service. Adding free parking at some point on this route could generate meaningful new ridership.

The commuter rail and rapid transit systems also depend to a significant degree on auto access to their services. The commuter rail system and its associated parking extends throughout eastern Massachusetts, and those regional bus services that operate in areas also served by commuter rail must offer competitive travel times and parking options to retain ridership.

| | Service |
|---|---------------------|
| Lot Location | Number of Spaces |
| Unserved lots with regional service elsewhere in the community: | |
| Andover (Dascomb Rd.) | 154 |
| Millbury (Exit 11) | 140 |
| Plymouth (Commerce Way @ Route 44) | 552 |
| Raynham (Carver St.) | 79 |
| Wareham (Routes 6/28 | 122 |
| Unserved lots in communities with fixed-route RTA service: | |
| Canton (MBTA) | 120 |
| Milton (MBTA) | 200 |
| Weston (MBTA) | 100 |
| Charlemont (FRTA) | 75 |
| Ludlow (PVTA) | 43 |
| Northampton (PVTA) | 81 |
| Northampton (PVTA) | 30 |
| Auburn (WRTA) | 135 |
| Unserved lots in communities with no fixed-route RTA service: | |
| Berlin | 45 |
| Bridgewater | 60 |
| Freetown | 33 |
| Mattapoisett | 80 |
| Somerset | 68 |
| Sturbridge | 50 |

Table 21MassDOT Park-and-Ride Lots with No Regional Bus Service

| | | | Dropped- | Another | | | |
|--|--------|----------|----------|---------|-------|-------|--------|
| Carrier/Route | Walk | Drive | Off | Bus | Boat | Taxi | Other |
| Bloom | | | | | | | |
| Taunton–Raynham– W. Bridgewater– Boston | 5.7% | 81.0% | 8.6% | 4.8% | 0.0% | 0.0% | 0.0% |
| C&J | | | | | | | |
| Newburyport-Boston | 3.8% | 75.5% | 20.8% | 0.0% | 0.0% | 0.0% | 0.0% |
| Coach Company | | | | | | | |
| Newburyport– Peabody–Boston | 12.8% | 86.2% | 1.1% | 0.0% | 0.0% | 0.0% | 0.0% |
| Haverhill–Groveland– Georgetown–Boxford– Topsfield– Boston | 3.6% | 92.9% | 3.6% | 0.0% | 0.0% | 0.0% | 0.0% |
| DATTCO | 010,0 | 00,0 | 0.070 | 01070 | ,. | 010,0 | 010,0 |
| Fairhaven–New Bedford–Taunton– Boston | 15.4% | 55.8% | 16.7% | 4.5% | 0.0% | 7.1% | 0.6% |
| MVRTA | 101170 | 001070 | | 110 / 0 | 01070 | ,0 | 01070 |
| Methuen–Lawrence– Andover–Boston | 26.6% | 67.2% | 6.3% | 0.0% | 0.0% | 0.0% | 0.0% |
| P&B | | | | | | | |
| Plymouth–Kingston– Marshfield–Rockland– Boston | 3.1% | 89.4% | 6.8% | 0.0% | 0.0% | 0.6% | 0.0% |
| Hyannis–Bourne– Plymouth–Rockland– | 0.00/ | <u> </u> | 04.00/ | 4 40/ | 4.00/ | 0 40/ | 0.004 |
| Boston | 6.9% | 63.2% | 21.9% | 1.1% | 1.6% | 2.4% | 2.6% |
| | | | | | | (0 | Cont.) |

Table 22Bus Access Mode for Boston-Bound Riders

| | | | Drannad | Anothor | | | |
|---|-------|-------|-----------------|----------------|-------|------|-------|
| Carrier/Route | Walk | Drive | Dropped- Off | Another Bus | Boat | Taxi | Other |
| Peter Pan | | | | | | | |
| Woods Hole– Falmouth–Bourne– Boston | 15.6% | 57.8% | 8.9% | 0.0% | 15.6% | 2.2% | 0.0% |
| Newport–Fall River– Boston | 25.0% | 36.1% | 30.6% | 2.8% | 0.0% | 5.6% | 0.0% |
| Springfield– Worcester– Framingham–Boston | 18.2% | 6.1% | 39.4% | 27.3% | 0.0% | 6.1% | 3.0% |
| Providence- Boston | 7.9% | 21.1% | 63.2% | 5.3% | 0.0% | 0.0% | 2.6% |
| Worcester–Flutie Pass commuter– Boston | 18.2% | 81.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Yankee | | | | | | | |
| Acton–Concord– Boston | 0.0% | 90.0% | 10.0% | 0.0% | 0.0% | 0.0% | 0.0% |

Table 22 (Cont.)Bus Access Mode for Boston-Bound Riders

Source: CTPS survey

2.8 Fare Structures, Including Potential Integration of Regional Bus and MBTA Fare Structures

2.8.1 Fare Structures

Private regional bus ticket prices are generally higher than MBTA commuter rail tickets for trips of similar distances. The commuter rail fare increase of July 2012 narrowed but did not close this price gap. Most bus carriers, however, offer deep per-trip discounts for riders purchasing 10-ride, 20-ride, or monthly tickets. The cost of regional bus multi-trip options and commuter rail monthly passes are similar over comparable distances. However, the commuter rail pass offers the advantage of also allowing entry to MBTA subway and bus services. Most commuter rail parking lots charge for parking, however, whereas most regional bus parking lots are free of charge.

Table 23 shows the results of a review of in-state regional bus fares in effect in June 2012. Fares per mile traveled for one-way tickets purchased on the day of travel range from \$0.16 to \$0.71 per mile. The multi-ride tickets sold by most carriers offer significant discounts, sometimes to less than half the one-way fare. Fares per mile per trip for 10-ride tickets ranged from \$0.11 to \$0.45. On some routes that only operate in peak periods, over 90% of the passengers surveyed were found to utilize multi-ride tickets. The use of multi-ride tickets is summarized in Table 24.

| Fares Charged per Mile, by Carrier | | | | | | |
|------------------------------------|----------------|--------------------------------------|--|--|--|--|
| Carrier | One-Way Ticket | 10-Ride Ticket (Single-Ride Cost) | | | | |
| Bloom | \$0.29-\$0.34 | \$0.19-\$0.23 | | | | |
| Boston Express | \$0.26-\$0.38 | \$0.16-\$0.24 | | | | |
| C&J | \$0.28-\$0.41 | \$0.13-\$0.23 | | | | |
| Coach Company | \$0.29-\$0.63 | \$0.21-\$0.45 | | | | |
| Concord Coach | \$0.20-\$0.22 | \$0.11-\$0.13 | | | | |
| Dartmouth Coach | \$0.26-\$0.28 | \$0.13-\$0.14 | | | | |
| MVRTA | \$0.17-\$0.21 | \$0.13-\$0.17 | | | | |
| P&B | \$0.27-\$0.57 | \$0.11-\$0.26 | | | | |
| Peter Pan | \$0.16-\$0.71 | \$0.13-\$0.29 | | | | |
| Yankee | \$0.28-\$0.33 | \$0.22-\$0.27 | | | | |

Table 23

Source: CTPS review of bus company websites

CTPS

| Carrier/Route | Percentage of Riders Using Multi-Ride Discount Tickets |
|---|---|
| Bloom | |
| Taunton-Raynham-West Bridgewater-Boston | 94.2% |
| Coach Company | |
| Newburyport-Peabody-Boston | 98.9% |
| Haverhill–Groveland–Georgetown–Boxford– Topsfield–Boston | 100.0% |
| C&J | |
| Newburyport–Boston | 63.8% |
| DATTCO | |
| Fairhaven-New Bedford-Taunton-Boston | 71.5% |
| MVRTA | |
| Methuen-Lawrence-Andover-Boston | 93.8% |
| P&B | |
| Plymouth–Kingston–Marshfield–Rockland–Boston | 99.4% |
| Hyannis–Bourne–Plymouth–Rockland–Boston | 57.6% |
| Provincetown–Hyannis | 0.0% |
| Peter Pan | |
| Woods Hole–Falmouth–Bourne–Boston | 61.4% |
| Newport–Fall River–Boston | 66.7% |
| Springfield–Worcester–Framingham–Boston | 0.0% |
| Boston–Providence | 29.7% |
| Worcester (Flutie Pass commuter lot)-Boston | 90.9% |
| Worcester (portion of Hartford–Boston service, in- state passengers only)–Boston | 18.2% |
| Hyannis-Providence | 0.0% |
| Providence–Worcester–Springfield–Pittsfield–Albany | 0.0% |
| | (Cont.) |

Table 24Percentage of Passengers Utilizing Multi-Ride Tickets, by Route

Table 24 (Cont.)Percentage of Passengers Utilizing Multi-Ride Tickets, by Route

| Carrier/Route | Percentage of Riders Using Multi-Ride Discount Tickets |
|---|---|
| Springfield–Amherst (includes one trip to Greenfield) | 4.9% |
| Yankee | |
| Acton–Concord–Boston | 90.0% |

Source: CTPS survey

2.8.2 Interaction with the MBTA Rapid Transit System

Upon arrival in Boston, either at the intercity bus terminal at South Station or at one of several on-street stop locations, a substantial number of regional bus passengers transfer to the MBTA subway system to complete their trips. The percent of regional bus passengers transferring to the MBTA is summarized by bus route in Table 25.

As shown in Table 25, the percentage of regional bus riders transferring to the MBTA varies widely. Regional carriers facing a competing commuter rail service have found that making more than one stop in downtown Boston is a powerful competitive tool. By offering a convenient one-seat ride to many passengers, these services result in a smaller percentage of passengers transferring. Similarly, services operated primarily during the peak periods that serve passengers who are mostly headed to a downtown work location have fewer transfers.

| Table 25 | | | | |
|--|--|--|--|--|
| Percentage of Regional Bus Passengers Transferring | | | | |
| to or from MBTA Rapid Transit System | | | | |

| Carrier/Route | Percentage of Riders Transferring |
|---|--------------------------------------|
| Bloom | |
| Taunton–Raynham–West Bridgewater–Boston | 16.7% |
| Coach Company | |
| Newburyport–Peabody–Boston | 2.1% |
| Haverhill–Groveland–Georgetown–Boxford–Topsfield– Boston | 0.0% |
| C&J | |
| Newburyport–Boston | 10.5% |
| DATTCO | |
| Fairhaven–New Bedford–Taunton–Boston | 28.4% |
| MVRTA | |
| Methuen-Lawrence-Andover-Boston | 7.9% |
| P&B | |
| Plymouth–Kingston–Marshfield– Rockland–Boston | 6.8% |
| Hyannis–Bourne–Plymouth–Rockland–Boston | 21.3% |
| Peter Pan | |
| Woods Hole–Falmouth–Bourne–Boston | 26.7% |
| Newport–Fall River–Boston | 47.2% |
| Springfield–Worcester–Framingham–Boston | 47.1% |
| Providence–Boston | 18.4% |
| Worcester (Flutie Pass commuter lot)–Boston | 9.1% |
| Worcester (portion of Hartford–Boston service, in-state passengers only)–Boston | 45.5% |
| Yankee | |
| Acton–Concord–Boston | 0.0% |

Source: CTPS survey

2.8.3 Interaction with MBTA Commuter Rail

The regional bus passenger survey included a question concerning the mode the rider would choose if the service upon which he/she were being surveyed were unavailable. Many riders on commuter-oriented regional buses listed "other public transportation" as their first option, a response that would likely indicate commuter rail for most corridors.

On buses between Boston and Worcester, several surveyed passengers stated that on that day they would make their return trip via commuter rail; that is, they were traveling in one direction via bus and in the other via train. This would suggest that there could be some value in exploring a common ticket that could be used on either service on the same day in that travel corridor. Regional buses and commuter rail both use Union Station in Worcester, and this was the only corridor where surveyed riders indicated that they would be making a mixed-mode round-trip.

The present bus and commuter rail schedules between Boston and Worcester could be depicted as one common schedule, as shown in Table 26. This combined schedule shows how bus trips presently fill gaps in off-peak commuter rail departures and arrivals.

| Origin of Bus <u>Service</u> | Leave <u>Worcester</u> | Arrive <u>Boston</u> | Leave <u>Boston</u> | Arrive <u>Worcester</u> | Destination of <u>Bus Service</u> |
|---------------------------------|---------------------------|-------------------------|------------------------|----------------------------|--------------------------------------|
| New York City | 4:10 | 5:00 | 4:05 | 5:24 | Commuter rail |
| Commuter rail | 4:45 | 6:31 | 6:50 | 8:16 | Commuter rail |
| Commuter rail | 5:15 | 6:47 | 7:00 | 8:20 | Hartford |
| Worcester | 5:55 | 7:30 | 7:25 | 8:25 | Albany |
| Commuter rail | 5:55 | 7:36 | 8:00 | 9:00 | Springfield |
| Commuter rail | 6:35 | 8:16 | 9:05 | 10:31 | Commuter rail |
| Commuter rail | 7:00 | 8:28 | 9:30 | 10:25 | Hartford |
| New York City | 7:15 | 8:05 | 10:30 | 12:05 | Commuter rail |
| Commuter rail | 7:30 | 9:03 | 11:15 | 12:20 | Hartford |
| Commuter rail | 8:30 | 10:00 | 12:15 | 13:15 | Albany |
| Hartford | 9:20 | 10:20 | 12:22 | 13:53 | Commuter rail |
| Hartford | 10:25 | 11:45 | 13:00 | 14:10 | Hartford |
| Commuter rail | 10:50 | 12:25 | 13:15 | 14:48 | Commuter rail |
| Springfield | 11:15 | 12:20 | 13:30 | 14:20 | Springfield |
| Commuter rail | 12:20 | 13:55 | 14:45 | 16:18 | Commuter rail |
| Albany | 12:35 | 13:35 | 15:00 | 16:10 | Hartford |
| Springfield | 13:15 | 14:25 | 16:05 | 17:24 | Commuter rail |
| Commuter rail | 14:10 | 15:45 | 17:00 | 18:00 | Hartford |
| Hartford | 14:25 | 15:20 | 17:00 | 18:40 | Worcester |
| Commuter rail | 15:25 | 17:00 | 17:00 | 18:20 | Commuter rail |
| Albany | 16:25 | 17:25 | 17:35 | 18:56 | Commuter rail |
| Commuter rail | 16:55 | 18:31 | 17:55 | 19:36 | Commuter rail |
| Springfield | 17:30 | 18:30 | 19:18 | 20:55 | Commuter rail |
| Hartford | 17:45 | 18:55 | 19:30 | 20:35 | Hartford |
| Commuter rail | 18:12 | 19:53 | 19:40 | 20:40 | Albany |
| Hartford | 19:40 | 20:55 | 20:00 | 21:05 | Springfield |
| Commuter rail | 19:55 | 21:11 | 20:35 | 22:11 | Commuter rail |
| Commuter rail | 21:30 | 23:00 | 22:20 | 23:56 | Commuter rail |
| Springfield | 22:00 | 23:00 | 23:25 | 1:01 | Commuter rail |
| Hartford | 22:25 | 23:30 | | | |
| Commuter rail | 24:10 | 1:30 | | | |

Table 26Boston–Worcester Combined Bus/Commuter Rail Schedule

Source: Public timetables as of October 29, 2012

2.8.4 Potential Integration with MBTA Fare Media

The MBTA automated fare-collection (AFC) system currently makes use of two distinct media types: smart cards with embedded integrated circuits, and tickets with magnetic encoded strips. These two credit card–sized media have been branded the "CharlieCard" and "CharlieTicket," respectively. CharlieCards and CharlieTickets are read and system entry is allowed using equipment supplied by German vendor Scheidt & Bachmann. The conversion to the new system took five years and was completed in 2007.

The CharlieCard offers a convenient "tap-and-go" capability, and can be used at all MBTA bus and light rail fareboxes as well as at fare-gates at MBTA rapid transit stations. Only CharlieTickets, however, can be used on the MBTA commuter rail network, where they are visually inspected for zone and month.

The MBTA originally contemplated an AFC-II contract, to bring smart card technology to the commuter rail network. As of 2012, however, the MBTA is no longer pursuing an expansion of the AFC system to include smart card use on commuter rail lines. As an alternative, the MBTA has begun a pilot program with Masabi USA to develop a system to sell and distribute commuter rail tickets via a smartphone application.

The MBTA efforts to adapt smartphone fare collection techniques to the needs of the commuter rail system may offer an opportunity to develop a standard device-based media that could also be used by regional bus carriers. The commuter rail and regional bus systems both sell tickets based upon specific pairs of cities or zones, a pricing challenge that the smartphone systems are being designed to address. Given that this is a characteristic of regional transportation systems, the regional carriers could possibly collaborate to implement a bus-specific system.