



SouthWest Advisory
Planning Committee (SWAP)
Regional Public Transit Feasibility Study

SWAP Regional Public Transit Feasibility Study

Project Managers

Jonathan Belcher-Central Transportation Planning Staff
Eric Halvorsen-Metropolitan Area Planning Council

Project Principal

Annette Demchur

Data Analysts

Steven Andrews
Jonathan Belcher

Graphics

Steven Andrews

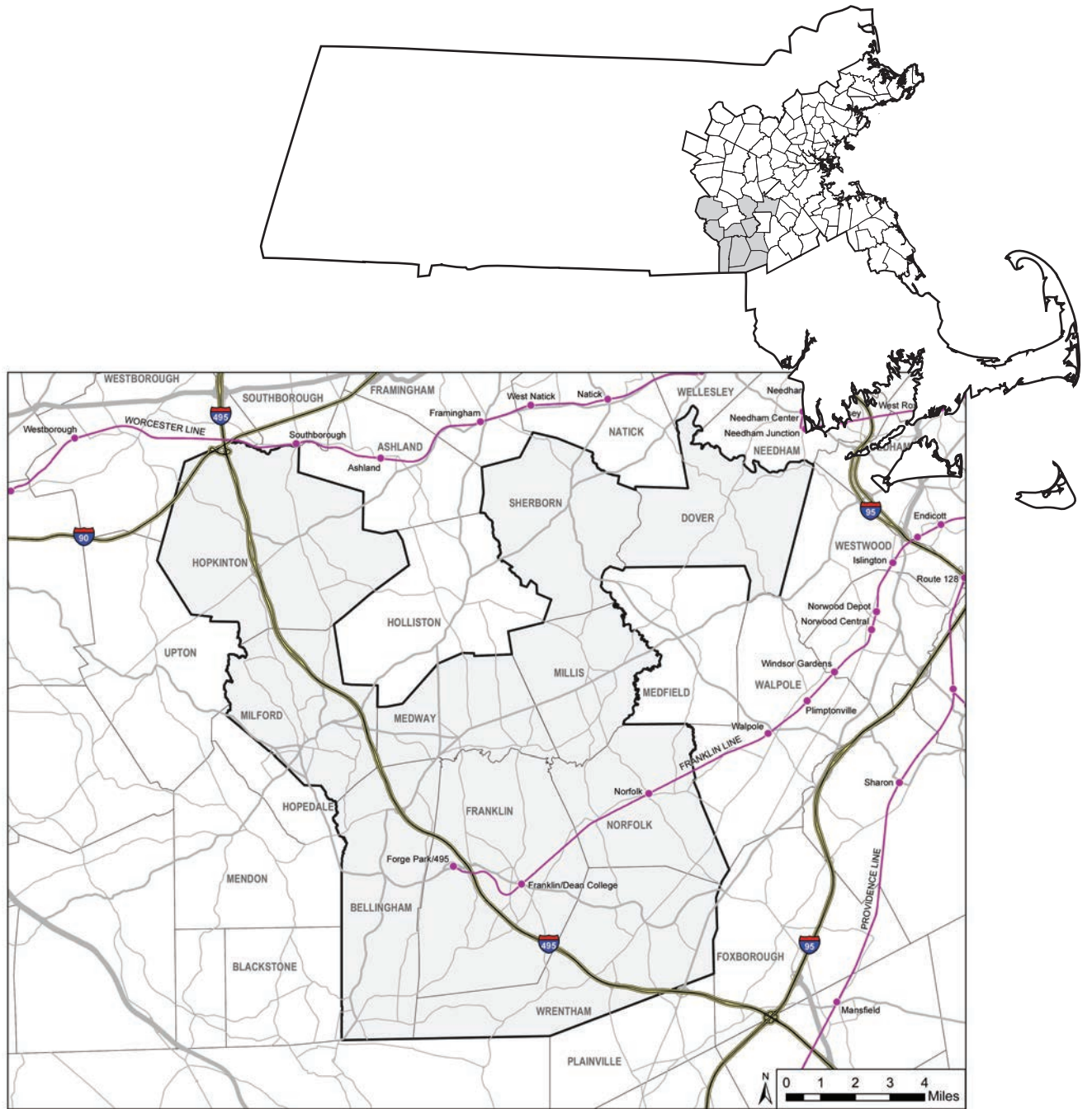
Cover Design

Kim Noonan

Central Transportation Planning Staff

Directed by the **Boston Region Metropolitan Planning Organization**. The MPO is composed of state and regional agencies and authorities, and local governments.

October 3, 2013



To request additional copies of this document or copies in an accessible format, contact:

Central Transportation Planning Staff
State Transportation Building
Ten Park Plaza, Suite 2150
Boston, Massachusetts 02116

(617) 973-7100
(617) 973-8855 (fax)
(617) 973-7089 (TTY)

ctps@ctps.org
www.bostonmpo.org

Abstract

The SouthWest Advisory Planning Committee (SWAP) has requested through the Unified Planning Work Program (UPWP) to have the Metropolitan Area Planning Council (MAPC) and Central Transportation Planning Staff (CTPS) lead a joint effort to analyze the existing public transit network in the subregion and identify opportunities to increase ridership and provide better connections to housing, employment, and commercial centers in the SWAP communities of Bellingham, Dover, Hopkinton, Franklin, Medway, Milford, Millis, Norfolk, Sherborn, and Wrentham. Current SWAP transit services are limited to Massachusetts Bay Transportation Authority (MBTA) commuter rail, MetroWest Regional Transit Authority (MWRTA) fixed-route service, Greater Attleboro Taunton Regional Transit Authority (GATRA) commuter shuttle services, GATRA in-town services and their support to councils on aging, and other in-town transportation services such as veterans' services or volunteer driver programs.

Existing transit services, existing commuter flows, activity centers, and existing population and employment patterns were reviewed to determine the best potential for new or modified transit services in the SWAP subregion. Several potential transit services were identified and analyzed. The greatest potential for a modified service is the resumption of full service on MWRTA's route from Milford to Framingham. There is also potential for additional shuttle routes connecting SWAP communities to commuter rail stations, following the example of an existing shuttle in Medway. Providing new connections between Franklin, Bellingham, and Milford would be another route or series of routes to consider for short-term implementation. Long-term expansion would consider more routes and connections between additional towns in the subregion.

Contents

SWAP Regional Public Transit Feasibility Study	1
Abstract	3
1 Existing Conditions	7
1.1 Description of Study area	7
1.2 Existing Transit Services	8
1.2.1 Bellingham	10
1.2.2 Dover	10
1.2.3 Franklin	10
1.2.4 Hopkinton	11
1.2.5 Medway	11
1.2.6 Millis	12
1.2.7 Milford	12
1.2.8 Norfolk	12
1.2.9 Sherborn	13
1.2.10 Wrentham	13
1.3 Commuter Rail Ridership from SWAP Communities	13
1.3.1 Bellingham	16
1.3.2 Dover	16
1.3.3 Franklin	16
1.3.4 Hopkinton	17
1.3.5 Medway	17
1.3.6 Milford	17
1.3.7 Millis	17
1.3.8 Norfolk	18
1.3.9 Sherborn	18
1.3.10 Wrentham	18
1.4 Demographic Data for SWAP Communities	18
1.5 Commuter Flows to and from SWAP Communities	26
1.6 Major Trip Activity Centers and Trip Generators in SWAP Communities	29

2	Potential New or Modified Fixed-Route Transit Services	30
2.1	Potential New Transit Services	30
2.1.1	Full-Time Service on MWRTA Route 6 Milford-Framingham	30
2.1.2	Millis-Norfolk Commuter Rail Station Shuttle	31
2.1.3	Wrentham-Norfolk Station Shuttle	32
2.1.4	Hopkinton Commuter Rail Shuttle	32
2.1.5	Extend Existing GATRA Attleboro-Plainville Route to Wrentham Village Premium Outlet Mall	33
2.1.6	Operate Midday South Bellingham-North Bellingham Service	34
2.1.7	Expand Franklin Area Bus Hours of Service to Meet Commuter Rail	35
2.1.8	Connect Franklin, Bellingham, and Milford	36
2.1.9	Connect Bellingham, Medway, and Holliston	36
2.1.10	Operate Local Service in Milford	36
2.2	Potential Additional Long-Range Expansion	37
2.3	Funding for Service	39
3	Steps for Implementation	41
3.1	Next Steps to Implement RTA services	41
3.2	Other Approaches for Community Coordination	42
3.3	Summary: Communication—the Key to Better Coordination	43

List of Exhibits

Figure

1	Population Density, Large Employers, Other Generators, and Existing Transit Options	9
2	Flows from SWAP Communities to MBTA Commuter Rail Stations	15
3	Population Density of MetroWest and GATRA Communities	20
4	Population Density of People Aged 19 or Younger in the SWAP Region	21
5	Population Density of People Aged 65 or Older in the SWAP Region	22
6	Population Density of Minorities in the SWAP Region	23
7	Median Income by Census Tract	24
8	Zero Vehicle Households By Census Tract	25
9	Home to Work Flows from SWAP (including SWAP communities)	27
10	Home to Work Flows to SWAP (including SWAP communities)	28
11	Existing Conditions and Long-Term Vision	38

Table

1-1	SWAP Community Population, Labor Force, and Density Summary	8
-----	---	---

Chapter 1

Existing Conditions

1.1 DESCRIPTION OF STUDY AREA

The SouthWest Advisory Planning Committee includes the communities of Bellingham, Dover, Hopkinton, Franklin, Medway, Milford, Millis, Norfolk, Sherborn, and Wrentham. A description of each community from the MAPC MetroBoston DataCommon¹ follows:

- **Milford** is categorized by MAPC as a Subregional Urban Center. These communities are characterized by an urban-scale downtown core surrounded by residential neighborhoods with a mix of housing. Many are home to sizeable immigrant, low-income, and minority communities. New growth takes the form of redevelopment in downtown or industrial areas and greenfield development on the periphery.
- **Bellingham, Franklin, Medway, Millis, and Norfolk** are each categorized by MAPC as a Mature New England Town. These communities are characterized by a mixed-use town center surrounded by compact neighborhoods, with conventional single-family subdivisions elsewhere. They have a large amount of vacant developable land, and new growth comes in the form of new subdivisions; a few towns have experienced revitalization of their town center.
- **Dover, Hopkinton, Sherborn, and Wrentham** are each categorized by MAPC as a Country Suburb. In general, these communities have very low housing density, with no significant mixed-use town center and no compact neighborhoods. Some have large amounts of vacant developable land, and new growth largely takes the form of conventional low-density subdivisions developed on vacant land, or auto-oriented office and industrial parks. They are generally growing rapidly in percentage terms. Dover and Sherborn, it should be noted, do not share the later characteristics.

¹ The MetroBoston DataCommon is an interactive data portal and online mapping tool.

Population, labor force, and community-wide density rates for each SWAP community are summarized in Table 1-1, below.

**Table 1-1
SWAP Community Population, Labor Force, and Density Summary**

Municipality	2010 Population	Labor Force	2009 Population per Square Mile
Bellingham	16,332	9,732	857
Dover	5,589	2,839	373
Hopkinton	14,925	7,600	552
Franklin	31,635	16,933	1,200
Medway	12,752	7,145	1,126
Milford	27,999	15,225	1,892
Millis	7,891	4,511	661
Norfolk	11,227	4,944	754
Sherborn	4,119	1,955	268
Wrentham	10,955	5,862	505

Source: Massachusetts Department of Revenue, Division of Local Services Database.

1.2 EXISTING TRANSIT SERVICES

Transit service in each of the ten SWAP towns is summarized by communities in this section. With the exception of Milford, all SWAP communities are within the MBTA district, while several are members of the Greater Taunton Attleboro Regional Transit Authority (GATRA) or the MetroWest Regional Transit Authority (MWRTA). Council-on-aging transportation services are also available in some form in SWAP communities. Existing fixed-route service is displayed in Figure 1.

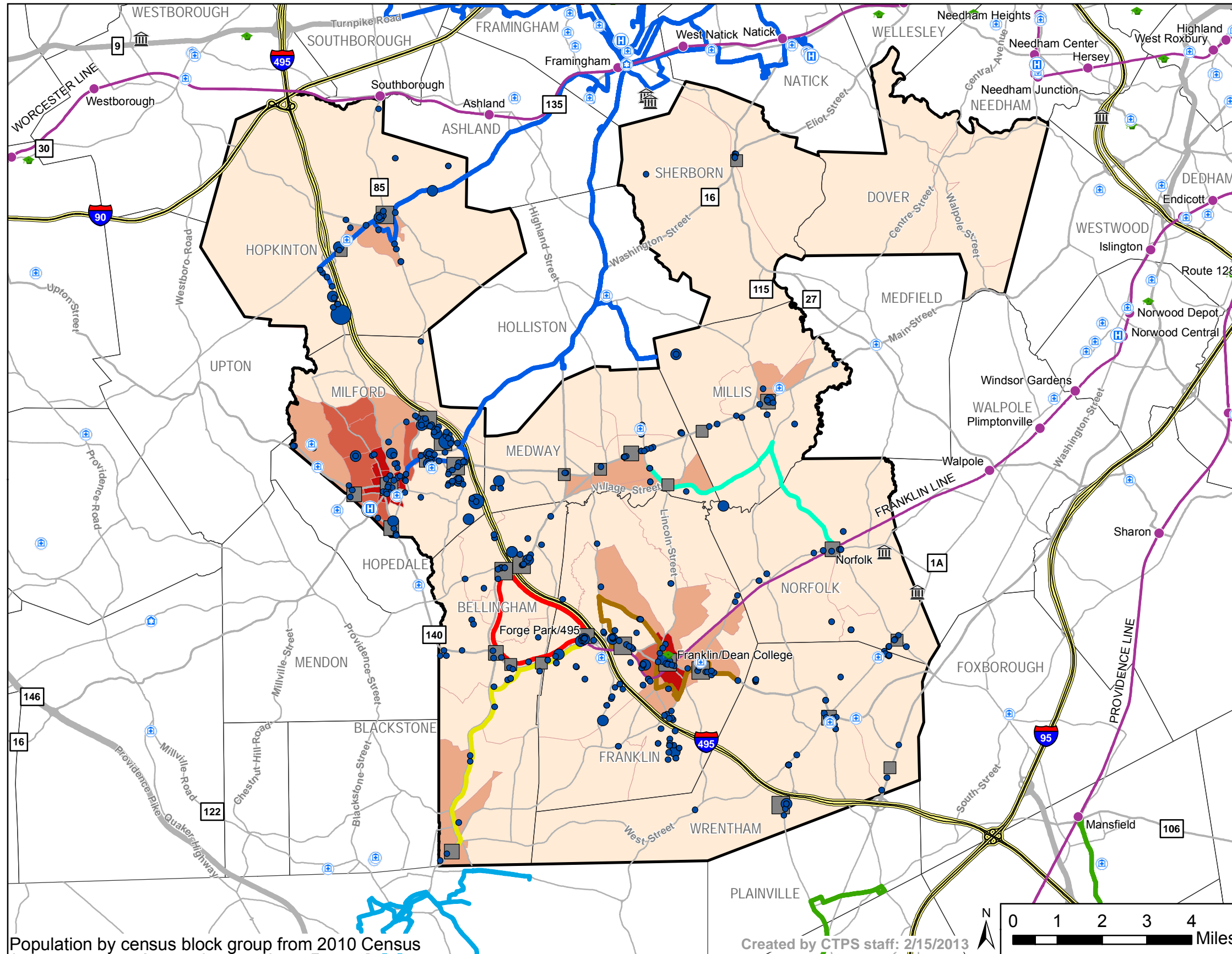


FIGURE 1
 Population Density, Large Employers, Other Generators, and Existing Transit Options

- Greater Attleboro Taunton RTA**
- North Bellingham Shuttle
 - South Bellingham Shuttle
 - Franklin Area Bus
 - Medway T Shuttle
 - Other GATRA routes
- Other Public Transportation Agencies**
- All MWRTA routes
 - All other routes
 - MBTA commuter rail lines
- Population per Square Mile**
- Less than 1,500.1
 - 1,500.1 - 3,000.0
 - 3,000.1 - 5,000.0
 - More than 5,000.0
- Employers with 25 or More Employees**
- 25–160
 - 161–670
 - 671–1,500
 - 1,501–5,000
- Commercial Centers**
- Small
 - Medium
 - Large
- Other Generators**
- Ⓜ Acute-care hospital
 - Ⓜ Community health center
 - Ⓜ Long-term-care residence
 - Ⓜ Private college/university
 - Ⓜ Public college/university
 - Ⓜ Prison

1.2.1 Bellingham

Bellingham is a member community of the MBTA and of GATRA. The Bellingham Council-On-Aging, under contract to GATRA, provides two weekday fixed-route shuttles from Bellingham to the Forge Park commuter rail station in nearby Franklin. There are two routes, a north shuttle and a south shuttle. The north Bellingham shuttle service was initiated in 2011, and the south Bellingham shuttle started in 2012. There are three AM and three PM trips on the north shuttle and two AM and two PM trips on the south shuttle. Scheduled end-to-end travel time is 15 minutes for the north shuttle and 20-to-25 minutes for the south shuttle. These services are fairly new, and ridership is still building. Average daily ridership for both shuttles combined in 2012 was 22 passengers as reported by GATRA. The regular one-way fare is \$1.00, while elderly and students pay \$0.50.

GATRA also provides demand-response service in Bellingham for seniors and people with disabilities. Average monthly demand-response ridership in Bellingham was 391 passengers in 2012.

1.2.2 Dover

Dover is a member community of the MBTA and just recently joined the MWRTA. There is no fixed-route transit service presently operating in Dover. The MBTA para-transit service, The Ride, provides services to Dover for people with disabilities. According to the MBTA's 2010 Ridership and Service Statistics book, there were 354 trip origins for The Ride in Dover in fiscal year 2009.

1.2.3 Franklin

Franklin is a member community of the MBTA and GATRA. There are two MBTA commuter rail stations in Franklin, Forge Park/495 station and Franklin/Dean College station. According to the MBTA's 2010 Ridership and Service Statistics book, average weekday boardings at Forge Park/495 were 827 passengers while 782 passengers boarded at Franklin/Dean College during the same period.

GATRA operates the Franklin Area Bus, a local service, Monday through Saturday in Franklin. This service was introduced in 2007. The bus extends into Bellingham on Saturdays to provide service to a shopping area that includes Market Basket, Walmart, Whole Foods, and Old Navy. The average daily ridership for the Franklin fixed-route

service was 42 passengers in 2012. There are 11 round trips operated between 6:40 AM and 5:11 PM on weekdays and seven round trips on Saturday from 8:20 AM to 4:30 PM. The regular fare is \$1.00, while seniors, people with disabilities, and students pay \$.50 cents. Twenty-ride passes and monthly passes are offered.

GATRA also operates demand-response service in Franklin for seniors and people with disabilities. Average monthly Franklin demand-response ridership in 2012 was 1070 passengers.

1.2.4 Hopkinton

Hopkinton is a member community of the MBTA and of MWRTA. MWRTA operates a fixed-route service (Route 5) between Hopkinton and Framingham via Ashland. Service operates Monday through Friday. There are 13 round trips between 5:30 AM and 8:15 PM, operating every 70 minutes. There are close to 110 riders on an average day on the entire route per MWRTA ridership data, over half of which are traveling to or from Hopkinton.

MWRTA also provides demand-response service in Hopkinton for the elderly and people with disabilities.

1.2.5 Medway

Medway is a member community of the MBTA and GATRA. Since 2007, GATRA, in partnership with the Medway Council-on-Aging has provided a fixed-route shuttle service from Medway to the Norfolk commuter rail station. Ridership data from GATRA shows an average of 53 daily passenger trips on the shuttle (25-to-26 people making round trips). There are four trips operated in the AM peak period and three trips in the PM peak. There are two pick-up locations in Medway, the Medway Middle School and the Village Street Post Office. The stop that was made in West Medway when the service was initiated was later discontinued because of low ridership from that location. Medway and GATRA officials report that one of the evening trips has had standing loads, as a large concentration of riders make a common return trip from Boston on the same commuter rail train.

GATRA also provides demand-response service in Medway for seniors and people with disabilities. Average monthly ridership in 2012 was 180 passengers.

1.2.6 Millis

Millis is a member community of the MBTA. There is no fixed-route transit service in Millis. The Millis Council-On-Aging provides some transportation services for seniors.

1.2.7 Milford

Milford is not a member of a regional transit authority and is the only SWAP community that is not part of the MBTA district. However, limited fixed-route service is provided in Milford by the MWRTA on its Route 6 bus, operating between Milford and Framingham via Holliston and Ashland. Service to Milford is limited to one AM and one PM round-trip in the peak period. The route is a very long-established service, having been operated by private carriers and the town of Framingham Local Intra-Framingham Transit (LIFT) service prior to the creation of MWRTA in 2007. The morning trip operating through to Milford departs Framingham at 6:00 AM and returns from Milford at 6:45 AM. The evening trip departs Framingham at 5:35 PM and returns from Milford at 6:40 PM. Ridership counts from MWRTA show approximately 25 Milford passengers riding each of the round trips.

MWRTA operates full service on the portion of Route 6 from Holliston and Ashland to Framingham (MWRTA reduced service operating through to Milford in 2008 because Milford is not a member of the authority and does not pay into the cost of providing the service). There are enough passengers from Milford on the peak trips that the fare revenue covers the added cost of operating service beyond Holliston to Milford. Full-time service, including a resumption of off-peak midday service and the addition of more peak period trips, would require a subsidy to cover the increased costs of providing the service.

1.2.8 Norfolk

Norfolk is a member community of the MBTA and of GATRA. There is one MBTA commuter rail station located in Norfolk. According to the MBTA's 2010 Ridership and Service Statistics book, there are 757 average weekday boardings at Norfolk station. GATRA has obtained Job Access and Reverse Commute (JARC) funding to initiate a local shuttle connecting several correctional facilities and several residential complexes with the Norfolk commuter rail station; however, service has yet to start.

GATRA provides demand-response service in Norfolk for seniors and the people with disabilities. Average monthly ridership for these services in 2012 was 87 passengers.

1.2.9 Sherborn

Sherborn is a member community of the MBTA and of MWRTA. There is no fixed-route transit service presently operating in Sherborn. MWRTA operated a trial shuttle to the West Natick commuter rail station in 2010 and 2011, but the service was discontinued because of low ridership.

1.2.10 Wrentham

Wrentham is a member community of the MBTA and of GATRA. There is no fixed-route transit service presently operating in Wrentham.

GATRA provides demand-response service in Wrentham for seniors and people with disabilities. Average monthly ridership in 2012 was 237 passengers.

1.3 COMMUTER RAIL RIDERSHIP FROM SWAP COMMUNITIES

SWAP is directly served by the MBTA's Franklin commuter rail line. There are two stops in Franklin (Forge Park/I-495 and Franklin-Dean College), and a stop in Norfolk. Other SWAP communities are indirectly serviced by other commuter rail lines with stations in communities directly adjacent to SWAP communities.

- The MBTA's Worcester commuter rail line, with stops in Southborough, Ashland, Framingham, West Natick, and Natick, serves an area near the northern boundary of the SWAP subregion.
- The MBTA's Needham commuter rail line provides service to Needham, adjacent to the SWAP community of Dover.

MBTA commuter rail riders were surveyed by Boston Region MPO staff between 2008 and 2009 as part of the MBTA System wide Passenger Survey project. Data from this survey has been reviewed and summarized to show activity, sorted by commuter rail station, for each of the SWAP communities. Figure 2 shows the number of passengers

SWAP Regional Public Transit Feasibility Study

from each SWAP community commuting to each specific commuter rail station.

Fixed-route shuttles from SWAP communities to commuter rail stations can provide an alternative to commuters driving longer distances to stations. Shuttle service, scheduled specifically to connect with commuter rail trains, is presently provided in Medway and Bellingham. These services could serve as a template for other SWAP communities to follow if there is enough demand to support such a service.

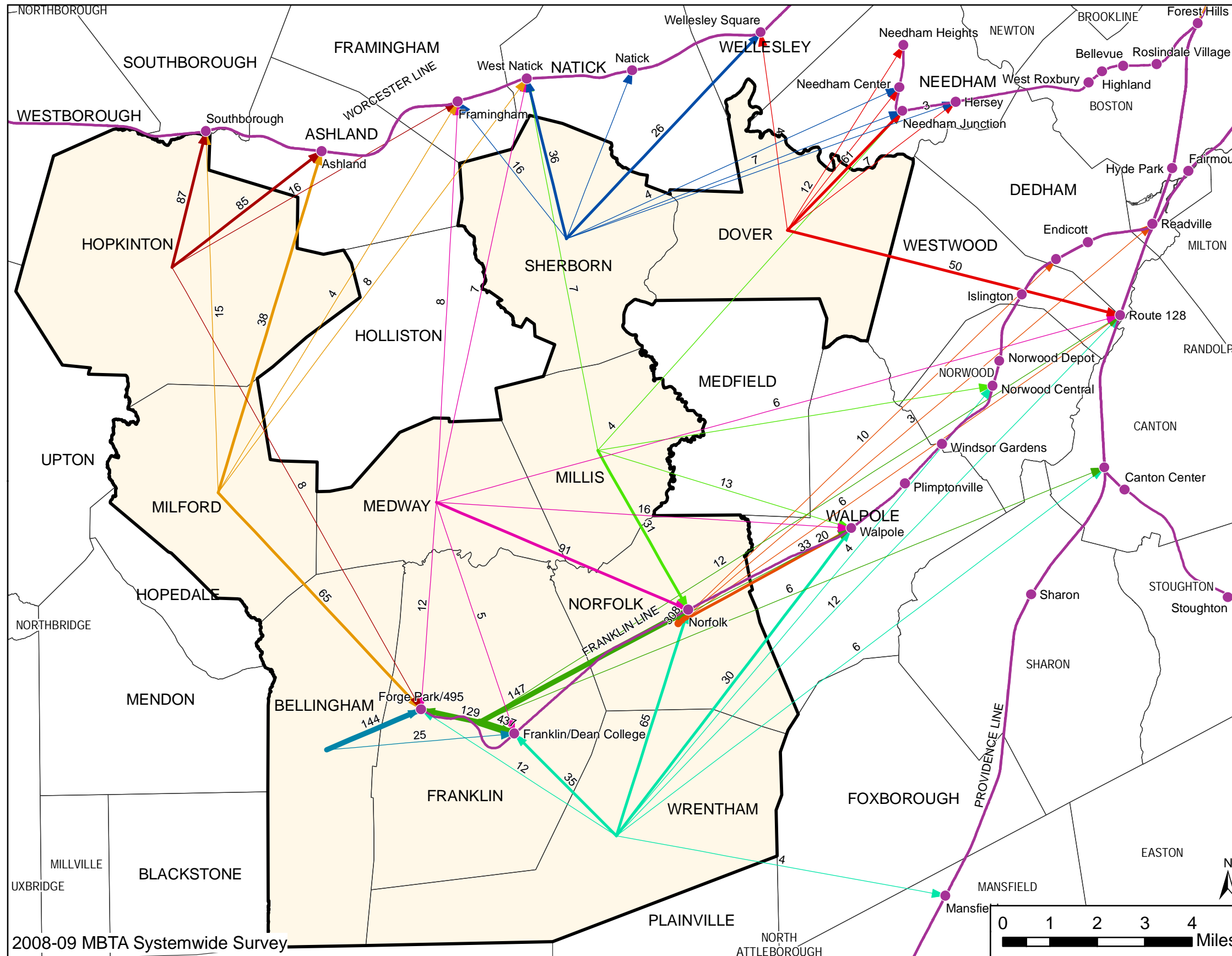


FIGURE 2
Flows from SWAP Communities
to MBTA Commuter Rail Stations

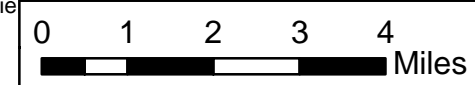
Volumes from Survey

- 1- 25 trips
- 26 - 100
- 101 - 200
- More than 200

➔ Direction of travel

Origin Town

- Bellingham
- Dover
- Franklin
- Hopkinton
- Medway
- Milford
- Millis
- Norfolk
- Sherborn
- Wrentham



1.3.1 Bellingham

The system-wide survey showed 169 commuter rail riders from Bellingham. All of the passengers boarded at stations along the Franklin Line. The majority of these riders (144) boarded at Forge Park station, while 25 boarded at Franklin/Dean College. The majority of riders (131) drove to the stations, while 34 were dropped off. Four passengers biked to the stations. Since the time of the survey, GATRA shuttle service has been initiated to Forge Park station from Bellingham. This shuttle activity would not be reflected in the survey, but based on ridership data from GATRA, there are 11 passengers who would use this commuter shuttle each day.

1.3.2 Dover

The system-wide survey showed 146 commuter rail riders from Dover. The majority of these riders boarded at stations on the Needham Line, with 61 boarding at Needham Junction, 12 each at Needham Center and Needham Heights, and 7 at Hersey. There were also 50 riders boarding at Route 128 station on the Providence Line and 4 at Wellesley Square on the Framingham/Worcester Line. The majority of Dover riders (131) drove to the stations, while 15 were dropped off.

1.3.3 Franklin

There are two MBTA commuter rail stations in Franklin, Forge Park/495 station and Franklin/Dean College station. The system-wide survey showed 752 commuter rail riders from Franklin. The majority boarded at the two stations in Franklin, with 437 boarding at Franklin/Dean College and 129 at Forge Park/495. There were also 147 commuter rail riders from Franklin boarding at Norfolk station and 20 at Walpole station, all on the Franklin Line. A small number of passengers from Franklin boarded at stations on lines other than the Franklin Line, with 12 boarding at Route 128 station and 6 boarding at Canton Junction, both on the Providence Line. The majority of Franklin passengers (440) drove to the stations, although 156 were dropped off, and 150 walked to the station. There were also three passengers each that used the GATRA local bus and that biked to reach the train station. The present GATRA Franklin local bus schedule does not meet arriving PM peak-period commuter trains, and is not practical to use as a commuter feeder. It does, however, meet AM peak-period and midday trains.

1.3.4 Hopkinton

The system-wide survey showed 196 commuter rail passengers from Hopkinton. There were 87 passengers boarding at Southborough station and 85 passengers at Ashland station. A small number of passengers (16) boarded at Framingham, while 8 boarded at Forge Park station. The vast majority of riders parked at the station, although 19 passengers at Southborough were dropped off and 8 biked to the station. Although MWRTA bus Route 5 connects Hopkinton to Framingham, the survey did not show any passengers from Hopkinton identifying the bus as their method for reaching the commuter rail line.

1.3.5 Medway

The system-wide survey showed 146 commuter rail passengers from Medway. Of this total number of passengers, 91 boarded at Norfolk, 16 at Walpole, 12 at Forge Park, 8 at Framingham, 7 at West Natick, 6 at Route 128 station, and 5 at Franklin. There were 27 passengers that utilized the GATRA Medway-Norfolk shuttle bus to reach the commuter rail network. This is a significant portion of the grand total of riders accessing the commuter rail network from Medway. There were also 100 passengers that drove and parked at the station where they boarded the train, and 7 that were dropped off. There were also 8 passengers that walked from Medway to Norfolk station to reach the train.

1.3.6 Milford

The system-wide survey showed 129 commuter rail passengers from Milford. Of this total number of riders, 65 boarded at Forge Park station, 38 at Ashland, 15 at Southborough, 8 at West Natick, and 4 at Framingham. The majority of riders drove and parked at the station where they board the train, and 19 were dropped off.

1.3.7 Millis

The system-wide survey showed 58 commuter rail passengers from Millis. Of this total number of passengers, 31 boarded at Norfolk station, 13 boarded at Walpole, 7 boarded at West Natick, and 4 each boarded at Needham Junction and Norwood Central. Most riders drove and parked at the station, although, 9 passengers traveling to Norfolk station were dropped off.

1.3.8 Norfolk

The system-wide survey showed 361 commuter rail passengers from Norfolk. Of this total, 308 passengers boarded at Norfolk station, 33 at Walpole, 10 at Dedham Corporate Center, 6 at Route 128 station, and 3 at Readville. Although Norfolk station is located within the community, most of the riders drove and parked at the station where they board. A large number of riders (89) were dropped off at Norfolk station, while 35 people walked and 9 biked to the station.

1.3.9 Sherborn

The system-wide survey showed 96 commuter rail passengers from Sherborn. Of these passengers, 36 boarded at West Natick, 26 at Wellesley Square, 16 at Framingham, 7 at Needham Junction, 4 at Natick, 4 at Needham Center, and 4 at Hersey. The majority of passengers (89) drove to the stations, while 7 were dropped off at West Natick.

1.3.10 Wrentham

The system wide survey showed 168 commuter rail passengers from Wrentham. Of these passengers, 65 boarded at Norfolk, 35 at Franklin/Dean College, 30 at Walpole, 12 at Forge Park/495, 12 at Route 128, 6 at Canton Junction, 4 at Mansfield, and 4 at Norwood Central. The majority (145) of these passengers drove and parked at the station where they board, 20 were dropped off, and 3 answered “other”.

1.4 DEMOGRAPHIC DATA FOR SWAP COMMUNITES

Fixed-route transit is generally most effective in areas with high residential density and high employment density, as this increases the likelihood of multiple potential transit customers sharing common commuting patterns. Transit service located amongst populations with lower levels of access to automobiles or those unable to use automobiles, such as younger age groups, older age groups, and lower-income groups, also have a greater likelihood of generating ridership to sustain a transit service. If providing improved mobility for segments of the population with limited alternatives is a goal, a community may desire to provide service at a relatively high cost per rider, even where demographic characteristics do not traditionally support well-utilized fixed-route transit service.

This section reviews 2010 U.S. Census and 2006–10 American Community Survey demographic data of the SWAP subregion to help identify population and household characteristics that are typically associated with utilizing transit services.

The population density for much of the overall SWAP subregion is less than 1,500 persons per square mile. Franklin and Milford have the greatest areas of higher population density; both communities have sections with densities of 5,000 people or greater per square mile.

Figure 3 below shows the population densities of the entire coverage areas of both MWRTA and GATRA. When compared to the overall coverage areas of MWRTA and GATRA, there are fewer areas of dense population in SWAP than are found in much of the two RTA's coverage area, particularly that of MWRTA. MWRTA principally serves Framingham, Natick, and Marlborough. GATRA has a very wide coverage area, with much of their fixed-route service operating in Attleboro and Taunton.

The population density both for people aged 19 and younger and those aged 65 or older somewhat matches the patterns in total population density for the SWAP subregion, with Franklin and Milford having some of the greatest concentration of population in these age groups. Franklin and Milford also have the greatest concentration of minority populations in the SWAP subregion. Figure 4 displays population densities for residents age 19 or younger, while Figure 5 displays densities for populations age 65 or older. Figure 6 shows the population densities for minority communities within the SWAP subregion.

Median income at a Census tract level for the SWAP subregion is displayed in Figure 7. As shown in Figure 7, Milford has the greatest concentration of households in the lowest income bracket (\$48,000 to \$65,000) while portions of Bellingham, Franklin, Hopkinton, Millis, Medway, Norfolk, and Wrentham have tracts with a median income in the \$100,000-\$130,000 range.

Figure 8 displays zero-vehicle household rates for the SWAP subregion. As shown in Figure 8, Milford has the greatest concentration of zero-vehicle households, with a concentration near Milford Center of more than 165 households per square mile with zero vehicles available.

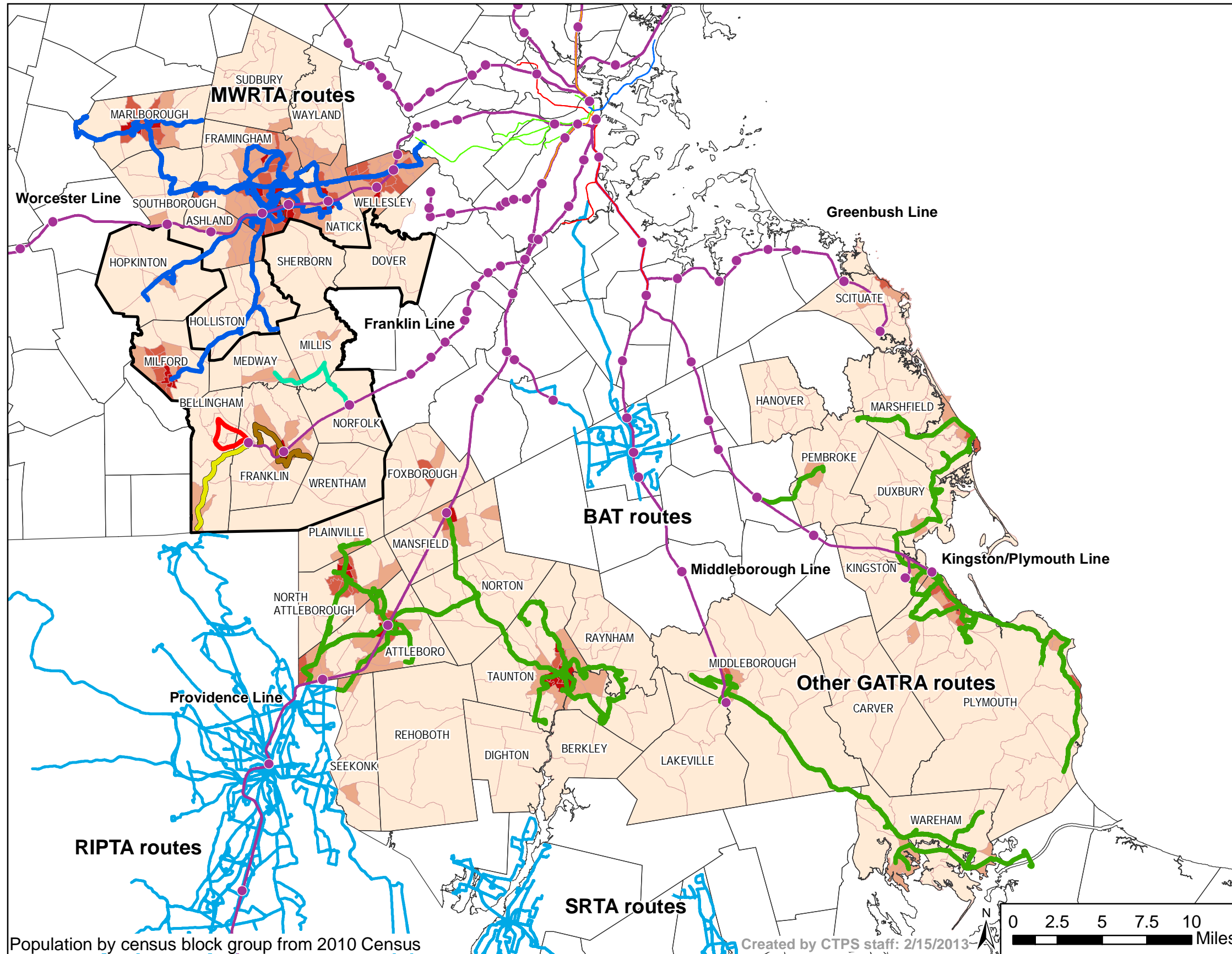
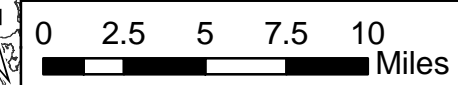


FIGURE 3
Population Density of MetroWest and GATRA Communities

- Greater Attleboro Taunton RTA**
- North Bellingham Shuttle
 - South Bellingham Shuttle
 - Franklin Area Bus
 - Medway T Shuttle
 - Other GATRA routes
- Other Public Transportation Agencies**
- All MWRTA routes
 - All other routes (RIPTA, BAT, SRTA)
 - MBTA commuter rail lines
- Population per Square Mile**
- Less than 1,500.1
 - 1,500.1 - 3,000.0
 - 3,000.1 - 5,000.0
 - More than 5,000.0
- SWAP boundary



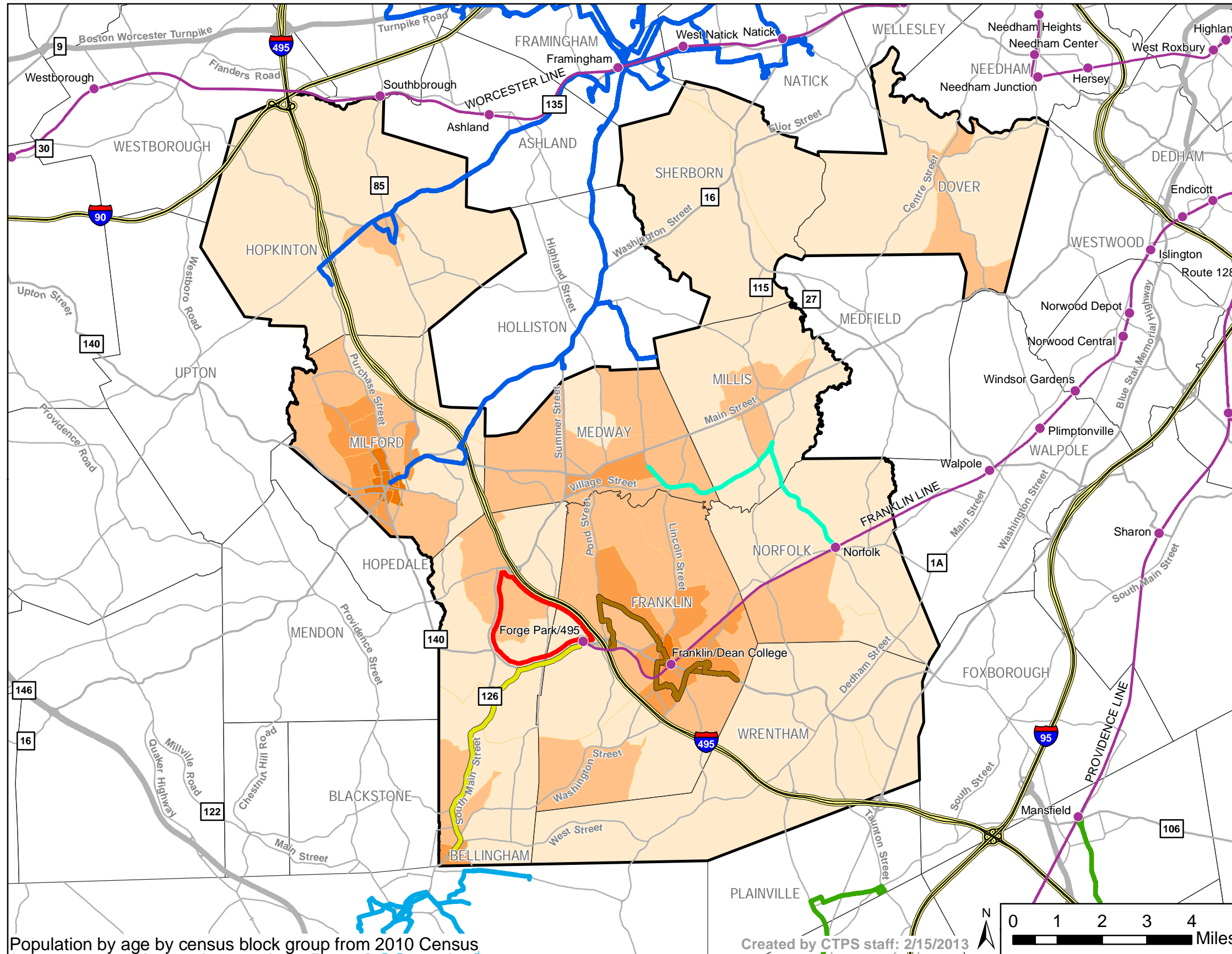


FIGURE 4
Population Density of People Aged 19 or Younger in the SWAP Region

Greater Attleboro Taunton RTA

- North Bellingham Shuttle
- South Bellingham Shuttle
- Franklin Area Bus
- Medway T Shuttle
- Other GATRA routes

Other Public Transportation Agencies

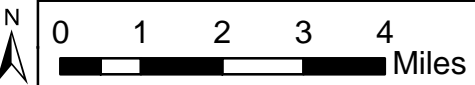
- All MWRTA routes
- All other routes
- MBTA commuter rail lines

People Aged 19 or Younger per Sq. Mile

- Less than 250.1
- 250.1 - 600.0
- 600.1 - 1,300.0
- More than 1,300.0

Population by age by census block group from 2010 Census

Created by CTPS staff: 2/15/2013



CTPS

SWAP Regional Public Transit Feasibility Study

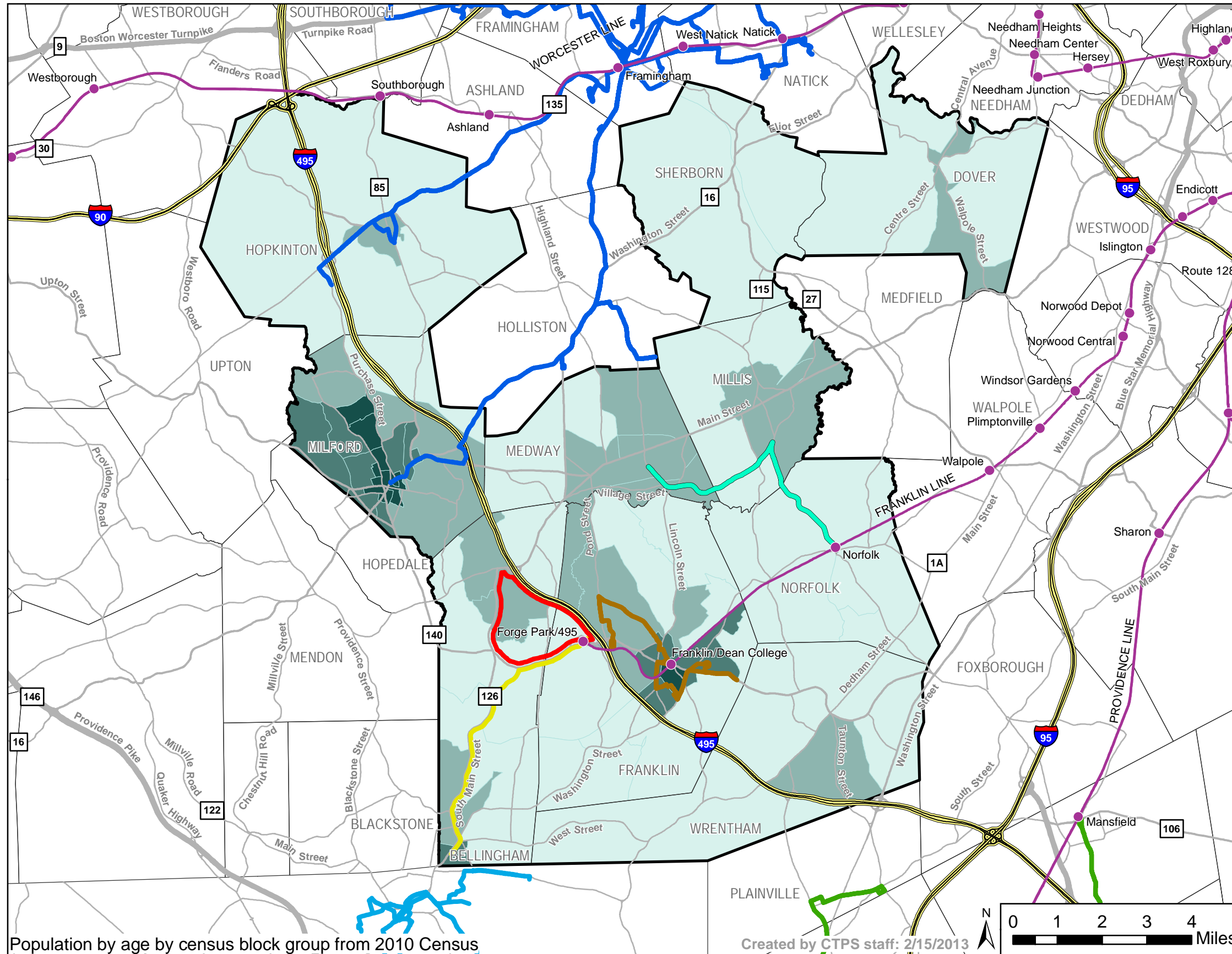
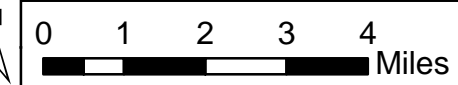


FIGURE 5
 Population Density of People Aged 65 or Older in the SWAP Region

- Greater Attleboro Taunton RTA**
- North Bellingham Shuttle
 - South Bellingham Shuttle
 - Franklin Area Bus
 - Medway T Shuttle
 - Other GATRA routes
- Other Public Transportation Agencies**
- All MWRTA routes
 - All other routes
 - MBTA commuter rail lines
- People Aged 65 or Older per Sq. Mile**
- Less than 100.1
 - 100.1 - 300.0
 - 300.1 - 600.0
 - More than 600.0



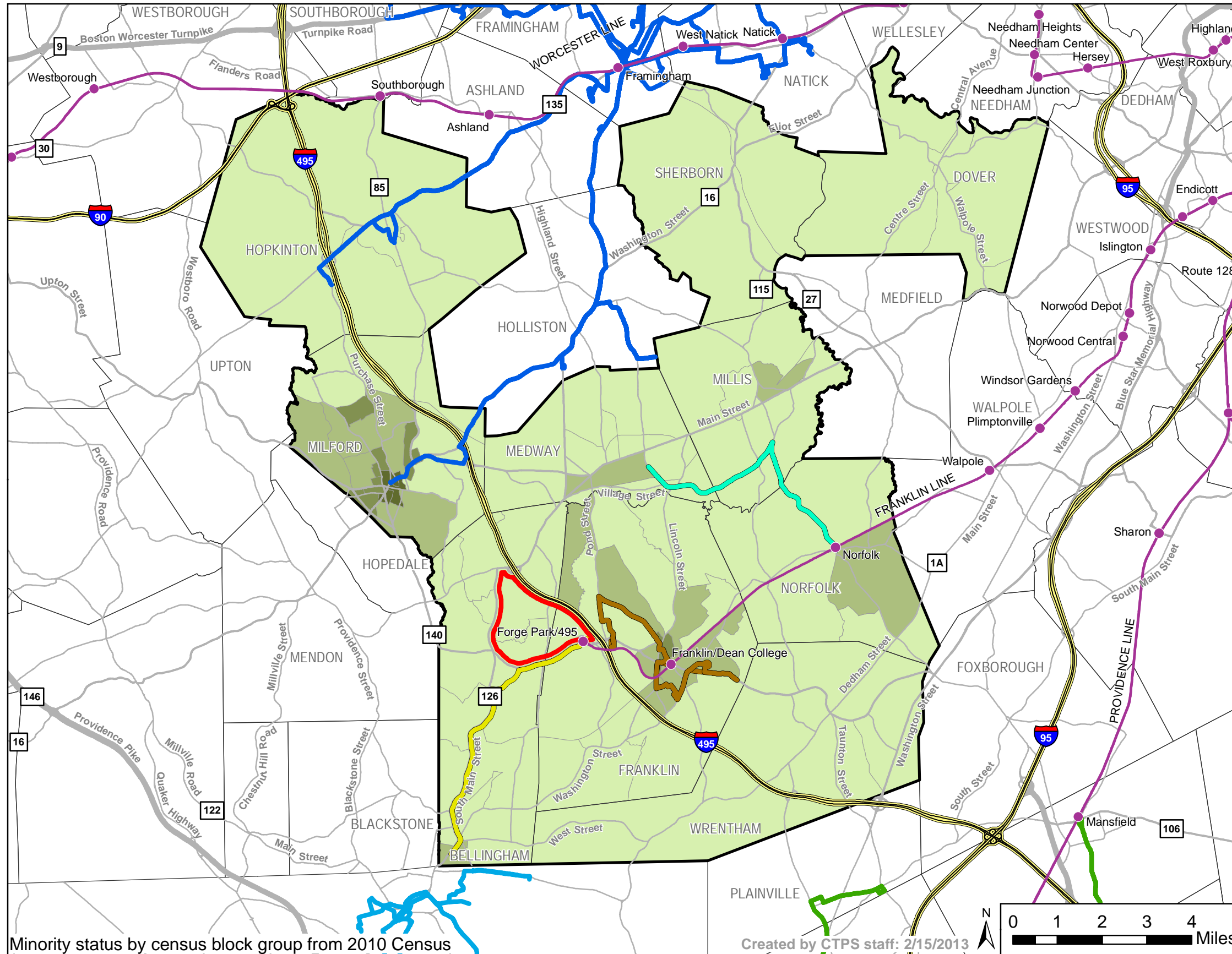
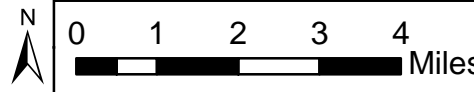


FIGURE 6
Population Density of
Minorities in the SWAP Region

- Greater Attleboro Taunton RTA**
- North Bellingham Shuttle
 - South Bellingham Shuttle
 - Franklin Area Bus
 - Medway T Shuttle
 - Other GATRA routes
- Other Public Transportation Agencies**
- All MWRTA routes
 - All other routes
 - MBTA commuter rail lines
- Minorities per Square Mile**
- Less than 100.1
 - 100.1 - 600.0
 - 600.1 - 1,400.0
 - More than 1,400.0

Minority status by census block group from 2010 Census

Created by CTPS staff: 2/15/2013



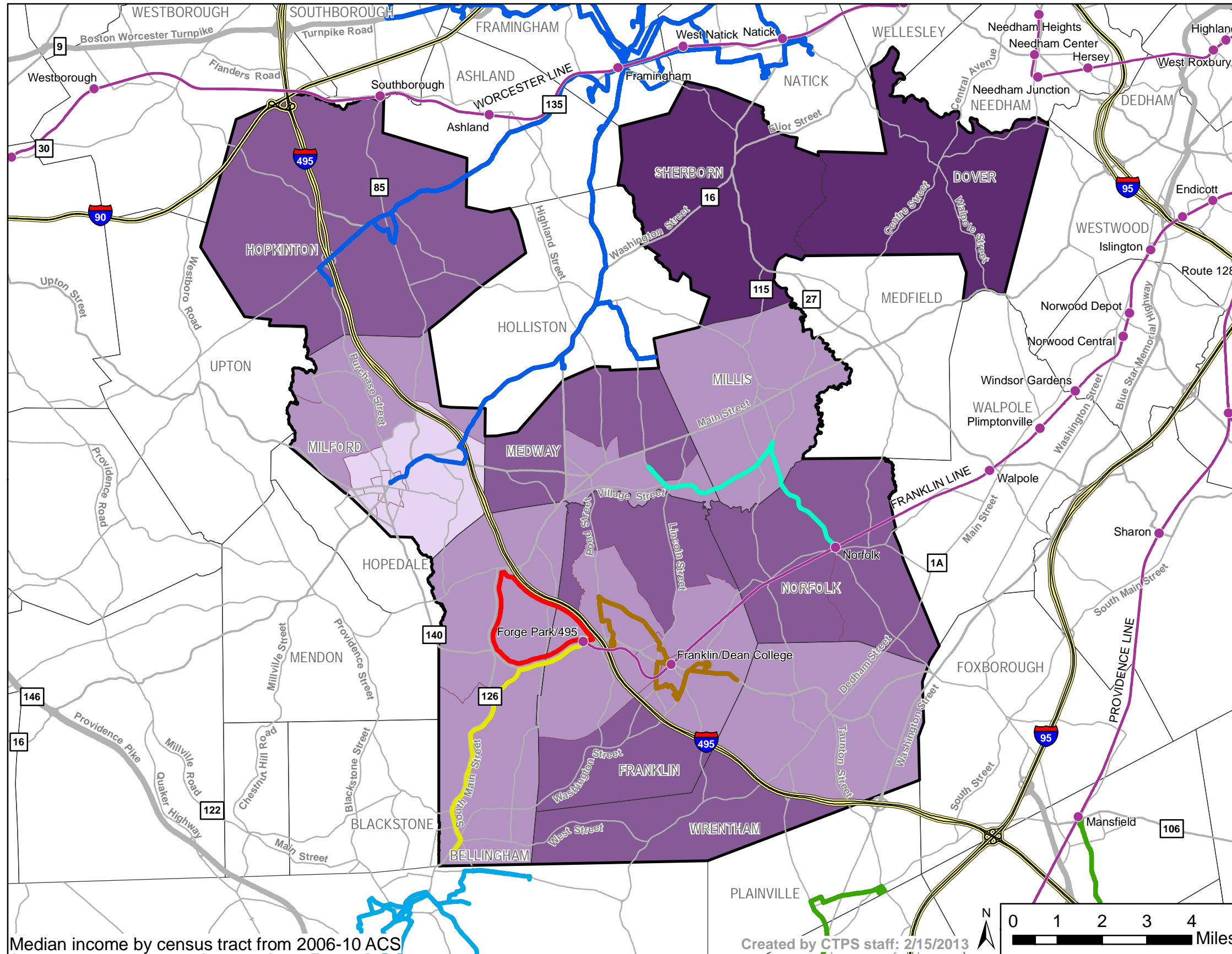
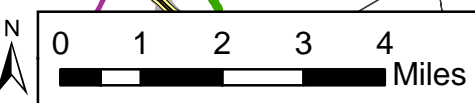


FIGURE 7
Median Income by Census Tract

Median income by census tract from 2006-10 ACS

Created by CTPS staff: 2/15/2013



CTPS

SWAP Regional Public
Transit Feasibility Study

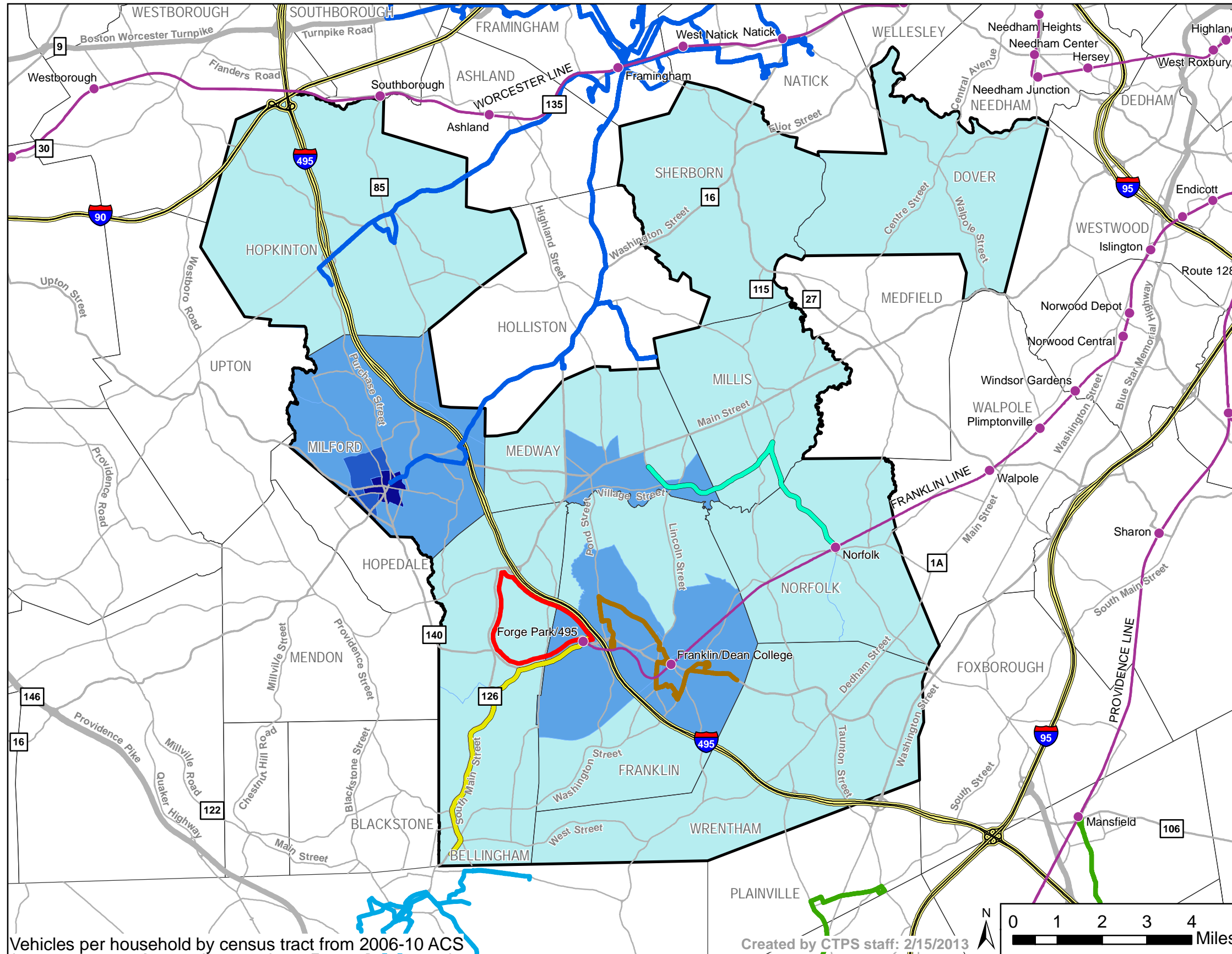
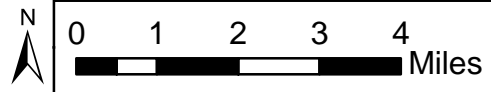


FIGURE 8
Zero Vehicle Households
By Census Tract

- Greater Attleboro Taunton RTA**
- North Bellingham Shuttle
 - South Bellingham Shuttle
 - Franklin Area Bus
 - Medway T Shuttle
 - Other GATRA routes
- Other Public Transportation Agencies**
- All MWRTA routes
 - All other routes
 - MBTA commuter rail lines
- Zero Vehicle HH per Square Mile**
- Less than 13.1
 - 13.1 - 50.0
 - 50.1 - 165.0
 - More than 165.0

Vehicles per household by census tract from 2006-10 ACS

Created by CTPS staff: 2/15/2013



1.5 COMMUTER FLOWS TO AND FROM SWAP COMMUNITIES

American Community Survey (ACS) data collected by the Census Bureau between 2006 and 2010 was analyzed to determine community-to-community home-to-work commuter flows to, from, and within SWAP communities. Non-commute trips are not included in the community flow data. The 2006-2010 data is not yet available at the Census tract level nor is it available by travel mode.

For all SWAP communities except Dover, the greatest numbers of commute trips are made entirely within each community. In Milford and Franklin, more than 4,000 commuters live and work within their respective community. In Bellingham and Hopkinton, more than 1,000 residents in each community also travel entirely within their community for home to work trips. For the remaining SWAP communities, the numbers of commuters that live and work within the same community are less than 1,000.

Not all commuters will choose to use transit even if it is available for their commute, so a reasonable threshold should be considered when evaluating the potential for generating enough ridership to justify the cost of providing fixed-route transit for commuter trips. For this study, community-to-community home-to-work trip flows of 400 or more commuters per day were examined.

Figure 9 shows daily flows of 400 or more commuters for home-to-work trips from residents in SWAP communities, while Figure 10 shows flows of 400 or more to work locations in SWAP communities.

According to ACS data, there are two community-to-community commute flows from SWAP communities with more than 1,000 trips. Daily home-to-work trips from Franklin to Boston are 1,550, while daily trips from Milford to Framingham are 1,113.

The largest groups of commuter flows to Massachusetts work locations outside of SWAP are trips to Boston, Framingham, Natick, and Worcester. All SWAP communities except for Sherborn have more than 400 residents each commuting to Boston. The number of these commutes presently made by commuter rail is summarized in section 1.3.

Communities where daily flows of 400 or more commuters are made between two SWAP communities include Franklin to Milford, Milford to Franklin, Bellingham to Franklin, Bellingham to Milford, and Milford to Hopkinton.

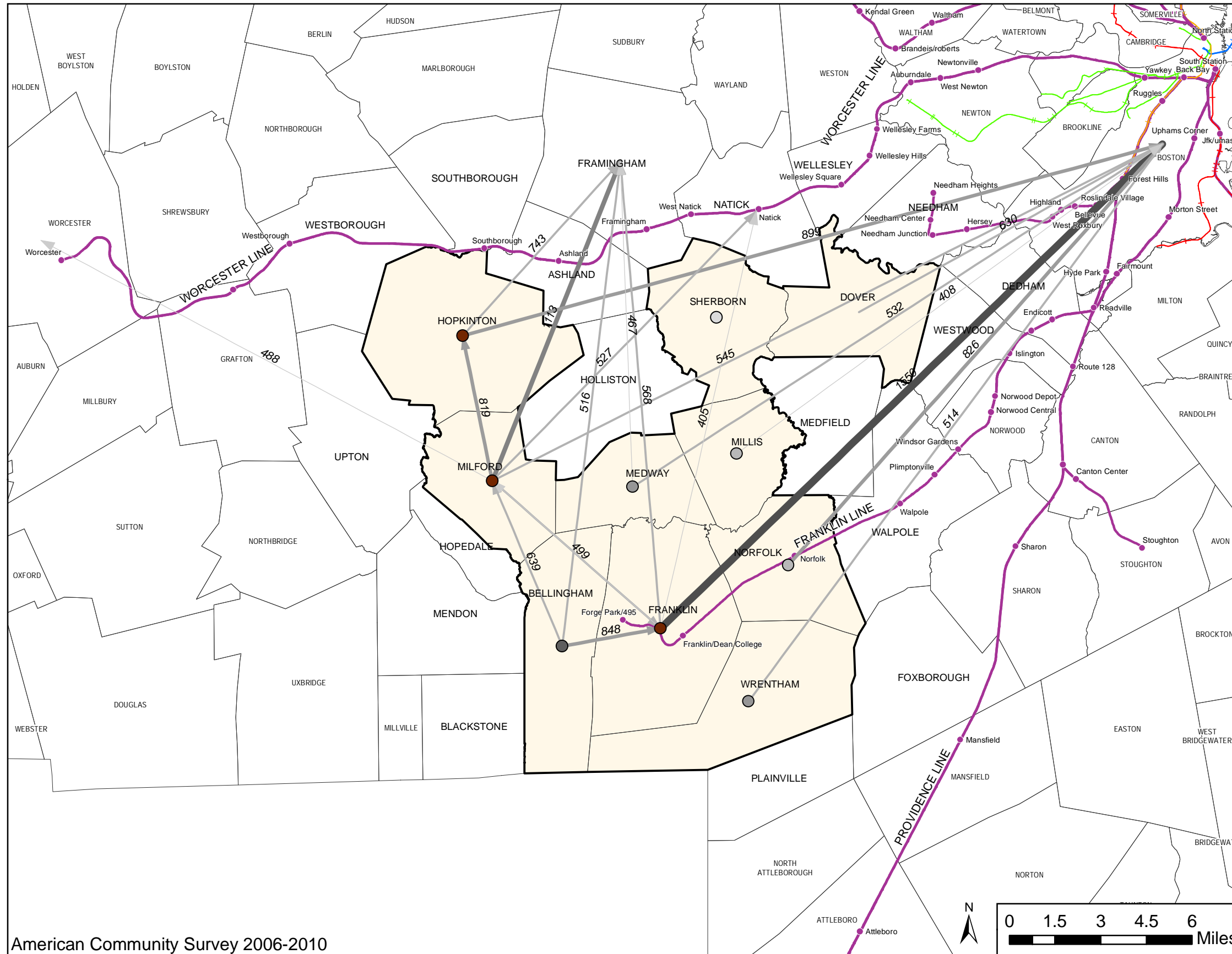
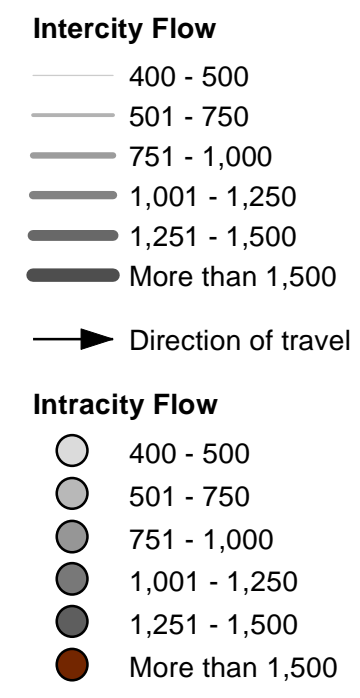


FIGURE 9
Home to Work Flows from SWAP
(including SWAP communities)



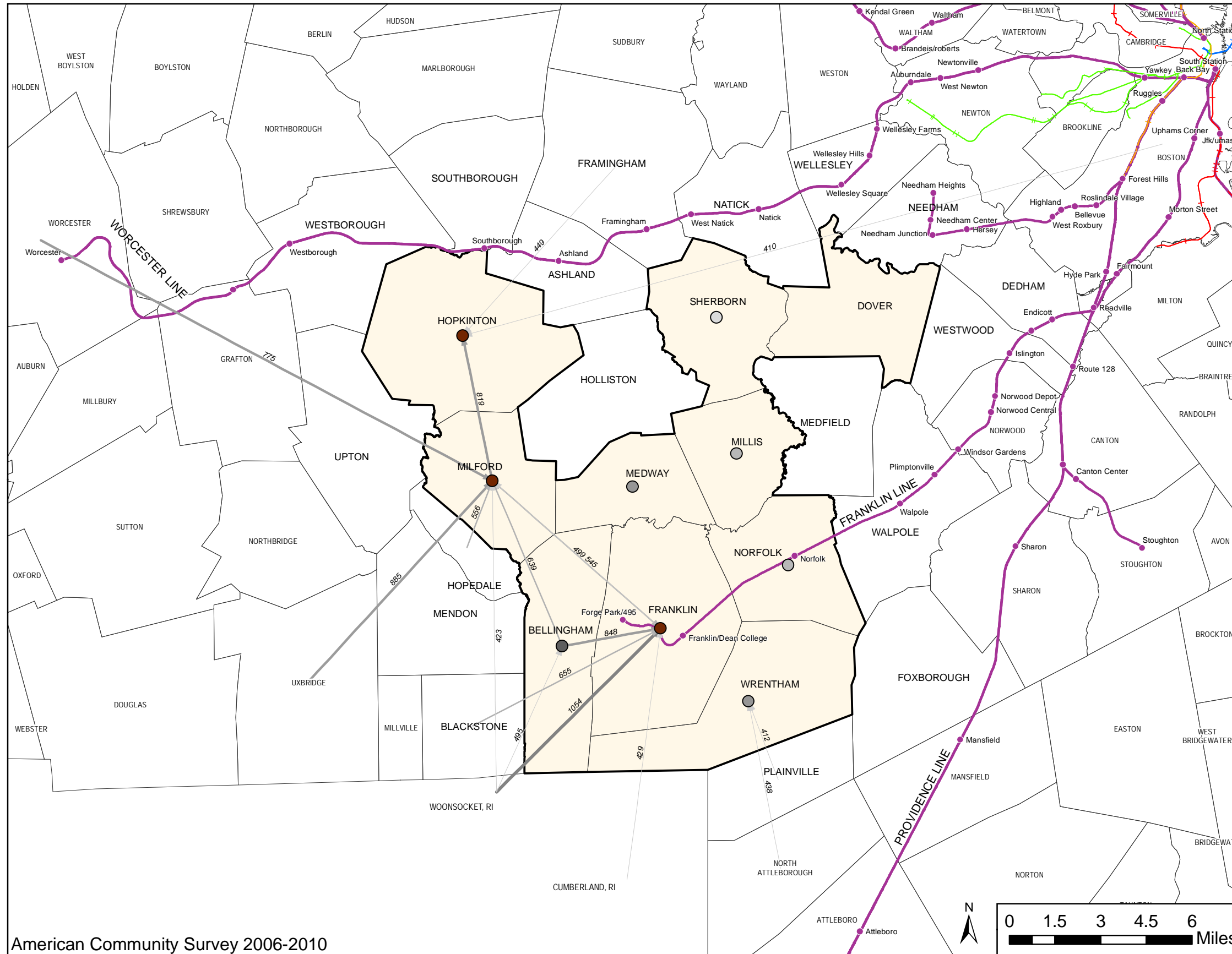


FIGURE 10
Home to Work Flows to SWAP
(including SWAP communities)

Intercity Flow

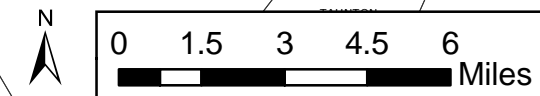
- 400 - 500
- 501 - 750
- 751 - 1,000
- 1,001 - 1,250
- 1,251 - 1,500
- More than 1,500

➔ Direction of travel

Intracity Flow

- 400 - 500
- 501 - 750
- 751 - 1,000
- 1,001 - 1,250
- 1,251 - 1,500
- More than 1,500

American Community Survey 2006-2010



Home-to-work flows of more than 400 commuters from communities outside of SWAP to communities within SWAP include Boston to Hopkinton, Framingham to Hopkinton, Worcester to Milford, Uxbridge to Milford, Hopedale to Milford, Blackstone to Franklin, North Attleborough to Wrentham, and Plainville to Wrentham. Trips of 400 or more are made from Woonsocket, Rhode Island to Franklin, Bellingham, and Milford each, while more than 400 riders commute from Cumberland, Rhode Island to Franklin.

1.6 MAJOR TRIP ACTIVITY CENTERS AND TRIP GENERATORS IN SWAP COMMUNITIES

Employment data from the Census, major activity centers identified by MAPC, and responses to questionnaires completed by planners from SWAP communities were reviewed to identify activity centers and potential major trip generators in SWAP communities. Examples of activity centers include major employers, schools, government offices, large retail complexes, and concentrations of smaller retail outlets. Figure 1, referenced earlier, shows the locations of major activity centers in SWAP communities. The Milford Regional Medical Center and the Milford Courthouse were specifically identified by planners from SWAP communities as facilities of regional significance. Other major activity centers in the SWAP subregion include:

- Dean College is a major activity center in the town center of Franklin.
- EMC Corporation is a major employer in Hopkinton and Franklin.
- Large retail commercial centers are found along Route 495 in Bellingham and Milford.
- Wrentham Village Premium Outlets is a large center of commercial activity and a large employment area in Wrentham.

Chapter 2

Potential New or Modified Fixed-Route Transit Services

2.1 POTENTIAL NEW TRANSIT SERVICES

The review of population patterns, activity centers, and commuter flows, when compared to existing transit options, suggests that several new or modified transit services can be considered in the SWAP area. Each of these services is examined in the subsections that follow and are displayed in Figure 11.

2.1.1 Full-Time Service on MWRTA Route 6 Milford-Framingham

MWRTA presently operates a peak-hour extension of their Route 6 Holliston-Framingham service into Milford, with one AM and one PM round trip operating between Milford and Framingham. Because Milford is not a member of MWRTA, the authority only operates a small amount of service. There are enough passengers boarding and alighting in Milford to generate farebox revenue to cover the added costs of operating the two round trips in Milford. Even with the limited service provided, MWRTA reports 20-to-25 passengers boarding from Milford each day.

The commuter flow data in section 1.5 shows Milford-Framingham to be one of the heaviest town-to-town commuter flows in the SWAP region. The demographic data in section 1.4 indicates that Milford has characteristics that could support fixed-route transit service such as residential density, major regional employers, and high percentages of residents that are either unable to drive or do not have access to an automobile. The community characteristics, commuter flow data, and relatively high demand for the limited service that now exists all support the potential for expanded Milford-Framingham bus service to generate reasonable ridership. A full schedule would include operating midday service and expanding commuter-period service beyond the minimal service now operated. MWRTA estimates that the annual cost to Milford to support a full service would be \$250,000.

2.1.2 Millis-Norfolk Commuter Rail Station Shuttle

GATRA, working with the Medway Council-on-Aging, operates a Medway-Norfolk station shuttle. The route operates through a portion of Millis but does not stop in Millis. Service to Millis could be provided by modifying the existing Medway shuttle route to include a stop in Millis, or operating a new independent service between Millis and Norfolk station.

Commuter rail departure times going toward Boston in the morning peak period are 5:19, 5:54, 6:19, 6:49, 7:14, and 7:59 AM. In the evening, peak-period trains arrive at Norfolk from Boston at 4:47, 5:10, 6:04, 6:38, and 7:05 PM.

A new separate Millis-Norfolk shuttle (not part of the existing Medway shuttle) could be scheduled with one vehicle to meet three of the morning departures and three of the evening arrivals. Approximately six vehicle hours of service per day would be required to operate the service. The 2011 National Transit Database costs per hour reported by GATRA were \$73.75 for fixed-route service and \$49.09 for demand-response service. At that cost, operating a fixed-route service six hours a day for 250 weekdays would result in an annual operating cost of approximately \$110,625 for a separate service. Any fare revenue collected could be subtracted from the total costs to lower the assessment that would be required to fund the service. Millis presently pays a \$40,000 assessment to the MBTA. If Millis were to join GATRA, the GATRA assessment could be subtracted from the MBTA assessment with Millis paying the difference as an additional assessment cost.

Modifying the existing Medway service to include a stop in Millis would have lower annual costs than operating a new separate route; however it could potentially add travel time for existing Medway riders and could result in capacity problems with the small-sized vehicle now utilized. If Millis contributed toward the cost of a combined service, however, it could potentially cover the added costs of operating a larger vehicle.

Millis is presently not a member of GATRA and would need to join the district to arrange for either an added stop on the existing Medway service or a new separate shuttle route.

2.1.3 Wrentham-Norfolk Station Shuttle

The commuter rail survey data showed 168 riders from Wrentham, with boardings split primarily between Franklin, Norfolk, and Walpole station. Norfolk had the largest number of Wrentham commuters boarding of the three stations. A shuttle bus to Norfolk station from Wrentham would be the most direct service that would also serve a reasonably large portion of Wrentham. Wrentham has identified parking availability at the former Central School parking lot at the intersection of Routes 140 and 1A. If this was available for shuttle commuters, it would expand the potential market of the shuttle beyond those commuters within a reasonable walking distance of the shuttle route.

Commuter rail departure times toward Boston in the morning peak period are 5:19, 5:54, 6:19, 6:49, 7:14, and 7:59 AM. In the evening, peak-period trains arrive at Norfolk from Boston at 4:47, 5:10, 6:04, 6:38, and 7:05 PM.

A new Wrentham-Norfolk station shuttle could be scheduled with one vehicle to meet three of the morning departures and three of the evening arrivals. Approximately six vehicle hours of service per day would be required to operate the service. The 2011 National Transit Database costs reported by GATRA were \$73.75 per hour for fixed-route service and \$49.09 for demand-response service. Assuming this rate, a fixed-route service operating six hours a day for 250 weekdays would result in an annual operating cost of approximately \$110,625. Any fare revenue collected could be subtracted from the total costs to lower the assessment that would be required to fund the service.

As an alternative to providing a shuttle to Norfolk station, Wrentham could explore a GATRA service to Franklin/Dean College station. While a Franklin shuttle route would be an indirect route for Wrentham residents living in the eastern part of the community, such a service could potentially be operated as an extension of the existing Franklin local service provided by GATRA. Operating the route as a combined Franklin/Wrentham service could potentially reduce the costs to Wrentham compared to a stand-alone shuttle service, while also allowing Franklin to expand the service at no added cost to that community.

2.1.4 Hopkinton Commuter Rail Shuttle

MWRTA presently operates Route 5 service between Hopkinton and Framingham via Ashland, which connects with the MBTA commuter rail system at Framingham station. Commuter rail passenger survey results did not show any commuters regularly using this route to connect to the

commuter rail. The survey also showed that commuter rail riders from Hopkinton primarily access commuter rail at Southborough or Ashland stations, with numbers close to evenly split between 87 boardings at Southborough and 85 at Ashland. Boardings of commuters from Hopkinton at Framingham station were only 16. A direct shuttle from Hopkinton to the Ashland or Southborough stations, specifically scheduled to meet commuter rail trains, could potentially be a more attractive service for commuter rail access than can be offered by the Route 5. It should be noted, however, that town of Framingham LIFT bus service (a predecessor to MWRTA) briefly operated a route between Milford, Hopkinton, and Southborough station when the station first opened in 2002. The service was discontinued after a brief period of operation because of low ridership. In the decade since then, commuter rail ridership has matured and interest in a direct shuttle from Hopkinton, specially timed to train departures and arrivals may be greater.

In the morning peak period, trains depart Southborough at 5:16, 5:43, 6:23, 7:03, 7:28, and 7:58 AM. The same trains depart Ashland five minutes later. In the evening peak period, trains arrive at Ashland at 4:48, 5:46, 6:29, and 7:00 PM. The same trains arrive at Southborough five minutes later.

One vehicle could be scheduled to meet three of the morning train departures and three of the evening arrivals. Approximately six vehicle hours of service per day would be required to operate the service. The 2011 National Transit Database costs per hour reported by MWRTA were \$66.87 per hour for fixed-route and \$58.84 for demand-response service. Assuming this rate, a fixed-route service operating six hours a day for 250 weekdays would result in an annual operating cost of approximately \$100,305. Any fare revenue collected could be subtracted from the total costs to lower the assessment that would be required to fund the service.

Given the low residential density of Hopkinton, remote parking within the community would need to be identified for use by shuttle passengers to attract enough riders to sustain the service.

2.1.5 Extend Existing GATRA Attleboro-Plainville Route to Wrentham Village Premium Outlet Mall

GATRA presently operates their Route 14 service between Attleboro, North Attleborough, and Plainville. Buses leave Attleboro weekdays at 5:40 AM, 6:45 AM, 8:00 AM and then every 60 minutes until 6:00 PM. Saturday service operates from 9:00 AM to 4:00 PM. Service returning

from Plainville departs weekdays at 6:15 AM, 7:30 AM, and then every 60 minutes until 6:30 PM. Travel time is 25 minutes and connections are made at Attleboro to the MBTA Boston-Providence commuter rail line and other GATRA bus routes, including service to Taunton.

Route 14 could be extended from its present terminal in Plainville to the Wrentham Village Premium Outlet via East Bacon Street (highway route 106) and South Street (highway route 1A). This would add approximately 4.3 miles each way or 8.5 miles round trip.

The commuter flow data summarized in section 1.3 shows 400 or more daily commuters each from North Attleborough and Plainville. A large number of these commuters most likely are traveling to work at the outlet stores complex.

If GATRA desired to maintain at least a 60-minute frequency on the existing service, it would be necessary to add an additional vehicle to the route to accommodate the extension to Wrentham Village. If the extension was operated all day on all trips, the hours of service provided each day would increase by 13. As an alternative, service could be restricted to trips designed around the most common employee shift times at the outlet mall, such as a trip arriving at 9:00 AM and a corresponding return trip at 7:00 PM.

The 2011 National Transit Database costs per hour for GATRA were \$73.75 for fixed-route and \$49.09 for demand-response service. Adding 13 hours of additional weekday service for full-day service to Wrentham Village would cost close to \$240,000 per year. Adding a small amount of service, two hours per day, would cost close to \$37,000. The potential increase in the town assessment could be reduced or eliminated if Wrentham Village Outlets subsidized all or part of the added cost to provide the service.

2.1.6 Operate Midday South Bellingham-North Bellingham Service

GATRA, with the Bellingham Council-on-Aging, operates two peak-period shuttle routes from Bellingham to the Forge Park commuter rail station. While this service is primarily useful for commuters, it provides limited options for students, seniors, or other travelers making local trips within the community. Midday service from 9:00 AM to 4:00 PM along a similar route as the shuttle service would increase mobility options for non-commuters. Approximately seven additional hours of service would be required to operate a one-vehicle north-south shuttle. Because the existing service utilizes equipment that is currently used by the Council-On-Aging for other purposes during midday, GATRA and Bellingham

would need to identify either additional equipment or a different contractor to operate a midday fixed route.

A full-time service operating to south Bellingham could also potentially connect with RIPTA service just across the state line in Woonsocket, Rhode Island. Commuter flow data summarized in section 1.5 shows that Bellingham, Franklin, and Milford each generate commuter flows of more than 400 riders a day from Woonsocket.

The 2011 National Transit Database costs per hour reported by GATRA were \$73.75 for fixed-route and \$49.09 for demand-response service. Annual costs for adding seven hours of fixed-route service at this rate would be close to \$130,000. Nearly the full value of the town's MBTA assessment is presently used toward the town's existing assessment with GATRA. Any additional service added would require an increase in the GATRA assessment above and beyond the value of the town's MBTA assessment.

2.1.7 Expand Franklin Area Bus Hours of Service to Meet Commuter Rail

The GATRA Franklin Area bus service operates from 6:40 AM to 5:36 PM. The route serves the Franklin commuter rail station. The last northbound trip to stop at the station departs the station at 4:50 PM, while the last southbound trip departs near the station at 5:21 PM. This is too early to meet peak commuter rail arrivals from Boston, which arrive at 4:55, 5:18, 6:12, 6:44, and 7:13 PM. Adding a later round trip would make it viable for Franklin residents to utilize the bus as a feeder to the commuter rail station. In the morning, the present schedule allows for some connections to peak-period trains with a northbound bus arriving at the station at 6:49 AM, which allows a connection to a 7:07 AM train; while a southbound bus arrives at Dean College at 7:20 AM, allowing for a connection to a 7:52 AM departure to Boston.

As noted in section 1.3.3, there are a considerable number of Franklin area residents using the MBTA commuter rail service. As also noted in section 1.5, Franklin to Boston commuter trips represent the heaviest flow of work trips from a location in SWAP to a location outside of SWAP. Given the large number of existing riders, a later trip to serve as a commuter rail feeder might generate additional ridership. This trip would require adding at least one hour of service to the present schedule.

There is presently only one outbound commuter rail train from Boston scheduled to arrive in Franklin during the AM peak period. The train

arrives Franklin at 8:43 AM. A northbound bus departs the station at 8:52 AM, allowing for a connection. Without later evening service for return trips however, it is not practical for commuters from Boston to utilize the GATRA service to travel from the commuter rail station to an employer along the GATRA route. If Franklin can identify businesses that would benefit from the expansion of the bus service to better meet the schedule of reverse commuters, those businesses could be approached to share the cost of adding the additional hour of service in the evening as a benefit to their employees.

2.1.8 Connect Franklin, Bellingham, and Milford

The GATRA Franklin area bus service extends to shopping areas in Bellingham only on Saturday. Other than the commuter shuttles operating from Bellingham to Forge Park station, this presently is the only fixed-route service connecting the two communities. The greatest number of town-to-town commuter trips made between two SWAP communities are trips between Franklin-Bellingham, Franklin-Milford, and Bellingham-Milford. The courthouse and hospital in Milford have been identified by planners from SWAP communities as two facilities that attract regional activity, while shopping areas in Bellingham have also been identified as areas with significant activity. Extending the existing Franklin service to Bellingham on weekdays would provide part of the link to connect the three communities. If full-time transit service is initiated between Milford and Framingham, a further extension of that service into Bellingham would allow for connections to Franklin-Bellingham service and allow for multiple inter-municipal trip possibilities such as Franklin-Framingham and Holliston-Bellingham.

2.1.9 Connect Bellingham, Medway, and Holliston

MWRTA presently operates Route 6 Holliston-Framingham service. Except for two peak-period trips, which are extended to Milford, the route terminates at Mission Spring, near the Holliston-Medway border.

If a full-time north-south service was initiated in Bellingham (described in section 2.1.6), a further extension of that service into Holliston would allow for connections between the GATRA service and the MWRTA service.

2.1.10 Operate Local Service in Milford

MWRTA presently operates a peak-hour extension of their Route 6 Holliston-Framingham service into Milford. As described in section 2.1.1, restoring a more extensive service on this route should be

considered. The population density and demographics within Milford further suggest the potential for local service within the community, either operated as an extension of the Route 6 Milford-Framingham service or as a separate route. The district courthouse and Milford Regional Medical Center have been identified as two potential trip generators for both local and regional trips.

2.2 POTENTIAL ADDITIONAL LONG-RANGE EXPANSION

Long-term expansion of transit service in the SWAP subregion beyond the fixed-route services considered in section 2.1 could include the following new services that were identified by planners in the SWAP communities as potential corridors of interest.

- Service in Sherborn connecting to adjoining communities
- Service connecting Wrentham to Bellingham and Franklin
- Local service along Route 109 connecting Millis, Medway, and Milford

The demographic and commuter flow data in section 1 support the proposals identified in section 2.1. Given potential constraints in available funding, expanding service beyond the corridors identified in section 2.1 to areas where the potential for fixed-route transit service to succeed could be more challenging may need to wait until a later date to be implemented.

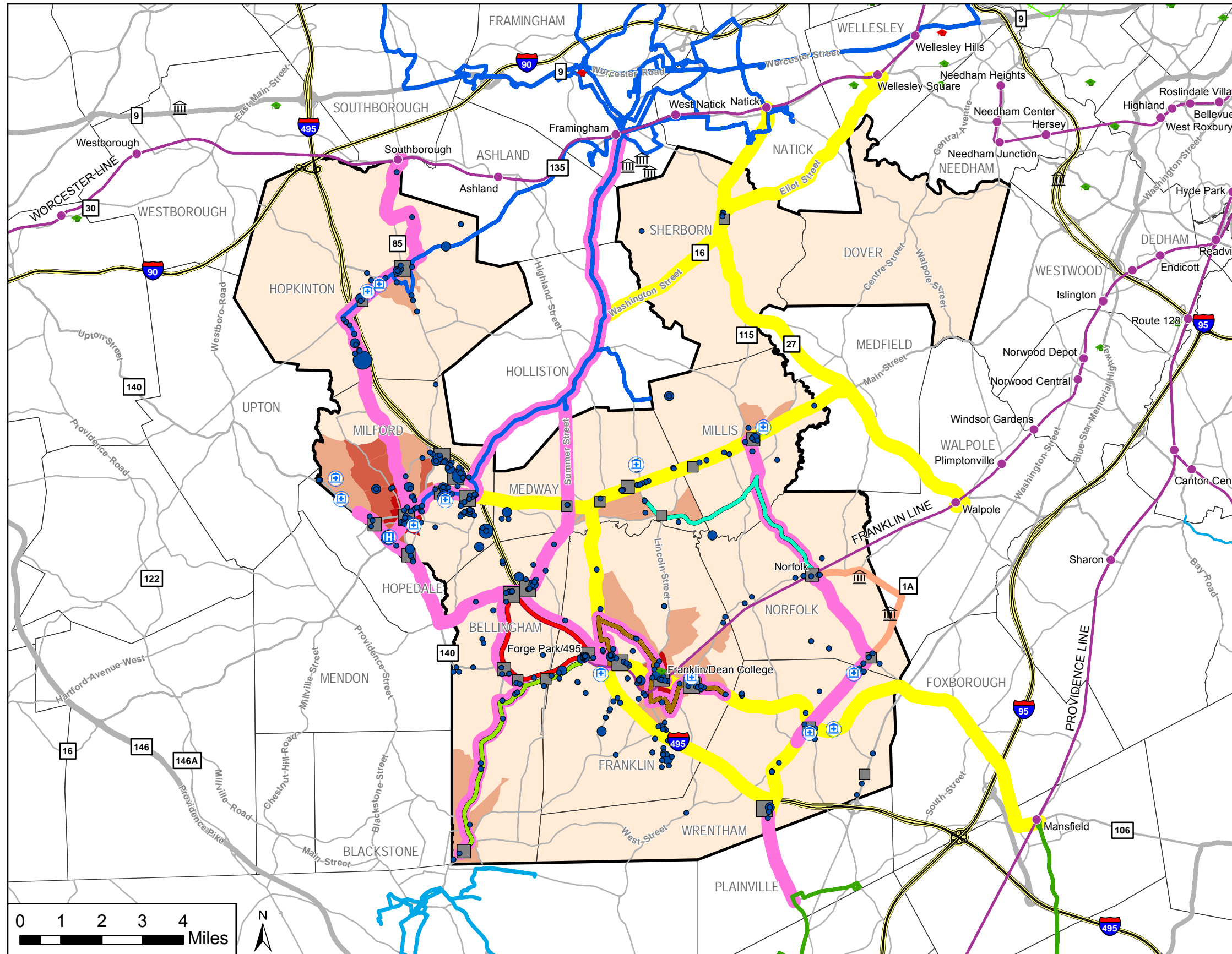
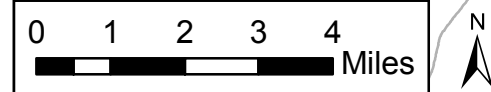


FIGURE 11
Existing Conditions
and Long-Term Vision

- Planned JARC-funded route
 - Potential short-run service change
 - Long-term route
- Greater Attleboro Taunton RTA**
- North Bellingham Shuttle
 - South Bellingham Shuttle
 - Franklin Area Bus
 - Medway MBTA Shuttle
 - Other GATRA routes
- Other Public Transportation Agencies**
- All MWRTA routes
 - All other routes
 - MBTA commuter rail lines
- Population per Square Mile**
- Less than 1,500.1
 - 1,500.1 - 3,000.0
 - 3,000.1 - 5,000.0
 - More than 5,000.0
- Employers with 25 or More Employees**
- 25-160
 - 161-670
 - 671-1,500
 - 1,501-5,000
- Commercial Centers**
- Small
 - Medium
 - Large
- Other Generators**
- Acute-care hospital
 - Long-term-care residence
 - Private college/university
 - Public college/university
 - Prison



2.3 FUNDING FOR SERVICE

With the exception of Milford, all of the SWAP communities are within the MBTA district and are charged an annual assessment. Those communities that are members of MWRTA or GATRA can subtract the RTA assessment from the MBTA assessment. If the RTA assessment is equal to or larger than the MBTA assessment, a community can allocate the entire MBTA assessment towards the RTA assessment and pay an additional amount to the RTA if required. Based on the most recent FY 2013 “cherry sheets”² provided by the Commonwealth Department of Revenue, MBTA and RTA assessments for SWAP communities are as follows:

- Bellingham: \$106,169 assessment from the MBTA, of which \$105,701 was subtracted for GATRA and \$468 remained for the MBTA.
- Dover: \$118,127 assessment from the MBTA. Dover has since joined MWRTA but was not yet a member at the time FY 2013 data was generated by the state.
- Franklin: \$205,489 assessment from the MBTA, of which \$182,344 was subtracted for GATRA and \$23,145 remained for the MBTA.
- Hopkinton: \$97,006 assessment from the MBTA, of which \$8,766 was subtracted for MWRTA and \$88,240 remained for the MBTA.
- Medway: \$82,790 assessment from the MBTA, of which \$68,210 was subtracted for GATRA and \$14,580 remained for the MBTA.
- Millis: \$40,860 assessment from the MBTA, none of which was subtracted for an RTA, as Millis is not a member of a regional transit authority.
- Norfolk: \$237,243 assessment from the MBTA, of which \$65,265 was subtracted for GATRA and \$171,978 remained for the MBTA.
- Sherborn: \$26,824 assessment from the MBTA, of which \$1,985 was subtracted for MWRTA and \$24,839 remained for the MBTA.

² The cherry sheet is the official notification by the Commissioner of Revenue to municipalities and school districts of estimated state aid to be paid and charges to be assessed during the next fiscal year.

SWAP Regional Public Transit Feasibility Study

- Wrentham: \$71,247 assessment for the MBTA, of which \$70,795 was subtracted for GATRA and \$452 remained for the MBTA.

Since it is not in the MBTA district, Milford would need to pay a new assessment to an RTA if it were to join one. Bellingham and Wrentham are paying GATRA close to 100% of their annual MBTA assessment. Any new service beyond what GATRA presently provides to these communities would increase their total assessment.

Chapter 3

Steps for Implementation

3.1 NEXT STEPS TO IMPLEMENT RTA SERVICES

As described in Chapter 1, most of the communities in SWAP are members of a regional transit authority. Dover, Hopkinton, and Sherborn are members of MWRTA, while Bellingham, Franklin, Medway, Norfolk, and Wrentham are members of GATRA. Only Millis and Milford are not members of a regional transit authority; and Milford also is the only SWAP community that is not a member of the larger MBTA district. Service proposals analyzed in this study include a potential GATRA service operating in Millis, and expanded MWRTA service in Milford. A key initial step in implementing these services would be for the communities to join their respective RTAs.

For those communities that already are members of MWRTA or GATRA, each town appoints a member to the advisory board for the RTA. The RTA advisory board member, the Town Planner, or Town Administrators/Managers can approach the RTA administration to discuss new or changed services within the community. While cost estimates for new services in this study are based on annual costs for MWRTA and GATRA as reported to the FTA National Transit Database, these should be considered only as rough estimates. Each RTA should be approached to determine a more specific cost and potential operating plan. Because several of the proposals suggested in this study involve services that would serve multiple towns, the ability to pool together resources for a combined service might lower the cost for each individual community.

To prepare for engaging an RTA in a local or regional conversation surrounding transit service, the community may want to address some or all of the following points:

- What type of service does the town want to initiate? And is there an identified need in the community for this service?
- Is this a local or regional service? If regional, are the other partners engaged in the process?

- How will this service be funded (assessment, public/private partnership, town-funded, etc.)?
- Has the town identified a potential route? If it involves a park-and-ride component, has the town identified a parking location? And has the town had any discussions with the property owner?
- Have any surveys been done that show that interest in the service exists?

Obtaining the answers to these questions ahead of any meeting with an RTA can help foster a more direct dialogue, and possibly lead to more rapid implementation of the service.

3.2 OTHER APPROACHES FOR COMMUNITY COORDINATION

In 2010, MAPC began working with the Minuteman Advisory Group on Interlocal Coordination (MAGIC) subregion to investigate possible models for a coordinated regional approach to improving mobility options. Based on demographics and current development patterns in the 13 towns that comprise MAGIC, it was determined that the traditional public transportation approach may not be cost effective or responsive to the various needs of residents and employers. The idea that did gain traction, and which was ultimately implemented, was to work on coordinating and eventually combining the various public and private transportation services that already exist in the subregion. This includes council-on-aging van services, employer shuttles, and town owned and operated services.

In 2011, the Town of Acton partnered with several other towns and one business to apply for a Community Innovation Challenge (CIC) grant through the Commonwealth of Massachusetts to work on a regional model for sharing these services. The grant application was funded, which allowed the towns to hire a consultant to work on a regional model for sharing and coordinating these transportation services. In 2012, the group was successful in securing another CIC grant through the Commonwealth and was able to formally establish “CrossTown Connect” as the official organization that would regionalize and coordinate the sharing of several town and business shuttle and van services. CrossTown Connect is a transportation management association (TMA) that relies on both public and private financial participation. CrossTown Connect will serve as a connection to commuter rail stations for employees/employers in the subregion, and will also provide transportation connections to hospitals, shopping centers, municipal buildings, downtowns, and other key destinations

inside and outside the subregion for residents of participating communities.

While this unique public/private partnership model is still in the early stages of implementation in the MAGIC subregion, it does offer another model for communities in the Commonwealth that are looking to coordinate and establish more inter-town routes. Bringing larger employers into the fold also allows municipalities to share costs across a larger group of stakeholders, thereby lowering the costs for all participants. Although the consultant hired through the CIC grant program is completing a significant portion of the work to implement CrossTown Connect, town staff members have been involved at all levels. Coordination among the following parties in each town has been critical:

- Board of Selectmen
- Town Manager
- Legal Staff
- Financial Staff
- Planning Staff
- Council-on-Aging Directors, Drivers, and Dispatchers

The Town of Acton, which took the lead on authoring and coordinating the CIC grant applications, has played a critical leadership role. While all the towns involved in the grant provide input at critical stages in the process, Acton is the day-to-day leader that works with the consultant team to implement CrossTown Connect.

3.3 SUMMARY: COMMUNICATION—THE KEY TO BETTER COORDINATION

In conclusion, after analyzing the existing services, commuter flows, activity centers, demographics, and so forth in the SWAP subregion, it is clear that in order to increase ridership and provide better connections to vital facilities, good communication is the key to achieving desired results.

Equally important is for each town to have the support of an advocate, a partner that not only would help them sort out and articulate their needs, but also assist in promoting them. Organizations like the RTAs, and hybrid models, such as CrossTown Connect are well poised to be such advocates. Regardless of which model of support a town chooses to help implement new services, each town needs to be clear about its needs prior to engaging in discussions about funding and service.

SWAP Regional Public Transit Feasibility Study

Finally, it is important to have an ongoing regional working group in place that can host continued discussions about each town's desires, plans, and progress. The presence of such a group can enhance the communication and coordination that already is taking place. Ultimately, it can help turn *thoughts* about improving mobility into *solutions* for improving mobility for residents and employees alike in the subregion.