

10 STATE DEMOGRAPHICS AND PROJECT IMPACTS ANALYSIS

INTRODUCTION

The GIS Services unit within the MassDOT Office of Transportation Planning (OTP) is responsible for developing and updating maps which depict the Title VI populations of the Commonwealth. With MassDOT's triennial Title VI Program submissions, these maps are overlaid with MassDOT's state and federal funded transit projects with a three year look-back period to identify any potential disparities in project distribution vis-à-vis Title VI population concentrations. In the following sections of this chapter, those maps and narrative analyses are presented.

Please note: The analysis of the distribution of FTA funds contained within this chapter includes only project-related state and federal transit investments. For an analysis of the distribution of state-managed FTA funds, please refer to Chapter 11.

ONLINE TITLE VI TOOL

MassDOT's Office of Diversity and Civil Rights and the Office of Transportation Planning are currently collaborating on the development of an online map-based Title VI related application. The application is public-facing and available to all who are interested. Its intended use is to inform MassDOT staff, consultants, MPO/RPA staff, RTA staff, etc. of the Title VI demographics of any given area of the Commonwealth to better inform public outreach strategies to promote inclusivity and avoid barriers to public participation in MassDOT programs, services, and activities. The current beta version of the tool, which is still in a testing phase, can be accessed here:

<http://services.massdot.state.ma.us/maptemplate/languagetracts/>

The final version of the tool is meant to feature three (3) key components:

- The concentration of individuals with limited English proficiency

- Geographically-based contact information for stakeholder individuals and organizations
- Accessible public meeting locations

At present, the tool features the first two key components (languages and contacts). The third component (accessible meeting locations) is under development. The source data for the language component is the same information MassDOT draws upon for its LEP Four-Factor Analysis, such as US Census data and American Community Survey data. The source data for the list of available contacts is MassDOT's own outreach database, combined with the outreach databases of the MPOs/RPAs as well as any individuals or organizations that have opted-in to receive MassDOT announcements. During 2013, ODCR tasked the MPOs/RPAs with screening the entire list of registered not-for-profit organizations in the Commonwealth to identify individuals and organizations not currently included in MassDOT and/or MPO/RPA outreach that should be and that represent a Title VI population(s). The result of this effort is a combined statewide Title VI outreach list that is nearly 5,000 contacts strong.

The user of this application is envisioned as a recipient or subrecipient staffer or consultant with public outreach responsibilities, both project-related and statewide. This tool allows the user to select a part of the state (project locale, potential public meeting location, transit service area, etc.) and be provided with the three key pieces of information described above – languages other than English present in the area and concentrations, contact information to as diverse an array of individuals and community based organizations as can be identified in the area that should be included in public outreach, and potential meeting locations that have been confirmed as accessible (by MassDOT staff, consultant staff, the staff of the Massachusetts Office on Disability, the staff of the Massachusetts Secretary of the Commonwealth's Office, a regional Independent Living Center covering the area, and/or a local Disability Commission) to individuals with disabilities.

The incorporation of this tool in MassDOT and subrecipient public outreach activities helps to ensure that Title VI populations are included in federally assisted programs, services, and activities as they are being planned, rather than relying only on analyzing federal funding distribution across Title VI populations after-the-fact. By providing a tool that can be used to plan and achieve inclusive outreach, the after-the-fact analysis becomes an important measure of

effectiveness of these strategies and any trends identified through it can help MassDOT and subrecipients refine outreach strategies to reach all populations across the Commonwealth.

DEMOGRAPHIC PROFILE OF THE STATE

Appendix 10-A, 10-B, and 10-C contain maps that depict the demographic profile of the State.

Please Note: for more detailed maps of concentrations of limited-English-proficient populations by language, refer to Chapter 6.

TRANSIT PROJECTS INVESTMENTS AND TITLE VI POPULATIONS

Appendices 10-D, 10-E, and 10-F contain maps that depict the distribution of transit project investments across Title VI populations statewide. Below is an analysis of that data to identify any disparities in funding distributions across Minority, Low-Income, and limited-English-proficient populations.

Further analysis will need to be done to better identify the types of transit projects that could provide a benefit system-wide.

Future analysis may include such variables as:

- Average vehicle age
- Project type
- Vehicle distribution
- Expenditures
- Project cost

The following types of transit projects were excluded from analysis because they are considered demand response:

- Para Transit

- Van/minibus
- MAP-21

Analysis of Transit Project Distribution across Minority and Low-Income Populations

Overall during the years of 2011 through 2013, over 92.1% of state and municipal transit projects geographically intersected low-income and/or minority census block groups. Statewide over 91.0% of all low-income and/or minority block groups were intersected by transit projects.

Because the majority of transit projects are geographically spread out over the entire transit system, a resulting majority of low-income and/or minority census block groups are intersected by the systemwide transit projects. For example, the replacement of buses on a transit system affects the entire transit network, and thus any low-income and/or minority census block groups along the bus routes.

Altogether there were only two low-income and/or minority census block groups that did not intersect an urban area. Overall systemwide transit projects in expanded transportation urbanized areas can account for the high impact between transit projects and low-income and/or minority census block groups.

Therefore, the preliminary analysis shows that low-income and minority block groups are served well by the existing transit projects over the past 3 years. This is especially true in the expanded transportation urbanized areas given that the block groups are predominantly located in urban areas.

Analysis of Transit Project Distribution across Limited English Proficient Populations

Overall during the years of 2011 through 2013 over 90.5% of state and municipal transit projects geographically intersected limited-English proficiency low-income census block groups. Statewide over 93.3% of all limited-English-proficiency block groups were intersected by transit projects.

Because the majority of transit projects are geographically spread out over the entire transit system, a resulting majority of limited-English-proficiency block

groups are intersected by the system wide transit projects, especially in the expanded transportation urban areas. For example, the replacement of buses on a transit system geographically affects the entire transit network, and thus any limited-English-proficiency block groups along the bus routes.

Altogether there was only one limited-English-proficiency block group that did not intersect an urban area. Overall systemwide transit projects in expanded transportation urbanized areas can account for the high impact between transit projects and limited-English-proficiency block groups.

Therefore, the preliminary analysis shows that limited-English-proficiency block groups are served well by the existing transit projects over the past 3 years. This is especially true in the expanded transportation urbanized areas given that the block groups are predominantly located in urban areas.

DISPARATE IMPACT ANALYSIS

The following disparate impact analysis was produced by MassDOT's Office of Transportation Planning in June 2014. It is intended to identify any disparities in the distribution of impacts of transit investments across Title VI populations since MassDOT's last triennial Title VI Program submission to FTA in 2011.

Federal Transit Program Projects: Disparate Impact Analysis on Title VI Populations in Massachusetts

MassDOT Office of Transportation Planning
June 2014



TITLE VI DISPARATE IMPACT ANALYSIS FOR FEDERAL TRANSIT PROJECTS IN MASSACHUSETTS

BACKGROUND

As a recipient of federal funds, as well as a distributor of funds to sub recipients such as Metropolitan Planning Organizations (MPOs), the Massachusetts Department of Transportation (MassDOT) complies with Title VI of the Civil Rights Act of 1964 (Title VI) in all of its work. Title VI prohibits discrimination based upon race, color, and national origin. Specifically, 42 USC 2000 states that *“No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”*

PHASE I

On March 31, 2014, MassDOT submitted to FTA a collection of maps depicting the distribution of FTA Program funded transportation projects for the previous three years (January 2011-December 2013). That research concluded that there was equitable access to services in areas of high Limited English Proficiency (LEP), high minority areas and low income areas. The summed analysis reads as follows:

“The preliminary analysis shows that limited English proficiency block groups are served well by the existing transit projects over the past 3 years. This is especially true in the expanded transportation urbanized areas given that the block groups are predominantly located in urban areas.” ‘Overall system wide transit projects in expanded transportation urbanized areas can account for the high impact between transit projects and low income and/or minority census block groups.’

The FTA subsequently asked for a Disparate Impact Analysis:

“Submit an analysis of impacts identified in the Demographic Maps that identifies any disparate impacts on the basis of race, color, or national origin. If such disparate impact exists, determine whether there is a substantial legitimate justification for the policy that resulted in the

disparate impacts, and if there are alternatives that could be employed that would have a less discriminatory impact (Chapter V, 2, e).”

PHASE II ANALYSIS

In order to understand whether there had been any disparate impacts to minority populations, a second phase of analysis was conducted. The FTA Title VI guidelines define Disparate Impact as an impact that disproportionately affects members of a group identified by race, color, or national origin - often resulting from what might appear to be a neutral policy or practice. This Title VI investigation uses a standard “20% below” threshold for the criterion of defining where a disparate impact may occur. Specifically, this means that service provided to a subject population and area must be less than 80% of the larger subject population and area being analyzed to be considered as a potentially significant – and potentially problematic – difference in service provision. In places where this criterion is clearly exceeded in the initial analysis (falling appreciably below the threshold), other factors then need to be examined to determine if a disparate impact has indeed occurred.

METHODOLOGY

A GIS-based approach was used in the disparate impact analysis to compare the distribution of benefits on all the FTA projects received by the minority/non-minority populations. For this analysis, census blocks were used to gather the minority data. The subject populations and areas were established with a one-quarter mile buffer around FTA projects and the comparative populations and areas were the municipalities in which the projects were located. A quarter mile buffer was used to represent a reasonable walking distance to a transit route and as such defined the areas of service provision.

This screening analysis aims to identify potential disparate impacts by comparing the average percentage of minority populations in defined service areas with the overall percentage of minority population in each municipality where a transit project(s) was funded. The service area was analyzed for every funded route during the look back period (2011-2013), and the percentage minority population was calculated by census block along the route. All census blocks that were either fully covered or partially covered by a buffer zone were included in the analysis.

The percentage of minority population served along a route(s) was then compared to the overall percentage of the minority population within the municipality where the funded transit projects were located.

The attached table (Table 1) lists the analysis results for each municipality in the Commonwealth where at least one transit project was funded during the look back period. For comparison purposes, the table also lists the total population, total Title VI-defined minority population, and percentage minority population for all Massachusetts municipalities, regardless of funding status or history. If a municipality has no threshold-related statistics listed in the table (shown in the three right-most columns), it simply means that it had no transit projects funded during the last three years, and not necessarily that there have been no transit projects funded previously or that no transit services exist.

As an example in the table, 53% of Boston's population is minority – so the “20% below” threshold is 80% of 53%, which is 42.4%. The area defined by the quarter mile buffer of each funded transit route in the city serves a population with an average of 50% minorities. That figure is above the threshold of 42.4% for Boston, so this data shows that there is no disparate impact in Boston.

In terms of identifying potential areas of disparate impact in the table, if a municipality is listed with a negative percentage point differential between the percent minority population served versus the threshold minority percentage for the entire municipality, that municipality does not meet the threshold. These cases are highlighted in various shades of red. However, there are several cases where the point differential can be considered insignificant (less than a five percentage point difference).

In the few cases where the differential equaled or exceeded five percentage points, we considered that a significant difference and examined each situation to see if there were other factors that contribute to the result when evaluating potential disparate impact.

RESULTS AND CONCLUSION

For most all municipalities in the Commonwealth, the “20% below” threshold was met (or barely exceeded and the percentage point differential not considered

significant), so overall there appears to be a balanced program across the state with no clear disparate impacts.

In a further evaluation of instances where the threshold was not met and the significantly exceeded (5 percentage point or more differential), the following municipalities were reviewed to help understand if there was an actual disparate impact, or some other reasonable explanation for the results. These cases are listed below:

Chelsea: The threshold minority population percentage for Chelsea is 59.8% while the average percent minority population for census blocks within the FTA project buffer area is 54.8% minority. This average percent minority population is 5 percentage points below Chelsea's threshold used to identify potential disparate impacts. The buffer area in Chelsea, however, contains many census blocks of industrial areas that have very little or no population – and accordingly zero percent minority as well. Due to the method of calculation used in the screening analysis, these census blocks are treated equally with higher population blocks when generating the buffer area average, so all the zero minority percentages in the industrial areas are skewing the true average. Together, the extensiveness of the buffer area in Chelsea, the presence of significant industrial land, and the fact that the actual percent minority population within the buffer area (when not counting the unpopulated industrial areas) is above 70% – all indicate that a disparate impact is not occurring.

Norfolk: The threshold minority population percentage for Norfolk is 12.4% while the average percent minority population for census blocks within the FTA project buffer area is 5.8% minority. This average percent minority population is 6.6 percentage points below Norfolk's threshold used to identify potential disparate impacts. A large proportion of Norfolk's minority population, however, lives at the Massachusetts Correctional Institution - Norfolk. Of the 1,734 minorities living in all of Norfolk, 1,106 minorities (63.8%) reside in the 2 census blocks housing this prison – and accordingly do not have access to transit. Therefore, in the case of Norfolk, the municipal-wide minority population and comparison threshold is not representative of the minority population that is able to use transit.

Sherborn: The threshold minority population percentage for Sherborn is 5.3% while the average percent minority population for census blocks within the FTA project buffer area is 0.0% minority. This average percent minority population is

5.3 percentage points below Sherborn's threshold used to identify potential disparate impacts. Sherborn is not currently served by any transit services. However, a small area (less than 2 acres) falls within the buffer area of a bus route in an adjacent municipality (which is counted in the screening analysis). This small area is not populated. Therefore, the potential disparate impact identified in Sherborn can be discounted.

Shirley: The threshold minority population percentage for Shirley is 16.3% while the average percent minority population for census blocks within the FTA project buffer area is 8.6% minority. This average percent minority population is 7.8 percentage points below Shirley's threshold used to identify potential disparate impacts. A large proportion of Shirley's minority population, however, lives at the Massachusetts Correctional Institution - Shirley. Of the 1,472 minorities living in all of Shirley, 832 minorities (56.5%) reside in the census block housing this prison – and accordingly do not have access to transit. Therefore, in the case of Shirley, the municipal-wide minority population and comparison threshold is not representative of the minority population that is able to use transit.

Westborough: The threshold minority population percentage for Westborough is 19.9% while the average percent minority population for census blocks within the FTA project buffer area is 13.8% minority. This average percent minority population is 6.1 percentage points below Westborough's threshold used to identify potential disparate impacts. The buffer area is almost entirely comprised of land surrounding the right of way of the Framingham/Worcester Line of the MBTA's Commuter Rail. There is one station in Westborough, but the population in the buffer area around this station (which functions primarily as a park-and-ride station and not a walk-in station) is minuscule and much of the land is currently a parking lot. In this light, the underrepresentation of minorities in the Westborough buffer area is not a cause for concern. Rather, only negative impacts can be expected from proximity to Commuter Rail tracks so the underrepresentation of minorities in this area should not be considered a disparate impact.

After reviewing all percentages of minority populations near transit service across the Commonwealth, there is no apparent system wide issue producing disparate impacts. In conclusion, this analysis indicates an equitable distribution of FTA funds as well as a lack of disproportionate benefits and burdens of the transit projects those funds support across Title VI populations in the Commonwealth.

Table 1 - Disparate Impact Analysis Data

Municipality	2010 U.S. Census Population	Minority (including white Hispanic) Population	Municipality-wide Title VI Minority Population Percentage	"20% Below" Threshold to meet, by municipality (80% of total municipal-wide minority percentage)	Average Percentage Minority Population of all block groups within 1/4mi Transit Project Buffer Area	Percentage point differential: Buffer area vs. Threshold
Abington	15,985	1,368	8.6%			
Acton	21,924	5,369	24.5%	19.6%	17.7%	-1.9%
Acushnet	10,303	384	3.7%	3.0%	6.8%	3.8%
Adams	8,485	319	3.8%	3.0%	4.7%	1.7%
Agawam	28,438	2,151	7.6%	6.1%	7.4%	1.4%
Alford	494	13	2.6%			
Amesbury	16,283	804	4.9%	4.0%	4.6%	0.7%
Amherst	37,819	10,102	26.7%	21.4%	24.2%	2.8%
Andover	33,201	5,503	16.6%	13.3%	17.3%	4.0%
Aquinnah	311	137	44.1%	35.2%	35.0%	-0.2%
Arlington	42,844	7,040	16.4%	13.1%	15.5%	2.4%
Ashburnham	6,081	368	6.1%			
Ashby	3,074	120	3.9%			
Ashfield	1,737	87	5.0%			
Ashland	16,593	3,063	18.5%	14.8%	17.8%	3.1%
Athol	11,584	780	6.7%	5.4%	7.6%	2.2%
Attleboro	43,593	6,985	16.0%	12.8%	17.7%	4.9%
Auburn	16,188	1,106	6.8%	5.5%	10.1%	4.6%
Avon	4,356	741	17.0%			
Ayer	7,427	1,382	18.6%	14.9%	15.2%	0.3%
Barnstable	45,193	5,681	12.6%			
Barre	5,398	266	4.9%			
Becket	1,779	80	4.5%			
Bedford	13,320	2,136	16.0%	12.8%	15.9%	3.1%
Belchertown	14,649	1,145	7.8%	6.3%	9.6%	3.4%
Bellingham	16,332	1,347	8.2%			
Belmont	24,729	4,611	18.6%	14.9%	17.8%	2.8%
Berkley	6,411	286	4.5%			
Berlin	2,866	151	5.3%	4.2%	3.8%	-0.4%
Bernardston	2,129	59	2.8%	2.2%	3.0%	0.8%
Beverly	39,502	3,397	8.6%	6.9%	9.5%	2.7%
Billerica	40,243	4,675	11.6%	9.3%	12.2%	2.9%
Blackstone	9,026	471	5.2%			
Blandford	1,233	34	2.8%			
Bolton	4,897	320	6.5%			
Boston	617,594	327,282	53.0%	42.4%	50.0%	7.6%
Bourne	19,754	1,493	7.6%			
Boxborough	4,996	1,056	21.1%	16.9%	13.6%	-3.3%
Boxford	7,965	395	5.0%			
Boylston	4,355	334	7.7%	6.1%	12.2%	6.1%

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Braintree	35,744	5,273	14.8%			
Brewster	9,820	450	4.6%			
Bridgewater	26,563	2,941	11.1%			
Brimfield	3,609	186	5.2%			
Brockton	93,810	53,542	57.1%			
Brookfield	3,390	125	3.7%	2.9%	3.5%	0.6%
Brookline	58,732	15,692	26.7%	21.4%	22.3%	0.9%
Buckland	1,902	73	3.8%	3.1%	5.4%	2.3%
Burlington	24,498	5,106	20.8%	16.7%	18.3%	1.7%
Cambridge	105,162	39,903	37.9%	30.4%	28.7%	-1.6%
Canton	21,561	3,610	16.7%			
Carlisle	4,852	595	12.3%	9.8%	9.0%	-0.8%
Carver	11,509	587	5.1%			
Charlemont	1,266	58	4.6%	3.7%	7.1%	3.5%
Charlton	12,981	748	5.8%			
Chatham	6,125	314	5.1%			
Chelmsford	33,802	4,347	12.9%	10.3%	13.3%	3.0%
Chelsea	35,177	26,295	74.8%	59.8%	54.8%	-5.0%
Cheshire	3,235	96	3.0%	2.4%	2.2%	-0.2%
Chester	1,337	24	1.8%			
Chesterfield	1,222	33	2.7%			
Chicopee	55,298	11,360	20.5%	16.4%	16.4%	-0.1%
Chilmark	866	36	4.2%			
Clarksburg	1,702	34	2.0%	1.6%	1.4%	-0.2%
Clinton	13,606	2,722	20.0%	16.0%	18.5%	2.5%
Cohasset	7,542	288	3.8%	3.1%	0.4%	-2.6%
Colrain	1,671	70	4.2%			
Concord	17,668	2,266	12.8%	10.3%	8.2%	-2.0%
Conway	1,897	88	4.6%			
Cummington	872	28	3.2%			
Dalton	6,756	287	4.2%	3.4%	4.4%	1.0%
Danvers	26,493	1,654	6.2%	5.0%	6.7%	1.7%
Dartmouth	34,032	3,230	9.5%	7.6%	8.5%	0.9%
Dedham	24,729	3,682	14.9%	11.9%	15.5%	3.6%
Deerfield	5,125	344	6.7%	5.4%	8.0%	2.7%
Dennis	14,207	1,090	7.7%			
Dighton	7,086	317	4.5%	3.6%	4.0%	0.5%
Douglas	8,471	397	4.7%			
Dover	5,589	490	8.8%			
Dracut	29,457	3,492	11.9%	9.5%	12.1%	2.6%
Dudley	11,390	708	6.2%	5.0%	11.3%	6.4%

Municipality	2010 U.S. Census Population	Minority (including white Hispanic) Population	Municipality- wide Title VI Minority Population Percentage	"20% Below" Threshold to meet, by municipality (80% of total municipal-wide minority percentage)	Average Percentage Minority Population of all block groups within 1/4mi Transit Project Buffer Area	Percentage point differential: Buffer area vs. Threshold
Dunstable	3,179	186	5.9%	4.7%	4.6%	-0.1%
Duxbury	15,059	560	3.7%			
East Bridgewater	13,794	790	5.7%			
East Brookfield	2,183	104	4.8%	3.8%	2.8%	-1.0%
East Longmeadow	15,720	1,108	7.0%	5.6%	10.2%	4.5%
Eastham	4,956	206	4.2%	3.3%	9.4%	6.1%
Easthampton	16,053	1,376	8.6%			
Easton	23,112	2,327	10.1%			
Edgartown	4,067	517	12.7%			
Egremont	1,225	54	4.4%			
Erving	1,800	72	4.0%	3.2%	2.9%	-0.3%
Essex	3,504	135	3.9%	3.1%	3.4%	0.3%
Everett	41,667	19,351	46.4%	37.2%	44.8%	7.6%
Fairhaven	15,873	839	5.3%	4.2%	3.6%	-0.7%
Fall River	88,857	14,750	16.6%	13.3%	14.4%	1.2%
Falmouth	31,531	2,919	9.3%			
Fitchburg	40,318	12,816	31.8%	25.4%	32.1%	6.7%
Florida	752	26	3.5%			
Foxborough	16,865	1,400	8.3%			
Framingham	68,318	23,693	34.7%	27.7%	35.9%	8.2%
Franklin	31,635	2,709	8.6%	6.9%	9.4%	2.6%
Freetown	8,870	390	4.4%	3.5%	7.2%	3.7%
Gardner	20,228	2,633	13.0%	10.4%	10.2%	-0.2%
Georgetown	8,183	351	4.3%			
Gill	1,500	61	4.1%	3.3%	6.6%	3.3%
Gloucester	28,789	1,689	5.9%	4.7%	5.3%	0.6%
Goshen	1,054	32	3.0%			
Gosnold	75	3	4.0%	3.2%	0.0%	-3.2%
Grafton	17,765	2,288	12.9%	10.3%	12.0%	1.7%
Granby	6,240	299	4.8%	3.8%	6.6%	2.8%
Granville	1,566	58	3.7%			
Great Barrington	7,104	904	12.7%	10.2%	13.6%	3.4%
Greenfield	17,456	1,781	10.2%	8.2%	9.6%	1.5%
Groton	10,646	682	6.4%	5.1%	8.2%	3.1%
Groveland	6,459	229	3.5%	2.8%	5.8%	2.9%
Hadley	5,250	555	10.6%	8.5%	14.9%	6.4%
Halifax	7,518	282	3.8%			
Hamilton	7,764	676	8.7%	7.0%	5.1%	-1.8%
Hampden	5,139	231	4.5%			
Hancock	717	31	4.3%			
Hanover	13,879	579	4.2%			

Municipality	2010 U.S. Census Population	Minority (including white Hispanic) Population	Municipality- wide Title VI Minority Population Percentage	"20% Below" Threshold to meet, by municipality (80% of total municipal-wide minority percentage)	Average Percentage Minority Population of all block groups within 1/4mi Transit Project Buffer Area	Percentage point differential: Buffer area vs. Threshold
Hanson	10,209	424	4.2%			
Hardwick	2,990	125	4.2%			
Harvard	6,520	852	13.1%			
Harwich	12,243	896	7.3%			
Hatfield	3,279	111	3.4%	2.7%	1.6%	-1.1%
Haverhill	60,879	12,485	20.5%	16.4%	19.8%	3.4%
Hawley	337	14	4.2%			
Heath	706	26	3.7%			
Hingham	22,157	1,022	4.6%			
Hinsdale	2,032	56	2.8%	2.2%	3.9%	1.7%
Holbrook	10,791	2,070	19.2%			
Holden	17,346	1,260	7.3%	5.8%	9.2%	3.4%
Holland	2,481	123	5.0%			
Holliston	13,547	902	6.7%	5.3%	7.9%	2.6%
Holyoke	39,880	21,229	53.2%	42.6%	44.7%	2.1%
Hopedale	5,911	350	5.9%			
Hopkinton	14,925	1,238	8.3%	6.6%	6.3%	-0.4%
Hubbardston	4,382	157	3.6%			
Hudson	19,063	2,118	11.1%			
Hull	10,293	591	5.7%			
Huntington	2,180	90	4.1%			
Ipswich	13,175	704	5.3%	4.3%	7.3%	3.1%
Kingston	12,629	598	4.7%	3.8%	2.9%	-0.9%
Lakeville	10,602	415	3.9%	3.1%	2.6%	-0.6%
Lancaster	8,055	1,487	18.5%	14.8%	21.1%	6.3%
Lanesborough	3,091	128	4.1%	3.3%	4.1%	0.8%
Lawrence	76,377	60,740	79.5%	63.6%	71.8%	8.2%
Lee	5,943	490	8.2%	6.6%	8.5%	1.9%
Leicester	10,970	1,009	9.2%	7.4%	11.6%	4.3%
Lenox	5,025	354	7.0%	5.6%	11.3%	5.7%
Leominster	40,759	10,014	24.6%	19.7%	22.7%	3.0%
Leverett	1,851	161	8.7%	7.0%	3.9%	-3.1%
Lexington	31,394	8,256	26.3%	21.0%	23.7%	2.6%
Leyden	711	18	2.5%			
Lincoln	6,362	1,096	17.2%	13.8%	17.9%	4.1%
Littleton	8,924	685	7.7%	6.1%	7.2%	1.1%
Longmeadow	15,784	1,462	9.3%	7.4%	7.8%	0.4%
Lowell	106,519	50,239	47.2%	37.7%	41.4%	3.7%
Ludlow	21,103	2,140	10.1%	8.1%	9.5%	1.4%
Lunenburg	10,086	635	6.3%	5.0%	13.4%	8.4%
Lynn	90,329	47,360	52.4%	41.9%	45.2%	3.2%

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Lynnfield	11,596	758	6.5%	5.2%	3.6%	-1.7%
Malden	59,450	28,239	47.5%	38.0%	43.1%	5.1%
Manchester	5,136	184	3.6%	2.9%	6.0%	3.1%
Mansfield	23,184	2,285	9.9%			
Marblehead	19,808	990	5.0%	4.0%	5.9%	1.9%
Marion	4,907	398	8.1%			
Marlborough	38,499	9,546	24.8%	19.8%	30.1%	10.3%
Marshfield	25,132	1,005	4.0%			
Mashpee	14,006	1,725	12.3%			
Mattapoisett	6,045	275	4.5%			
Maynard	10,106	996	9.9%			
Medfield	12,024	731	6.1%			
Medford	56,173	13,384	23.8%	19.1%	21.0%	2.0%
Medway	12,752	828	6.5%			
Melrose	26,983	2,822	10.5%	8.4%	10.6%	2.2%
Mendon	5,839	208	3.6%			
Merrimac	6,338	271	4.3%	3.4%	3.9%	0.5%
Methuen	47,255	11,868	25.1%	20.1%	23.1%	3.0%
Middleborough	23,116	1,386	6.0%	4.8%	8.1%	3.3%
Middlefield	521	16	3.1%			
Middleton	8,987	1,142	12.7%			
Milford	27,999	4,895	17.5%	14.0%	23.2%	9.2%
Millbury	13,261	952	7.2%	5.7%	6.8%	1.1%
Millis	7,891	576	7.3%			
Millville	3,190	117	3.7%			
Milton	27,003	6,514	24.1%	19.3%	24.1%	4.8%
Monroe	121	6	5.0%			
Monson	8,560	388	4.5%	3.6%	2.6%	-1.0%
Montague	8,437	816	9.7%	7.7%	8.6%	0.8%
Monterey	961	23	2.4%			
Montgomery	838	33	3.9%			
Mount Washington	167	4	2.4%			
Nahant	3,410	153	4.5%	3.6%	3.2%	-0.4%
Nantucket	10,172	1,980	19.5%			
Natick	33,006	4,817	14.6%	11.7%	13.6%	1.9%
Needham	28,886	3,156	10.9%	8.7%	12.4%	3.7%
New Ashford	228	14	6.1%			
New Bedford	95,072	30,474	32.1%	25.6%	27.5%	1.9%
New Braintree	999	31	3.1%			
New Marlborough	1,509	70	4.6%			
New Salem	990	46	4.6%			

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Newbury	6,666	198	3.0%	2.4%	5.8%	3.5%
Newburyport	17,416	842	4.8%	3.9%	5.6%	1.8%
Newton	85,146	17,345	20.4%	16.3%	19.1%	2.8%
Norfolk	11,227	1,734	15.4%	12.4%	5.8%	-6.6%
North Adams	13,708	1,210	8.8%	7.1%	7.9%	0.8%
North Andover	28,352	3,997	14.1%	11.3%	14.8%	3.5%
North Attleborough	28,712	2,583	9.0%	7.2%	9.2%	2.0%
North Brookfield	4,680	198	4.2%			
North Reading	14,892	901	6.1%			
Northampton	28,549	4,519	15.8%	12.7%	12.8%	0.2%
Northborough	14,155	1,995	14.1%	11.3%	13.9%	2.7%
Northbridge	15,707	987	6.3%			
Northfield	3,032	117	3.9%	3.1%	4.7%	1.6%
Norton	19,031	1,362	7.2%			
Norwell	10,506	495	4.7%			
Norwood	28,602	4,960	17.3%			
Oak Bluffs	4,527	790	17.5%			
Oakham	1,902	83	4.4%			
Orange	7,839	530	6.8%	5.4%	8.8%	3.4%
Orleans	5,890	260	4.4%			
Otis	1,612	53	3.3%			
Oxford	13,709	918	6.7%	5.4%	4.4%	-0.9%
Palmer	12,140	694	5.7%	4.6%	8.3%	3.7%
Paxton	4,806	361	7.5%	6.0%	7.6%	1.6%
Peabody	51,251	6,317	12.3%	9.9%	14.6%	4.8%
Pelham	1,321	112	8.5%	6.8%	15.6%	8.8%
Pembroke	17,837	699	3.9%			
Pepperell	11,497	551	4.8%	3.8%	5.5%	1.6%
Peru	847	18	2.1%			
Petersham	1,234	30	2.4%			
Phillipston	1,682	89	5.3%	4.2%	3.4%	-0.9%
Pittsfield	44,737	6,300	14.1%	11.3%	14.4%	3.1%
Plainfield	648	31	4.8%			
Plainville	8,264	573	6.9%	5.5%	7.5%	2.0%
Plymouth	56,468	4,230	7.5%			
Plympton	2,820	112	4.0%	3.2%	0.0%	-3.2%
Princeton	3,413	136	4.0%			
Provincetown	2,942	339	11.5%			
Quincy	92,271	31,823	34.5%	27.6%	29.7%	2.1%
Randolph	32,112	19,559	60.9%			
Raynham	13,383	1,064	8.0%	6.4%	11.7%	5.3%

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Reading	24,747	1,870	7.6%	6.0%	8.4%	2.4%
Rehoboth	11,608	524	4.5%	3.6%	3.4%	-0.2%
Revere	51,755	19,456	37.6%	30.1%	29.2%	-0.9%
Richmond	1,475	51	3.5%			
Rochester	5,232	259	5.0%			
Rockland	17,489	1,610	9.2%			
Rockport	6,952	286	4.1%	3.3%	3.8%	0.5%
Rowe	393	13	3.3%			
Rowley	5,856	196	3.3%	2.7%	0.8%	-1.9%
Royalston	1,258	55	4.4%			
Russell	1,775	74	4.2%			
Rutland	7,973	463	5.8%			
Salem	41,340	9,963	24.1%	19.3%	20.3%	1.1%
Salisbury	8,283	399	4.8%	3.9%	7.0%	3.2%
Sandisfield	915	40	4.4%			
Sandwich	20,675	858	4.1%			
Saugus	26,628	2,768	10.4%	8.3%	10.5%	2.2%
Savoy	692	48	6.9%			
Scituate	18,133	856	4.7%			
Seekonk	13,722	824	6.0%	4.8%	5.9%	1.1%
Sharon	17,612	3,341	19.0%			
Sheffield	3,257	187	5.7%			
Shelburne	1,893	86	4.5%	3.6%	6.1%	2.5%
Sherborn	4,119	274	6.7%	5.3%	0.0%	-5.3%
Shirley	7,211	1,472	20.4%	16.3%	8.6%	-7.8%
Shrewsbury	35,608	8,074	22.7%	18.1%	17.2%	-1.0%
Shutesbury	1,771	176	9.9%			
Somerset	18,165	610	3.4%	2.7%	3.6%	0.9%
Somerville	75,754	23,395	30.9%	24.7%	28.1%	3.4%
South Hadley	17,514	2,206	12.6%	10.1%	10.7%	0.6%
Southampton	5,792	199	3.4%	2.7%	2.9%	0.2%
Southborough	9,767	1,362	13.9%	11.2%	15.5%	4.4%
Southbridge	16,719	5,254	31.4%			
Southwick	9,502	474	5.0%			
Spencer	11,688	627	5.4%	4.3%	9.5%	5.2%
Springfield	153,060	96,812	63.3%	50.6%	56.2%	5.6%
Sterling	7,808	367	4.7%	3.8%	0.4%	-3.4%
Stockbridge	1,947	121	6.2%	5.0%	6.4%	1.4%
Stoneham	21,437	2,033	9.5%	7.6%	9.5%	1.9%
Stoughton	26,962	5,822	21.6%			
Stow	6,590	511	7.8%			

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Sturbridge	9,268	603	6.5%			
Sudbury	17,659	1,880	10.6%			
Sunderland	3,684	566	15.4%	12.3%	17.8%	5.5%
Sutton	8,963	359	4.0%			
Swampscott	13,787	963	7.0%	5.6%	6.7%	1.1%
Swansea	15,865	578	3.6%	2.9%	4.4%	1.5%
Taunton	55,874	8,653	15.5%	12.4%	18.0%	5.6%
Templeton	8,013	357	4.5%	3.6%	4.1%	0.5%
Tewksbury	28,961	2,075	7.2%	5.7%	6.9%	1.1%
Tisbury	3,949	615	15.6%			
Tolland	485	26	5.4%			
Topsfield	6,085	283	4.7%			
Townsend	8,926	420	4.7%			
Truro	2,003	120	6.0%			
Tyngsborough	11,292	1,055	9.3%	7.5%	11.7%	4.2%
Tyringham	327	9	2.8%			
Upton	7,542	437	5.8%			
Uxbridge	13,457	701	5.2%			
Wakefield	24,932	1,751	7.0%	5.6%	6.3%	0.7%
Wales	1,838	77	4.2%			
Walpole	24,070	2,222	9.2%	7.4%	8.1%	0.7%
Waltham	60,632	18,954	31.3%	25.0%	30.4%	5.4%
Ware	9,872	771	7.8%	6.2%	7.0%	0.8%
Wareham	21,822	3,228	14.8%			
Warren	5,135	242	4.7%			
Warwick	780	26	3.3%			
Washington	538	12	2.2%			
Watertown	31,915	5,850	18.3%	14.7%	16.5%	1.8%
Wayland	12,994	1,912	14.7%	11.8%	13.0%	1.3%
Webster	16,767	2,109	12.6%	10.1%	17.5%	7.4%
Wellesley	27,982	4,921	17.6%	14.1%	13.9%	-0.2%
Wellfleet	2,750	115	4.2%			
Wendell	848	44	5.2%	4.2%	6.1%	1.9%
Wenham	4,875	268	5.5%	4.4%	4.5%	0.1%
West Boylston	7,669	852	11.1%	8.9%	7.3%	-1.6%
West Bridgewater	6,916	440	6.4%			
West Brookfield	3,701	152	4.1%			
West Newbury	4,235	156	3.7%			
West Springfield	28,391	5,085	17.9%	14.3%	16.8%	2.4%
West Stockbridge	1,306	56	4.3%	3.4%	1.3%	-2.2%
West Tisbury	2,740	162	5.9%			

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Westborough	18,272	4,549	24.9%	19.9%	13.8%	-6.2%
Westfield	41,094	4,764	11.6%	9.3%	15.5%	6.2%
Westford	21,951	3,526	16.1%	12.9%	18.1%	5.3%
Westhampton	1,607	49	3.0%			
Westminster	7,277	409	5.6%	4.5%	8.3%	3.8%
Weston	11,261	1,868	16.6%	13.3%	18.2%	5.0%
Westport	15,532	476	3.1%	2.5%	3.9%	1.4%
Westwood	14,618	1,237	8.5%	6.8%	10.6%	3.8%
Weymouth	53,743	6,379	11.9%			
Whately	1,496	56	3.7%	3.0%	6.6%	3.6%
Whitman	14,489	886	6.1%			
Wilbraham	14,219	1,111	7.8%	6.3%	9.3%	3.1%
Williamsburg	2,482	113	4.6%	3.6%	4.5%	0.8%
Williamstown	7,754	1,167	15.1%	12.0%	17.2%	5.2%
Wilmington	22,325	1,725	7.7%	6.2%	7.7%	1.5%
Winchendon	10,300	824	8.0%	6.4%	8.7%	2.3%
Winchester	21,374	3,065	14.3%	11.5%	12.4%	0.9%
Windsor	899	38	4.2%			
Winthrop	17,497	2,011	11.5%	9.2%	9.9%	0.7%
Woburn	38,120	6,990	18.3%	14.7%	16.6%	1.9%
Worcester	181,045	73,231	40.4%	32.4%	35.3%	3.0%
Worthington	1,156	44	3.8%			
Wrentham	10,955	414	3.8%			
Yarmouth	23,793	2,095	8.8%			

Total 6,547,629 1,562,829 23.87%