

APPENDIX E

GEOGRAPHIC DISTRIBUTION OF TIP FUNDING

OVERVIEW OF CONTENTS

Appendix E provides information about the geographic distribution of federal highway funding in the Boston region between federal fiscal years (FFYs) 2020 and 2024, including the distribution of the Boston Region Metropolitan Planning Organization's (MPO) Regional Target Program funding (the MPO's discretionary funding) and funding for projects and programs prioritized by the Massachusetts Department of Transportation. Funding amounts shown include the state's matching funds that leverage the available federal funds.

Figures E-I through E-4 show the breakdown of the MPO's Regional Target Program funding and all federal highway funding in the Boston region by subregion and municipality type. The complete dataset showing funding for each individual municipality in the region is provided in Table E-I.

PURPOSE

The analysis presented here provides details about how the MPO has allocated its federal transportation highway dollars across its geographic region by showing which municipalities and areas of the Boston region have received highway funding for the construction of transportation projects. This data was first compiled for FFYs 2008-13 in response to the Boston Region MPO's 2014 Certification Review by the Federal Highway Administration and Federal Transit Administration.

METHODOLOGY

MPO staff took the following steps to develop the dataset:

- Recorded information about TIP projects and the amount of funding programmed in each FFY
- Calculated the amount of programmed funds associated with each municipality for each FFY
- Recorded the total amount of programmed funds for each municipality for each FFY
- Divided programmed funds equally by the number of municipalities located within the project area for projects that spanned multiple municipalities

NEXT STEPS

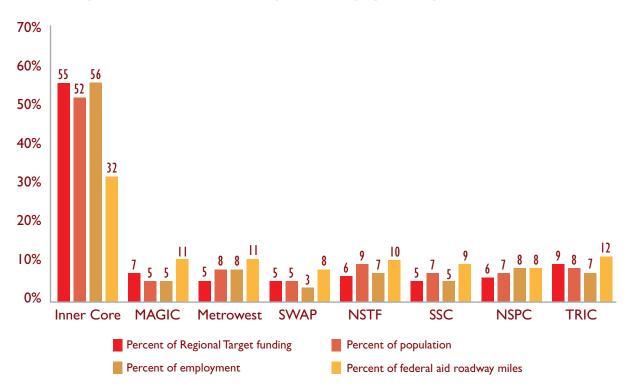
The data summarized in this appendix could be used in various ways to help guide programming decisions for future TIPs. Some analyses that the MPO could perform in the future include

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examining TIP funding by municipality and comparing that data to the number of road miles, the Chapter 90 apportionment, and the distribution of needs—as identified in the Needs Assessment of the Long-Range Transportation Plan—for each community.

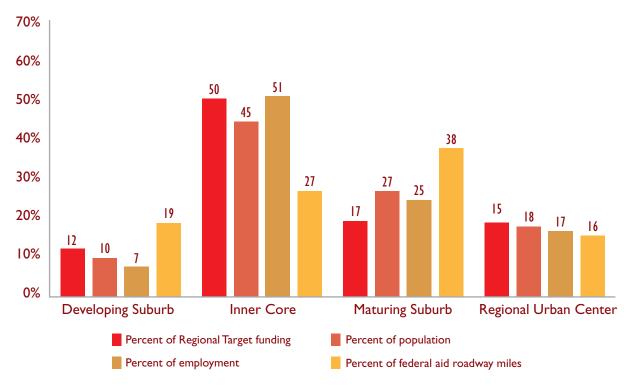
A database that tracks the geographic distribution of TIP funding can serve as an important input into the funding decisions made each year. Along with the data described above, this data on geographic distribution of highway funding can help guide the MPO's public outreach and decision-making to help ensure that, over time, the transportation needs of the region are met equitably.

Figure E-I
Regional Distribution of Target Funding by Subregion FFYs 2020–24



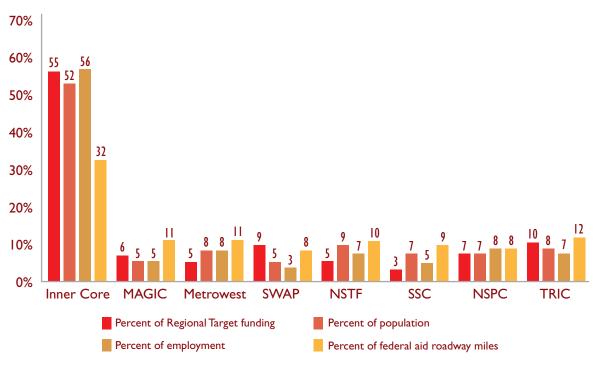
Inner Core = Inner Core Committee. MAGIC = Minuteman Advisory Group on Interlocal Coordination. MetroWest = MetroWest Regional Collaborative. NSPC = North Shore Planning Council. NSTF = North Shore Task Force. SSC = South Shore Coalition. SWAP = South West Advisory Planning Committee. TRIC = Three Rivers Interlocal Council.





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Figure E-3
All Federal Highway Funding in the Boston Region by Subregion FFYs 2020–24



Inner Core = Inner Core Committee. MAGIC = Minuteman Advisory Group on Interlocal Coordination. MetroWest = MetroWest Regional Collaborative. NSPC = North Shore Planning Council. NSTF = North Shore Task Force. SSC = South Shore Coalition. SWAP = South West Advisory Planning Committee. TRIC = Three Rivers Interlocal Council.

Figure E-4
All Federal Highway Funding in the Boston Region by Municipality Type FFYs 2020–24

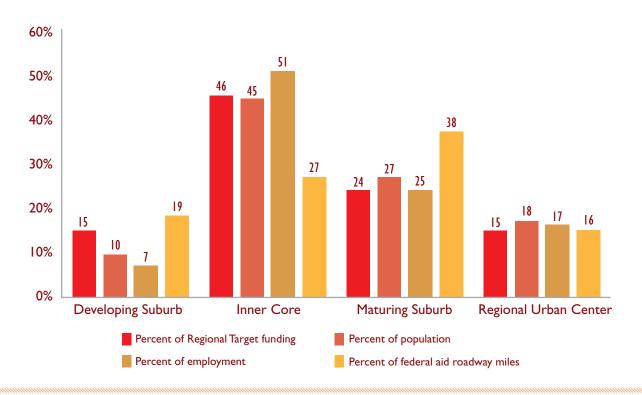


Table E-I
Federal Highway Programming for Municipalities in the Boston Region FFYs 2020–24

| Municipality | Subregion | Community Type | Percent of Population | Percent of Employment | Percent Federal-Aid Roadway Miles (2016) | Regionally Prioritized Target Funding | Percent Regionally Prioritized Target Funding | State Prioritized Funding | Percent State Prioritized Funding | Total Funding (Regionally Prioritized and State Prioritized) | Percent Total Funding (Regionally Prioritized and State Prioritized) |
|--------------|------------|-----------------------|--------------------------|--------------------------|---|---|--|---------------------------------|---|---|--|
| Boston | Inner Core | Inner Core | 20.0% | 31.2% | 11.1% | \$142,653,482 | 27.2% | \$251,653,579 | 31.7% | \$394,307,061 | 29.9% |
| Hopkinton | SWAP | Developing Suburb | 0.5% | 0.5% | 1.0% | \$7,946,749 | 1.5% | \$87,035,694 | 10.9% | \$94,982,443 | 7.2% |
| Chelsea | Inner Core | Inner Core | 1.1% | 0.8% | 0.6% | \$9,669,765 | 1.8% | \$69,145,821 | 8.7% | \$78,815,586 | 6.0% |
| Lynn | Inner Core | Regional Urban Center | 2.9% | 1.3% | 1.3% | \$24,644,712 | 4.7% | \$42,138,964 | 5.3% | \$66,783,676 | 5.1% |
| Wilmington | NSPC | Maturing Suburb | 0.7% | 1.0% | 1.3% | \$16,042,594 | 3.1% | \$33,082,195 | 4.2% | \$49,124,789 | 3.7% |
| Saugus | Inner Core | Maturing Suburb | 0.9% | 0.6% | 0.8% | \$0 | 0.0% | \$34,190,354 | 4.3% | \$34,190,354 | 2.6% |
| Milton | TRIC | Maturing Suburb | 0.9% | 0.3% | 1.3% | \$0 | 0.0% | \$27,554,878 | 3.5% | \$27,554,878 | 2.1% |
| Everett | Inner Core | Inner Core | 1.3% | 0.7% | 0.6% | \$26,768,357 | 5.1% | \$0 | 0.0% | \$26,768,357 | 2.0% |
| Walpole | TRIC | Developing Suburb | 0.8% | 0.6% | 1.2% | \$19,906,002 | 3.8% | \$6,329,417 | 0.8% | \$26,235,419 | 2.0% |
| Somerville | Inner Core | Inner Core | 2.5% | 1.2% | 1.2% | \$16,377,067 | 3.1% | \$8,721,613 | 1.1% | \$25,098,680 | 1.9% |
| Framingham | MetroWest | Regional Urban Center | 2.2% | 2.5% | 2.5% | \$11,347,228 | 2.2% | \$12,855,700 | 1.6% | \$24,202,928 | 1.8% |
| Peabody | NSTF | Regional Urban Center | 1.7% | 1.3% | 1.4% | \$13,047,647 | 2.5% | \$11,138,490 | 1. 4 % | \$24,186,137 | 1.8% |
| Quincy | Inner Core | Regional Urban Center | 3.0% | 2.6% | 2.1% | \$6,292,937 | 1.2% | \$15,445,156 | 1.9% | \$21,738,093 | 1.6% |
| Acton | MAGIC | Maturing Suburb | 0.7% | 0.5% | 1.1% | \$15,141,463 | 2.9% | \$5,657,725 | 0.7% | \$20,799,188 | 1.6% |
| Cambridge | Inner Core | Inner Core | 3.4% | 6.0% | 1.8% | \$16,377,067 | 3.1% | \$3,540,000 | 0.4% | \$19,917,067 | 1.5% |
| Sudbury | MAGIC | Maturing Suburb | 0.6% | 0.5% | 1.0% | \$9,334,137 | 1.8% | \$9,402,453 | 1.2% | \$18,736,590 | 1.4% |
| Watertown | Inner Core | Inner Core | 1.0% | 1.1% | 0.6% | \$15,120,000 | 2.9% | \$2,688,000 | 0.3% | \$17,808,000 | 1.4% |
| Norwood | TRIC | Regional Urban Center | 0.9% | 1.3% | 1.0% | \$14,194,571 | 2.7% | \$ 3,583,933 | 0.5% | \$17,778,504 | 1.3% |
| Ashland | MetroWest | Maturing Suburb | 0.5% | 0.3% | 0.5% | \$17,453,325 | 3.3% | \$0 | 0.0% | \$17,453,325 | 1.3% |
| Medford | Inner Core | Inner Core | 1.8% | 1.0% | 1.5% | \$16,377,067 | 3.1% | \$989,895 | 0.1% | \$17,366,962 | 1.3% |
| Canton | TRIC | Maturing Suburb | 0.7% | 1.2% | 1.1% | \$0 | 0.0% | \$16,868,965 | 2.1% | \$16,868,965 | 1.3% |
| Woburn | NSPC | Regional Urban Center | 1.2% | 2.2% | 1.5% | \$15,482,660 | 3.0% | \$0 | 0.0% | \$15,482,660 | 1.2% |
| Newton | Inner Core | Inner Core | 2.8% | 3.0% | 2.6% | \$8,702,969 | 1.7% | \$5,934,358 | 0.7% | \$14,637,326 | 1.1% |
| Beverly | NSTF | Regional Urban Center | 1.3% | 1.2% | 1.2% | \$12,899,809 | 2.5% | \$271,952 | 0.0% | \$13,171,761 | 1.0% |
| Wrentham | SWAP | Developing Suburb | 0.4% | 0.3% | 1.0% | \$13,103,505 | 2.5% | \$0 | 0.0% | \$13,103,505 | 1.0% |
| Natick | MetroWest | Maturing Suburb | 1.1% | 1.3% | 1.2% | \$0 | 0.0% | \$12,855,700 | 1.6% | \$12,855,700 | 1.0% |
| Stow | MAGIC | Developing Suburb | 0.2% | 0.1% | 0.6% | \$0 | 0.0% | \$12,542,112 | 1.6% | \$12,542,112 | 1.0% |
| Hingham | SSC | Maturing Suburb | 0.7% | 0.7% | 1.3% | \$8,700,001 | 1.7% | \$2,819,413 | 0.4% | \$11,519,414 | 0.9% |
| Lynnfield | NSPC | Maturing Suburb | 0.4% | 0.3% | 0.6% | \$0 | 0.0% | \$11,066,432 | 1.4% | \$11,066,432 | 0.8% |
| Randolph | TRIC | Maturing Suburb | 1.0% | 0.5% | 1.0% | \$0 | 0.0% | \$10,319,696 | 1.3% | \$10,319,696 | 0.8% |
| Marlborough | MetroWest | Regional Urban Center | 1.2% | 1.6% | 2.0% | \$0 | 0.0% | \$9,867,120 | 1.2% | \$9,867,120 | 0.7% |

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Table E-I
Federal Highway Programming for Municipalities in the Boston Region FFYS 2020–24 (cont. 2)

| Municipality | Subregion | Community Type | Percent of Population | Percent of Employment | Percent Federal-Aid Roadway Miles (2016) | Regionally Prioritized Target Funding | Percent Regionally Prioritized Target Funding | State Prioritized Funding | Percent State Prioritized Funding | Total Funding (Regionally Prioritized and State Prioritized) | Percent Total Funding (Regionally Prioritized and State Prioritized) |
|--------------|------------|-----------------------|--------------------------|--------------------------|---|---|--|---------------------------------|---|---|--|
| Braintree | SSC | Maturing Suburb | 1.2% | 1.5% | I. 4 % | \$0 | 0.0% | \$9,552,235 | 1.2% | \$9,552,235 | 0.7% |
| Dedham | TRIC | Maturing Suburb | 0.8% | 0.9% | 1.1% | \$4,368,780 | 0.8% | \$4,829,746 | 0.6% | \$9,198,526 | 0.7% |
| Needham | TRIC | Maturing Suburb | 0.9% | 1.0% | 1.2% | \$8,702,969 | 1.7% | \$0 | 0.0% | \$8,702,969 | 0.7% |
| Bedford | MAGIC | Maturing Suburb | 0.4% | 1.1% | 0.8% | \$8,234,946 | 1.6% | \$0 | 0.0% | \$8,234,946 | 0.6% |
| Cohasset | SSC | Developing Suburb | 0.2% | 0.1% | 0.5% | \$8,074,472 | 1.5% | \$0 | 0.0% | \$8,074,472 | 0.6% |
| Essex | NSTF | Developing Suburb | 0.1% | 0.1% | 0.2% | \$0 | 0.0% | \$8,054,272 | 1.0% | \$8,054,272 | 0.6% |
| Hull | SSC | Maturing Suburb | 0.3% | 0.1% | 0.4% | \$7,263,401 | 1.4% | \$0 | 0.0% | \$7,263,401 | 0.6% |
| Wakefield | NSPC | Maturing Suburb | 0.8% | 0.8% | 0.9% | \$0 | 0.0% | \$7,040,375 | 0.9% | \$7,040,375 | 0.5% |
| Bellingham | SWAP | Developing Suburb | 0.5% | 0.3% | 0.9% | \$4,380,828 | 0.8% | \$1,600,800 | 0.2% | \$5,981,628 | 0.5% |
| Sharon | TRIC | Maturing Suburb | 0.6% | 0.2% | 1.1% | \$0 | 0.0% | \$5,860,487 | 0.7% | \$5,860,487 | 0.4% |
| Winthrop | Inner Core | Inner Core | 0.6% | 0.1% | 0.3% | \$5,644,800 | 1.1% | \$0 | 0.0% | \$5,644,800 | 0.4% |
| Littleton | MAGIC | Developing Suburb | 0.3% | 0.3% | 1.0% | \$5,380,789 | 1.0% | \$0 | 0.0% | \$5,380,789 | 0.4% |
| Holbrook | SSC | Maturing Suburb | 0.3% | 0.1% | 0.3% | \$2,743,381 | 0.5% | \$1,527,250 | 0.2% | \$4,270,631 | 0.3% |
| Middleton | NSTF | Developing Suburb | 0.3% | 0.3% | 0.5% | \$0 | 0.0% | \$4,073,920 | 0.5% | \$4,073,920 | 0.3% |
| Hamilton | NSTF | Developing Suburb | 0.3% | 0.1% | 0.4% | \$0 | 0.0% | \$3,698,544 | 0.5% | \$3,698,544 | 0.3% |
| Foxborough | TRIC | Developing Suburb | 0.5% | 0.7% | 1.3% | \$0 | 0.0% | \$3,641,707 | 0.5% | \$3,641,707 | 0.3% |
| Gloucester | NSTF | Regional Urban Center | 0.9% | 0.6% | 1.0% | \$0 | 0.0% | \$3,542,912 | 0.4% | \$3,542,912 | 0.3% |
| Manchester | NSTF | Developing Suburb | 0.2% | 0.1% | 0.4% | \$0 | 0.0% | \$3,542,912 | 0.4% | \$3,542,912 | 0.3% |
| Wenham | NSTF | Developing Suburb | 0.2% | 0.1% | 0.4% | \$0 | 0.0% | \$3,542,912 | 0.4% | \$3,542,912 | 0.3% |
| Reading | NSPC | Maturing Suburb | 0.8% | 0.4% | 0.8% | \$1,750,419 | 0.3% | \$1,500,000 | 0.2% | \$3,250,419 | 0.2% |
| Milford | SWAP | Regional Urban Center | 0.9% | 0.8% | 1.2% | \$3,132,000 | 0.6% | \$0 | 0.0% | \$3,132,000 | 0.2% |
| lpswich | NSTF | Developing Suburb | 0.4% | 0.3% | 0.7% | \$2,939,052 | 0.6% | \$0 | 0.0% | \$2,939,052 | 0.2% |
| Weymouth | SSC | Maturing Suburb | 1.7% | 1.0% | 1.5% | \$0 | 0.0% | \$2,819,413 | 0.4% | \$2,819,413 | 0.2% |
| Weston | MetroWest | Maturing Suburb | 0.4% | 0.2% | 1.3% | \$0 | 0.0% | \$2,558,929 | 0.3% | \$2,558,929 | 0.2% |
| Hudson | MAGIC | Developing Suburb | 0.6% | 0.5% | 0.7% | \$0 | 0.0% | \$2,223,333 | 0.3% | \$2,223,333 | 0.2% |
| Malden | Inner Core | Inner Core | 1.9% | 0.8% | 1.0% | \$1,988,532 | 0.4% | \$0 | 0.0% | \$1,988,532 | 0.2% |
| Brookline | Inner Core | Inner Core | 1.9% | 0.9% | 1.3% | \$0 | 0.0% | \$1,672,686 | 0.2% | \$1,672,686 | 0.1% |
| Winchester | NSPC | Maturing Suburb | 0.7% | 0.5% | 0.6% | \$0 | 0.0% | \$1,671,716 | 0.2% | \$1,671,716 | 0.1% |
| Maynard | MAGIC | Maturing Suburb | 0.3% | 0.2% | 0.3% | \$0 | 0.0% | \$1,646,400 | 0.2% | \$1,646,400 | 0.1% |
| Belmont | Inner Core | Inner Core | 0.8% | 0.4% | 0.6% | \$0 | 0.0% | \$1,614,288 | 0.2% | \$1,614,288 | 0.1% |

Table E-I Federal Highway Programming for Municipalities in the Boston Region FFYs 2020–24 (cont. 3)

| Municipality | Subregion | Community Type | Percent of Population | Percent of Employment | Percent Federal-Aid Roadway Miles (2016) | Regionally Prioritized Target Funding | Percent Regionally Prioritized Target Funding | State Prioritized Funding | Percent State Prioritized Funding | Total Funding (Regionally Prioritized and State Prioritized) | Percent Total Funding (Regionally Prioritized and State Prioritized) |
|---------------|------------|-----------------------|--------------------------|--------------------------|---|---|--|---------------------------------|---|---|--|
| Franklin | SWAP | Developing Suburb | 1.0% | 0.8% | 1.2% | \$0 | 0.0% | \$1,600,800 | 0.2% | \$1,600,800 | 0.1% |
| Salem | NSTF | Regional Urban Center | 1.3% | 1.1% | 0.7% | \$0 | 0.0% | \$1,523,721 | 0.2% | \$1,523,721 | 0.1% |
| Danvers | NSTF | Maturing Suburb | 0.9% | 1.4% | 1.5% | \$0 | 0.0% | \$1,168,877 | 0.1% | \$1,168,877 | 0.1% |
| Swampscott | NSTF | Maturing Suburb | 0.4% | 0.2% | 0.3% | \$0 | 0.0% | \$1,157,036 | 0.1% | \$1,157,036 | 0.1% |
| Concord | MAGIC | Maturing Suburb | 0.6% | 0.7% | 1.1% | \$0 | 0.0% | \$1,087,500 | 0.1% | \$1,087,500 | 0.1% |
| Lexington | MAGIC | Maturing Suburb | 1.0% | 1.1% | 1.9% | \$0 | 0.0% | \$1,087,500 | 0.1% | \$1,087,500 | 0.1% |
| Lincoln | MAGIC | Maturing Suburb | 0.2% | 0.1% | 0.6% | \$0 | 0.0% | \$1,087,500 | 0.1% | \$1,087,500 | 0.1% |
| Westwood | TRIC | Maturing Suburb | 0.5% | 0.5% | 0.7% | \$0 | 0.0% | \$1,071,429 | 0.1% | \$1,071,429 | 0.1% |
| Arlington | Inner Core | Inner Core | 1. 4 % | 0.5% | 0.8% | \$0 | 0.0% | \$950,000 | 0.1% | \$950,000 | 0.1% |
| Scituate | SSC | Maturing Suburb | 0.6% | 0.2% | 1.0% | \$897,164 | 0.2% | \$0 | 0.0% | \$897,164 | 0.1% |
| Marblehead | NSTF | Maturing Suburb | 0.6% | 0.3% | 0.5% | \$786,568 | 0.2% | \$0 | 0.0% | \$786,568 | 0.1% |
| Dover | SWAP | Developing Suburb | 0.2% | 0.0% | 0.5% | \$0 | 0.0% | \$271,952 | 0.0% | \$271,952 | 0.0% |
| Bolton | MAGIC | Developing Suburb | 0.2% | 0.1% | 0.7% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Boxborough | MAGIC | Developing Suburb | 0.2% | 0.2% | 0.4% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Burlington | NSPC | Maturing Suburb | 0.8% | 2.2% | 1.3% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Carlisle | MAGIC | Developing Suburb | 0.2% | 0.0% | 0.4% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Holliston | MetroWest | Developing Suburb | 0.4% | 0.3% | 0.5% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Marshfield | SSC | Maturing Suburb | 0.8% | 0.3% | 1.0% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Medfield | TRIC | Maturing Suburb | 0.4% | 0.2% | 0.5% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Medway | SWAP | Developing Suburb | 0.4% | 0.2% | 0.6% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Melrose | Inner Core | Inner Core | 0.9% | 0.3% | 0.4% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Millis | SWAP | Developing Suburb | 0.3% | 0.1% | 0.4% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Nahant | Inner Core | Maturing Suburb | 0.1% | 0.0% | 0.2% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Norfolk | SWAP | Developing Suburb | 0.4% | 0.2% | 0.5% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| North Reading | NSPC | Maturing Suburb | 0.5% | 0.4% | 0.6% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Norwell | SSC | Developing Suburb | 0.3% | 0.5% | 0.8% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Revere | Inner Core | Inner Core | 1.7% | 0.5% | 1.3% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Rockland | SSC | Developing Suburb | 0.6% | 0.4% | 0.6% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Rockport | NSTF | Developing Suburb | 0.2% | 0.1% | 0.2% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Sherborn | SWAP | Developing Suburb | 0.1% | 0.0% | 0.4% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Southborough | MetroWest | Maturing Suburb | 0.3% | 0.4% | 1.2% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
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Federal Highway Programming for Municipalities in the Boston Region FFYs 2020–24 (cont. 4)

| Municipality | Subregion | Community Type | Percent of Population | Percent of Employment | Percent Federal-Aid Roadway Miles (2016) | | Percent Regionally Prioritized Target Funding | State Prioritized Funding | | Total Funding (Regionally Prioritized and State Prioritized) | Percent Total Funding (Regionally Prioritized and State Prioritized) |
|--------------|------------|-------------------|--------------------------|--------------------------|---|-----|--|---------------------------------|------|---|--|
| Stoneham | NSPC | Maturing Suburb | 0.7% | 0.4% | 0.8% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Topsfield | NSTF | Developing Suburb | 0.2% | 0.1% | 0.6% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Waltham | Inner Core | Inner Core | 2.0% | 3.0% | 1.6% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Wayland | MetroWest | Maturing Suburb | 0.4% | 0.2% | 0.7% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |
| Wellesley | MetroWest | Maturing Suburb | 0.9% | 0.9% | 0.9% | \$0 | 0.0% | \$0 | 0.0% | \$0 | 0.0% |

Inner Core = Inner Core Committee, MAGIC = Minuteman Advisory Group on Interlocal Coordination, MetroWest = MetroWest Regional Collaborative, NSPC = North Shore Task Force, SSC = South Shore Coalition, SWAP = South West Advisory Planning Committee, TRIC = Three Rivers Interlocal Council