

# 6

## Transportation Equity

## 6. Transportation Equity

### Introduction

Transportation and social equity, Title VI and Environmental Justice all play a key role in the quality of life in the region by shaping access to jobs, housing, services and recreational opportunities and is essential to addressing poverty, unemployment and other equal opportunity goals.

- **Transportation and social equity** is a civil and human rights priority and major goal for the Montachusett Region. It requires making investments that provide all residents - regardless of age, race, color, national origin, income or physical ability - with opportunities to work, shop, be healthy, and play.
- **Title VI** was enacted as part of the landmark Civil Rights Act of 1964 and prohibits discrimination on the basis of race, color, sex and national origin in programs and activities receiving federal financial assistance.
- **Environmental Justice** is based on the principle that all people have a right to be protected from environmental pollution, and to live in and enjoy a clean and healthful environment. Environmental justice is the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits” ([www.mass.gov](http://www.mass.gov)) . In Massachusetts a community is recognized as an Environmental Justice community if any of the following are true:
  - Block group whose annual median household income is equal to or less than 65 percent of the statewide median; or
  - 25% or more of the residents identifying as minority; or
  - 25% or more of households having no one over the age of 14 who speaks English only or very well - Limited English Proficiency (LEP)EJ neighborhoods where more than one criterion is met may be at an even greater risk of exposure to environmental and health hazards.

MassDOT and FHWA require MPO’s to include a geographic and social equity analysis of past and current TIP projects. This analysis is broken into two parts. The first is an examination of federal target eligible projects contained within the most recent TIP, i.e. FFY 2024-2028. The

second involves a five year “look back” at prior TIP projects. For this analysis that would include projects from FFY 2019 to 2023.

## **Methodology**

Projects identified for the two analyses include site specific projects, i.e. bridge replacements/rehabilitations and intersection improvements, as well as road and highway segments that may stretch several miles and across multiple communities. The identified projects were then mapped for each analysis against identified Environmental Justice (EJ) and/or Title VI populations. Staff then assessed the project locations relative to the identified populations.

### **Source: 2017-2021 ACS 5-Year Estimates**

#### **By Block Group**

Variable	2017-2021 ACS Table No.
Total Population	B03002
Majority Population	B03002
Poverty Determined Population	B17021
Below Poverty Population	B17021
Population 65 Years or Older Population	B09020
Median Household Income	B19013
Limited English Proficiency (LEP) Households	C16002

### **Source: 2017-2021 ACS 5-Year Estimates**

#### **By Census Tract**

Variable	2017-2021 ACS Table No.
Total Population	DP02
Foreign Born	DP02
Individuals with Disabilities	DP02
Percent Household Limited English Proficiency (LEP)	DP02
Percent Language Spoken at Home – Non-English	DP02

Environmental Justice (EJ) and Title VI populations are defined differently by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). In addition, EJ analysis is based on different criteria, ex. poverty based on the statewide median income rather than the regional median income. The tables below define the Title VI and EJ criteria utilized in the regional analysis.

## Environmental Justice and Title VI Definitions for Analysis

Environmental Justice Block Groups	Analysis Criteria
1. Block group whose annual median household income is equal to or less than 65 percent (%) of the statewide median (\$81,215 in 2019);	Statewide Median Income: \$89,026 65% of Median Household Income: <b>\$57,867</b> Geography: <b>Block Group</b>
2. Twenty-five percent (25%) or more of the residents identifying as minority;	Minority Population Equal or Greater Than <b>25%</b> Geography: <b>Block Group</b>
3. Twenty-five percent (25%) or more of the households having no one over the age of 14 who speaks English as their primary language or have a limited ability to read, speak, write, or understand English - Limited English Proficiency (LEP).	Limited English Proficiency Equal or Greater Than <b>25%</b> Geography: <b>Block Group</b>

FTA Title VI Communities	Analysis Criteria
1. Minority – Percent of population including Hispanic or Latino of any race that is considered non-white and is higher than the regional average	Regional Average: <b>20.96%</b> Geography: <b>Block Group</b>
2. Low Income - Percent estimated below poverty level that is higher than the regional average	Regional Average: <b>8.30%</b> Geography: <b>Block Group</b>

FHWA Title VI Communities	Analysis Criteria
1. Elderly – Percent of Total Population > 65 that is higher than the regional average	Regional Average: <b>16.45%</b> Geography: <b>Block Group</b>
2. Individuals with Disabilities – Percent of population with a disability that is higher than the regional average	Regional Average: <b>12.30%</b> Geography: <b>Census Tract</b>
3. Minority – Percent of population including Hispanic or Latino of any race that is considered non-white and is higher than the regional average	Regional Average: <b>20.96%</b> Geography: <b>Block Group</b>
4. Foreign Born – Percent of population that is Foreign Born and is higher than the regional average	Regional Average: <b>8.80%</b> Geography: <b>Census Tract</b>
5. Language – Percent of Population Spoken Language Other than English that is higher than the regional average	Regional Average: <b>15.70%</b> Geography: <b>Census Tract</b>

### A. FFY 2024-2028 Target Eligible Projects

To assess the possible benefits or burdens of the projects within the FFY 2024-2028 TIP, those projects identified as federal aid target eligible were identified. The analysis for this TIP is limited to these projects as they are the projects with the most programming control of the MPO. Bridge projects as well as those on the Interstate system, etc., are prioritized at the state level.

The following table identifies 16 target eligible projects in the Montachusett Region, listed by their calculated TEC score as well as their anticipated FFY year listing for this TIP. Projects without a TIP year are listed in the Appendix of the TIP. The Appendix is a listing of projects without an identified funding source or program year due to design status and/or fiscal constraint issues.

#### FFY 2024-2028 Target Eligible Projects

TIP Year	MassDOT ID #	Community	Description	TEC	Est Cost FFY 2021 Dollars
	609227	Ayer	Ayer- Roadway Rehabilitation on Route 2A/111 (Park Street and Main Street)	38	\$4,800,000
2024-25'	604499	Leominster	Leominster- Resurfacing and Related Work on Rt 12 (Central St)	38	\$21,444,970
2028	612242	Fitchburg	Reconstruction of John Fitch Highway	37	\$9,174,115
	612771	Winchendon	Winchendon- Intersectin Improvements at Blair Square: Front Street, C	33	\$3,129,916
2026-27'	609213	Harvard	Harvard- Resurfacing and Box Widening on Ayer Road, from Route 2 to the Ayer Town Line	32	\$11,171,079
2027	610681	Clinton	Clinton- Reconstruction of Sterling Street (Route 62), from Willow/Lawrence Street to Main Street	31	\$4,715,060
2027	608415	Athol	Athol- Intersection Improvements at Route 2A and Brookside Road	30	\$1,544,720
2028	612612	Sterling	Sterling - Intersection Improvements at Route 140 and Route 62	30	\$3,117,500
	606640	Ayer	Ayer- Resurfacing & Related Work on Rt 2A (Fitchburg Rd & Park St)	25	\$2,400,000
2025	609244	Ashburnham	Ashburnham- Roadway Rehabilitation on Rt 101	25	\$8,556,417
	611989	Athol	Athol - Sidewalk Installation along Templeton Road (Route 2A) 0.9 mi	23	\$2,590,300
	608832	Lancaster	Lancaster- Interchange Improvements at Route 2 Exit 34 (Old Union Turnpike)	23	\$6,060,800
	608177	Ashby	Ashby - Reconstruction of Route 119 (Townsend Road) from Bernhardt Road to Route 31.	21	\$6,727,500
2026	608424	Templeton	Templeton- Reconstruction of Route 68, From King Phillip Trail (Route 202) North to the Phillipston Town Line (2.65 Miles)	18	\$6,063,291
	608879	Winchendon	Winchendon- Resurfacing & Related Work on Maple Street (Route 202), From Vine Street to Glenallen Street (1.36 Miles)	15	\$1,680,444
	607604	Sterling/West Boylston	Sterling/West Boylston - Improvements on Route 140 at I-190	14	\$3,647,110

#### B. FFY 2024-2028 Target Eligible Projects Equity Analysis

An analysis of the geographic distribution of the nine projects within the 2024-2028 TIP resulted in an understanding of the percentage of TIP projects and TIP funds allocated within Environmental Justice and Title VI geographic areas. The results of this analysis are as follows:

- The total regional population was determined, along with the population of each identified Environmental Justice and Title IV group (Row 1), from which the percentage of total population was determined for each group (Row 2).
- Of the 9 projects analyzed based on EJ and Title VI identified populations, a dollar amount which was programmed within each geographic area was determined (Row 3). It was then determined what percent of total funds were spent within each group (Row 4)
- Row 5 displays the comparison of the percentage of total population to the percentage of funding spent.

#### FFY 2024-2028 TIP Target Eligible Projects Equity Analysis Summary

		Total Regional Population	EJ Block Groups			FTA Title VI Block Groups		FHWA Title VI Block Groups		FHWA Title VI Census Tracts		
			Income**	Minority	LEP HH*	Minority	Low Income**	Elderly	Minority	Disabilities	Foreign Born	Language***
1	Population	249,749	20,040	52,337	2,950	52,337	20,040	41,075	52,337	29,901	21,952	37,190
2	Percent of Total Regional Population	100%	8.02%	20.96%	1.18%	20.96%	8.02%	16.45%	20.96%	11.97%	8.79%	14.89%
3	Total Cost of TIP Projects	\$92,058,010	\$21,839,441	\$22,457,139	\$13,283,024	\$31,013,556	\$43,336,627	\$44,267,899	\$31,013,556	\$19,275,252	\$37,309,042	\$45,865,459
4	Percent of Regional Cost of Projects	100%	23.72%	24.39%	14.43%	33.69%	47.08%	48.09%	33.69%	20.94%	40.53%	49.82%
5	Difference in % Cost and % Population	0.00%	15.70%	3.44%	13.25%	12.73%	39.05%	31.64%	12.73%	8.97%	31.74%	34.93%

\* Percentage of Total Montachusett Region Households (96,748)

\*\* Percentage of Poverty determined Montachusett Population (241,423)

\*\*\* Percentage of Montachusett Region Total Population Five Years and Older (236,131)

The following table identifies 16 projects for the Montachusett Region implemented in the last five years, i.e. from FFY 2019 to FFY 2023. All projects appeared in a prior TIP and were advertised for construction, initiated construction, or completed construction prior to the development of this TIP.

### FFY 2019-2023 TIP Five Year Look Back Projects

TIP Year	MassDOT ID #	Community	Description	Est Cost
2019	608728	Winchendon	Resurfacing & Related Work on Route 202, From the Templeton Town Line to Main Street (3.1 Miles)	\$1,795,875
2019	604961	Clinton	Resurfacing & Related Work on Route 110 (High Street)	\$3,153,674
2019	607848	Hubbardston	Resurfacing & Related Work on Route 68, From Williamsville Road to the Gardner C.L.	\$4,190,296
2019	607446	Westminster	Intersection Improvements, Route 2A at Route 140	\$2,139,574
2020	605651	Leominster	Reconstruction on Route 13, From Hawes Street to Prospect Street	\$5,994,626
2020	607902	Ayer	Reclamation & Related Work on Route 2A, From Harvard Road to Main Street	\$3,837,875
2021	607431	Westminster	Westminster - Resurfacing & Related Work on Route 140, From Route 2A to Patricia Road	\$1,668,791
2021	608548	Winchendon	Winchendon- Improvements & Related work on Central Street (Route 202), from Front Street to Maple Street (0.5 Miles)	\$4,900,253
2021	608657	Lunenburg	Lunenburg- Bridge rehabilitation, L-17-009, Route 2A over Pearl Hill Brook	\$1,755,772
2021	608888	Gardner	Gardner- Reclamation and related work on Pearson Boulevard	\$1,264,648
2021	608891	Gardner	Gardner- Resurfacing and rumble strip installation on Route 140	\$1,791,202
2022	608779	Lancaster	Lancaster- Intersection Improvements on Route 117/Route 70 at Lunenburg Road and Route 117/Route 70 at Main Street	\$5,747,806
2022	608793	Hubbardston	Hubbardston- Highway Reconstruction of Route 68 (Main Street), from 1,000 ft North of Williamsville Road to Elm Street	\$5,241,283
2023	607432	Westminster	Westminster - Rehabilitation & Box Widening on Rt 140, From Patricia Rd to the Princeton T.L.	\$6,375,205
2023	609279	Gardner	Gardner- Roundabout Construction at Elm Street, Pearl Street, Central Street and Green Street	\$2,571,433
2023	608784	Templeton	Templeton- Roundabout Construction at The Intersection of Patriots Road, South Main Street, North Main Street and Gardner Road	\$2,037,795

#### 1. 2019-2023 Projects Five Year Lookback Equity Analysis

An examination of projects funded over the last five TIPs, identified 16 individual projects with an estimated total cost of \$54,466,108. As with the current Target Projects, a geographic distribution of these 16 projects against those areas categorized as Environmental Justice (EJ) or Title VI areas resulted in the following:

- The total regional population was determined, along with the population of each identified Environmental Justice and Title IV group (Row 1), from which the percentage of total population was determined for each group (Row 2).
- Of the 15 projects analyzed based on EJ and Title VI identified populations, a dollar amount which was spent within each geographic area was determined (Row 3). It was then determined what percent of total funds were spent within each group (Row 4)
- Row 5 displays the comparison of the percentage of total population to the percentage of funding spent.

### FFY 2019-2023 TIP Five Year Look Back Projects Equity Analysis Summary

		Total Regional Population	EJ Block Groups			FTA Title VI Block Groups		FHWA Title VI Block Groups		FHWA Title VI Census Tracts		
			Income **	Minority	LEP HH*	Minority	Low Income**	Elderly	Minority	Disabilities	Foreign Born	Language***
1	Population	249,749	20,040	52,337	2,950	52,337	20,040	41,075	52,337	29,901	21,952	37,190
2	Percent of Total Regional Population	100%	8.02%	20.96%	1.18%	20.96%	8.02%	16.45%	20.96%	11.97%	8.79%	14.89%
3	Total Cost of TIP Projects	\$54,466,108	\$20,712,458	\$18,411,188	\$0	\$22,601,484	\$23,469,826	\$41,771,061	\$18,411,188	\$26,355,401	\$14,777,377	\$13,510,935
4	Percent of Regional Cost of Projects	100%	38.03%	33.80%	0.00%	41.50%	43.09%	76.69%	33.80%	48.39%	27.13%	24.81%
5	Difference in % Cost and % Population	0.00%	30.00%	12.85%	-1.18%	20.54%	35.07%	60.25%	12.85%	36.42%	18.34%	9.92%

\* Percentage of Total Montachusett Region Households (96,748)

\*\* Percentage of Poverty determined Montachusett Population (241,423)

\*\*\* Percentage of Montachusett Region Total Population Five Years and Older (236,131)

- An examination of Row 5 shows the majority of identified groups benefit disproportionately in these investments when compared to their overall regional population.
- There was one group who saw less total percentage cost than percentage population:
  - The EJ population of Limited English Proficiency (LEP) per Household, in which there is only one such Block Group regionwide

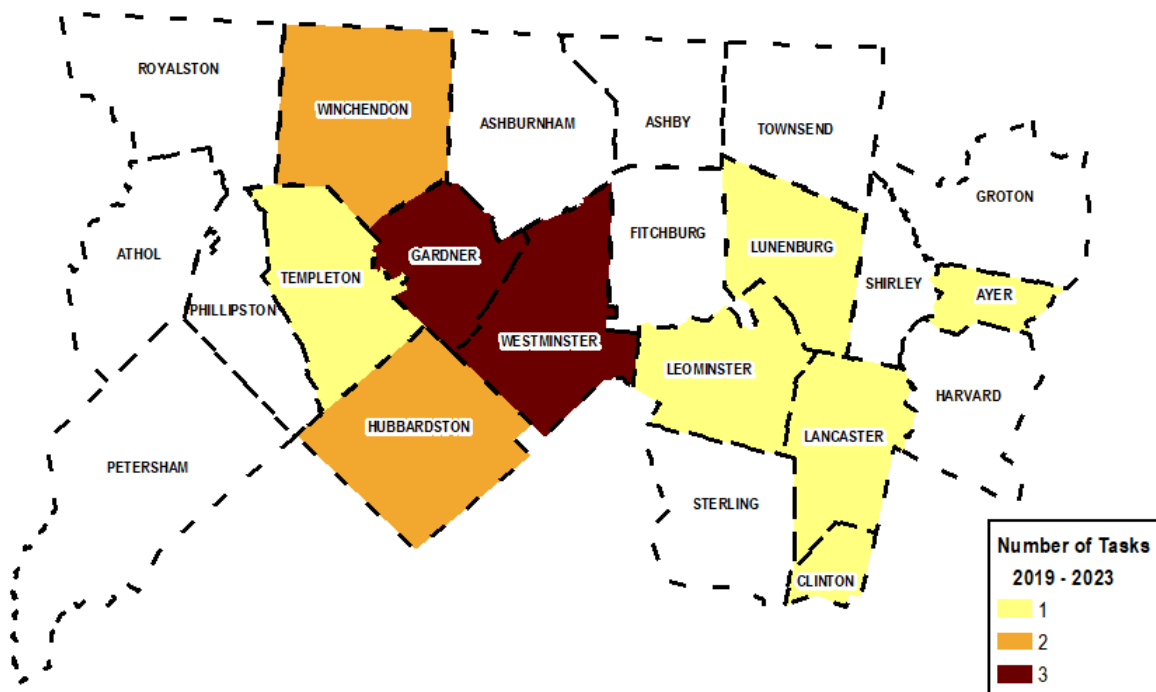


## 2. Summary of Equity Analysis

The percentage of TIP funds that have been allocated in Environmental Justice and FHWA or FTA areas is greater than the percentage of the region's population that reside in those areas. Overall, it can be determined that the projects implemented through the TIP process in the past five years have benefitted the Environmental Justice and Title VI populations in an equitable manner. Such analysis will be conducted on a yearly basis to ensure that the Environmental Justice and Title VI populations continue to benefit from the transportation planning process in the Montachusett Region.

## 3. Summary of Community Distribution

The map below shows the geographic equity analysis that was also conducted based on the projects conducted over the past five years for those specific communities. This map corresponds with the five-year lookback table on the previous page. The darker color shows where the most projects were conducted, and the communities shown in white had no projects that were specific to that community over the past five years (2019 – 2023).



Based upon this analysis and review, it would appear that the Montachusett MPO is making an effort to address transportation planning issues in Title VI and EJ communities in the Region. Projects compiled in the last five years have been developed in an attempt to locate them in communities which either have an Environmental Justice population, FHWA Title VI population, FTA Title VI population, or a combination of all three. Future efforts should focus on the communities in which no funding has been spent in the recent past. Efforts will be made to continue to monitor such trends and encourage communities, especially those which have not been taking advantage of TIP funds, to engage in the process and develop projects for inclusion.

### **Trends**

After analyzing the types of projects being implemented, it seems that the majority of highway projects continue to consist of improvements to already existing infrastructure (ex. roadway resurfacing and rehabilitation, and bridge repair) as opposed to building new facilities and therefore do not bear an undue burden or benefit as compared to the rest of the region. These types of projects allow for smoother navigation through these areas (by personal vehicle, bicycling, walking or public transit) and provide improved access for commuting.

The region continues to make strong connections with Title VI and EJ populations through email communication and meeting attendance. This pattern continues to increase, yet with the pandemic, public meetings seem to have slowed down. This is both a benefit and a burden where there appears to be more attendance for virtual meetings but participation and public input does not seem to have increased. It is hoped that involvement will show signs of increasing as time goes on.

### **Recommendations**

The MRPC continues to strive to solicit meaningful participation with Title VI and EJ populations through their Public Participation Plan, Limited English Proficiency Plan, and its submittals to MassDOT and the Federal transportation agencies through the Title VI. For this planning

document there was extensive outreach to the EJ and Title VI populations by both daytime and evening meetings with locations along the public transportation routes, contacted public service agencies, online surveys, and were included as meeting topics during other agency meetings. With that being said, there is always room for improvement. These improvements may include the following:

- Advance the outreach process by making stronger connections with Title VI and Environmental Justice type organizations and individuals.
- Continue to coordinate with local communities/organizations/advocates to monitor and address issues as they relate to identified target populations.
- Expand our mailing list to include other Title VI and EJ populations and organizations.
- Continue to monitor and advocate for TIP projects that show a benefit to Title VI and EJ areas.