

Appendix K
Environmental Justice

ENVIRONMENTAL JUSTICE

1. Introduction

1.1. Summary

As part of the National Environmental Policy Act (NEPA) review of the Draw One Bridge Replacement Project (the “Proposed Project”), MBTA must comply with Federal and State laws, rules, and regulations to make diligent efforts to involve Environmental Justice (EJ) populations. The most recent Federal guidance on environmental justice, Executive Order (EO) 14096, *Revitalizing Our Nation’s Commitment to Environmental Justice for All* (April 21, 2023),¹ defines “environmental justice” to mean:

the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other Federal activities that affect human health and the environment so that people:

(i) are fully protected from disproportionate and adverse human health and environmental effects (including risks) and hazards, including those related to climate change, the cumulative impacts of environmental and other burdens, and the legacy of racism or other structural or systemic barriers; and

(ii) have equitable access to a healthy, sustainable, and resilient environment in which to live, play, work, learn, grow, worship, and engage in cultural and subsistence practices.

This document describes the presence of such identified minority, low-income, and Limited English Proficiency (LEP) populations living near the Proposed Project, including their racial characteristics, and provides tools and techniques for outreach to and engagement with these populations throughout the NEPA review of the Proposed Project. MBTA’s goals are to:

- Provide members of Environmental Justice (EJ) populations with information about the Project and opportunities to provide input during the NEPA process;
- Solicit review of and comments on the Proposed Project from EJ populations, including comments regarding proposed mitigation measures;
- Consider the views of and input from EJ populations in the assessment and identification of any potential disproportionately adverse effects on such populations, as well as proposed measures to mitigate such effects; and
- Provide opportunities to meaningfully engage LEP populations, as necessary.

¹ <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/04/21/executive-order-on-revitalizing-our-nations-commitment-to-environmental-justice-for-all/>

1.2. Project Background

The Massachusetts Bay Transportation Authority (MBTA) proposes to replace the Draw One Bridge, which carries Amtrak passenger and MBTA commuter rail traffic over the Charles River in the cities of Boston and Cambridge, Massachusetts. The existing two two-track bascule bridge spans still in use, as well as the supporting infrastructure of the two disused spans, would be replaced with three two-track, standalone vertical lift bridge structures within the footprint of the existing bridge (the new bridge structures would carry six tracks, rather than four). The Proposed Project would also replace the Boston and Main Railroad (B&MRR) Signal Tower A and modify the Massachusetts Department of Conservation and Recreation (DCR)-owned North Bank Bridge, which crosses the MBTA Right-of-Way (ROW) north of the Draw One Bridge. The existing signal system and switch heaters associated with the Draw One Bridge would be replaced, and a new drainage system would be provided. The existing Draw One Bridge and Signal Tower A, both of which are eligible for listing in the National Register of Historic Places (NHRP), would be demolished.

2. Methodology

2.1. Federal and State Requirements

2.1.1. Federal Regulations and Guidance

Both EO 14096 and EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994),² require specific and meaningful engagement with members of environmental justice communities as part of the environmental review process.

EO 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*,³ EO 14008, *Tackling the Climate Crisis at Home and Abroad*,⁴ and the implementation guidance document M-21-28⁵ were issued in January 2021 as part of the Biden administration's goal to advance racial equity. These executive orders and the guidance document establish a whole-of-government approach to advancing environmental justice. EO 14008 also establishes the Justice40 initiative, which includes the goal that 40 percent of Federal investments flow to disadvantaged communities. EO 13985 refers to equity for underserved communities, and EO 14008 uses the term disadvantaged communities. While the individuals and communities that fall under the definition of EJ populations would also fall under the definition of "disadvantaged communities" or "underserved communities," these terms are much broader, expanding the focus of environmental justice to include a larger swath of the general population.

² <https://www.federalregister.gov/documents/1994/02/16/94-3685/federal-actions-to-address-environmental-justice-in-minority-populations-and-low-income-populations>

³ <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>

⁴ <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>

⁵ <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>

The Council on Environmental Quality (CEQ) has developed guidance to assist federal agencies with their NEPA procedures so that environmental justice concerns are effectively identified and addressed (*Environmental Justice Guidance under the National Environmental Policy Act* [December 1997]). Federal agencies are permitted to supplement this guidance with more specific procedures tailored to their particular programs or activities, as USDOT has done.⁶

Consistent with Federal guidance, this analysis involved four basic steps:

1. Identify the area where the Proposed Project may cause adverse impacts (i.e., the study area);
2. Compile race and ethnicity and income data for the census block groups in the study area and identify minority and low-income populations;
3. Identify the Proposed Project's potential adverse impacts on minority and low-income populations; and
4. Evaluate the Proposed Project's potential adverse effects on minority and low-income populations relative to its effects on non-minority and non-low-income populations to determine whether it would result in any disproportionate adverse effects on minority or low-income populations.

2.1.2. State Regulations and Guidance

MBTA has also considered the defined environmental justice principles and populations outlined in the Massachusetts Environmental Policy Act's (MEPA) Public Involvement Protocol for Environmental Justice Populations (MEPA EJ Public Involvement Protocol),⁷ which was developed under the requirements outlined in former Massachusetts Governor Charlie Baker's *An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy*⁸ and the resulting *Environmental Justice Policy of the Executive Office of Energy and Environmental Affairs*.⁹

The MEPA EJ Public Involvement Protocol defines the public involvement requirements for all MEPA projects. It requires the identification of EJ populations relative to the project location, characteristics of those EJ populations (e.g., racial demographics, income, language spoken at home, etc.), and likely effects of the project on EJ populations. As described further in Section 3, "Identification of Environmental Justice Communities," this analysis relies on the precise definition of environmental justice communities provided in State guidance rather than the more ambiguous framework outlined in Federal regulations.

It also notes that best practice for providing EJ populations ample opportunity to meaningfully engage in MEPA project reviews requires taking early steps to provide public involvement opportunities. This includes providing advance notification of the project to community-based organizations and tribes, employing outreach and community engagement strategies tailored to the specifics of the project (e.g., dissemination of a written project summary with translation into relevant languages, making project

⁶ FTA guidance includes FTA Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration Recipients* (August 15, 2012), and FTA Circular 4702.1B, *Title VI Requirements and Guidelines for Federal Transit Administration Recipients* (October 1, 2012).

⁷ <https://www.mass.gov/doc/final-mepa-public-involvement-protocol-for-environmental-justice-populations-effective-date-of-january-1-2022/download>

⁸ <https://malegislature.gov/Laws/SessionLaws/Acts/2021/Chapter8>

⁹ <https://www.mass.gov/doc/environmental-justice-policy6242021-update/download>

information available through a website or other electronic means, hosting focused community meetings organized by topic, neighborhood, or interest group, etc.).

2.2. Study Area and Data Sources

The study area for environmental justice encompasses the area that could be affected by the Proposed Project and considers the area where potential impacts resulting from construction and operation of the Proposed Project could occur. The study area for environmental justice follows the quarter-mile study area used for the analyses of land use and socioeconomic conditions. This study area is appropriate for capturing all surrounding areas where people residing, working, or visiting may be expected to experience any potential adverse environmental effects associated with Project construction, or from within which they might experience (e.g., view) permanent changes to the environment with full implementation of the Proposed Project. It also includes areas served by community resources such as parks and open space that could themselves be affected by the Proposed Project, either during construction or operations.

Data from both EJScreen,¹⁰ the Environmental Protection Agency's (EPA) environmental justice mapping and screening tool to identify potential EJ communities, and the Massachusetts Bureau of Geographic Information (MassGIS) EJ Maps Viewer¹¹ are used to inform the appropriateness of outreach techniques given their different categorizations of potential EJ populations, as described further below.

3. Identification of Environmental Justice Communities

FTA's 2012 Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration Recipients*, specifies that an EJ analysis begins with determining whether minority and/or low-income populations will experience potential environmental or health impacts from a proposed project. Minorities are defined to include persons who are American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian and other Pacific Islander. In addition, minority populations may include persons who identified themselves as being either "some other race" or "two or more races" in response to the Census questionnaire. Low-income means a person whose median household income is at or below the Department of Health and Human Services (HHS) poverty guidelines. Figure J-1, "EPA EJScreen Socioeconomic Indicators," identifies Census block groups that, compared with the country as a whole, are within the 50th percentile for people or color and/or the 50th percentile for low-income populations (i.e., where the household income is less than or equal to twice the Federal poverty level).

However, FTA also encourages the use of local poverty thresholds or a percentage of median income for the area, provided that the threshold is at least as inclusive as the HHS poverty guidelines. The Massachusetts guidance for defining environmental justice communities differs slightly from the Federal definition; because the State guidance is both more stringent (i.e., prescribes thresholds for a Census blocks group to qualify as an environmental justice community rather than allowing for more flexible interpretation) and provides a broader definition (e.g., includes consideration of LEP populations), it requires consideration of potential impacts to a larger segment of the population.

¹⁰ <https://www.epa.gov/ejscreen>

¹¹ <https://www.mass.gov/info-details/massgis-data-2020-environmental-justice-populations>

As such, State criteria for EJ populations is also considered. In accordance with guidance developed by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA), an environmental justice population is defined as a Census block group that includes one or more of the following demographic characteristics:¹²

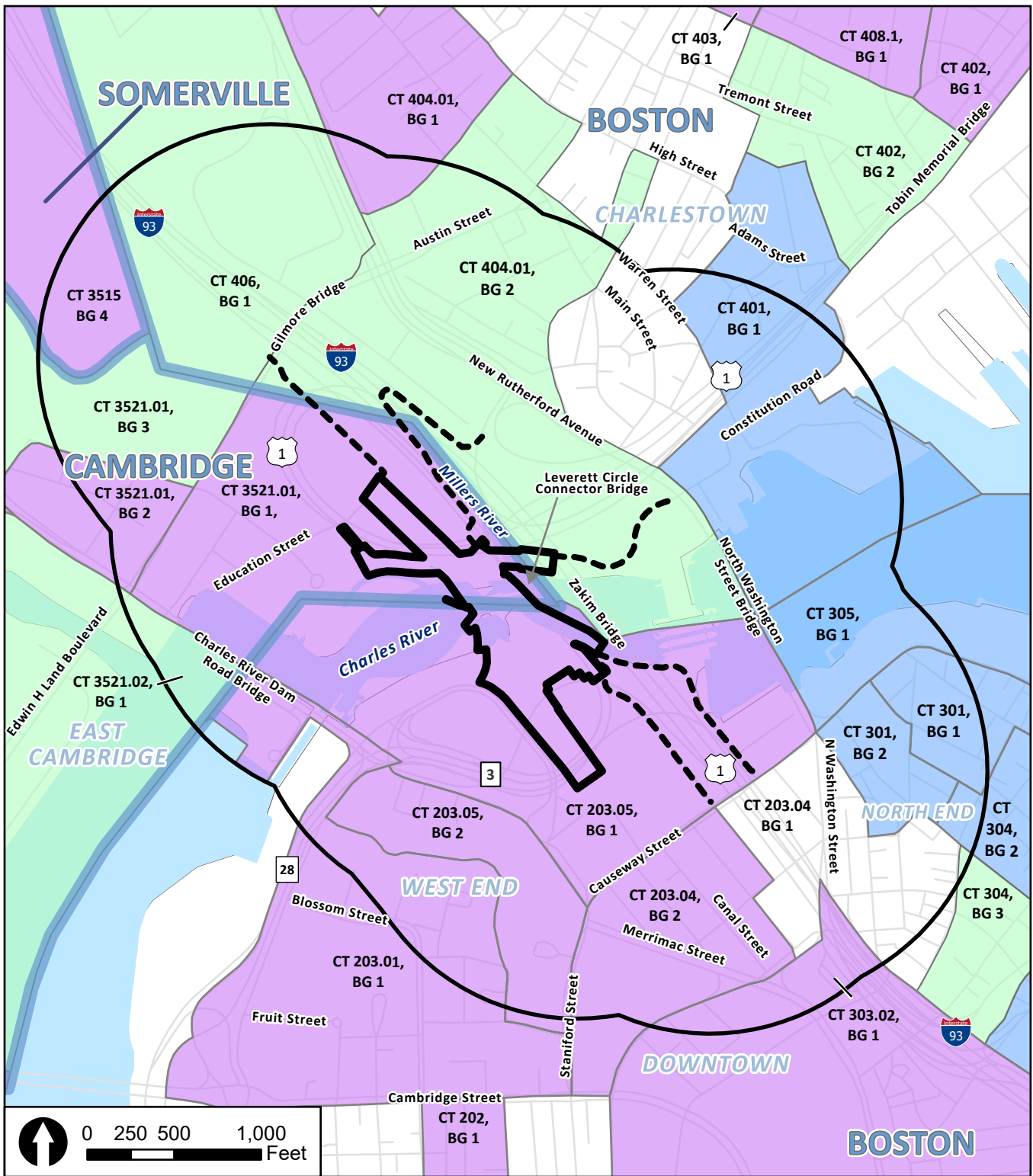
- **Income:** The annual median household income is not more than 65 percent of the statewide annual median household income;
- **Minority:** Minorities (i.e., individuals who identify themselves as Latino/Hispanic, Black/African American, Asian, Indigenous people, and people who otherwise identify as non-white) comprise 40 percent or more of the population;
- **Minority and Income:** Minorities comprise 25 percent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 percent of the statewide annual median household income; or
- **English Language Isolation:** 25 percent or more of households lack English language proficiency.

Figure J-2, “EEA EJ Populations (2020),” presents the Census block groups that meet State criteria, per the MassGIS EJ Maps Viewer, which uses data from the 2020 U.S. Census and American Community Survey (ACS) 5-Year Estimates for years 2016-2020. Figure J-3, “EEA EJ Populations (2020),” presents the same information, though using the most recently available ACS 5-Year estimates for years 2018-2022.

The Project Limits touch both the City of Cambridge and the City of Boston and are located entirely in an area that can be considered an EJ community based on State guidance. All block groups in the portion of the study area within the City of Cambridge are considered environmental justice communities. Within the City of Boston, environmental justice communities comprise those extending southeast of the Project Limits into Downtown Boston. EPA’s EJScreen tool also identifies potential environmental justice communities along the eastern edge of the study area. Therefore, any adverse effects from the construction or operation of the Proposed Project would occur in an environmental justice community.

Table J-1, “Study Area Demographic Profile,” and Table J-2, “Race by Block Group,” provide detailed demographic data for the Census block groups within the study area; blue highlighted rows with bolded text indicate Census block groups that have been identified as EJ communities per EPA’s EJScreen and/or MassGIS’ EJ Maps Viewer.

¹² The Massachusetts Executive Office of Energy and Environmental Affairs can also designate a geographic portion of a neighborhood as an EJ population.

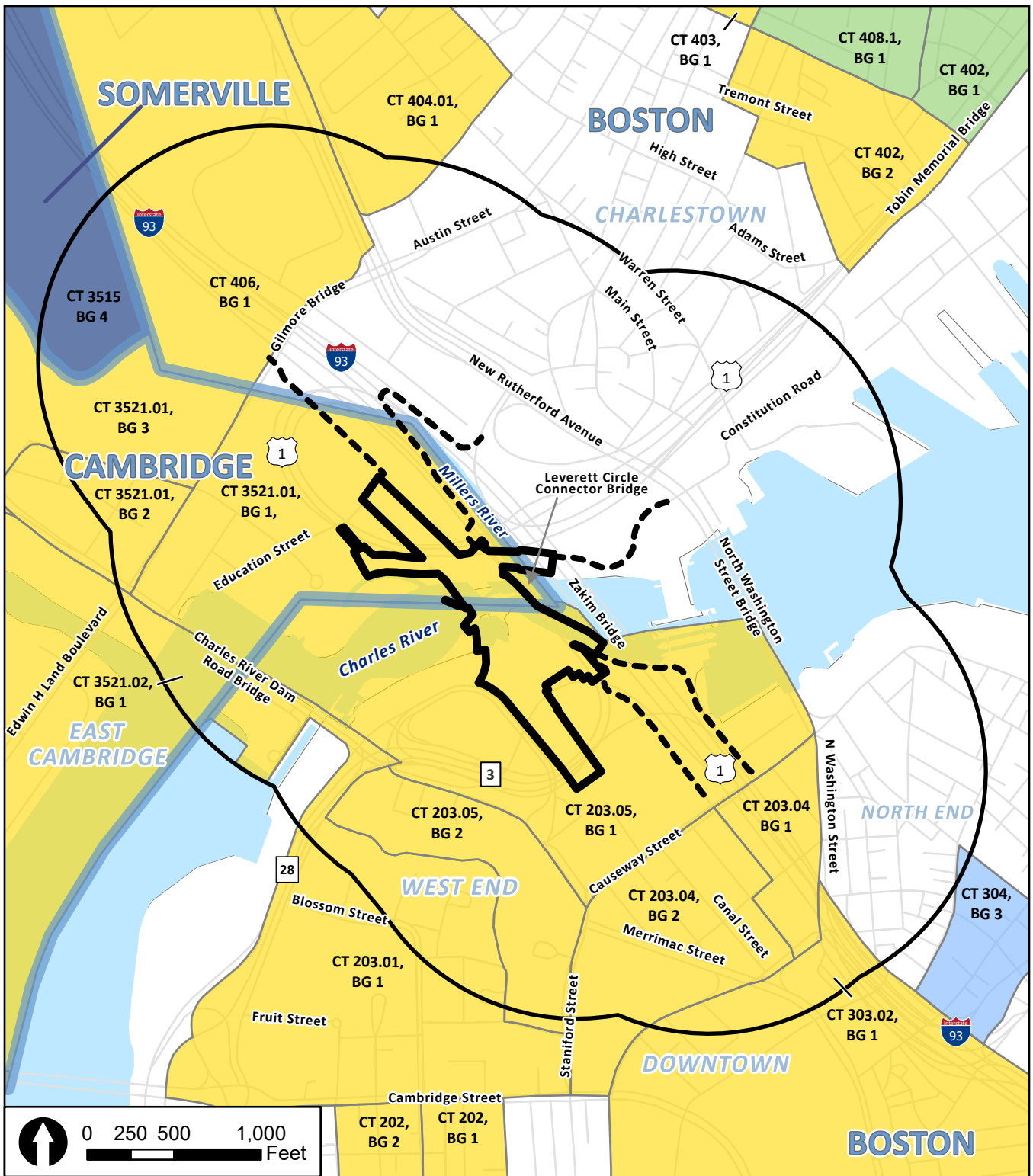


Source: Environmental Protection Agency (EPA) Environmental Justice Screening, 2024; Massachusetts Executive Office of Technology Services and Security, MassGIS; Massachusetts Department of Transportation; STV Incorporated, 2024.

Project Limits	Environmental Justice Population Criteria
Construction Access	50th Percentile People of Color
1/4-Mile Study Area	50th Percentile Low Income
Municipal Boundaries	50th Percentile Both People of Color and Low Income

Figure J-1
EPA EJScreen
Socioeconomic
Indicators



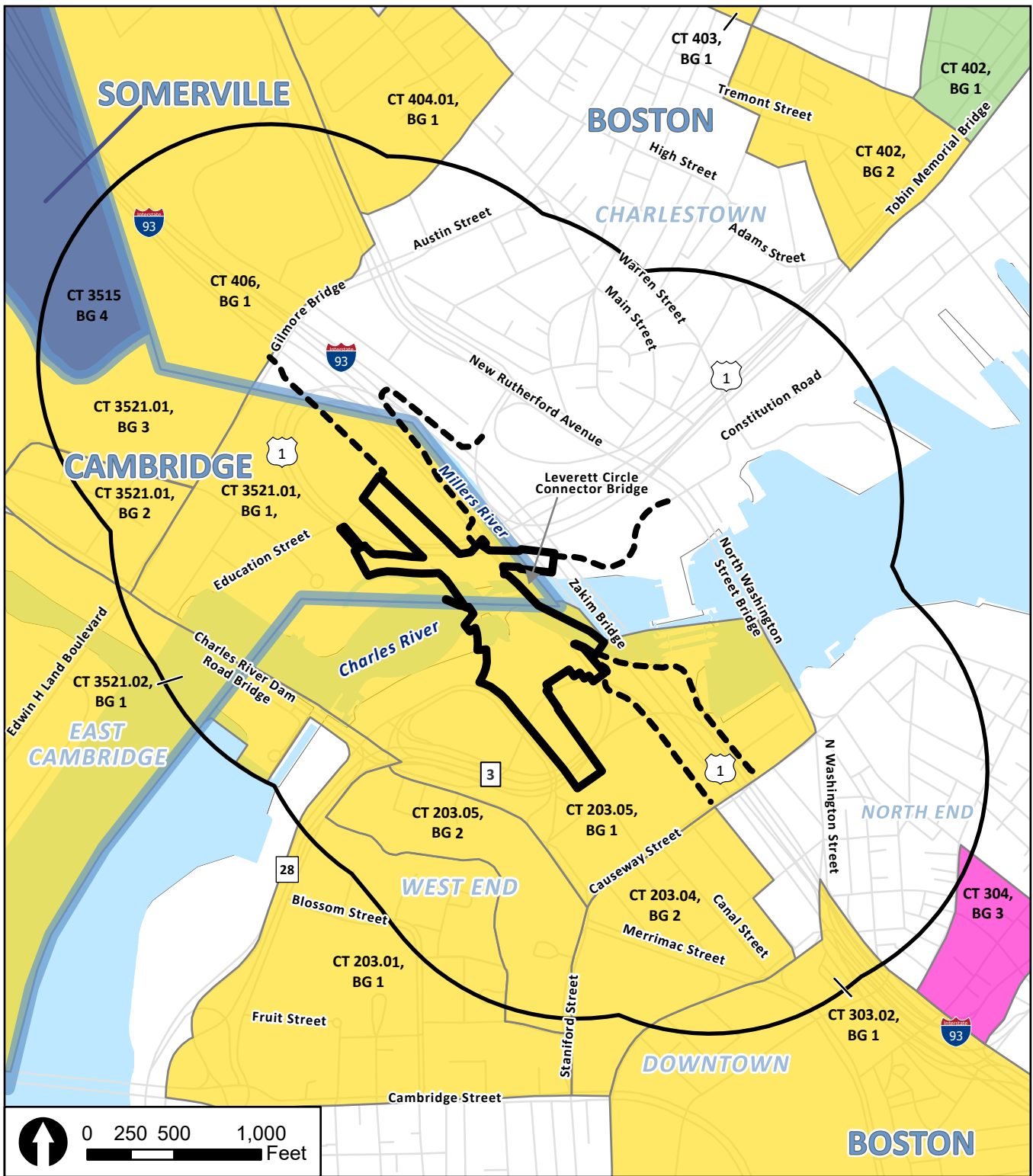


Source: Massachusetts Executive Office of Technology Services and Security, MassGIS; Massachusetts Department of Transportation; STV Incorporated, 2024.

Project Limits	Environmental Justice Population Criteria	
Construction Access	Minority	Minority and Income
1/4-Mile Study Area	English Isolation	Minority, Income and English Isolation
Municipal Boundaries		

Figure J-2
EEA EJ Populations (2020)





Source: Massachusetts Executive Office of Technology Services and Security, MassGIS; Massachusetts Department of Transportation; STV Incorporated, 2024.

Project Limits	Environmental Justice Population Criteria	
Construction Access	Minority	Minority and English Isolation
1/4-Mile Study Area	Minority and Income	Minority, Income and English Isolation
Municipal Boundaries		

Figure J-3
EEA EJ Populations
(2022)



Table J-1: Study Area Demographic Profile

Geography	% Minority	% Hispanic/Latino	% LEP	Languages Spoken by at Least 5% of LEP Population	Median Household Income	% Households Below Poverty Rate	% Low Income (< \$60k)
Census Tract 3515, Block Group 4	68.5%	0.0%	47.5%	Spanish, Portuguese, Indo-European	\$11,860	64.3%	94.8%
Census Tract 3521.01, Block Group 1	56.9%	14.7%	14.6%	Spanish, Portuguese	\$79,013	16.7%	36.9%
Census Tract 3521.01, Block Group 2	53.3%	14.2%	8.1%		\$89,688	24.4%	36.0%
Census Tract 3521.01, Block Group 3	52.1%	7.6%	16.4%		\$72,467	8.9%	37.5%
Census Tract 3521.02, Block Group 1	37.7%	11.6%	4.8%		\$196,500	10.7%	16.2%
Census Tract 203.01, Block Group 1	40.4%	14.9%	7.9%	Chinese	\$106,593	15.6%	28.4%
Census Tract 203.04, Block Group 1*	23.2%	11.4%	5.4%		\$177,632	11.7%	14.7%
Census Tract 203.04, Block Group 2	37.5%	6.9%	1.7%	Spanish	\$201,625	3.1%	18.3%
Census Tract 203.05, Block Group 1	53.6%	24.5%	10.8%	Spanish	\$128,810	8.9%	22.3%
Census Tract 203.05, Block Group 2	25.6%	7.0%	9.7%		\$106,538	21.5%	34.7%
Census Tract 301, Block Group 1**	21.7%	15.8%	3.4%		\$87,614	16.6%	33.6%
Census Tract 301, Block Group 2**	12.0%	10.2%	1.0%		\$108,625	13.4%	23.9%
Census Tract 302, Block Group 1	17.4%	3.6%	7.5%		\$109,103	7.1%	16.0%
Census Tract 302, Block Group 2	11.4%	6.8%	3.7%		\$113,152	6.8%	22.0%
Census Tract 303.02, Block Group 1	33.3%	6.1%	3.9%		\$137,778	7.3%	16.6%
Census Tract 304, Block Group 2**	7.9%	4.9%	3.3%		\$95,577	4.2%	17.6%
Census Tract 304, Block Group 3	26.6%	3.9%	24.9%		\$79,813	9.1%	21.6%
Census Tract 305, Block Group 1**	8.2%	0.2%	8.5%		\$194,583	19.8%	33.2%
Census Tract 401, Block Group 1**	13.9%	6.2%	9.8%		\$162,415	10.6%	26.0%
Census Tract 401, Block Group 2	21.8%	0.3%	0.1%		\$177,552	10.7%	22.0%
Census Tract 404.01, Block Group 1	25.7%	9.0%	8.7%	Chinese	\$108,333	6.8%	35.3%
Census Tract 404.01, Block Group 2**	23.9%	0.0%	2.8%		\$164,896	5.0%	13.4%
Census Tract 406, Block Group 1	30.4%	6.9%	3.0%		\$133,672	2.3%	25.5%
Census Tract 9815.01, Block Group 1	N/A	N/A	N/A		N/A	N/A	N/A

Table J-1: Study Area Demographic Profile (cont.)

Geography		% Minority	% Hispanic/Latino	% LEP	Languages Spoken by at Least 5% of LEP Population	Median Household Income	% Households Below Poverty Rate	% Low Income (< \$60k)
Study Area	City of Cambridge	24.1%	7.7%	6.4%	-	\$133,017	10.0%	23.6%
	City of Boston	53.7%	9.6%	18.3%	-	\$89,906	25.0%	44.3%
City of Cambridge		44.0%	8.7%	8.3%	-	\$121,539	11.5%	26.7%
City of Boston		55.8%	19.6%	16.1%	-	\$89,212	17.9%	37.8%
Suffolk County		56.2%	23.5%	18.5%	-	\$87,669	17.6%	37.9%
Middlesex County		31.7%	8.4%	9.6%	-	\$121,304	8.2%	25.3%
Massachusetts		31.1%	12.6%	9.6%	-	\$96,505	10.8%	32.7%
<p><i>Notes:</i></p> <p>* MassGIS' EJ Maps Viewer identified Census Tract 203.04, Block Group 1 as an EJ population based on data from the 2020 U.S. Census and American Community Survey (ACS) 5-Year Estimates for years 2016-2020 for meeting the State's minority criteria; ACS 5-Year Estimates for years 2018-2022 did not identify this block group as an EJ population. However, in an effort to be conservative, it is included in the analysis presented herein.</p> <p>** EPA's EJScreen tool identified Census Tract 301, Block Groups 1 and 2, Census Tract 304, Block Group 2, Census Tract 305, Block Group 1, Census Tract 401, Block Group 1, and Census Tract 404.01, Block Group 2 as potential EJ communities given that they are in the 50th percentile for low income; MassGIS' EJ Maps Viewer did not identify these block groups as an EJ population. However, in an effort to be conservative, they are included in the analysis presented herein.</p>								

Source: ACS 5-Year Estimates, 2018-2022

Table J-2: Race by Block Group

Geography	White		Black or African American		American Indian and Alaska Native		Asian		Native Hawaiian/Pacific Islander		Some Other Race		Two or More Races		Total Non-White	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Census Tract 3515, Block Group 4	81	31.5%	22	8.6%	0	0.0%	61	23.7%	0	0.0%	62	24.1%	31	12.1%	176	68.5%
Census Tract 3521.01, Block Group 1	361	54.0%	53	7.9%	0	0.0%	229	34.3%	0	0.0%	5	0.7%	20	3.0%	307	46.0%
Census Tract 3521.01, Block Group 2	795	55.5%	57	4.0%	0	0.0%	376	26.3%	0	0.0%	34	2.4%	170	11.9%	637	44.5%
Census Tract 3521.01, Block Group 3	594	51.9%	65	5.7%	0	0.0%	417	36.4%	0	0.0%	0	0.0%	69	6.0%	551	48.1%
Census Tract 3521.02, Block Group 1	868	68.7%	47	3.7%	0	0.0%	242	19.1%	0	0.0%	10	0.8%	97	7.7%	396	31.3%
Census Tract 203.01, Block Group 1	1,451	61.6%	82	3.5%	1	0.0%	369	15.7%	0	0.0%	140	5.9%	313	13.3%	905	38.4%
Census Tract 203.04, Block Group 1*	673	80.4%	9	1.1%	0	0.0%	40	4.8%	0	0.0%	73	8.7%	42	5.0%	164	19.6%
Census Tract 203.04, Block Group 2	246	67.8%	26	7.2%	0	0.0%	10	2.8%	0	0.0%	0	0.0%	81	22.3%	117	32.2%
Census Tract 203.05, Block Group 1	643	46.4%	169	12.2%	0	0.0%	231	16.7%	0	0.0%	259	18.7%	84	6.1%	743	53.6%
Census Tract 203.05, Block Group 2	1,996	77.8%	38	1.5%	0	0.0%	234	9.1%	0	0.0%	39	1.5%	257	10.0%	568	22.2%
Census Tract 301, Block Group 1**	1,061	85.2%	0	0.0%	0	0.0%	73	5.9%	0	0.0%	108	8.7%	3	0.2%	184	14.8%
Census Tract 301, Block Group 2**	916	97.1%	0	0.0%	8	0.8%	9	1.0%	0	0.0%	0	0.0%	10	1.1%	27	2.9%
Census Tract 302, Block Group 1	759	84.5%	27	3.0%	0	0.0%	87	9.7%	0	0.0%	9	1.0%	16	1.8%	139	15.5%
Census Tract 302, Block Group 2	622	89.8%	9	1.3%	0	0.0%	23	3.3%	0	0.0%	0	0.0%	39	5.6%	71	10.2%
Census Tract 303.02, Block Group 1	1,638	68.9%	230	9.7%	0	0.0%	232	9.8%	0	0.0%	108	4.5%	169	7.1%	739	31.1%
Census Tract 304, Block Group 2**	892	93.9%	28	2.9%	0	0.0%	0	0.0%	0	0.0%	30	3.2%	0	0.0%	58	6.1%
Census Tract 304, Block Group 3	662	76.1%	174	20.0%	0	0.0%	12	1.4%	0	0.0%	20	2.3%	2	0.2%	208	23.9%
Census Tract 305, Block Group 1**	524	91.8%	0	0.0%	0	0.0%	46	8.1%	0	0.0%	0	0.0%	1	0.2%	47	8.2%
Census Tract 401, Block Group 1**	887	89.1%	0	0.0%	0	0.0%	72	7.2%	0	0.0%	0	0.0%	37	3.7%	109	10.9%
Census Tract 401, Block Group 2	1,247	78.2%	0	0.0%	0	0.0%	120	7.5%	0	0.0%	0	0.0%	228	14.3%	348	21.8%
Census Tract 404.01, Block Group 1	1,679	79.0%	40	1.9%	2	0.1%	310	14.6%	0	0.0%	17	0.8%	76	3.6%	445	21.0%
Census Tract 404.01, Block Group 2**	569	76.1%	32	4.3%	0	0.0%	5	0.7%	0	0.0%	0	0.0%	142	19.0%	179	23.9%
Census Tract 406, Block Group 1	1,266	70.1%	191	10.6%	0	0.0%	198	11.0%	0	0.0%	86	4.8%	64	3.5%	539	29.9%
Census Tract 9815.01, Block Group 1	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A

Table J-2: Race by Block Group (cont.)

Geography		White		Black or African American		American Indian and Alaska Native		Asian		Native Hawaiian/Pacific Islander		Some Other Race		Two or More Races		Total Non-White	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Study Area	City of Cambridge	17,731	76.0%	1,055	4.5%	11	0.0%	2,071	8.9%	0	0.0%	889	3.8%	1,564	6.7%	5,590	24.0%
	City of Boston	2,699	56.6%	244	5.1%	0	0.0%	1,325	27.8%	0	0.0%	111	2.3%	387	8.1%	2,067	43.4%
City of Cambridge		69,984	59.3%	12,704	10.8%	179	0.2%	22,720	19.3%	130	0.1%	2,651	2.2%	9,594	8.1%	47,978	40.7%
City of Boston		323,655	48.6%	150,002	22.5%	2,286	0.3%	64,387	9.7%	544	0.1%	45,360	6.8%	79,711	12.0%	342,290	51.4%
Suffolk County		387,745	49.4%	155,625	19.8%	2,916	0.4%	69,412	8.8%	544	0.1%	59,052	7.5%	110,149	14.0%	397,698	50.6%
Middlesex County		1,154,437	71.1%	81,837	5.0%	2,753	0.2%	210,784	13.0%	751	0.0%	59,686	3.7%	112,861	7.0%	468,672	28.9%
Massachusetts		5,075,525	72.7%	498,785	7.1%	14,740	0.2%	487,600	7.0%	2,766	0.0%	347,501	5.0%	557,288	8.0%	1,908,680	27.3%

Notes:
 * MassGIS' EJ Maps Viewer identified Census Tract 203.04, Block Group 1 as an EJ population based on data from the 2020 U.S. Census and ACS 5-Year Estimates for years 2016-2020 for meeting the State's minority criteria; ACS 5-Year Estimates for years 2018-2022 did not identify this block group as an EJ population. However, in an effort to be conservative, it is included in the analysis presented herein.
 ** EPA's EJScreen tool identified Census Tract 301, Block Groups 1 and 2, Census Tract 304, Block Group 2, Census Tract 305, Block Group 1, Census Tract 401, Block Group 1, and Census Tract 404.01, Block Group 2 as potential EJ communities given that they are in the 50th percentile for low income; MassGIS' EJ Maps Viewer did not identify these block groups as an EJ population. However, in an effort to be conservative, they are included in the analysis presented herein.

Source: ACS 5-Year Estimates, 2018-2022.

4. Engagement with EJ Populations

4.1. Our Public Process

Public involvement is key to informing MBTA projects and decisions. MBTA's 2023 Public Engagement Plan¹³ outlines the following public engagement principles that agency representatives and those working in concert with the MBTA on transportation projects and initiatives will strive to achieve:

- **Strong Community Partnerships:** MBTA shall develop collaborative working partnerships with community members, community and advocacy organizations, and municipalities to build trust, avenues for regular communication, and ongoing engagement.
- **Strategic and Continuous Outreach:** Concerted effort must be given to encouraging participation through early, accessible, and ongoing strategic outreach to the public that MBTA serves. This includes using a variety of tools and mechanisms to reach the riders who are most likely to be impacted by proposed changes.
- **Accessibility, Equity, and Inclusion:** All public participation and engagement activities should promote inclusion and equity with specific strategies that encourage participation from diverse members of the community. Every effort should be made to ensure that participation opportunities are physically, geographically, temporally, linguistically, and culturally accessible. Public engagement processes should include, as appropriate to a project or those impacted, a range of socioeconomic, ethnic, environmental, and cultural perspectives and include people with low-incomes, people of color, people with disabilities, people with limited English proficiency, young people and older adults, and other traditionally underserved communities.
- **Respectful and Solution-Oriented Dialogue:** MBTA welcomes constructive contributions by members of the public and encourages the respect and inclusion of all points of view. When there are conflicting opinions, conversations should be structured to allow for compromise, when possible, while staying solution-focused to respond to community concerns.
- **Transparent Process:** The decision-making processes and level of input for any event or community process should be clear, open, and understandable. Plans and projects must be clearly described, including the potential effect of public input, so that the public understands what is being proposed and how to get involved.

MBTA seeks to engage the public about its policies, planning, and projects. The level of complexity for each project and the impact on the community guide the structure and process of public engagement. Simple projects may require less extensive engagement, while some projects may require outreach over the life of the project. Further, MBTA recognizes that its riders have different time constraints and strives to provide multiple ways to ensure rider voices are heard.

The most common types of public engagement that MBTA uses are in-person and virtual public meetings, including public hearings, as well as community meetings, open houses and breakout sessions, stakeholder meetings, station pop-ups, virtual community drop-in sessions, and one-on-one interactions. MBTA also deploys street outreach teams, intercept and periodic surveys, and interviews or question-and-answer sessions at stations or bus stops. While MBTA is committed to in-person public engagement,

¹³ <https://cdn.mbta.com/sites/default/files/2023-06/2023-06-Public-Engagement-Plan-English.pdf>

virtual public engagement methods have been proven to make participation more accessible and convenient for the public and are a key public engagement strategy at MBTA.

4.2. Inclusive Engagement Strategies

MBTA is committed to fostering equitable engagement with EJ populations – communities often underrepresented in decision-making processes – including low-income residents, communities of color, and individuals with LEP. This aligns with MEPA requirements, the Title VI Civil Rights Act, and MBTA’s broader goals for accessibility, transparency, and inclusion through MBTA’s 2023 Public Engagement Plan.

4.2.1. Guiding Principles for Engagement

MBTA maintains the following guiding principles to facilitate meaningful public engagement:

- **Proactive Communication:** Engage EJ populations early and maintain consistent outreach throughout the project lifecycle.
- **Accessibility:** Ensure all outreach is linguistically, culturally, and geographically accessible, adhering to Title VI and Americans with Disabilities Act (ADA) guidelines.
- **Transparency:** Provide clear, timely, and accurate updates about the project and its impacts.
- **Stakeholder-Centered Design:** Collaborate with community organizations, municipalities, and advocacy groups to ensure equitable participation.

4.2.2. Tools and Techniques for Engagement

Consistent Communication

To ensure open and effective lines of communication, MBTA:

- Disseminates regular **design update bulletins** with information about construction schedules, disruptions, and mitigation plans.
- Uses an electronic stakeholder database to distribute updates and project alerts. This database includes community organizations, officials, community advocates and individuals from EJ and LEP populations.
- Leverages outreach channels such as email, social media, press releases, and printed materials to ensure information reaches diverse audiences.

Stakeholder Meetings

MBTA coordinates meetings with relevant stakeholders as needed. These sessions may include, and are not limited to:

- Elected officials, community boards, and neighborhood associations.
- Advocacy groups for EJ populations, LEP communities, and ADA representatives.
- Business owners, residents, and civic organizations near the project area.

These meetings include targeted discussions to identify and address EJ community concerns. To maximize attendance, notifications are distributed using culturally relevant methods, including multicultural media and flyers posted in high-traffic areas in EJ communities.

Multilingual Outreach

MBTA recognizes language barriers as a significant factor in engagement. To address this:

- All project materials, including flyers, emails, and meeting notices, are translated into relevant languages such as Spanish, Chinese, Portuguese, Haitian Creole, Amharic, Bangla, and Vietnamese, with additional languages available upon request.
- Real-time interpretation and translated materials are provided at public meetings.
- Ethnic media platforms are utilized to increase awareness within linguistically diverse communities.

Digital and Traditional Outreach

- **Digital Tools:** Utilize project websites, social media platforms (Facebook, Instagram, X), and email newsletters to share updates; use targeted ads to engage specific demographics.
- **Traditional Methods:** Distribute flyers, posters, and printed materials in community hubs, libraries, and transit stations to reach residents without internet access.
- **Project Email and Hotline:** Establish a dedicated email address and hotline for inquiries, ensuring public access to timely responses.

Accessible Public Meetings

Public meetings are designed to accommodate EJ populations and underserved communities by:

- Holding meetings in ADA-compliant venues accessible by public transit.
- Scheduling flexibly, including evenings and weekends, to suit diverse schedules.
- Conducting meetings with virtual options featuring closed captioning, sign language interpretation, and real-time language services.

Ongoing Communication and Feedback Mechanisms

- **Community Partnerships:** Collaborate with local groups, such as La Colaborativa, GreenRoots, and Charles River Conservancy, to co-design outreach strategies.
- **Information Sharing:** Make all public materials available online and in accessible formats. Meeting minutes, presentations, and feedback summaries are shared promptly.
- **Feedback Loops:** MBTA responds to community input through newsletters and regular updates, demonstrating how feedback shapes project decisions.

4.3. Draw One Bridge Replacement Project

Outreach activities for the Proposed Project will continue to be conducted in alignment with MBTA's 2023 Public Engagement Plan and the policies for inclusive and ongoing engagement described above. MBTA has implemented targeted engagement strategies for the Draw One Bridge Replacement project, including:

- Collaborations with local advocacy groups to host bilingual focus groups and workshops.
- Distribution of multilingual materials in partnership with local organizations and ethnic media.
- Proactive engagement with elected officials and municipal agencies to address concerns raised by EJ populations.

Past Events:

- Public Meeting | Draw One Bridge Replacement (Virtual)
 - June 6, 2024, 6:00 PM
- Public Meeting | Draw One Bridge Replacement (Virtual)
 - Virtual, Boston, MA

Future Events:

- Public Meeting | Draw One Bridge Replacement (Virtual)
 - January 6, 2025, 6:00 PM
 - The event website and project website will include an electronic comment form for submitting written comments and requesting additional project information.
- Community Meeting | Draw One Bridge Replacement (In Person Open House)
 - January 8, 2025, 6:00pm at a community organization within an EJ community, to be determined.
 - The event website and project website will include an electronic comment form for submitting written comments and requesting additional project information.

5. Summary of Effects Potentially Relevant to EJ Communities

The assessment of the Proposed Project’s potential effects to EJ communities focuses on those who live or work in areas that may experience direct or indirect Project impacts (e.g., related to air quality, noise, traffic, and bicycle and pedestrian facilities), those who are reliant on community services (e.g., emergency or medical services), those who may use local community resources (e.g., parks and recreational resources), and those who are served by regional public transit, including MBTA and Amtrak service into North Station.

As described in Table 8, “Summary of Potential Project Impacts and Benefits and Proposed Measures to Avoid, Minimize, or Mitigate,” of the NEPA Environmental Assessment (EA), the Proposed Project would not introduce new residents or employees to the study area, nor would it directly affect existing community facilities or emergency or medical services in the study area. The Proposed Project would require two permanent easements and five temporary (construction) easements and may result in minor and temporary construction-period impacts with respect to community facilities and services, parks and recreational resources, pedestrian and bicycle facilities, rail transportation and transit, and noise and vibration. Any of these construction-period impacts, however, would be minor and temporary, not significant or permanent, and mitigation measures would be implemented, as appropriate (see Table 8). For example, measures required by code and best management practices would be employed to minimize or avoid any potential adverse effects related to air quality and noise and vibration during construction periods.

While slight modifications to the North Bank Bridge, affecting landings in North Point Park and Paul Revere Park, would be required to accommodate and tie into the new rail infrastructure, the Proposed Project would not impede access to these parks. North Bank Bridge would experience multiple closures of the pedestrian bridge of up to two weeks, totaling one month; these closures would take place over a six-

month period. Temporary closures of the North Bank Park, pedestrian walkways, and bicycle paths, as well as detours, would be coordinated with DCR and the local community.

The Proposed Project would require the acquisition of an extremely small portion of the South Bank Park site for the installation of a new manhole in approximately the same location as an existing manhole, but this would not represent a direct or indirect significant impact to the future South Bank Park. The Proposed Project would also require the permanent removal of public sidewalks along the east and west sides of the existing Draw One Bridge south trestles, but these sidewalks terminate before the navigable Charles River channel and do not provide access to pedestrian or bicycle facilities north of the river, so this would not represent a significant impact to pedestrian and bicycle resources.

Indirect and cumulative effects of the Proposed Project are also assessed to consider the combination of potential Project effects that may not be, in and of themselves, significant. The Proposed Project would not result in increased train frequency, capacity, or ridership, nor would it induce development, result in indirect effects related to population or employment increases, or create new permanent jobs. Further, the Proposed Project, considered together with other recently completed or reasonably foreseeable projects in the area, would not result in any cumulative effects beyond contributing to safe and efficient transportation access in the study area. MBTA will coordinate the construction of the Proposed Project and other planned projects in the vicinity to ensure that there are no interruptions or significant impact to MBTA commuter rail or Amtrak service and to avoid disruption to each construction program.

Overall, the Proposed Project, including the new Draw One Bridge and Signal Tower A, would return rail infrastructure over the Charles River to a state of good repair and enhance the reliability and safety of passenger and commuter rail for people, including those in EJ communities, living and working in or visiting greater Boston and the New England coast.

6. Determination: No Disproportionate Adverse Effects on EJ Communities

As defined in FTA's guidance, a disproportionately adverse effect on an environmental justice population is an adverse effect that is predominantly borne by a minority and/or low-income population, or will be appreciably greater for the minority and/or low-income population than for the non-minority and/or non-low-income population. Effects that may occur as a result of a proposed action may be considered in the context of associated mitigation measures and offsetting benefits when determining whether disproportionately high and adverse effects may be likely to occur.

The Proposed Project would not disproportionately affect EJ communities. The Proposed Project would replace an existing bridge on an existing rail corridor and would represent an overall benefit to the entire community. It is important to the region's continued economic prosperity. The improved safety and reliability of the Draw One Bridge would benefit environmental justice communities, which comprise a substantial portion of the local community. The long-term benefits of the Proposed Project would accrue not only to the local environmental justice communities working, living near, or commuting to/from North Station, but also to environmental justice communities throughout the region that depend on the regional rail accessibility provided by the Draw One Bridge and the regional economic benefits accruing from its continued usage.