

Environmental Justice Screening Form

Project Name	MBTA Southside Commuter Rail Maintenance and Layover Facility, Boston, MA
Anticipated Date of MEPA Filing	Late July, 2022
Proponent Name	MBTA
Contact Information (e.g., consultant)	Paul Martin, BSC Group, Inc. pmartin@bscgroup.com 617.896.4325
Public website for project or other physical location where project materials can be obtained (if available)	MBTA.com/SSMF
Municipality and Zip Code for Project (if known)	Boston, 02136
Project Type (list all that apply)	Transportation-Roadways/Transit
Is the project site within a mapped 100-year FEMA flood plain? Y/N/yet unknown	No
Estimated GHG emissions of conditioned spaces if known (click here for GHG Estimation tool)	127 tons per year conditioned (cooled) spaces 486 tons per year for rest of building (heat/light only, not cooled)

Project Description

1. Provide a brief project description, including overall size of the project site and square footage of proposed buildings and structures if known.

The MBTA Southside Commuter Rail Maintenance and Layover Facility (SSMF) Project proposes to address the maintenance facilities needs of the MBTA Commuter Rail's operation. The project involves the construction of a new rail maintenance facility, temporary and permanent layover storage yards with buildings for Train Crew and Maintenance Staff accommodations. Work is proposed on the Existing Yard 1, Yard 2, Upper Yard 2, and an adjacent property. All three Yards are characterized by existing MBTA rail facilities and buildings. The adjacent property is an existing metal scrapyards and recycling facility.

- The adjacent property is 8.6332 acres
- Yard 1 work area is 6.25 acres
- Yard 2 area is 16.99 acres
- Upper Yard 2 is 3.79 acres
- SSMF building is 288,944 gsf
- Yard 1 temporary buildings are 5,760 gsf. (Yard 1 temporary buildings will be used until the layover/mid-day facility at the adjacent property is operational)

- Yard 2 temporary buildings are 2,064 gsf. (Yard 2 temporary buildings will only be used during the construction of the SSMF building and demolished about a month before the facility is operational for repairs).

2. List anticipated MEPA review thresholds (301 CMR 11.03) (if known)

- 301 CMR 11.03(1)(b)(2) *Creation of more than 5 acres of Impervious surface*
- 301 CMR 11.03(11)(b) *Any Project within a designated ACEC*

3. List all anticipated state, local and federal permits needed for the project (if known)

NEPA	Categorical Exclusion Approval
U.S. Army Corps of Engineers (USACE)	Section 404 Pre-Construction Notification, includes Section 106 consultation, Tribal consultation, ESA Section 7 Consultation
United States Environmental Protection Agency (EPA)	National Pollutant Discharge Elimination System (NPDES) Construction General Permit for Stormwater Discharges from Construction Activities/Stormwater Pollution Prevention Plan (SWPPP)
Massachusetts General Law Chapter 90 § 16A MassDEP regulations 310 CMR 7.00	Stationary emission sources at the facility may be subject to air plan approval under Massachusetts air quality regulations, depending on the final design of equipment and type and quantity of emissions released. Stationary emission sources may also be exempt from a plan approval if exemptions found under 310 CMR 7.02(2) apply
Executive Office of Energy and Environmental Affairs (EEA)	MEPA Review/Certificate of the Secretary
Massachusetts Historical Commission (MHC)	Consultation under M.G.L. c. 9 in accordance with 950 CMR 70-71
Boston Conservation Commission	Courtesy Notification

4. Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles of project site (can attach map from [EJ Maps Viewer](#) in lieu of narrative)

Within a 1-mile radius of the project site boundary there are 19 EJ communities categorized as minority (16), minority/income (2), and minority/income/English isolation (1). These census tracts are located in the City of Boston and Town of Dedham.

Within a 5-mile radius of the project site boundary there are 219 EJ communities categorized as minority (139), income (7) minority/income (48), minority/English isolation (12) and minority/income/English isolation (13). These census tracts are located in the City of Boston and the Towns of Boston, Braintree, Brookline, Canton, Dedham, Milton, Norwood, Quincy, and Randolph, MA.

These are all listed in Attachment A.

5. Identify any municipality or census tract meeting the definition of “vulnerable health EJ criteria” in the [DPH EJ Tool](#) located in whole or in part within a 1 mile radius of the project site

Vulnerable health environmental justice population communities within a 1-mile radius are included in the Table in Attachment B.

6. Identify potential short-term and long-term environmental and public health impacts that may affect EJ Populations and any anticipated mitigation

Short-term impacts of the Project:

Air Quality:

Construction will occur over a three to five-year period. Emissions will be produced during this period from on-site construction equipment and on-road construction vehicles, off-site on-road equipment and vehicles, and dust-generating construction activities. These emissions have the potential to affect local and regional air quality. The construction emission rate will vary over the construction duration, corresponding to the level of activity of emission producing equipment.

In general, much of the heavy equipment used in construction is powered by diesel engines, which will result in emissions of nitrogen oxides (NO_x) and diesel particulate matter (DPM). Fugitive dust generated by construction activities is also a source of particulate matter emissions. Sulfur oxide (SO_x) emissions from construction activities would be negligible since USEPA mandates the use of ultra-low sulfur diesel (ULSD) fuel for all highway and non-road diesel engines.

During construction of the SSMF, temporary facilities will be constructed at Yard 1 and trainset layover will occur at Yard 1 and Upper Yard 2. Diesel locomotive trainsets will layover in Yard 1 and Upper Yard 2 during mid-day and overnight periods during the SSMF construction. Emission sources associated with layover will be similar to existing conditions. During the bulk of the layover period, locomotive engines will be shutdown. Locomotive trainsets' use of Yard 1 for layover will occur during the three- to five-year period while the SSMF and Yard 2 construction activities progress. Once construction is complete, Yard 1 will no longer be used for layover.

Noise:

During the construction phase, there will be a need for demolition equipment as well as construction equipment, all of which produce noise. The extent of that noise and its impacts on the surrounding community are dependent on the amount and types of heavy equipment in use, the locations of the work areas, the types of work being performed, and the time of day and/or night when construction activities will take place. Some impact equipment will be necessary for demolition such as hoe rams and jackhammers; however, use of blasting is not anticipated. Other construction noise sources could include equipment such as backhoes, excavators, front end loaders, dump trucks, graders, pavers, concrete trucks, delivery trucks, as well as all the other supporting equipment such as generators, pumps, and compressors.

A quantitative construction noise assessment will be performed during the design phase, which will take into account the aforementioned aspects of the project; the results of which will indicate the acceptability or severity of construction noise expected to affect the surrounding community. The analysis will be done using state of the art computer prediction models implementing ISO Standard 9613 for outdoor sound propagation. The results of the analysis will be used to develop a Construction Noise Control Specification for this project, similar to MBTA Specification 01561, which is typically included in all MBTA construction projects.

Water Quality:

Impacts to public water supply sources from the construction activity will not occur. No impacts to public drinking water resources are anticipated to occur as a result of construction of the Project. While the Neponset River is adjacent to a portion of the site along with Sprague Pond, water quality impacts to these surface water resources will be avoided or minimized through the implementation of erosion and sediment controls and implementation of a Spill Prevention and Control Plan, if needed during construction. It is anticipated the project will be constructed under the NPDES Construction General Permit and associated SWPPP, to be obtained for the project.

Land Protection and Open Space:

The project only involves land that is already serving as railroad facilities or is industrial property being used for a metal scrapyards operation. Conversion of open land is not proposed. Adjacent to the site is the Neponset River Reservation, which is state land managed by the Department of Conservation and Recreation. It is not anticipated that any work associated with construction of the SSMF and Layover Facility will need to occur within the Neponset River Reservation, pending resolution of the remedial design to address contamination on the adjacent property and a portion of Yard 2.

A portion of Yard 2 and the adjacent property will need to be capped under the Massachusetts Contingency Plan (MCP) regulations (310 CMR 40.0000).

Wetlands and Wildlife Habitat:

Typical urban – suburban wildlife could occur on-site including various rodents (mice and rats) as well as the potential for opossum, raccoons, and squirrels to spend limited amounts of time on the site given the paucity of food, general lack of vegetation and the industrial nature of the properties. Typical birds may be seen as well (sparrows, common crow, blue jays, cardinals, pigeons, seagulls). While vegetated wetlands can provide habitat for certain species for breeding or foraging purposes, the position of the IVWs between the scrap metal processing areas of the adjacent property and Yard 2 likely limits the possibility that the wetlands would be used by more sensitive species such as turtles, salamanders, or waterfowl.

Five isolated vegetated wetlands (IVWs) constituting approximately 0.75 acres of area were identified within a vegetated area along the property line that separates the existing rail facility on Yard 2 and the adjacent property. All were found to be highly disturbed, were at least partially characterized by invasives, and may have been developed as a result of adjacent land use operations. Trash, debris, asphalt, and invasive plant species including common reed (*Phragmites australis*) and Oriental bittersweet (*Celastrus orbiculatus*) were commonly found across the delineated areas. No jurisdictional waterways were found to connect the vegetated wetlands to the adjacent Neponset River.

Work proposed at Yard 1 as part of this project will not impact any jurisdictional wetland resource areas or their buffers. There is no wildlife habitat located within Yard 1.

Track or signal work at the northern end of Yard 2 has the potential to fall within the 25-foot Riverfront Area (RFA), and 100-foot Buffer Zone to the Neponset River and a small area of associated BVW and Inland Bank. No direct impacts to the wetland and riparian buffer of the Neponset River are proposed

as part of this project. It is anticipated that the filling of the IVWs will be needed to support construction of the SSMF and associated layover facility.

Traffic:

Yard 1 access is from the intersection of Hyde Park Avenue and Milton Street and through Parking Lot C (adjacent to the Fairmont Line tracks). Vehicles must proceed south through the center driving aisle of Lot C until there is a paved grade crossing of the Fairmont Line main track to a gravel access road in Yard 1. Currently, the MBTA has limited activities in Yard 1. Generally, fewer than 10 vehicles per day access the portion of Yard 1 that is immediately opposite the Fairmont Line platform, Readville Station. The MBTA has the signal and communications equipment for required maintenance in this area, and a limited number of Keolis staff park adjacent to this equipment.

Existing traffic volumes associated with Yard 2 include MBTA employees, Keolis employees, and visitors who enter the site from Wolcott Court. The MBTA employees include Vehicle Maintenance Building staff, crews for the trains that lay overnight in Yard 2, and other on-site support and supervisory staff. While the shop crews work standard shifts (e.g., arrival at about 7 am and departure at about 3 pm), the train crews arrive and depart on staggered schedules, starting as early as 4 am and ending late at night.

The adjacent property is accessed at the end of Walcott Court.

There will be a traffic increase to Yard 2 for the construction project's duration because of material deliveries and construction laborers and a change in the trip distribution of existing trips in and around Yard 1 when used as a temporary layover facility.

Long-term impacts of the Project:

Air Quality:

The SSMF will include emissions from both stationary and mobile sources. An emergency generator would only be routinely run for maintenance testing purposes according to manufacturer's requirement. Typical run duration may be 1 hour per week. Therefore, emissions produced would be minor and intermittent. The building hot water boilers would combust natural gas and would routinely operate to provide hot water and steam for trainset maintenance work. Emissions would be routinely produced by the boilers but are expected to be minor as natural gas will be used. Activities within the SSMF such as welding, woodworking, grinding, fueling, and sanding would produce a variety of emissions of varying duration and varying quantity depending on the work schedule. The shop and work areas with the SSMF will be ventilated through rooftop vents/fans, therefore fugitive emissions from within the SSMF would exhaust through the rooftop vents.

In addition to the emission sources within the SSMF, diesel locomotive trainsets will layover in during mid-day and overnight periods. Emission sources will consist of slowly moving and brief idling of diesel locomotives. During the bulk of the layover period, locomotive engines will be shutdown.

Air pollutant emissions will also be produced from mobile sources such as trucks delivering supplies and fuel to the site, and worker commuting vehicles. It is estimated that worker commuting may increase

from approximately 40 vehicles during the peak hour to approximately 125 vehicles, resulting in slightly increased emissions from worker commuting vehicles.

Noise:

At its busiest, the future Layover facility could service as many as 13 trainsets. Light maintenance, cleaning, refueling and restocking takes place overnight while the trains are in the layover yard.

In general, MBTA trains currently arrive at the layover facility around 11:00 AM, turn off and lay up for several hours during each afternoon. The trains restart again around 3:00 PM and then head out for their evening revenue service runs. The trains return to the layover facility at about 10:00 PM and shut down again. They are restarted around 3:00 AM and head out for their morning revenue service runs. More specifically, the trains are expected to only idle for about an hour from 3:00 PM to 4:00 PM during the afternoons and for about an hour from 3:00 AM to 4:00 AM during the nighttime. Train layover and maintenance operations in the future are expected to occur on a similar timetable. Sounding devices on the locomotives and Control Coaches will be tested.

The new Yard 2 will provide layover and midday storage of trainsets in the future on the adjacent property, which will be located towards the east of the SSMF building, thus placing them closer to the adjacent community along Riley Road and Sierra Road. The most proximate receptors are several multi-family, 4-story apartment buildings. The MBTA is continuing to assess the future operational noise conditions for this community which includes both ambient noise monitoring and future condition noise modeling. The Cadna-A noise model was used to predict future operational noise levels in the community in accordance with FTA/MBTA noise policies.

Community noise impacts associated with the interim operation of Yard 1 are not anticipated at this time. There are only six trainsets expected to layover in Yard 1, and the noise levels they would generate for receptors along Prescott Street are not anticipated to exceed applicable FTA/MBTA guidelines. If it is determined that future operational noise conditions emanating from Yard 2 or the new Layover facility will likely exceed applicable noise limits to the MBTA will consider noise mitigation options to reduce noise effects on the Riley Road apartments or other receptors. At this time, it is envisioned that a noise barrier built along the common property line would be the best noise control option. The noise barrier would be designed to allow compliance with applicable FTA/MBTA limits for Ldn sound levels at the residential apartments or other receptors.

Water Quality:

Impacts to public water supply sources from operational activities will not occur, primarily since neither Sprague Pond nor the downstream reach of the Neponset River are used for public water supply. Direct impacts to these waterbodies is not anticipated.

The project involves a number of improvements, including the new SSMF building, tracks with pervious ballast, paved parking and access roads and ancillary buildings. The net impact will be an increase in impervious cover with the associated increase in site stormwater runoff volume and peak rates. In order to address these increases, a stormwater management plan will be developed in accordance with the Massachusetts Stormwater Management Standards to address these impacts. It is anticipated that stormwater could be handled by:

- Infiltration of stormwater into pervious surfaces (e.g., ballast and gravel surfaces),
- Sheet flow across impervious surfaces collected by a closed storm drainage system (catch basins, manholes and pipes),
- Water quality improvement basins and/or proprietary units, and
- Detention and/or infiltration basins and/or underground tanks.

The objective will be to meet the 10 Stormwater Standards, particularly regarding water quality improvement and not increasing the peak rate of runoff. By meeting the 10 Stormwater Standards, the project will have a negligible impact to water quality in either Sprague Pond or the Neponset River.

Land Protection and Open Space:

Since the project will occur within existing rail facilities and the adjacent industrial property used as a metal scrapyard, there will be no alteration or loss of open space.

Wetlands and Wildlife Habitat:

Once construction is complete, there will be no wetland resources on-site. The new SSMF will increase maintenance and repair activities which will result in similar, but amplified impacts to local urban wildlife. The increased train traffic and maintenance work will expand and amplify the duration of noises, smells, sounds, and lighting associated with the required work. The Layover Facility on the adjacent property will introduce these impacts closer in proximity to the forested riparian corridor along the Neponset River. However, for daylight periods, the wildlife along the adjacent property currently experience the impacts associated with the operation of the metal scrapyard.

Traffic:

The proposed additional capacity for the train maintenance facility will increase the number of MBTA staff once the project has been completed, resulting in additional traffic through the project area. The estimate for the number of new trips for the proposed site is based on the future number of train crew members and additional train maintenance staff. The estimated existing peak hour volume is 30 to 50 vehicles; it is estimated that during the operation of the new SSMF and Layover facility, the peak hour volume will be 100 to 130 vehicles.

- Identify project benefits, including “Environmental Benefits” as defined in 301 CMR 11.02, that may improve environmental conditions or public health of the EJ population

The Project will allow for:

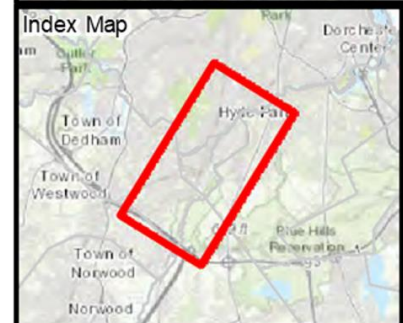
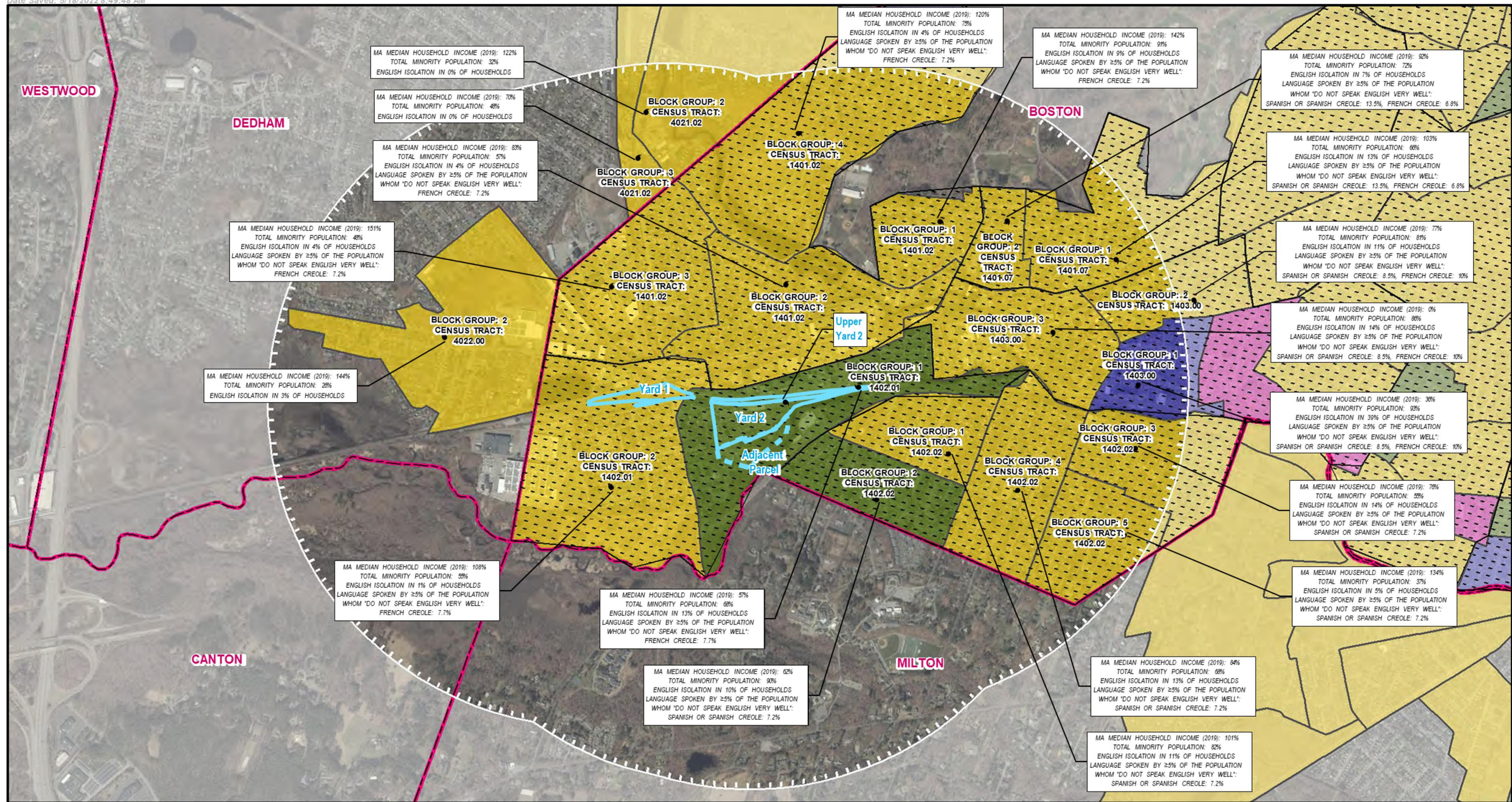
- Proximity to South Station and the South-Side Commuter Rail lines will reduce train movements, reducing fuel consumption and transportation costs;
- Needed shop redundancy and allow for improved maintenance processes, eliminating equipment repair backlogs and improve locomotive and coach counts;
- The ability to provide maintenance and repair of Electric, Dual mode and Battery locomotives to accommodate the next generation of MBTA locomotives;
- Construction of a LEED certified (more energy efficient) maintenance building to replace the older, existing structure; and

- Overall, regionally reduced diesel locomotive emissions since travel distance to the SSMF will be less than going to the existing Somerville maintenance facility, for commuter trains operating on the south side of Boston.

7. Describe how the community can request a meeting to discuss the project, and how the community can request oral language interpretation services at the meeting. Specify how to request other accommodations, including meetings after business hours and at locations near public transportation.

Meetings can be requested by sending an email to the following: SSMF@MBTA.com. In your request, please indicate if you need materials written in a language other than English and/or you would like an oral language interpreter to be present, and which language(s) should the interpreter be able to translate in. If there are other specific requests regarding the meeting, such as a preferred location, preferred day, or preferred time of day, please indicate this in your request.

ATTACHMENT A
EJ POPULATIONS AND CHARACTERISTICS



Legend

- Project Area
- Adjacent Parcel
- Environmental Justice Populations 2020
 - Minority
 - Minority and Income
 - Minority and English isolation
 - Minority, Income and English isolation
- 1-mile Buffer to Project Area
- Languages Spoken by at least 5% of Population in the Census Tract Whom Do Not Speak English Very Well
- Town Boundary

1 inch = 1,500 feet
 0 750 1,500
 Feet

**Indicates Layers Set to Transparency*

MBTA SOUTH SIDE MAINTENANCE AND LAYOVER FACILITY

Environmental Justice Map 1-Mile Radius

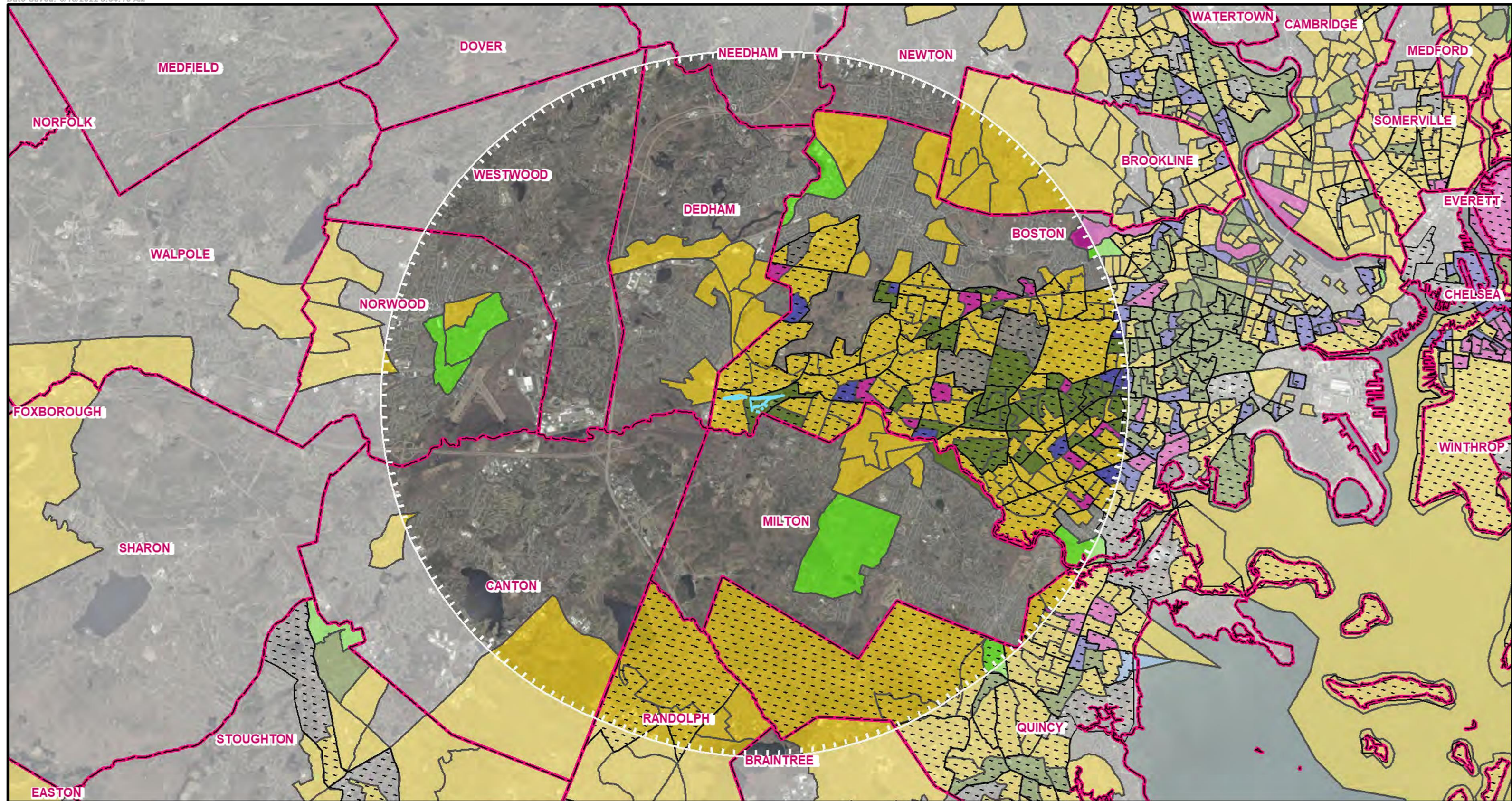
Boston and Dedham, MA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

South Side Commuter Rail Maintenance and Layover Facility (SSMF) Environmental Justice Layers (2020 Census Data) within 1 mile

Block Group / Census Tract		2020 EJ Block Group Criteria	MA Median Household Income 2019 (%)	Total Minority Population (%)	Households with English Isolation (%)	Languages spoken by at least 5% of population in the census tract who do not speak English very well
1	1401.02	Minority	142%	91%	9%	French Creole: 7.2%
2		Minority	83%	57%	4%	
3		Minority	151%	48%	4%	
4		Minority	120%	75%	4%	
1	1401.07	Minority	103%	66%	13%	Spanish or Spanish Creole: 13.5% French Creole: 6.8%
2		Minority	92%	72%	7%	
1*	1402.01	Minority and income	57%	68%	13%	French Creole: 7.7%
2*		Minority	108%	55%	1%	
1	1402.02	Minority	101%	82%	11%	Spanish or Spanish Creole: 7.2%
2		Minority and income	62%	90%	10%	
3		Minority	76%	55%	14%	
4		Minority	84%	68%	13%	
5		Minority	134%	37%	5%	
1	1403.00	Minority, income and English isolation	36%	93%	39%	Spanish or Spanish Creole: 8.5%, French Creole: 10%
2		Minority	77%	81%	11%	
3		Minority	0%	86%	14%	
2	4021.02	Minority	122%	32%	0%	N/A
3		Minority	70%	48%	0%	
2	4022.00	Minority	144%	26%	3%	N/A

*Project Limits Occur within this Block Group and Census Tract



Legend

- Project Area
- Adjacent Parcel
- Environmental Justice Populations 2020
- Minority
- Income
- English isolation
- Minority and Income
- Minority and English isolation
- Minority, Income and English isolation
- Languages Spoken by at least 5% of Population in the Census Tract Whom Do Not Speak English Very Well
- 5-mile Buffer to Project Area
- Town Boundary

1 inch = 7,000 feet
 0 3,500 7,000
 Feet

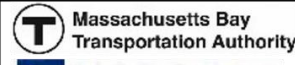

**Indicates Layers Set to Transparency*

MBTA SOUTH SIDE MAINTENANCE AND LAYOVER FACILITY

Environmental Justice Map 5-Mile Radius

Boston, Braintree, Brookline, Canton, Dedham, Milton, Norwood, Quincy & Randolph, MA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

South Side Commuter Rail Maintenance and Layover Facility (SSMF) Environmental Justice Layers (2020 Census Data)

Block Group / Census Tract		2020 EJ Block Group Criteria	MA Median Household Income 2019 (%)	Total Minority Population (%)	Households with English Isolation (%)	Languages spoken by at least 5% of population in the census tract who do not speak English very well
1	813.00	Minority, income and English isolation	20%	80%	36%	Spanish or Spanish Creole: 20.3%
4	819.00	Minority, income and English isolation	32%	100%	33%	Spanish or Spanish Creole: 11.9%
1	820.00	Minority	76%	91%	8%	Spanish or Spanish Creole: 7.8%
1	821.00	Minority	0%	83%	22%	Spanish or Spanish Creole: 13.7%
2		Minority	0%	97%	10%	
3		Minority and income	27%	92%	23%	
1	901.00	Minority, income and English isolation	26%	97%	27%	Spanish or Spanish Creole: 11.2% and French Creole: 6.3%
2		Minority and income	39%	96%	17%	
3		Minority and income	56%	99%	9%	
4		Minority and income	55%	100%	14%	
5		Minority and income	63%	91%	8%	
1	902.00	Minority and income	33%	97%	21%	Spanish or Spanish Creole: 25% and African languages: 7.9%
2		Minority, income and English isolation	19%	96%	35%	
3		Minority, income and English isolation	38%	100%	25%	
1	917.00	Minority and income	60%	91%	16%	Spanish or Spanish Creole: 14.5%, French Creole: 5.1% and Portuguese or Portuguese Creole: 5.8%
3		Minority and income	42%	100%	21%	
3	918.00	Minority and income	31%	92%	16%	Spanish or Spanish Creole: 5.5%, French Creole: 7.6% and Portuguese or Portuguese Creole: 5.5%
1	919.00	Minority and income	31%	89%	10%	Spanish or Spanish Creole: 10.4% and French Creole: 6.5%
2		Minority	69%	93%	11%	
3		Minority and income	64%	100%	7%	
4		Minority	85%	97%	22%	
1	920.00	Minority, income and English isolation	58%	90%	28%	Spanish or Spanish Creole: 13%, French Creole: 5.5%, Portuguese or Portuguese Creole: 4.5% and Vietnamese: 6.8%
2		Minority	77%	90%	8%	
3		Minority and English isolation	89%	94%	28%	
4		Minority and income	57%	98%	9%	
1	921.01	Minority	73%	64%	17%	Vietnamese: 27.2%
4		Minority, income and English isolation	48%	81%	34%	
5		Minority, income and English isolation	63%	75%	27%	

Block Group / Census Tract		2020 EJ Block Group Criteria	MA Median Household Income 2019 (%)	Total Minority Population (%)	Households with English Isolation (%)	Languages spoken by at least 5% of population in the census tract who do not speak English very well
1	922.00	Minority	138%	68%	12%	Vietnamese: 10.2%
2		Minority	121%	76%	7%	
3		Minority	73%	85%	9%	
4		Minority and income	45%	68%	0%	
1	923.00	Minority	78%	99%	12%	Spanish or Spanish Creole: 5.2% and French Creole: 7.5%
2		Minority and income	47%	95%	16%	
3		Minority	99%	92%	7%	
4		Minority and income	61%	100%	14%	
1	924.00	Minority and income	65%	100%	21%	Spanish or Spanish Creole: 8.4% and French Creole: 5.6%
2		Minority and income	33%	95%	5%	
3		Minority and income	55%	100%	6%	
4		Minority and income	23%	100%	22%	
5		Minority and English isolation	0%	100%	43%	
1	1001.00	Minority	0%	90%	0%	Spanish or Spanish Creole: 9.8% and French Creole: 5.4%
2		Minority and income	49%	100%	11%	
3		Minority and income	38%	100%	19%	
4		Minority and income	64%	92%	21%	
5		Minority	0%	99%	0%	
6		Minority and income	18%	99%	11%	
7		Minority	0%	100%	17%	
1	1002.00	Minority	70%	97%	3%	N/A
2		Minority and income	46%	98%	0%	
3		Minority and income	49%	100%	3%	
1	1003.00	Minority	79%	93%	7%	French Creole: 5.2%
2		Minority and income	61%	100%	3%	
3		Minority	90%	100%	5%	
4		Minority and income	35%	97%	9%	
1	1004.00	Minority	0%	89%	14%	N/A
2		Minority	0%	81%	4%	
3		Minority	107%	90%	6%	
4		Minority and income	53%	98%	7%	
1	1005.00	Minority	0%	87%	16%	Spanish or Spanish Creole: 7.6%, French Creole: 5.7% and Vietnamese: 5.3%
2		Minority	123%	53%	5%	
3		Minority and English isolation	0%	75%	29%	
4		Minority	74%	90%	12%	
5		Minority, income and English isolation	54%	99%	28%	
1	1006.01	Minority	111%	42%	11%	Vietnamese: 13.8%
2		Minority	74%	66%	0%	
3		Minority	77%	81%	4%	
4		Minority	109%	60%	15%	

Block Group / Census Tract		2020 EJ Block Group Criteria	MA Median Household Income 2019 (%)	Total Minority Population (%)	Households with English Isolation (%)	Languages spoken by at least 5% of population in the census tract who do not speak English very well
2	1007.00	Income	36%	18%	2%	N/A
4		Minority	113%	25%	15%	
1	1008.00	Minority	177%	53%	6%	Vietnamese: 6.6%
2		Minority and English isolation	97%	38%	28%	
3		Minority	121%	38%	0%	
4		Minority	78%	55%	7%	
5		Minority	83%	37%	4%	
6		Minority	129%	43%	6%	
1	1009.00	Minority	86%	77%	0%	Vietnamese: 6.1%
2		Minority	83%	72%	16%	
3		Minority	102%	76%	3%	
4		Minority	117%	100%	17%	
5		Minority	132%	73%	7%	
1	1010.01	Minority	0%	98%	15%	French Creole: 15.5%
2		Minority and English isolation	0%	100%	47%	
3		Minority, income and English isolation	52%	100%	25%	
4		Minority and income	39%	100%	0%	
5		Minority	89%	98%	17%	
6		Minority	89%	95%	23%	
1	1010.02	Minority and income	23%	92%	9%	Spanish or spanish Creole: 9% and French Creole: 10.1%
2		Minority and income	53%	97%	16%	
3		Minority	67%	97%	9%	
1	1011.01	Minority and income	41%	97%	0%	Spanish or Spanish Creole: 14.8% and French Creole: 6.7%
2		Minority and income	65%	99%	4%	
3		Minority and income	52%	100%	12%	
1	1011.02	Minority and income	63%	100%	19%	Spanish or Spanish Creole: 5.4% and French Creole: 11.7%
2		Minority and income	58%	99%	18%	
3		Minority and income	60%	98%	12%	
4		Minority and income	32%	96%	16%	
1	1101.03	Minority	116%	27%	4%	Spanish or Spanish Creole: 12.4%
2		Minority and income	53%	76%	13%	
3		Minority and English isolation	0%	55%	42%	
4		Minority and income	61%	84%	17%	
5		Minority	456%	35%	2%	
7		Minority	69%	86%	17%	
1	1102.01	Minority and income	53%	87%	20%	Spanish or Spanish Creole: 9.2%
1	1103.01	Minority	72%	84%	5%	Spanish or Spanish Creole: 13.6%
2		Minority	118%	38%	4%	

Block Group / Census Tract		2020 EJ Block Group Criteria	MA Median Household Income 2019 (%)	Total Minority Population (%)	Households with English Isolation (%)	Languages spoken by at least 5% of population in the census tract who do not speak English very well
1	1104.01	Minority and English isolation	69%	85%	32%	Spanish or Spanish Creole: 9.8% and French Creole: 5.1%
2		Minority	87%	43%	1%	
1	1104.03	Minority and income	55%	80%	24%	Spanish or Spanish Creole: 9.1% and French Creole: 7.2%
2		Minority	133%	42%	0%	
3		Minority	138%	46%	0%	
4		Minority	149%	35%	8%	
5		Minority	121%	48%	3%	
2	1105.01	Minority	110%	28%	5%	N/A
1	1105.02	Minority	141%	53%	13%	Spanish or Spanish Creole: 6.6%
2		Minority	90%	52%	16%	
3		Minority	0%	49%	11%	
2	1106.01	Minority	161%	25%	15%	N/A
1	1106.07	Minority	158%	43%	0%	N/A
2	1201.04	Minority	96%	61%	14%	N/A
1	1202.01	Minority	103%	50%	10%	Spanish or Spanish Creole: 14.6%
2		Minority	77%	56%	21%	
3		Minority	98%	45%	3%	
1	1203.01	Minority	150%	59%	24%	Spanish or Spanish Creole: 17.6%
2		Minority	73%	73%	9%	
3		Minority	104%	52%	13%	
4		Minority	114%	50%	2%	
2	1204.00	Minority	108%	43%	5%	N/A
3		Minority	147%	29%	0%	
5		Income	40%	22%	15%	
1	1301.00	Minority	129%	26%	0%	N/A
2		Minority	120%	46%	7%	
6		Minority	137%	40%	0%	
4	1303.00	Minority	102%	25%	0%	N/A
2	1304.02	Income	47%	22%	4%	N/A
5		Minority	148%	51%	0%	
1	1304.04	Minority	67%	51%	5%	Spanish or Spanish Creole: 5.5%
3		Minority	101%	34%	8%	
1	1304.06	Minority, income and English isolation	45%	92%	32%	Spanish or Spanish Creole: 11.2% and French Creole: 6.4%
2		Minority	74%	56%	18%	
3		Minority and English isolation	79%	46%	28%	
1	1401.02	Minority	142%	91%	9%	French Creole: 7.2%
2		Minority	83%	57%	4%	
3		Minority	151%	48%	4%	
4		Minority	120%	75%	4%	

Block Group / Census Tract		2020 EJ Block Group Criteria	MA Median Household Income 2019 (%)	Total Minority Population (%)	Households with English Isolation (%)	Languages spoken by at least 5% of population in the census tract who do not speak English very well
1	1401.05	Minority	101%	60%	4%	Spanish or Spanish Creole: 8.1% and French Creole: 5.7%
2		Minority	124%	89%	0%	
1	1401.06	Minority and income	50%	76%	15%	Spanish or Spanish Creole: 10.1%, French Creole: 5.7% and African languages: 6.1%
2		Minority, income and English isolation	32%	95%	27%	
1	1401.07	Minority	103%	66%	13%	Spanish or Spanish Creole: 13.5% French Creole: 6.8%
2		Minority	92%	72%	7%	
1*	1402.01	Minority and income	57%	68%	13%	French Creole: 7.7%
2*		Minority	108%	55%	1%	
1	1402.02	Minority	101%	82%	11%	Spanish or Spanish Creole: 7.2%
2		Minority and income	62%	90%	10%	
3		Minority	76%	55%	14%	
4		Minority	84%	68%	13%	
5		Minority	134%	37%	5%	
1	1403.00	Minority, income and English isolation	36%	93%	39%	Spanish or Spanish Creole: 8.5% and French Creole: 10%
2		Minority	77%	81%	11%	
3		Minority	0%	86%	14%	
4		Minority	176%	82%	0%	
5		Minority and English isolation	0%	84%	35%	
6		Minority	78%	87%	19%	
1	1404.00	Minority and English isolation	0%	97%	30%	French Creole: 7%
2		Minority	81%	97%	0%	
3		Minority	113%	100%	0%	
4		Minority and income	40%	100%	0%	
5		Minority	97%	88%	0%	
6		Minority	67%	95%	16%	
7		Minority	67%	83%	8%	
1	4011.00	Minority	141%	34%	5%	N/A
1	4012.00	Minority	139%	30%	15%	N/A
2		Minority	227%	37%	3%	
3		Minority	134%	41%	15%	
4		Minority	222%	42%	2%	
2	4021.02	Minority	122%	32%	0%	N/A
3		Minority	70%	48%	0%	
4		Minority	123%	34%	4%	
2	4022.00	Minority	144%	26%	3%	N/A
1	4024.00	Minority	68%	38%	0%	N/A
2		Minority	194%	29%	0%	

Block Group / Census Tract		2020 EJ Block Group Criteria	MA Median Household Income 2019 (%)	Total Minority Population (%)	Households with English Isolation (%)	Languages spoken by at least 5% of population in the census tract who do not speak English very well
1	4025.00	Minority	127%	35%	0%	N/A
4	4131.00	Income	62%	23%	8%	N/A
3	4132.00	Minority	92%	25%	0%	N/A
4		Income	58%	2%	7%	
2	4135.00	Minority	95%	34%	13%	N/A
2	4151.02	Minority	87%	40%	0%	N/A
2	4152.00	Minority	127%	36%	4%	N/A
4	4161.01	Income	52%	16%	0%	N/A
1	4162.00	Minority	147%	68%	0%	N/A
5		Minority	138%	69%	7%	
6		Minority	162%	55%	3%	
7		Minority	124%	85%	6%	
2	4163.00	Minority	139%	51%	2%	N/A
5		Minority and income	27%	50%	2%	
4	4171.00	Minority	146%	32%	4%	Chinese: 15%
5		Minority	133%	41%	6%	
1	4172.00	Minority	98%	58%	18%	Chinese: 19.6%
2		Minority and English isolation	67%	27%	29%	
5		Minority	96%	57%	9%	
6		Minority	72%	48%	17%	
7		Minority	0%	80%	18%	
1	4180.03	Minority	106%	40%	7%	Chinese: 6.2%
1	4181.02	Minority and income	59%	31%	8%	Chinese: 5.9%
1	4182.00	Income	64%	23%	1%	Chinese: 6.2%
2		Minority	94%	39%	6%	
3		Minority	111%	31%	13%	
4		Minority	116%	43%	11%	
1	4191.00	Minority	119%	34%	3%	N/A
1	4201.00	Minority	110%	74%	21%	N/A
2		Minority	88%	51%	6%	
4		Minority	97%	76%	12%	
1	4202.01	Minority	161%	79%	9%	N/A
1	4202.02	Minority	92%	66%	11%	French Creole: 6.8%
2		Minority	100%	63%	17%	
3		Minority	90%	70%	2%	
1	9803.00	Minority	0%	52%	0%	Spanish or Spanish Creole: 18.3%
4	9811.00	Minority and income	52%	79%	0%	Spanish or Spanish Creole: 9.8%
1	9818.00	Minority and English isolation	0%	31%	29%	N/A

**ATTACHMENT B
CENSUS TRACT HEALTH CRITERIA**

Vulnerable Health Environmental Justice Population Communities within 1-Mile Radius

Vulnerable Health Environmental Justice Criteria				
Municipality	EJ and Vulnerable Health EJ Criteria Status	Vulnerable Health Topic EJ Criteria Met	Municipality Rate	Statewide Rate
Boston	Meets at least one Vulnerable Health EJ Criteria	Childhood Asthma (5-14 Years) Rate per 10,000 (2013-2017)	172.8 <small>Statistically significantly higher</small>	83.1
		Low Birth Weight Rate per 1,000 Births (2011-2015)	282.4 <small>Statistically significantly higher</small>	216.8
Dedham	Meets at least one Vulnerable Health EJ Criteria	Low Birth Weight Rate per 1,000 Births (2011-2015)	257 <small>Not statistically significantly different</small>	216.8