

# Section 4.5

## Environmental Justice

### BALTIMORE-WASHINGTON SUPERCONDUCTING MAGLEV PROJECT

DRAFT ENVIRONMENTAL IMPACT STATEMENT AND  
SECTION 4(f) EVALUATION



U.S. Department of Transportation  
**Federal Railroad Administration**



## 4.5 Environmental Justice

### 4.5.1 Introduction

This section defines the environmental justice (EJ) populations relevant to the Superconducting Magnetic Levitation Project (SCMAGLEV Project) and defines the regulatory context, methodology and SCMAGLEV Project Affected Environment used in this analysis. For each Build Alternative and the No Build Alternative, this section assesses the potential short-term and long-term effects on EJ populations. This section also discusses proposed avoidance, minimization, and mitigation measures to reduce adverse impacts of the SCMAGLEV Project. Appendix D.3 Socioeconomic Technical Report (SETR) contains additional information.

### 4.5.2 Regulatory Context and Methodology

#### 4.5.2.1 Regulatory Context

In accordance with the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq., the Council on Environmental Quality (CEQ) regulations, 40 C.F.R. Parts 1500 - 1508, and the Federal Railroad Administration's (FRA) Procedures for Considering Environmental Impacts, 64 Fed. Reg. 28545 (May 26, 1999), FRA considered the potential impacts to EJ populations. The United States Environmental Protection Agency (USEPA) defines EJ as the equitable treatment and meaningful involvement of all people, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies<sup>1</sup>. This section describes the most pertinent regulatory context for evaluating impacts to EJ populations:

- Title VI of the Civil Rights Act (Title VI) (1964): Title VI prohibits discrimination in programs and activities receiving Federal financial assistance. Title VI specifically states, "no person in the US shall on the ground of race, color, or national origin be excluded from participation in, denied benefits of, or subjected to discrimination under any program or activity receiving Federal financial assistance."
- Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (1994): Directs Federal agencies to take appropriate and necessary steps to identify and address disproportionately high and adverse environmental effects of Federal agency actions (including transportation projects) on minority and low-income populations.
- United States Department of Transportation (USDOT) Order 5610.2(a), *Actions to Address Environmental Justice in Minority Populations and Low-*

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<sup>1</sup> USEPA. <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>.

*Income Populations* (2012): Sets forth the USDOT policy to consider EJ principles in all USDOT programs, policies, and activities. It describes how the objectives of EJ are integrated into planning and programming, rulemaking, and policy formulation. This Order also requires that any activities that will have a disproportionately high and adverse effect on populations protected by Title VI (“protected populations”) will only be carried out if:

1. A substantial need for the activity exists, based on the overall public interest; and
2. Build Alternatives that would have less adverse effects on protected populations (and that still satisfy the need identified in item 1 above), either:
  - Would have other adverse social, economic, environmental, or human health impacts that are severe; or
  - Would involve increased costs of extraordinary magnitude.

USDOT Order 5610.2(a) draws from the framework established by Title VI and the National Environmental Policy Act (NEPA) of 1969 and establishes three principles to ensure nondiscrimination in federally funded activities:

3. Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects—including social and economic effects—on minority populations and low-income populations.
4. Ensure full and fair participation by all potentially affected communities in transportation decision-making processes.
5. Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

In addition, the following guidance materials are applicable to the EJ analysis:

- Council on Environmental Quality (CEQ) Environmental Justice Guidance under the National Environmental Policy Act (1997): CEQ oversees Federal agency implementation of NEPA. This guidance is a response to EO 12898, developed by CEQ and other affected agencies to assist agencies with NEPA procedures and effective identification of and response to EJ concerns.
- Federal Highway Administration (FHWA) Technical Advisory 6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents* (1987) and Federal Transit Administration (FTA) Circular 4703.1, *Environmental Justice Policy Guidance for FTA Recipients* (2012): FHWA Technical Advisory 6640.8A and FTA Circular C 4703.1 are USDOT agency guidance documents that call for NEPA documentation to include identification of the EJ social groups that maybe benefitted or harmed by the proposed project and an assessment of whether any social group is disproportionately impacted with potentially adverse impacts to populations. These guidance documents provide direction on ways to fully engage EJ populations in the transportation decision-making process; to determine whether EJ populations will be subjected to disproportionately high and adverse human health or environmental effects of a public transportation

project, policy, or activity; and how to avoid, minimize, or mitigate these effects.

#### 4.5.2.2 Methodology

EJ definitions for terms used throughout this section and assessment, are found in the updated USDOT EJ Order 5610.2(a):

- *Disproportionately high and adverse effect.* An adverse effect that (1) is predominantly borne by a minority population and/or a low-income population, or (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.
- *Low-income.* A person with low income has a “median household income is at or below the United States Department of Health and Human Services poverty guidelines.”
- *Low-income population.* A low-income population is any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed program, policy, or activity.
- *Minority.* A minority individual identifies as Black, Hispanic or Latino, Asian, American Indian, Alaskan Native, Native Hawaiian and other Pacific Islander.
- *Minority population.* A minority population is any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed program, policy, or activity.

Initially, FRA used EJSCREEN as a preliminary step to consider environmental justice concerns, as it is an environmental justice mapping and screening tool that provides a nationally consistent dataset and approach for combining environmental and demographic indicators. The EJSCREEN Reports, for multiple project buffers, are located in Appendix D.3 Attachment E.

Then FRA initiated a more detailed environmental justice analysis. FRA used the United States Census Bureau (USCB) 2010 Decennial Census and the American Community Survey (ACS) five-year 2018 estimates (2014-2018) to identify minority and low-income populations. The USCB divides land into various sub-boundaries for statistical analysis, including census tracts, block groups, and blocks. Census tracts divide a county or similar area to offer a stable set of geographic units for the presentation of statistical data. Census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people; a census tract is made up of block groups that typically contain 600 to 3,000 people in a contiguous geographic location. Blocks are the smallest unit for which basic census data is available. This analysis utilized data at the block group level for consistency with the ACS five-year estimates, which present

data at the block group level. Consistent with the SCMAGLEV Project Affected Environment identified in Section 4.4 Neighborhoods and Community Facilities, the SCMAGLEV Project Affected Environment for EJ assessment is the synthesis of the block groups that are fully or partially within the 500 feet buffer of the proposed Build Alternatives alignments and the 1/4-mile buffer of the stations and TMF locations, as shown in Appendix D.3.

FRA used EJ guidance from the CEQ<sup>2</sup> to establish thresholds for minority and low-income populations within the SCMAGLEV Project Affected Environment. CEQ defines minority populations as those with a population percentage (a) greater than 50 percent or (b) meaningfully greater than the minority population percentage in the general population. For this assessment, a minority population is present if a block group contains at least 50 percent minority individuals or a minority percentage that is 10 percentage points above the respective jurisdiction’s minority percentage. Also, in alignment with CEQ guidance, a low-income population is present in a block group where percentage of the population below the Federal poverty level is 10 percentage points or more in comparison to the respective jurisdiction’s population living below poverty. Block groups that meet one or both criteria are referred to throughout this document as EJ population areas. Block groups that do not meet the criteria or fall outside of defined EJ area boundaries are referred to as non-environmental justice (non-EJ) population areas. See **Table 4.5-1** for demographics and EJ thresholds by jurisdiction.

**Table 4.5-1: Regional Environmental Justice Demographics**

| Jurisdiction           | Minority Population | Minority Population Threshold | Low-Income Population | Low-Income Population Threshold |
|------------------------|---------------------|-------------------------------|-----------------------|---------------------------------|
| Washington, D.C.       | 63.8%               | 50%                           | 16.8%                 | 26.8%                           |
| Prince George’s County | 87%                 | 50%                           | 8.9%                  | 18.9%                           |
| Anne Arundel County    | 31%                 | 41%                           | 6%                    | 16%                             |
| Baltimore County       | 41.9%               | 50%                           | 9.2%                  | 19.2%                           |
| Baltimore City         | 72.5%               | 50%                           | 19.5%                 | 29.5%                           |

Source: American Community Survey Sample Data (ACS 2018)

The USDOT EJ Order defines disproportionately high and adverse effect on minority and low-income populations means an adverse effect that is: A) predominantly borne by a minority population and/or a low-income population; or B) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population. Determinations of whether a project will

<sup>2</sup> [https://www.epa.gov/sites/production/files/2015-02/documents/ej\\_guidance\\_nepa\\_ceq1297.pdf](https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf)

have disproportionately high and adverse effects must consider “mitigation and enhancement measures that will be taken and all offsetting benefits to the affected minority and low-income populations...” (USDOT Order 5610.2[a], Section 8[b]). FRA will continue to analyze and consider adverse effects, related mitigation, benefits, and public input to inform FRA’s determination in its final decision document about whether the SCMAGLEV Project would result in disproportionately high and adverse effects to EJ populations.

FRA considered the location of block groups with EJ and non-EJ populations in relation to impacts of the Build Alternatives, as identified throughout Chapter 4 of this Draft Environmental Impact Statement (DEIS) to identify potentially adverse and beneficial effects of the Build Alternatives. FRA identified impacts associated with multiple environmental resources in relation to the Build Alternatives and population areas. The vast majority of the SCMAGLEV Project impacts would occur in EJ population areas due to the fact that most of the SCMAGLEV Project Affected Environment qualifies as EJ. In order to determine the potential for disproportionately high and adverse impacts to EJ populations, FRA will consider the location of the residential populations within EJ block groups relative to the SCMAGLEV Project direct and indirect impacts; proposed mitigation; SCMAGLEV Project benefits; and community feedback received during the DEIS phase of the SCMAGLEV Project. Prior to the FEIS, FRA will continue public outreach, stakeholder coordination, and mitigation identification efforts needed to refine the EJ analysis. FRA will document the outcome of the disproportionality analysis in the FEIS. In the FEIS, if FRA makes a finding of a disproportionately high and adverse impact, the document will include the appropriate analysis as required by DOT Order 5610.2(a) and Title VI.

### **4.5.3 SCMAGLEV Project Affected Environment**

**Table 4.5-2** shows population totals for racial and low-income demographics within the Affected Environment. Minority populations comprise 69.6 percent of the total population and low-income populations make up 12.7 percent of the SCMAGLEV Project Affected Environment.

**Table 4.5-2: EJ Demographics in the SCMAGLEV Project Affected Environment**

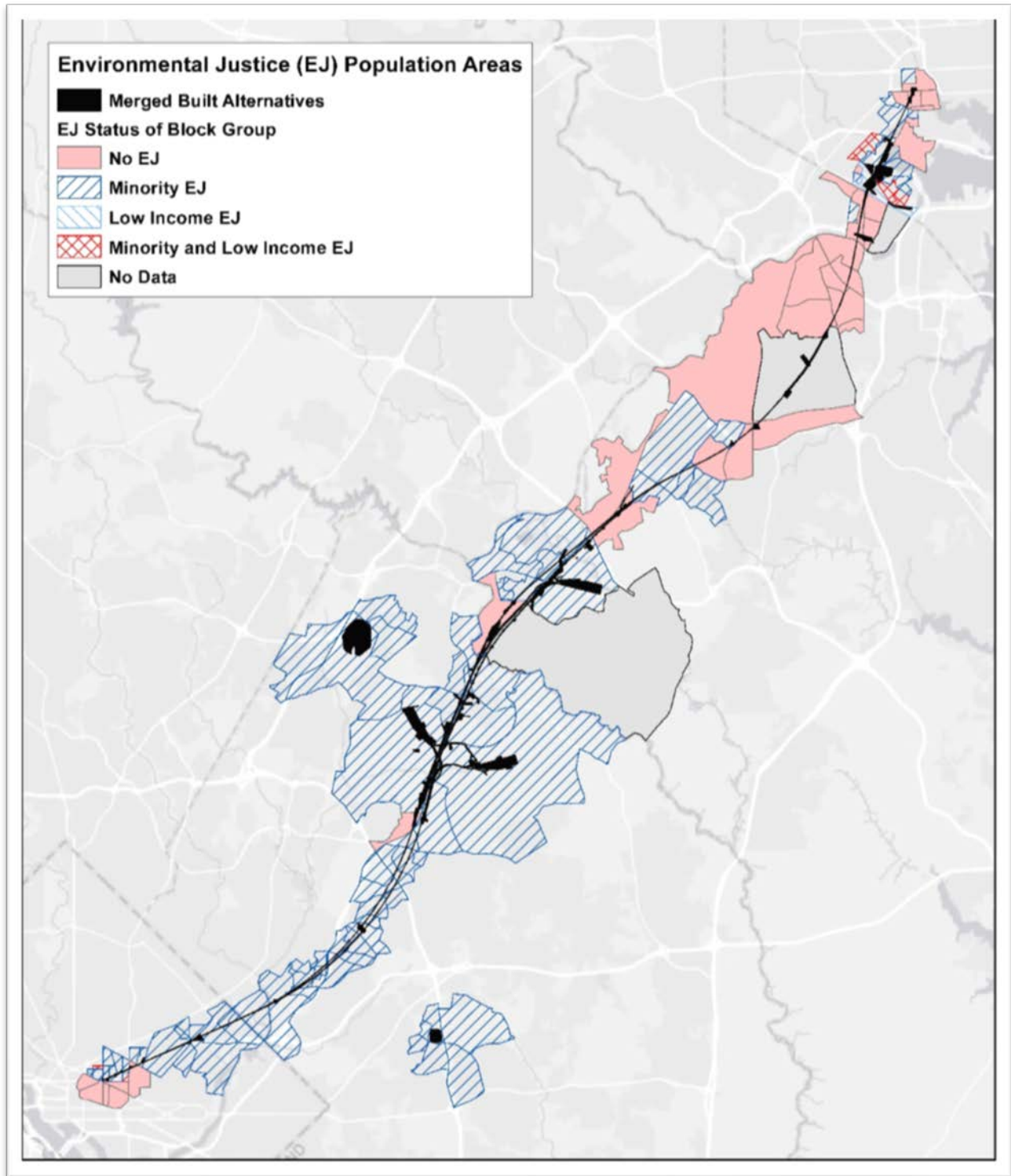
| Environmental Justice Identifier     | Total Population | Percent of Total Population |
|--------------------------------------|------------------|-----------------------------|
| Black or African American            | 105,072          | 46.6%                       |
| American Indian and Alaska Native    | 620              | 0.3%                        |
| Asian                                | 15,205           | 6.7%                        |
| Native Hawaiian and Pacific Islander | 308              | 0.1%                        |
| Some other race                      | 822              | 0.4%                        |
| Two or more races                    | 5,3877           | 2.4%                        |
| Hispanic or Latino                   | 29,505           | 13.1%                       |
| Non-White Hispanic or Latino         | 15,376           | 6.8%                        |
| Total Population (EJ and non-EJ)     | <b>225,635</b>   | <b>100%</b>                 |
| Total Minority Population            | <b>156,919</b>   | <b>69.6%</b>                |
| Low-income population                | 28,165           | 12.7%                       |

Source: American Community Survey Sample Data (ACS 2018)

Of the 124 block groups within the SCMAGLEV Project Affected Environment, 102 block groups exceed one or more of the EJ thresholds (refer to **Table 4.5-1**). Of the 102 block groups with EJ populations, 59 contain minority groups, ten have low-income residents, and 33 include both minority and low-income groups. EJ block groups identified account for 85 percent of all the block groups potentially affected by the SCMAGLEV Project. See **Figure 4.5-1** for locations of EJ and non-EJ block groups.

Block groups closer to Washington, D.C., Baltimore County, and Baltimore City are geographically smaller and more densely populated, whereas block groups in northern Prince George’s County and Anne Arundel County are comparatively larger in size and less densely populated. Some block groups, particularly the larger block groups within the counties, extend far beyond the SCMAGLEV Project limits. In these larger geographic block group areas, the Build Alternatives cross a number of relatively large, publicly owned properties (such as Beltsville Agricultural Research Center [BARC], Patuxent Research Refuge [PRR], and the Baltimore-Washington Parkway [BWP]) that either do not contain residential and/or commercial land uses or have residential and/or commercial land uses farther removed from the alignments.

**Figure 4.5-1: Environmental Justice Population Areas**





#### 4.5.4 Environmental Consequences

This section discusses the permanent or long-term effects of the No Build Alternative and Build Alternatives on EJ populations within the SCMAGLEV Project Affected Environment. To identify potential adverse and beneficial effects in EJ population areas, FRA considered the location of block groups with EJ and non-EJ populations in relation to effects of the Build Alternatives by environmental resource. **Table 4.5-3** identifies the environmental resource areas considered for the EJ disproportionality analysis and summarizes potential adverse impact thresholds considerations by resource. The referenced DEIS sections discuss the associated direct and indirect impacts, which will only be summarized in this section to highlight whether or not impacts are located within EJ population areas or specifically impacts EJ populations. The general location for each of the direct environmental impacts in relation to the EJ populations areas are shown in Appendix D.3 Attachment F. Due to the prevalence of EJ population areas, impacts to resources along the corridor will predominately be located in EJ population areas. The disproportionality analysis to be conducted in the FEIS will consider the concentration of impacts for the relevant resource areas within EJ populations areas, as well as the context and intensity of the impacts, the associated mitigation and/or benefits.

**Table 4.5-3: Impacts Considered in Disproportionality Analysis**

| Environmental Resource Areas  | Type of Impacts Consideration   | DEIS Reference Section |
|-------------------------------|---|------------------------|
| Transportation                | Impacts that would decrease the Level of Service (LOS) in residential areas; impacts that would change local access or mobility                     | Section 4.2            |
| Community Facilities          | Includes directly impacted community facilities   | Section 4.4            |
| Parkland                      | Includes directly impacted parklands  | Section 4.7            |
| Economic                      | Includes areas with the potential for changes to local economies  | Section 4.6            |
| Aesthetics and Visual Quality | Includes Moderate (M) and Higher (H) Levels of visual changes in residential neighborhoods  | Section 4.9            |
| Hazardous Materials           | Includes directly affected areas with an existing Risk Ranking of 4 or more (Medium to High)  | Section 4.15           |
| Noise                         | Includes areas that will result in a severe noise impact  | Section 4.17           |
| Vibration                     | Includes areas that will result in frequent vibration impact  | Section 4.17           |
| Land Use                      | Includes properties that would have permanent full parcel acquisitions, permanent partial parcel acquisition, and temporary full parcel acquisition | Section 4.3            |

#### 4.5.4.1 No Build Alternative

Under the No Build Alternative, the SCMAGLEV Project would not be built; therefore, impacts to minority and low-income populations related to the construction or operation of a SCMAGLEV system would not occur. Other planned and funded transportation projects would continue to be implemented in the area and could result in effects to EJ populations.

#### 4.5.4.2 Build Alternatives

Impacts would occur along the length of the SCMAGLEV Project corridor particularly in proximity to the portions of the SCMAGLEV Project that would be constructed aboveground, including stations, viaduct, tunnel portals, TMF sites, and ancillary facilities. Generally, the majority of the SCMAGLEV Project impacts for each Build Alternative, as identified throughout Chapter 4 of this DEIS, would occur within EJ population areas, given that the large majority of the Affected Environment consist of EJ populations. The Environmental Justice Impact Analysis mapping provided in Appendix D.3 Attachment F shows the combined limits of disturbance, the block groups that exceeded the Environmental Justice threshold, and symbology that represents the impacts of the SCMAGLEV Project. The associated table identifies the percentage of each type of impact that occurs within environmental population areas. Notable impacts are summarized below.

**Transportation.** FRA projects slight decreases in vehicular traffic volumes within the regional roadway network within the SCMAGLEV Project Affected Environment, along with localized traffic volume increases on major roadways surrounding SCMAGLEV Project stations, as discussed in Section 4.2 Transportation. Build Alternatives would generally result in corridor congestion during weekday morning or evening peak periods and additional congestion at several intersections primarily near stations and TMF locations.

Traffic level of service would decline to failing levels for PM peak times at five identified intersections near the Mount Vernon East Station. Each intersection is located within an EJ population area, and EJ populations in the proximity would experience degradation in traffic operations under each Build Alternative:

- New York Avenue @ 6<sup>th</sup> Street NW
- New York Avenue @ 9<sup>th</sup> Street NW
- New York Avenue @ 10<sup>th</sup> Street NW
- L Street NW @ 6<sup>th</sup> Street NW
- Massachusetts Avenue @ 6<sup>th</sup> Street NW

The Build Alternatives with the Cherry Hill Station would experience changes to access in mobility. Although traffic increases at the Cherry Hill Station are anticipated to have minimal impacts, roadways in the vicinity have been identified for signal and striping

improvements as part of the roadway upgrade. EJ communities in the area of Cherry Hill Station would experience changes to access and mobility with the upgrades along Annapolis Road and Waterview Avenue. There is also potential for intermittent delays in traffic during AM and PM peak periods for both the BARC Airstrip TMF on Odell Road and BARC West TMF on Springfield Road. Nearby EJ populations may experience an increase in traffic delays in these areas.

In general, the addition of SCMAGLEV Project to the transportation network will change the way in which trips are made within the SCMAGLEV Project Affected Environment, with individual travelers making trip choices based on factors such as changes in cost and total trip time. One impact of the addition of SCMAGLEV Project to the network will be changes in forecasted Build Alternatives aggregate travel times within the SCMAGLEV Project Affected Environment when compared to the No Build Alternative. The SCMAGLEV Project will result in forecasted travel times savings in 2030 and 2045, and for both Baltimore Station scenarios. This decline is a result of the forecasted diversion of trips from modes with longer travel times to the SCMAGLEV system and is a benefit for travelers within the SCMAGLEV Project Affected Environment.

**Mitigation.** The Project Sponsor would apply mitigation strategies as needed, such as detailed wayfinding signage to disperse pedestrian movement, mobile applications, and street-level, real-time signage to identify crowded areas. FRA and the Project Sponsor would continue to coordinate with Federal, state, county, and local area jurisdictions to identify mitigation strategies for site-specific design elements. Planned mitigation measures and case-by-case mitigation would reduce impacts. The Project Sponsor will develop a detailed mitigation plan to address traffic impacts during construction.

**Community facilities.** Impacts to community facilities are discussed in Section 4.4 Neighborhoods and Community Resources. Collectively, the Build Alternatives would impact 20 community facilities, 18 of which are located in EJ population areas. SCMAGLEV Project impacts differ by option depending on the alignment, station, and TMF chosen, as identified in Section 4.4, however nearly all of the property acquisitions and disruptions to community facilities would occur in neighborhoods and areas containing EJ populations. Impacted facilities that are not only located within EJ population areas, but also serve EJ population include the Adams Place, the Woodlands Job Corp, and the Medmark Treatment Center.

- The Adams Place would be displaced by each of the Build Alternatives. The Adam's Place Emergency Shelter is operated by the Catholic Charities and is a men's emergency shelter. The next closest men's shelter is the New York Avenue Shelter located approximately a mile away.
- The Woodlands Job Corp. would be displaced by each Build Alternative that includes the MD 198 TMF. This community facility provides a residential career training program and job placement program for low-income individuals. The US Department of Labor (DOL) expressed opposition to any Build Alternatives that would remove the facility, as it is only one of two of

the kind in the DC area and that relocating the center would be extremely costly. The Potomac Job Corps Center, located in Washington, DC and the Woodstock Job Corps Center located in Woodstock, MD in Baltimore County are the next closest facilities.

- The Medmark Treatment Center would be displaced by each Build Alternative that includes the Cherry Hill Station. The MedMark Treatment Center is an addiction treatment facility that helps people overcome opioid addiction with comprehensive medication-assisted treatment (MAT) programs. The University of Maryland Addiction Treatment Center and the Kolmac Outpatient Recovery are the next closest addiction treatment facilities and are located approximately 3 miles away.

Indirect impacts would occur to community facilities in the area of the SCMAGLEV Project, such as increased patronage and nearby land use changes due to operation of the SCMAGLEV. The SCMAGLEV Project could spur development and commercial investment in neighborhoods in the vicinity of station locations. This indirect effect could impact the long-term character of neighborhoods' economic and demographic makeup due to changes in rents and mortgages, changes to commercial and retail offerings, and changes to available community facilities.

**Mitigation.** Build Alternatives would optimize underground tunnels where practicable and elevate the aboveground alignment above existing transportation corridors to maintain access and mobility. Minimization of facility footprints would also occur, such as consolidation of tunnel boring machine (TBM) launch sites, storage, and staging areas. To reduce or eliminate property acquisitions and displacements, where feasible, the Project Sponsor would coordinate with affected property owners.

**Parkland.** Impacts to public recreational facilities and parklands, as discussed in Section 4.7 Recreational Facilities and Parklands, primarily result from the aboveground features of the Build Alternatives. The degree of impact differs depending on the alignment, station, and TMF chosen. Collectively, the Build Alternatives would impact 14 parks, 12 of which are located in EJ population areas. The other two parks are large Federal properties that do not have an EJ designation. The majority of the parkland impacts would be to parkland of national significance, which is maintained and administered by Federal agencies including NPS and PRR. Impacts to the Maryland City Park and the Greenbelt Forest Preserve, both of which are located in EJ population areas, would have to greatest impacts to the nearby EJ populations.

Build Alternatives J1 alignment would impact Maryland City Park due to the construction of a tunnel portal, overhead electric lines, viaduct, SCMAGLEV systems, and stormwater management. Build Alternatives J1 would impact two baseball fields, two multi-purpose fields, and a paved trail that joins the two parcels that comprise the park. Anne Arundel County DPR representatives noted that Maryland City Park serves an area of the County less well served than others by ball fields and courts due to the presence of large Federal land areas such as Fort Meade and PRR.

Also, the Greenbelt Forest Preserve would be impacted by the Build Alternatives J1. It is historically significant as the “greenbelt” that surrounds the district, and therefore recreational opportunities offered within the greenbelt cannot be moved elsewhere. While it may be possible to move the public ballfields elsewhere within the forest preserve, the cut/cover tunnel associated with the Build Alternatives J1 would remove access to a large portion of the Greenbelt Forest Preserve to trail users, and lighting associated with the SCMAGLEV system would impede operation of the astronomical observatory.

**Mitigation.** Throughout preliminary design and DEIS development, FRA and the Project Sponsor discussed mitigation options to offset potential impacts to park properties. FRA coordinated with officials with jurisdiction, such as the National Park Service (NPS) and United States Fish and Wildlife Service (USFWS), to assess the presence of park properties and consider potential impacts and sought input from stakeholders (i.e., persons, groups, government agencies, and organizations with an interest or concern) and the public regarding effects on parks and other properties. In addition to coordination, FRA and Maryland Department of Transportation, Maryland Transit Administration (MDOT MTA) directed alignment options to use existing transportation and utility corridors as feasible to keep additional right-of-way (ROW) needs to a minimum and consider other design refinements to avoid or reduce impacts to park properties (i.e. retaining walls). Where park impacts cannot be avoided, the Project Sponsor would further implement design refinements, as feasible, and offer opportunities for public involvement to develop further mitigation strategies. Access to the Greenbelt Forest Preserve park and the Maryland City Park would be restricted during construction, and the Project Sponsor would consult with the City of Greenbelt and Anne Arundel County to develop mitigation plans to address temporary construction impacts.

**Economics.** The SCMAGLEV Project would positively affect the labor market. The number of job opportunities would increase, and some workers would find jobs and transition from unemployment to employment. Some workers would find better jobs than they have currently as they now face a large selection of job opportunities. In this instance, underemployed workers would find jobs that better fit their skills with an associated increase in labor productivity and earnings. Also, construction of the SCMAGLEV Project would support the local economy through the hiring of personnel, renting or purchasing equipment, and procurement of materials for the duration of the construction period, as quantified in Section 4.6 Economic Resources. Total construction employment impacts across Build Alternatives would range between 161,000 job-years and 195,000 job-years. Construction earnings for Build Alternatives would range between \$8.8 billion and \$10.6 billion. Average annual direct jobs per year, limited only to the construction industry, range between over 8,700 to over 10,560. These economic benefits would be regional, within a region where the majority of the population lives in areas that meet the environmental justice thresholds identified above. Therefore, a portion of these benefits would be experienced by environmental justice

populations. A full disproportionality analysis will be conducted for the Selected Alternative to be identified in the Final Environmental Impact Statement (FEIS).

Although the SCMAGLEV Project would result in commercial acquisitions, most of the acquisitions are not sufficiently unique in their commercial activity that the business could not find comparable building, resource, and transportation access elsewhere in the same jurisdiction. There would be multiple commercial acquisitions along W. Patapsco Avenue that could be relocated in nearby shopping centers. However, the Patapsco Flea Market, which has provided a long-standing retail space for numerous merchants and entrepreneurs, would be more difficult to relocate and/or attract long-standing consumers, provided the owner would seek relocation options.

The SCMAGLEV Project could potentially have gentrification and displacement impacts. Triggered by the SCMAGLEV investment, the Baltimore and Washington, D.C. economies would be much more accessible to one another, which would allow some workers in Washington D.C. to locate in Baltimore where housing costs are lower. This would increase demand for Baltimore housing in areas readily accessible to the SCMAGLEV stations and drive-up housing costs. There are more renters (53%) than homeowners (47 percent) within the study area, and neither the Washington, D.C. and Baltimore rental markets currently qualify as “tight” rental markets under the Department of US Department of Housing and Urban Development thresholds. The following factors that are now or would be present with the construction of the SCMAGLEV system, including a high rate of renters in some neighborhoods, ease of access to job centers, rising congestion in the Baltimore-Washington metro area, lower housing values in Baltimore neighborhoods, a large rent gap between Baltimore City and Washington D.C., construction of transportation infrastructure, and urban amenities. Thus, it is reasonable to expect that Baltimore neighborhoods would experience gentrification and resident households may feel pressure to relocate.

***Aesthetics and visual quality.*** Changes in aesthetics and visual quality would occur for both Build Alternatives in areas near aboveground and elevated portions of the SCMAGLEV Project, as shown in Section 4.9 Aesthetics and Visual Quality. The degree of impact differs on the alignment, station, and TMF chosen. FRA determined that surface features of both alignments, including the viaduct tunnel portal and ancillary facilities, would result in visual impacts to resources within the Area of Visual Effect (AVE) ranging from *lower level* or *relatively imperceptible* to *higher level* degrees. Collectively, of the 56 locations identified as a moderate or high sensitivity aesthetic impacts, 47 would be located in EJ population areas. The Build Alternatives with the longer Alignment J viaduct results in more visually sensitive resources impacted compared to the shorter viaduct/longer deep tunnel of Build Alternatives J1 alignments. With the exception of PRR, the entire length of the viaduct is located within and adjacent to EJ population areas, and the new aboveground elevated guideway would be visible to those EJ populations.

***Mitigation.*** To address aesthetic and scenic impacts of the Build Alternatives, FRA and the Project Sponsor would meet with impacted neighborhoods and stakeholders. In

addition to the extensive use of tunneling, the Project Sponsor would develop design criteria that adapts to local context and surroundings to help achieve integration into the local setting; adhere to existing utility and transportation corridors to reduce impacts to prime public lands, parklands, and ecological impacts; and employ vegetation management where feasible to maintain coverage and a natural appearance in locations of necessary clearing.

**Cultural resources.** Impacts to cultural resources are discussed in Section 4.8 Cultural Resources. For aboveground historic and archaeological resources within the area of potential effects (APE) a, adverse effects determinations under Section 106 of the National Historic Preservation Act (NHPA), are based on the permanent introduction of physical project components (for example, tunnels, viaduct, piers, stations and station entrances) into the boundaries of a property, or a property's character-defining setting, in such a way that the components negatively affect the integrity of a historic property. Adverse effects determinations also consider indirect sensory effects such as visual, noise, and vibration. All identified archaeological resources within the SCMAGLEV Project limits of disturbance (LOD) would experience adverse effects. Most cultural resources impacts occur within EJ block groups, except for a small portion of impacts associated with Build Alternatives J south of the MD 198 TMF. FRA will communicate with relevant EJ populations to determine the impacts felt by affected community members.

**Hazardous materials.** Impacts associated with hazardous materials are discussed in Section 4.15 Hazardous Materials and Solid Waste. Long-term operational effects of the SCMAGLEV Project for either Build Alternatives can include potential spills of hazardous substances or accidents. Incidents would be more likely to occur at stations, substations, maintenance of way (MOW) facilities, or TMFs. Such accidents could include spills and leaks from hazardous material storage equipment that could include fuel storage tanks, storage tanks for lubricants and waste oils; wash racks; storage tanks for degreasing solvents and for waste solvents, paints/coatings, and associated solvents; and compressed gases and solder for welding. Other spills could include chemical products used for cleaning and maintenance, such as acids or caustics. These spills are more likely to occur in EJ communities, as nearly all of the viaduct, ancillary facilities, MOW, and TMFs are within are in EJ population areas. A potential long-term benefit of the SCMAGLEV Project may result if remediation is required and performed at identified and existing hazardous material sites within the SCMAGLEV Project Affected Environment; the resultant cleaned up site may reduce risks to public health and the environment.

**Mitigation.** To address long-term operational effects, FRA would require establishment of procedures for the proper storage and maintenance of equipment and hazardous materials. Procedures would include training of all SCMAGLEV Project personnel, frequent and routine spill drills, and adequate supply of spill kits. All SCMAGLEV Project personnel would receive the appropriate type and level of hazardous materials

training and Resource Conservation and Recovery Act procedural training that includes:

- Conducting frequent and routine documented inspections of the construction site for violations, to verify consistent implementation of general construction permit conditions and best management practices (BMPs).
- Designating special storage areas for hazardous materials and hazardous waste, containment berms, and coverage from rain.
- Avoiding disturbing contaminated locations, if possible.
- Conducting frequent and routine spill drills.

The Project Sponsor will develop a Construction Management Plan that describes how to avoid and/or mitigate existing contamination and handle discovery of unknown contamination. The plan would also establish roles, responsibilities and procedures for workers to follow in areas with known or suspected soil or groundwater contamination. For sites that require demolition and removal, the plan will address issues such as lead, asbestos, polychlorinated biphenyls (PCBs), and other materials that would require disposal in a Toxic Substances Control Act (TSCA) landfill. The plan will specify how to appropriately contain, remove, and dispose of the asbestos and lead-containing material at licensed disposal facilities. The Project Sponsor will consider the addition of site-specific plans for high-risk sites.

For SCMAGLEV Project operations, the Project Sponsor will develop a Hazardous Materials and Solid Waste Management Plan as a tool for compliance that will address the following:

- Waste characterization (e.g. hazardous) and accumulation (inspections, secondary containment, liners and covers, waste compatibility, selecting the proper container, security, communication, equipment, etc.)
- Green Procurement/Waste Minimization
- HAZMAT safety requirements
- Spill Prevention Control and Countermeasure plan or Spill Prevention Plan for fuels and oils to address tank design (leak detection, overfill protection, double-walled, etc.); drum storage area design/containment system; tank and container inspections; spill prevention techniques; spill response; and spill training and reporting
- Stormwater Pollution Prevention Plan requiring that all persons are trained on the plan and know how to implement all the required BMPs

**Noise.** Noise impacts are shown in Section 4.17 Noise and Vibration. FRA evaluated the cumulative noise effects from new future sources, including SCMAGLEV train operations and facilities at over 3,600 noise-sensitive receptors. Noise impacts are concentrated along the viaduct. As such, over 99 percent of the impacted noise



receptors are located with EJ population areas. For the SCMAGLEV Project, noise impacts related to the Build Alternatives are similar for each Build Alternative, though each is present in a slightly different area. With only minor differences in the corridor wide impact counts, FRA predicted essentially the same number of impacts at noise-sensitive receptors for each of the Build Alternative alignments.

**Mitigation.** The Project Sponsor proposed several final design features to minimize potential noise impacts at residential communities within the Affected Environment, such as taller parapet walls along the viaduct, concrete-lined tunnels, and concrete viaducts. In addition, design would include sound attenuation walls, sound attenuation hood and shrouds, aerodynamic design of the nose of the SCMAGLEV trainset, and implementation other tunnel design features. At fresh air/emergency egress facilities, silencers and acoustical louvers would reduce fan noise along ventilation ducts. Substations would employ equipment enclosures and acoustical louvers. At TMF and MOW facilities, attenuation of noise impacts would occur through equipment enclosures, perimeter noise barriers, and relocation of loud maintenance activities to indoor areas.

**Vibration.** Vibration impacts related to the Build Alternatives are similar, though each is present in a slightly different area, as discussed in Section 4.17 Noise and Vibration. Vibration impacts are concentrated along the viaduct. As such, 100 percent of the severe vibration impacts would be located in EJ population areas. FRA predicted future vibration levels from SCMAGLEV train operations for all Build Alternatives. The primary differences between the Build Alternatives are different paths along the Patuxent Research Refuge and the length of the viaduct through this region. The longer viaduct would have more areas with vibration impacts.

**Mitigation.** Vibration control measures are not as well understood as other mitigation measures, due to the uniqueness of the magnetic levitation technology for transportation projects. Several final design features, including concrete-lined tunnels and concrete viaducts, would reduce vibration impacts at residential communities within the Affected Environment. Mitigation of vibration impacts would occur through application of experience gained from using successful control measures for other concrete-constructed systems. Controls, including resilient track beds and viaducts, would reduce the vibration produced by the SCMAGLEV system. With the incorporation of design and mitigation measures, the goal is to achieve compliance with FRA vibration impact criteria.

**Land use and parcel impacts.** Land use and parcel impacts are detailed in Section 4.3 Land Use and Zoning. Property acquisition would range from partial to full property acquisitions. Approximately 80 percent of the parcels that would be impacted are located within EJ population areas. Land use conversions and some rezoning would result from the surface features of the Build Alternatives. All Build Alternatives would generally support statewide and regional transportation goals as identified in various approved comprehensive planning documents. The aboveground SCMAGLEV Project elements for each Build Alternative would require land use changes.

Appendix D.3 shows property acquisitions for the Build Alternatives, Notably, there would be full permanent acquisition that would displace a residential structure in Baltimore City, all other full permanent acquisitions would occur on residential properties owned by an homeowners association or to non-residential properties including the Otterbein Church (for the alternatives that include the Camden Yards Station) and the Woodlands Job Corps facility (for all alternatives that include the MD 198 TMF). Both of those community facilities are located within EJ population areas and serve EJ populations. Two impacted commercial areas have a long history in the South Baltimore area and are integral to the surrounding EJ community, including the Patapsco Village Shopping Center and Patapsco Plaza Shopping Center. The Patapsco Village Shopping Center contains a laundromat and grocery store, and the SCMAGLEV Project design would avoid impacts to these businesses, although a banking business and some parking areas would be adversely impacted. The Patapsco Plaza Shopping Center contains the Patapsco Arena and the Patapsco Flea Market, a staple in the area for over 20 years that offers shopping and international fare every weekend and an affordable place to rent space and sell merchandise. Although only a small portion of the Patapsco Flea Market would be permanently impacted, the SCMAGLEV Project could potentially result in a full take of the Patapsco Flea Market.

**Mitigation.** SCMAGLEV Project design relied upon incorporation of tunneling in the Build Alternatives to avoid aboveground land use impacts and generally placed the location of viaducts parallel to existing transportation corridors. The Mount Vernon Square (MVS) East Station and Camden Yards Station would be underground to avoid significant permanent land use changes in highly developed, urban areas. The Cherry Hill Station would be located above an existing transportation facility to avoid and minimize land use impacts. The Project Sponsor would continue to coordinate with local and Federal governments regarding the location and positioning of the Build Alternatives to further reduce potential SCMAGLEV Project impacts. During final design, refinement of SCMAGLEV Project elements would further minimize land use impacts under the structures.

The Project Sponsor would provide fair compensation and property relocations to all residences and businesses without discrimination. All station alternatives would provide for intermodal connections with other existing modes of transportation, such as the metro in Washington, D.C., and the LightRail Link at Baltimore-Washington International Thurgood Marshall Airport (BWI Marshall Airport) and in Baltimore City. In addition to mitigation efforts from the Project Sponsor, the SCMAGLEV Project would result in regional benefits for affected populations. For example, transition of land use from industrial and commercial to transportation in the area of Cherry Hill would provide opportunities for local investment in new and infill development.

To reduce or eliminate property acquisitions and displacements, where feasible, the Project Sponsor would coordinate with affected property owners. In the event of federally funding, the Uniform Relocation Assistance and Real Property Acquisition Act

of 1970 (Uniform Act) would be followed to ensure equitable and uniform land acquisition policies.

***Economic Considerations.*** The SCMAGLEV Project would provide short-term and long-term economic benefits for the region (see Section 4.6 Economic Resources). EJ populations in the SCMAGLEV Project Affected Environment would likely experience these economic benefits. Construction would support the local labor and manufacturing markets. As the largest civil works project in the region, residents of Maryland and Washington, D.C., would fill openings for a variety of work activities. Specialized SCMAGLEV support facilities (for example, stations, FA/EE facilities, TMF/MOW) would require a variety of skills and trades, presenting significant opportunities for focused training and apprenticeship programs to ensure a diversified workforce. The Project Sponsor would work with local jurisdictions to ensure residents within the SCMAGLEV Project Affected Environment are afforded special employment opportunities. Each Build Alternative would have a short-term beneficial impact on local employment as total construction employment would provide employment opportunities for up to 7 years.

In the area surrounding SCMAGLEV stations, development is expected to centralize; more compact development would generate benefits such as decreased travel times and improvements to health, safety, and the environment. In addition, compact development would encourage mode shifts (for example, from automobile to pedestrian, bicycle, or transit) for local trips, decreasing auto emissions and improving air quality. Transit-oriented development (TOD) opportunities around station locations, particularly in Baltimore, would potentially include expanded housing and employment opportunities for residents; increased retail, especially supermarkets; improved vehicular and bicycle safety; direct ferry access to downtown Baltimore; enhanced security, lighting, and wayfinding; and added community amenities (for example, recreation, landscaping, waterfront access).

The urban area existing around the MVS East Station is a hub of transportation, offering multiple modes within proximity. The Camden Yards Station is also a densely populated urban center with existing access to multiple transportation modes. The greatest change would occur in the area of the proposed Cherry Hill Station, where the introduction of the SCMAGLEV Project could potentially bring redevelopment and private investment to the area. Construction of the station and associated features would reduce the presence of abandoned properties and industrial space, improve the local aesthetics, and continue to allow waterfront access.

Property values may increase around stations (except in the location of the BWI Marshall Airport Station), generally within a 1/2-mile radius for walkability purposes, because of improved access. Property value increases may potentially outprice existing low-income populations in the future.

The cost of the SCMAGLEV system would be prohibitive for some, notably low-income populations in EJ areas near stations. The SCMAGLEV Project would provide a premium service at a higher fare, estimated at \$60 per one-way trip, or seven times the

cost of an existing MDOT MTA Maryland Area Regional Commuter (MARC) commuter train fare between Washington, D.C. and Baltimore City. The Project Sponsor is investigating opportunities for fare subsidies to provide greater access for low-income populations since the introduction of the SCMAGLEV Project would provide an additional transportation choice between Washington, D.C. and Baltimore. The SCMAGLEV Project also provides improved direct access to BWI Marshall Airport. Low-income populations in EJ areas would likely choose to continue utilizing existing commuter services at the current estimated fare, unless fare equity was provided by the Project Sponsor to affected EJ communities.

**Air Quality.** The SCMAGLEV Project would likely result in a localized increase to mobile source air emissions throughout the affected environment, particularly in areas around station locations due to increased traffic (see Section 4.16 Air Quality). However, the operations of the SCMAGLEV Project would reduce overall mobile source air emissions regionally.

**Safety and Security.** The areas of the SCMAGLEV Project with the most notable safety and security concerns are in proximity to the ancillary facilities including the portals, MOW, and FA/EE facilities (see Section 4.22 Safety and Security). The primary concern is for unauthorized entry into these areas that would prohibit public access. Nearly all of the ancillary facilities are located in EJ population areas. Other public concerns include the chance of collision of very high-speed trains and other operational accidents.

**Mitigation.** The SCMAGLEV Project has incorporated safety in the planning and design, core systems, facilities, and maintenance practices. The SCMAGLEV Project includes a systemwide state-of-the-art signaling system to avoid collisions and implements intrusion detection to avoid unsafe conditions. Open cut tunnel transition portals, maintenance of work, FA/EE, and other ancillary facilities would be strictly controlled to prevent unauthorized entry by using fencing, security cameras, and security lighting.

#### 4.5.4.3 Short-term Construction Effects

The construction of and the associated construction staging and laydown areas and haul routes for the SCMAGLEV Project would predominately occur within Environmental Justice population areas (see Appendix D.3). Construction of the SCMAGLEV Project would include activities such as digging and tunneling using multiple tunnel boring machines, ground clearing, pile driving, excavating, grading, and the stockpiling of soil, muck, and materials. The SCMAGLEV Project would require temporary property acquisition along the alignment and within EJ population areas and could cause potential short-term impacts to air quality (fugitive dust and construction equipment exhaust), noise and vibration (construction equipment and activities), transportation (work vehicles, increased congestion, detours, and road closures), and changes to views and visual quality for EJ populations. Temporary construction impacts would be concentrated around the viaducts, portals, ancillary facilities, TMFs, stations, and

construction staging and laydown areas. Construction would occur simultaneously at different locations.

The underground stations and tunnel portions of the SCMAGLEV Project would be achieved using TBM technology. In order to create the underground stations and tunnels, construction staging areas would be needed for assembly, launch, operation, and retrieval of the TBMs. The TBM launch and retrieval areas would be located along the alignment and would be located at the future station locations and FA/EE facilities. The majority of the underground stations (MVS East Station and Camden Yards Station) and FA/EE facilities would be located in areas with EJ populations so these populations would experience increased noise and vibration due to construction. The BWI Marshal Station and FA/EE facilities located north and south of the BWI Marshall Station, are not in EJ population areas. Additionally, portions of the proposed hauling routes to and from TBM sites would be located within or immediately adjacent to EJ population areas including the Queen Chapel Road, MD 410, Kenilworth Avenue, MD 193, Brock Bridge Road, MD 197, MD 170, and MD 643/Annapolis Road so these communities would experience regular disruption from the added noise and traffic produced by the hauling.

The viaduct would be located in portions of Prince George's and Anne Arundel Counties either just east of the BWP (Build Alternatives J-01 – J-06) or just west of the BWP for (Build Alternatives J1-01 – J1-06), and in Baltimore City for Build Alternatives J-01, J-02, J-03, J1-01, J1-02, and J1-03 that would include the Cherry Hill Station. Elevated viaduct ramp structures would also be constructed to access TMFs. The entirety of the viaduct and viaduct ramp locations would be located in or adjacent to EJ population areas which would experience the construction impacts from these segments. There is a section of unpopulated PRR-owned land adjacent to Build Alternatives J-01 through J-06. Powder Mill Road, MD 197, MD 198, and MD 32 are potential construction access points during viaduct construction. Both local and state roads within these EJ population areas would serve as access points to construction areas and would be subject to associated traffic, noise, and vibration impacts from construction vehicles.

Construction laydown areas would be required in multiple locations throughout the SCMAGLEV Project corridor. All identified construction laydown areas would be located within areas with EJ populations. The four long-term laydown areas include:

- Landover Mall Site (on a vacant site adjacent to commercial and residential areas within an EJ Population Area) – in the Summerfield neighborhood in Prince George's County and adjacent to the Landover and Glenarden neighborhoods. The Maple Ridge Apartment Community is across Brightseat Road from and within 225 feet of the Landover Mall Site. EJ populations would be temporarily impacted due to increased noise, vibration, and changes to aesthetics.
- Konterra Site (on a vacant site within an EJ Population Area largely surrounded by major transportation corridors) – in the Konterra neighborhood

in Prince George's County and adjacent to the Laurel neighborhood. The Avalon Laurel Apartment community is within 450 feet of the Konterra Site. EJ populations would be temporarily impacted by noise, vibration, and changes to aesthetics during construction.

- Suburban Airport Site (within a non-populated section of an EJ Population Area) – in the Maryland City neighborhood in Anne Arundel County. No impacts to EJ populations are anticipated because residential areas and community facilities are not present in the general vicinity.
- Patapsco Avenue Site (with an EJ population Area) – in the Cherry Hill neighborhood in Baltimore City. EJ populations in proximity of Round Road, Spelman Road, and Bethune Road north of Patapsco Avenue would be temporarily impacted due to increased noise and changes to aesthetics.

Construction of the SCMAGLEV Project would result in short-term adverse impacts to EJ populations due to temporary use of property, increased noise and vibration, air quality/emissions, changes in aesthetics and visual quality, changes to access and mobility, changes in current transit service, and the use of community facilities. EJ populations subject to these impacts may also experience community disruption, which is a population's ability to navigate their way around their community, and adverse effects to community cohesion, the disruption of interaction between people and groups within a community. Community disruption would include temporary impacts to traffic (i.e. detours), pedestrian access, and neighborhood access and mobility during construction.

Construction impacts would occur at varying locations and for varying durations during the construction period. Construction operations would occur for up to 24 hours a day in some areas and last from 1 to 7 years. FRA anticipates construction impacts to cease upon completion of construction.

Prior to construction, the Project Sponsor would develop and continually implement a Public Safety Plan for the SCMAGLEV Project. Maintenance of traffic plans would also be developed in accordance with local requirements and in consultation with emergency services to ensure that temporary detours and road closure would not significantly impact emergency response times.

#### **4.5.5 Environmental Justice Outreach**

EJ outreach requires full and fair participation by affected communities in the transportation decision making process. Throughout the NEPA process, FRA tailored efforts to provide project awareness, engage communities, and generate opportunities for involvement and feedback from EJ populations. FRA developed an EJ outreach plan prior to performing EJ outreach activities; the plan identified area demographics and targeted strategies for engagement of EJ communities within the SCMAGLEV Project vicinity. A summary of EJ outreach efforts is below. Several tools and techniques are being used to generate continued meaningful public involvement, including public

meetings, a SCMAGLEV Project website, news and print media, social media, fliers, advertisements on public transit and community facilities, briefings to local government officials and stakeholders, and mass emails.

FRA held four rounds of meetings (five meetings per round) prior to the release of this DEIS. Meetings occurred throughout the corridor, with efforts to schedule each at convenient times and accessible (local) locations, and with strategically targeted outreach to nearby populations. Further details on public outreach efforts are available in Chapter 5 Public Involvement and Agency Coordination. FRA and the Project Sponsor prepared and are executing a public outreach plan that includes the following strategies geared toward EJ communities, among others:

- Use of information hubs, including churches and community centers, within EJ neighborhoods to serve as drop-off locations for SCMAGLEV Project materials
- Placement of targeted advertisements on mass transit, at ethnic grocery stores, social service provider offices, and on targeted social media, as well as print media, radio, and websites that target minority populations
- Consultation with social service providers, which include agencies and non-profit organizations that provide education, food, housing, health care, and employment benefits and facilities, regarding population types and organizations they serve within EJ communities
- Consultation with elected officials who serve EJ communities
- Use of clear and concise language in printed materials
- Use of highly visual project displays and renderings
- Translation of SCMAGLEV Project materials into Spanish, Korean, and Russian, with additional translations by request
- Use of bilingual staff and interpreters at SCMAGLEV Project outreach events and public meetings in targeted areas
- Mailings with the SCMAGLEV Project Affected Environment, which is predominately comprised of EJ block groups.

During the public involvement process, FRA and the MDOT MTA received a variety of comments in support of or in opposition to different characteristics of the SCMAGLEV Project, as well as specific concerns about the property impacts and SCMAGLEV Project costs and funding sources (for example, ticket price, taxes, and overall cost).

At the Bowie and Gambrills meetings in October 2017, attendees expressed concerns over direct impacts to historic Bowie, Odenton, and surrounding areas. Commenters also voiced opposition over impacts to the Odenton Volunteer Fire Company and Bowie Assisted Living, facilities that provide one-of-a-kind services for the area. At a later date,

the alternative in question was eliminated. At the Cherry Hill/Patapsco Avenue, Baltimore City Open House in December 2018, FRA generally received positive feedback. Public comments focused on safety, security, hazardous materials, potential negative environmental impacts, transportation connectivity, economic constraints, appropriation of Federal and state funding, station location, ticket pricing, and potential benefits and impacts on Baltimore City.

Several civic organizations local to South Baltimore attended meetings with the Project Sponsor and NEPA team members to discuss the SCMAGLEV Project, including the Lakeland Neighborhood Association, Cherry Hill Development Corporation, Westport Neighborhood Association, and the Westport Community Development Corporation. The Project Sponsor views these organizations as critical in helping define future development opportunities adjacent to the Cherry Hill Station. During these meetings, citizen stakeholders predominately voiced support for the SCMAGLEV Project and the corresponding economic benefits to the area. There were a few citizens who were more cautious about the SCMAGLEV Project and raised concerns about affordable fare pricing, property impacts, and cost of living increases potentially forcing current residents to relocate. See Chapter 5 Public Involvement and Agency Coordination for additional details on comments received.

Correspondences from communities surrounding the proposed Cherry Hill Station, which predominantly contain EJ populations, strongly support a nearby station and acknowledge the associated benefits that would likely be available to their communities. Following SCMAGLEV Project meetings, the Project Sponsor received letters in support of the Cherry Hill Station location. Additionally, the Project Sponsor met twice with the owner of the Patapsco Flea Market and Arena – a major source of small business activity in the area - and they expressed support for the SCMAGLEV Project. The owners also attended the December 2018 Cherry Hill Public Meeting, held at their Arena property, and they again expressed their support for the SCMAGLEV Project to NEPA team members.

The Westport Neighborhood Association's letter in support of the Cherry Hill Station, dated February 2019, is on behalf of residents of the Westport, Mt. Winans, Curtis Bay, Lakeland, and Cherry Hill communities in Baltimore City (all in EJ population block groups). The letter recognizes the value of the proposed SCMAGLEV station in Cherry Hill for increased access to jobs and support of local economic revitalization, and voices opposition to the Camden Yards Station location as a "failure to optimize potential development opportunities in the city's residential neighborhoods." An undated letter from the Westport Community Economic and Development Corporation cites conditional support of the Cherry Hill Station as an opportunity to increase access to jobs and a pathway to overcome "generations of disinvestment." The letter also expresses concerns about potential negative effects of the SCMAGLEV Project on air quality, noise pollution, increased traffic volumes, preservation of the existing sight lines to the waterfront for all residents, adequate station parking, damage to existing structures during SCMAGLEV Project construction, adequate compensation for property



acquisitions, and successful negotiation of a community benefits agreement. Provided abatement of these concerns, the Westport Community Economic and Development Corporation endorses the Cherry Hill Station.

In another demonstration of support for the SCMAGLEV Project, the Cherry Hill Development Corporation stated plans to include SCMAGLEV's Cherry Hill Station in their updated master plan while meeting with the Project Sponsor. In a letter dated January 2019, the Cherry Hill Development Corporation expresses strong support and excitement for the station, noting the potential for growth and creation of "meaningful opportunities" for residents, businesses, and institutions. The letter calls the SCMAGLEV Project a "major win" for the community and an opportunity to "allow [the] community to flourish going into the future, raising the profile of Baltimore as a whole." Furthermore, the Cherry Hill Development Corporation shares concerns over possible selection of the Camden Yards Station, conveying that this choice "would sadly continue the unfortunate past practices of neglecting to optimize potential development opportunities in the city's residential neighborhoods."

During meetings with elected officials, the Project Sponsor received support for the Cherry Hill Station from the councilman for the Cherry Hill/Westport area, area delegates, and the District's State Senator. In a letter from February 2019, the Vice President of the Baltimore City Council shares support and excitement for the Cherry Hill Station, considering it as a way to expand transportation options and TOD and provide construction related and long-term job opportunities for area residents. Also, the Vice Chair of the Land Use and Transportation Committee, the councilwoman sees the Cherry Hill Station in alignment with area strengths and an opportunity for housing improvements, as well as commercial expansion and industrial investments. The President of the Baltimore City Council also conveys support for the Cherry Hill Station and surrounding facilities in South Baltimore, pointing to expansion of TOD potential and characterizing the SCMAGLEV Project as "responsible neighborhood development... key to increasing Baltimore's population, decreasing vacant homes, and improving its local economy." An undated letter from another councilmember and Chair of the Land Use and Transportation Committee discusses the Cherry Hill Station as beneficial in respect to land use, transportation connectivity, and the economy. He writes, "[t]he beneficial economic consequences of locating a station in Cherry Hill will be huge and healthy, resulting in increased development potential for expanded residential, commercial, and industrial opportunities."

In a *Baltimore Sun* article dated June 28, 2019, local leaders of the National Association for the Advancement of Colored People (NAACP) conveyed support for the SCMAGLEV Project. NAACP leaders see the SCMAGLEV Project as an opportunity to offer new construction and permanent job opportunities for area residents. NAACP plans to provide outreach and education to inform minority communities about the SCMAGLEV Project, the lack of residential displacements, and potential for employment, as well as hold town hall meetings to elicit resident feedback. Again, the

owner of the Patapsco Flea Market and Arena, a major source of small business activity in this area, expressed support for the SCMAGLEV Project and the Cherry Hill Station.

Following publication of this DEIS, FRA and MDOT MTA will hold public hearings. The public hearings will include an opportunity for oral testimony, to be recorded by a stenographer. Comments and testimony provided at the public hearings will be addressed in the FEIS. Spanish language translators will be available at the public hearing. FRA and MDOT MTA will also conduct additional outreach in EJ communities to obtain additional information on the scope of impacts to these communities and develop appropriate mitigation. FRA will use this information to make the ultimate determination about whether or not disproportionate impacts to EJ communities exist for this Project in the FEIS.

#### **4.5.6 Potential Mitigation Strategies**

This section previously summarized FRA's and the Project Sponsor's specific mitigation initiatives intended to minimize adverse impacts of the Build Alternatives to EJ populations reducing the context and intensity of anticipated impacts. Additionally, there were multiple minimization strategies incorporated into the design process. Prior to the determination to study Build Alternatives J and Build Alternatives J1 in detail, FRA, in coordination with the Project Sponsor, minimized impacts to EJ populations by refining the Build Alternatives in response to public concerns with the goal of avoiding and minimizing the potential for negative impacts identified by the public and the analyses during the NEPA process.

The Project Sponsor identified and incorporated reasonable and feasible design elements in the Build Alternatives with the goal of avoidance or minimization of impacts to the natural and human environment, with targeted considerations for EJ populations. Design elements include optimizing the use of underground guideway and stations and locating the viaduct along or within existing transportation and utility corridors. As examples, the Mount Vernon Square East, BWI Marshall Airport, and Camden Yards Station options would be located underground to avoid significant surface impacts in urban, highly developed areas. The guideway under all Build Alternatives would be in a tunnel in Washington, D.C. and Baltimore City. The guideway viaduct would be parallel to the BWP for part of its alignment. The Cherry Hill Station in Baltimore City would be located above an existing transportation facility. Finally, consolidation of TBM launch sites, storage, staging areas, and fresh air and emergency egress facilities would reduce the geographic extent of facility impacts.

Despite minimization efforts during design, the SCMAGLEV Project would still have impacts to the natural and human environment within EJ population areas. To address these impacts, FRA and the Project Sponsor identified and will continue to identify additional, resource-specific mitigation strategies as discussed above. As the SCMAGLEV Project design progresses, the Project Sponsor will continue to refine the design regarding the location, positioning, and construction methods with the goal of avoiding temporary construction and permanent impacts where reasonably feasible, as

well as minimizing and mitigating impacts as practicable. The Project Sponsor would also continue with public, stakeholder, and agency involvement activities, such as targeted planning for inclusion of EJ populations, engaging metropolitan planning organizations, hosting small group meetings with EJ populations and communities, and incorporating traditional and nontraditional outreach methods to reach potentially affected populations. The Project Sponsor is committed to identifying and implementing adequate mitigations that specifically benefit EJ populations. The Project Sponsor wants local longtime residents, especially those in places like Cherry Hill and Westport who have been subject to years of chronic disinvestment, to benefit from the SCMAGLEV Project, specifically if Cherry Hill is selected as the Baltimore Station.

Also, EJ populations would experience some transportation and economic benefits from each Build Alternative. Adverse effects would be reduced by mitigation as outlined throughout this DEIS. Potential impacts would also be partially offset by SCMAGLEV Project benefits.