

19.1 INTRODUCTION

This chapter considers whether minority populations and/or low-income populations would experience disproportionately adverse impacts from the proposed Project. It also discusses the public outreach efforts undertaken to inform and involve minority and low-income populations within the study area.

19.2 METHODOLOGY

In accordance with Federal Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994), this environmental justice analysis identifies and addresses any disproportionate and adverse impacts on minority and low-income populations that lie within the study area for the proposed Project. Executive Order 12898 also requires federal agencies to work to ensure greater public participation in the decision-making process.

This environmental justice analysis was prepared to comply with the guidance and methodologies set forth in the DOT's Final Environmental Justice Order (DOT 2012), FTA's environmental justice guidance (FTA 2012), and the federal Council on Environmental Quality's (CEQ) environmental justice guidance (CEQ 1997).

Consistent with those documents, this analysis involved the following basic steps:

1. Select a geographic analysis area based on where the proposed Project components may cause impacts;
2. Obtain and analyze relevant race, ethnicity, income and poverty data in the study area to determine where minority and low-income communities, if any, are located;
3. Identify the potential of the Build Alternative to adversely impact minority and low-income populations;
4. Evaluate the potential of the Build Alternative to adversely affect minority and low-income populations relative to the effects on non-minority and non-low-income populations to determine whether the Build Alternative would result in any disproportionately high and adverse effects on minority or low-income populations;
5. Implement a public engagement strategy to encourage environmental justice populations to participate in the environmental review process; and
6. Should the Build Alternative result in disproportionately high and adverse effects on minority or low-income populations, determine whether further mitigation measures or alternatives that would avoid or reduce the disproportionately high and adverse effects are not practicable. Further, ensure that a substantial need for the action exists, and other alternatives that satisfy

the need would have less adverse impacts on the protected population but would either have other adverse impacts that are more severe or involve increased costs of extraordinary magnitude.

The study area for environmental justice encompasses the area most likely to be affected by the Build Alternative and considers the area where potential impacts resulting from construction and operation of the Build Alternative would occur. The study areas for environmental justice follows the two-mile study area (centered on the stacks at the Main Facility, Preferred Alternative Project Component A) for assessing potential air quality impacts and the 500-foot buffer area along Project Components B, C, D, E, F, and G used for the analyses of land use, socioeconomic conditions, and other analyses.

The 80 census tracts considered in the analysis are shown on Figure 5-1 in Chapter 5, “Socioeconomic Conditions.” In addition, as described in Chapter 5, “Socioeconomic Conditions,” since the Main Facility could have impacts that are more localized, this analysis considers more specific block group data within the Town of Kearny census tract 127, where the Main Facility would be located.

19.3 AFFECTED ENVIRONMENT

The environmental justice analysis in both study areas for Project Components A through G is discussed below.

19.3.1 Identification of Environmental Justice Populations

Data on race and ethnicity were gathered from the U.S. Census Bureau’s 2016 American Community Survey (ACS) data within the study areas, and then aggregated for each municipality. Data on poverty status were gathered from 2012- 2016 ACS 5-Year Estimates. For comparison purposes, data for Hudson, Essex and Bergen Counties were also compiled as well as the State of New Jersey. Based on census data on racial and ethnic characteristics and poverty status and the guidance documents described above, potential environmental justice areas were identified as follows:

Minority communities

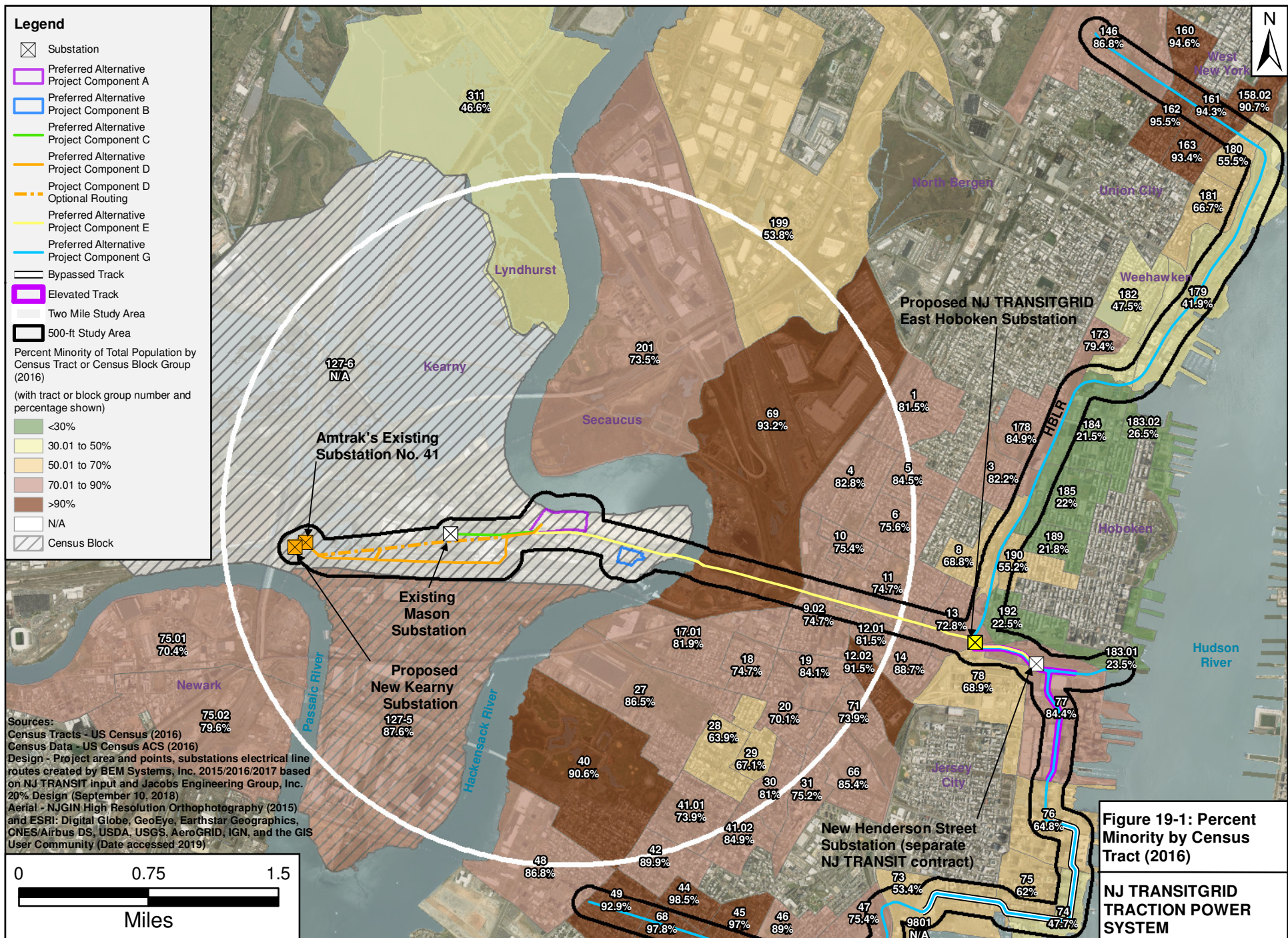
FTA’s Environmental Justice Circular 4703.1 defines minorities to include American Indians or Alaskan Natives, Asian, African Americans or Black persons, Hispanic or Latino persons, and Native Hawaiians or other Pacific Islanders. The environmental justice analysis also considers minority populations to include persons who identified themselves as being either “some other race” or “two or more races” in the 2010 Census. The DOT does not identify a threshold for determining whether an area’s population is considered minority. CEQ guidance defines minorities the same way and indicates that minority populations should be identified where either: (1) the minority population of the affected area exceeds 50 percent; or (2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. For this analysis, the CEQ’s threshold of 50 percent was used. In Hudson County, approximately 70.6 percent of the population is minority, Essex County contains approximately 68.5 percent minority, and Bergen County’s population is approximately 41.3 percent minority.

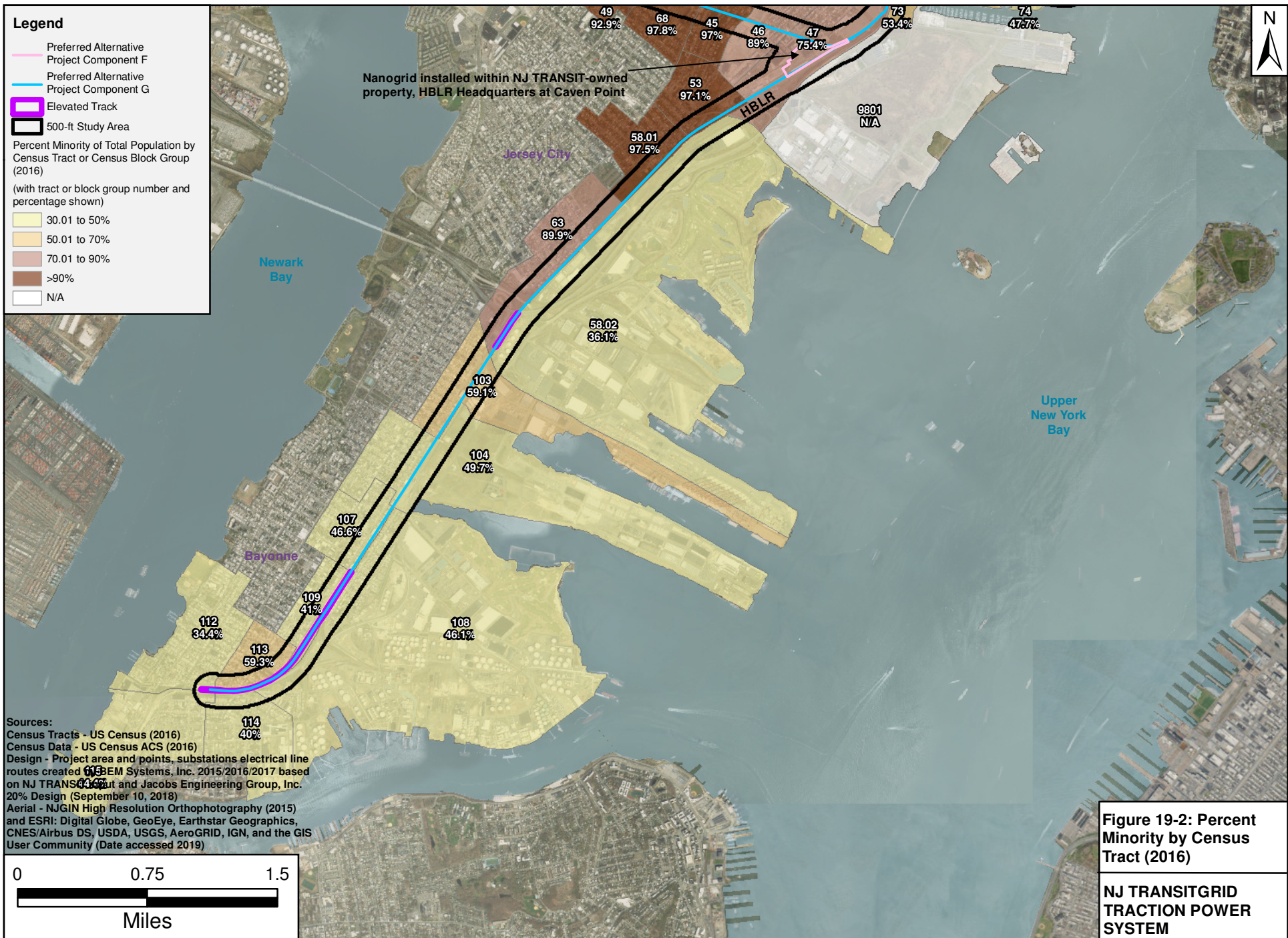
Low-income communities

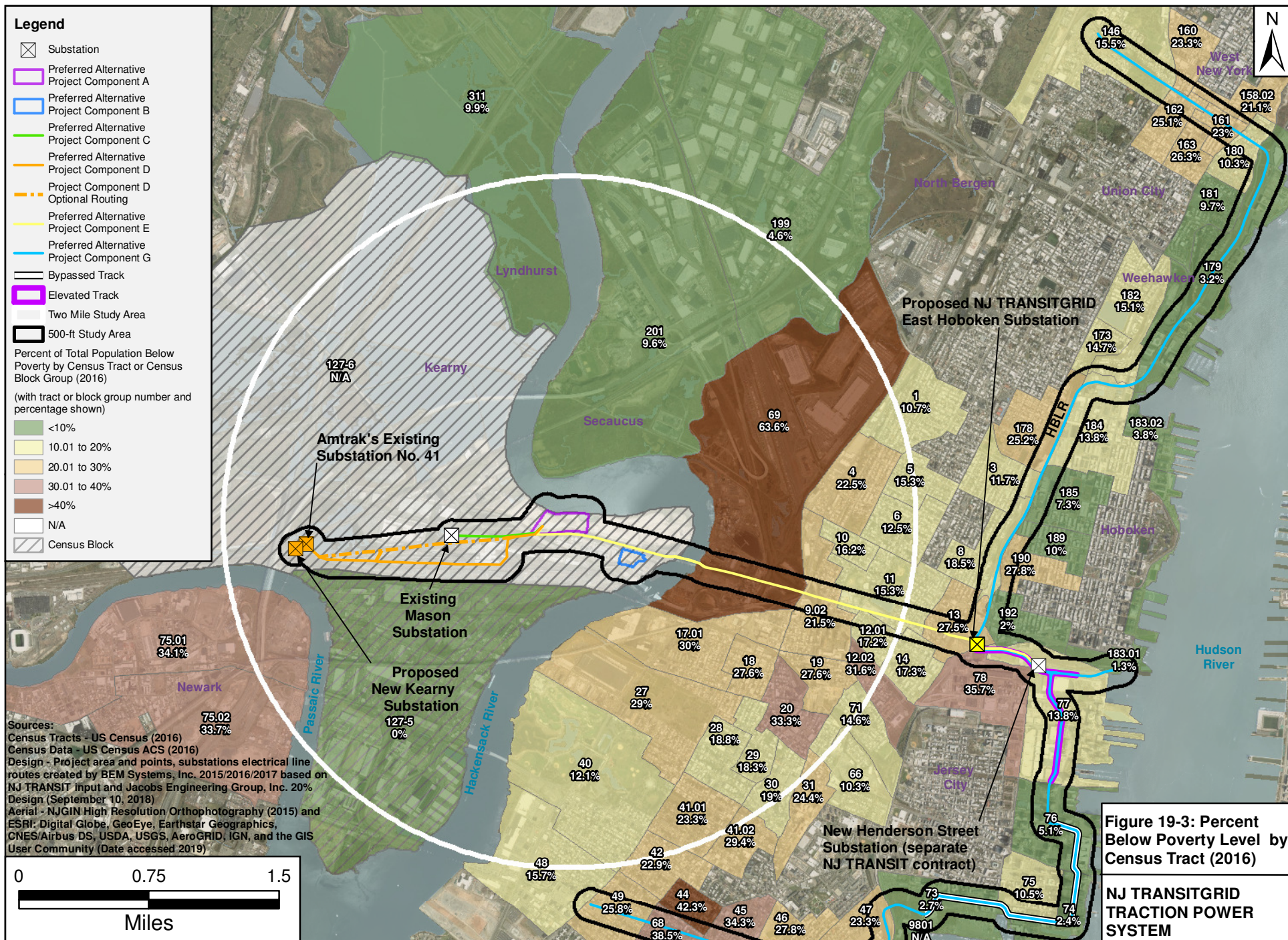
Low-income is defined by FTA to be people whose median household income is at or below the Department of Health and Human Services (HHS) poverty guidelines, which is updated annually and is based on household size. FTA also encourages the use of local poverty threshold or a percentage of median income for the area, provided that the threshold is at least as inclusive as the HHS poverty guidelines. Because HHS data is not available below the state level, this analysis uses the information on individuals in households below the poverty level as defined by the U.S. Census Bureau. The percent of individuals living below the poverty level in each census tract, as estimated in the 2012- 2016 ACS 5-Year Estimates, was used to identify low-income populations. Because CEQ guidance does not specify a threshold for identifying low-income communities, all census tracts with a low-income population percentage that is greater than in the state of New Jersey was considered a low-income community. Approximately 10.9 percent of the total population of New Jersey is living below the federal poverty level. This is a conservative approach since Hudson, Essex, and Bergen Counties have 17.4 percent, 17.2 percent, and 7.5 percent living below the poverty level, respectively.

19.3.2 Environmental Justice Populations in the Study Areas

Table 19-1 shows race, ethnicity, and poverty level for the census tracts in the study areas as well as census block group data within the Town of Kearny for census tract 127. Shading in the table denotes the presence of environmental justice populations. The percent minority population and percent of population below the poverty level are presented by geographic area in Figures 19-1 through 19-4.







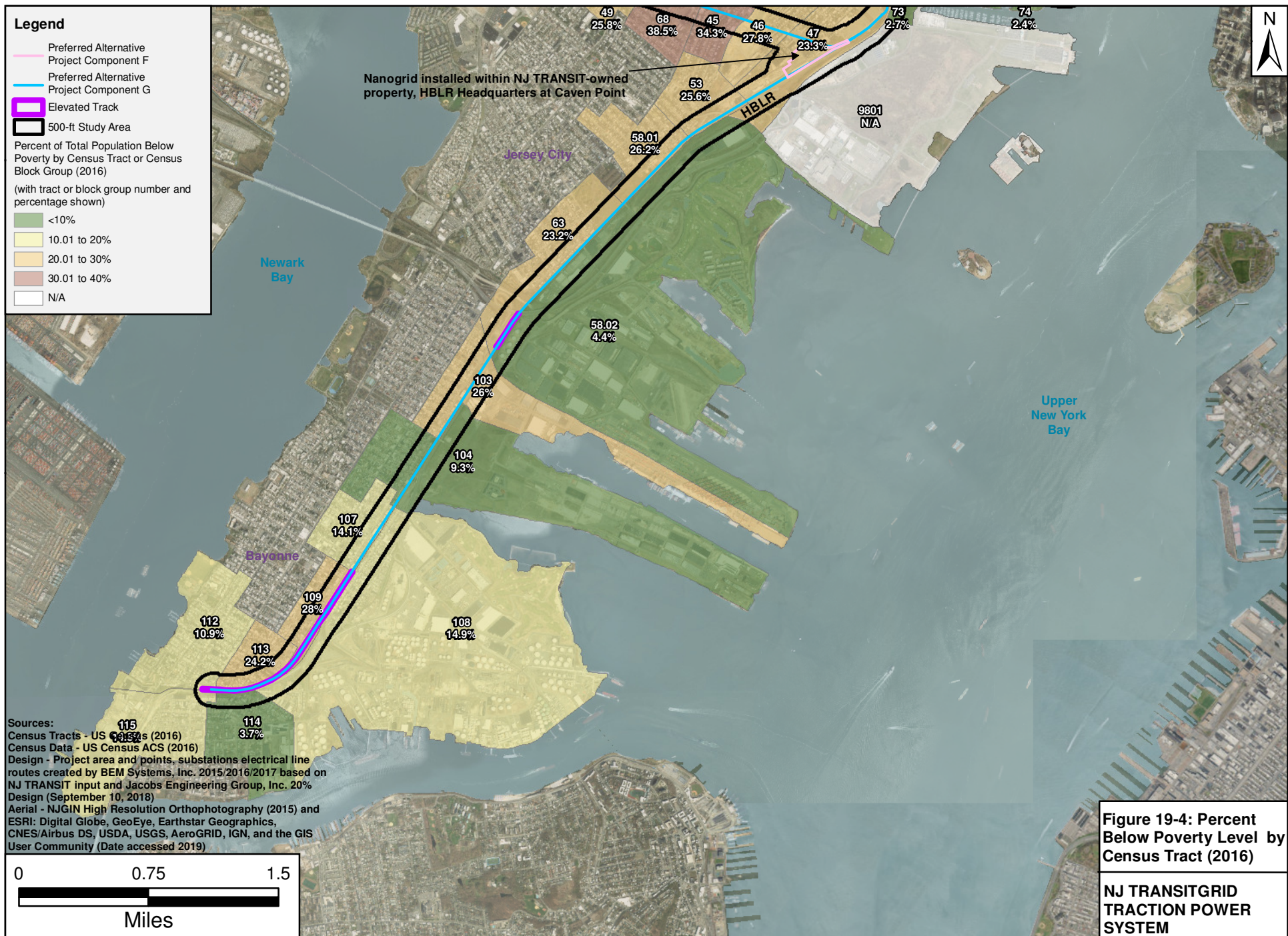


Table 19-1 Population and Economic Characteristics

Geographic Area	Race and Ethnicity ¹⁸																		Individuals Below Poverty Level
	2016 Total	White		Black/ African American		American Indian/ Alaska Native		Asian		Native Hawaiian and Other Pacific Islander		Other		Two or More Races		Hispanic		Total Minority	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Town of Kearny Census Block Group and Total ¹⁹																			
Census Tract 127, Block Group 5	832	103	12.4	340	40.9	0	0	0	0	0	0	0	0	0	0	389	46.8	87.6	0
Census Tract 127, Block Group 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Town of Kearny	42,029	17,959	42.7	1,414	3.4	92	0.2	1,897	4.5	0	0	666	1.6	655	1.6	19,346	46.0	57.3	11.6
Jersey City Census Tracts and Total																			
Census Tract 1	6,581	1,219	18.5	46	0.7	0	0	1,679	25.5	0	0	0	0	192	2.9	3,445	52.4	81.5	10.7

¹⁸ The race and ethnicity categories provided are further defined as: White (White alone, not Hispanic or Latino); Black (Black or African American alone, not Hispanic or Latino); Asian (Asian alone, not Hispanic or Latino); American Indian and Alaska Native alone, not Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone, not Hispanic or Latino; some other race alone, not Hispanic or Latino; two or more races, not Hispanic or Latino; Hispanic (Hispanic or Latino; Persons of Hispanic origin may be of any race).

¹⁹ There are no residences within the study areas in Kearny. The population associated with census tract 127, block group 5 reflects the Hudson County Correctional Facility near the southern tip of the Kearny peninsula. For a conservative analysis, this population is considered to be a potential environmental justice community.

Geographic Area	Race and Ethnicity ¹⁸																		Individuals Below Poverty Level
	2016 Total	White		Black/ African American		American Indian/ Alaska Native		Asian		Native Hawaiian and Other Pacific Islander		Other		Two or More Races		Hispanic		Total Minority	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Jersey City Census Tracts and Total																			
Census Tract 3	4,539	809	17.8	221	4.9	0	7	710	15.6	0	0	24	0.5	0	0	2,775	61.1	82.2	11.7
Census Tract 4	3,760	647	17.2	202	5.4	101	2.7	1,457	38.8	0	0	0	0	128	3.4	1,225	32.6	82.8	22.5
Census Tract 5	4,758	738	15.5	558	11.7	0	0	1,004	21.1	0	0	45	1	106	2.2	2,307	48.5	84.5	15.3
Census Tract 6	5,762	1,405	24.4	373	6.5	30	0.5	1,014	17.6	0	0	72	1.3	43	0.8	2,825	49	75.6	12.5
Census Tract 8	4,108	1,282	31.2	174	4.2	0	0	559	13.6	0	0	0	0	28	0.7	2,065	50.3	68.8	18.5
Census Tract 9.02	6,273	1,590	25.4	233	3.7	0		3,226	51.4	0	0	0	0	30	0.5	1,194	19	74.7	21.5
Census Tract 10	2,056	505	24.6	21	1	9	0.4	806	39.2	0	0	74	3.6	36	1.8	605	29.4	75.4	16.2
Census Tract 11	5,299	1,343	25.3	260	4.9	0	0	1,104	20.8	0	0	10	0.2	64	1.2	2,518	47.5	74.7	15.3
Census Tract 12.01	2,221	410	18.5	86	3.9	15	0.7	1,132	51	0	0	18	0.8	43	1.9	517	23.3	81.5	17.2
Census Tract 12.02	1,636	139	8.5	244	14.9	0	0	562	34.4	0	0	0	0	123	7.5	568	34.7	91.5	31.6
Census Tract 13	2,924	796	27.2	221	7.6	0	0	557	19.1	0	0	24	0.8	53	1.8	1,273	43.5	72.8	27.5
Census Tract 14	3,902	440	11.3	445	11.4	17	0.4	1,142	29.3	21	0.54	12	0.3	83	2.1	1,742	44.6	88.7	17.3
Census Tract 17.01	4,652	843	18.1	803	17.7	0	0	1,431	30.8	0	80	15	0.3	160	3.4	1,400	30.11	81.9	30
Census Tract 18	4,310	1,090	25.3	187	4.3	0	0	1,855	43	0	0	6	0.1	63	1.5	1,109	25.7	74.7	27.6

Geographic Area	Race and Ethnicity ¹⁸																		Individuals Below Poverty Level
	2016 Total	White		Black/ African American		American Indian/ Alaska Native		Asian		Native Hawaiian and Other Pacific Islander		Other		Two or More Races		Hispanic		Total Minority	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Jersey City Census Tracts and Total																			
Census Tract 19	1,299	207	15.9	133	10.2	11	0.9	873	67.2	0	0	0	8	30	2.3	45	3.5	84.1	27.6
Census Tract 20	3,956	1,182	29.9	318	8	15	0.4	1,615	40.8	0	0	81	2.1	30	0.8	715	18.1	70.1	33.3
Census Tract 27	5,632	760	13.55	1,610	28.6	35	0.6	1,638	29.1	0	0	0	0	46	0.8	1,543	27.4	86.5	29
Census Tract 28	6,175	2,231	36.1	1,351	21.9	0		809	13.1	26	0.4	0	0	76	1.2	1,682	27.2	63.9	18.8
Census Tract 29	4,297	1,415	32.9	535	12.5	6	0.1	1,301	30.3	0	0	0	0	13	0.3	1,027	23.9	67.1	18.3
Census Tract 30	2,900	550	19	475	16.4	9	0.3	0	0	0	0	0	0	56	1.9	1,084	37.4	81	19
Census Tract 31	4,463	1,108	24.8	631	14.1	0	0	0	0	0	0	15	0.3	56	1.3	1,352	30.3	75.2	24.4
Census Tract 40	5,485	513	9.4	1,168	21.3	0	0	2,062	37.6	1,253	22.8	346	6.3	143	2.61	0	0	90.6	12.1
Census Tract 40.01	6,525	1,706	26.2	1,716	26.3	0	0	959	14.7	1,876	28.8	0		268	4.11	0	0	73.9	23.3
Census Tract 41.02	3423	517	15.1	1556	45.5	0	0	143	4.2	1150	33.6	0	0	0	0	57	1.7	84.9	29.4
Census Tract 42	5049	509	10.1	2141	42.4	0	0	503	10	1,819	36	0	0	0	0	77	1.53	89.9	22.9
Census Tract 44	2,502	37	1.5	1,911	76.4	0	0	76	3	0	0	17	0.7	0	0	461	18.4	98.5	42.3
Census Tract 45	4,476	134	3	3,386	75.7	34	0.8	51	1.1	871	19.5	0	0	0	0	0	0	97.0	34.3
Census Tract 46	2,233	246	11.02	810	36.3	8	0.4	10	0.5	1,145	51.3	7	0.3	7	0.31	0	0	89.0	27.8
Census Tract 47	2,649	651	24.6	718	27.1	0	0	207	7.8	0	0	0	0	12	0	1,061	40.1	75.4	23.3

Geographic Area	Race and Ethnicity ¹⁸																		Individuals Below Poverty Level
	2016 Total	White		Black/ African American		American Indian/ Alaska Native		Asian		Native Hawaiian and Other Pacific Islander		Other		Two or More Races		Hispanic		Total Minority	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Jersey City Census Tracts and Total																			
Census Tract 48	4,257	560	13.2	923	21.7	77	1.8	1,838	43.2	0	0	79	1.9	55	1.3	725	17	86.8	15.7
Census Tract 49	3,885	247	6.4	1,782	45.9	0	0	706	8.3	0	0	35	0.9	0	0	1,088	28	92.9	25.8
Census Tract 53	2,887	85	2.9	1,877	65	0	0	20	0.7	0	0	11	0	0	0	894	31	97.1	25.6
Census Tract 58.01	5,543	139	2.5	3983	71.9	0	0	46	0.8	0	0	0	0	66	1.19	1,309	23.6	97.5	26.2
Census Tract 58.02	1,627	1040	63.9	63	3.9	0	0	252	0.2	0	0	20	1.2	14	0.86	238	14.6	36.1	4.4
Census Tract 63	4,098	415	10.1	1499	36.6	31	0.9	347	8.4	0	0	91	2.2	24	0.58	1,691	41.3	89.9	23.2
Census Tract 66	1,636	239	14.6	38	2.3	0	0	1,293	79	0	0	7	0.4	24	1.5	35	2.1	85.4	10.3
Census Tract 68	3,722	83	2.2	3,021	81.2	0	0	140	3.8	0	0	0	0	104	2.8	374	10	97.8	38.5
Census Tract 69	44	3	6.8	13	29.5	0	0	4	9.1	0	0	0	0	4	9.1	20	45.5	93.2	63.6
Census Tract 71	3,349	874	26.1	335	10	0	0	1,096	32.7	8	0.2	0	0	167	5	869	25.9	73.9	14.6
Census Tract 73	2,010	937	46.6	80	4	15	0.7	707	35.2	0	0	0	0	79	3.9	192	9.6	53.4	2.7
Census Tract 74	5375	2812	53	133	2.5	0	0	1692	31.6	0	0	0	0	215	4	523	9.73	47.7	2.4
Census Tract 75	5812	2208	38	340	5.8	0	0	2138	36.8	42	0.7	22	0.4	92	1.6	970	16.7	62.0	10.5
Census Tract 76	6928	2438	35.1	165	2.6	0	0	3512	50.7	0	0	0	0	313	4.5	500	7.2	64.8	5.1
Census Tract 77	10,202	1,590	15.6	545	5.3	0	0	6,780	66.5	0	0	121	1.2	311	3	855	8.4	84.4	2.4

Geographic Area	Race and Ethnicity ¹⁸																		Individuals Below Poverty Level
	2016 Total	White		Black/ African American		American Indian/ Alaska Native		Asian		Native Hawaiian and Other Pacific Islander		Other		Two or More Races		Hispanic		Total Minority	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Jersey City Census Tracts and Total																			
Census Tract 78	1,461	455	31.1	170	11.6	0	0	245	16.8	6	0.4	0	0	28	1.9	557	38.1	68.9	35.7
Census Tract 9801	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Jersey City	261,666	56,101	21.4	59,253	22.6	516	0.2	65,180	24.9	103	0	1,657	0.6	5,377	2.1	73,479	28.1	78.6	19.4
Hoboken Census Tract and Total																			
Census Tract 183.01	2,375	1,816	76.5	0	0	0	0	330	13.9	0	0	0	0	54	2.8	175	7.4	23.5	1.3
Census Tract 183.02	3,726	2,737	73.5	41	1.1	0	0	554	14.9	0	0	0	0	103	2.8	291	7.8	26.5	3.8
Census Tract 184	5,483	4,306	78.5	26	0.5	0	0	138	2.5	0	0	18	0.3	123	2.2	872	15.9	21.5	13.8
Census Tract 185	6,465	5,042	78	95	1.5	0	0	475	7.4	0	0	0	0	32	0.5	821	12.7	22	7.3
Census Tract 189	3,829	2,995	78.2	9	0.2	0	0	267	7	0	0	0	0	99	2.6	459	12	21.8	10
Census Tract 190	4,924	2,207	44.8	379	7.7	0	0	238	4.8	0	0	0	0	40	0.8	2,060	41.8	55.2	27.8
Census Tract 192	4,159	3,224	77.5	17	0.4	0	0	649	15.6	0	0	0	0	92	2.2	177	4.3	22.5	2
Hoboken	53,136	38,355	72.2	918	1.7	6	0	4,607	8.7	12	0	35	0.1	1,058	2.0	8,145	15.3	27.8	10.5
Township of Lyndhurst Census Tract and Total																			
Census Tract 311	5,684	3,036	53.4	86	1.5	0	0	781	13.7	0	0	53	0.9	48	0.8	1,680	29.6	46.6	9.9

Geographic Area	Race and Ethnicity ¹⁸																		Individuals Below Poverty Level
	2016 Total	White		Black/ African American		American Indian/ Alaska Native		Asian		Native Hawaiian and Other Pacific Islander		Other		Two or More Races		Hispanic		Total Minority	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Township of Lyndhurst Census Tract and Total																			
Township of Lyndhurst	21,582	15,020	69.6	212	1.0	19	0.1	1,581	7.3	0	0	104	0.5	179	0.8	4,467	20.7	30.4	9.9
City of Newark Census Tract and Total ²⁰																			
Census Tract 75.01	4,341	1,287	29.6	561	12.9	25	0.4	0	0	0	0	264	6.1	120	2.8	2,084	48.0	70.4	34.1
Census Tract 75.02	2,741	559	20.4	542	19.8	0	0	13	0.5	0	0	83	3.0	149	5.4	1,395	50.9	79.6	33.7
City of Newark	280,139	29,949	10.7	135,566	48.4	852	0.1	4,790	1.7	153	0.1	5,066	1.8	2,813	1.0	100,950	36.0	89.3	29.1
Township of Weehawken Census Tract and Total																			
Census Tract 179	2,379	1,383	58.1	59	2.5	0	0	683	28.7	0	0	0	0	35	1.5	219	9.2	41.9	3.2
Census Tract 180	4,182	1,863	44.6	152	3.6	0	0	282	6.7	0	0	0	0	45	1.2	1,840	44	55.5	10.3
Census Tract 181	2,971	989	33.3	105	3.5	0	0	214	7.2	0	0	0	0	8	0.3	1,655	55.7	66.7	9.7
Census Tract 182	4,139	2,173	52.5	141	3.4	0	0	309	7.5	0	0	0	0	68	1.6	1,448	35	47.5	15.1

²⁰ While these Newark census tracts reflect the presence of environmental justice populations, there are no residences within the limits of the two-mile study area in Newark.

Geographic Area	Race and Ethnicity ¹⁸																		Individuals Below Poverty Level
	2016 Total	White		Black/ African American		American Indian/ Alaska Native		Asian		Native Hawaiian and Other Pacific Islander		Other		Two or More Races		Hispanic		Total Minority	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Township of Weehawken Census Tract and Total																			
Township of Weehawken	13,671	6,408	46.9	457	3.3	0	0	1,488	10.9	0	0	0	0	156	1.1	5,162	37.8	53.1	10.3
Town of West New York Census Tract and Total																			
Census Tract 158.02	6,320	586	9.3	49	0.8	0	0	250	3.9	0	0	0	0	52	0.8	5,383	85.2	90.7	21.1
Census Tract 160	3,292	177	5.4	23	0.7	0	0	95	2.9	0	0	18	0.6	0	0	2,979	90.5	94.6	23.3
Town of West New York	52,407	6,516	12.4	1,076	2.1	40	0	3,138	6.0	29	0.1	431	0.8	305	0.6	40,872	78.0	87.6	21.9
Township of North Bergen Census Tract and Total																			
Census Tract 146	3,754	497	13.2	114	3	0	0	272	7.3	0	0	41	1.1	13	0.4	2,817	75	86.8	15.5
Township of North Bergen	62,791	9,758	15.5	1,594	2.5	68	0.1	3,870	6.2	0	0	263	0.4	328	0.5	46,910	74.7	84.5	14.8
City of Bayonne Census Tract and Total																			
Census Tract 103	3,171	1,297	40.9	646	20.4	0	0	205	6.5	0	0	11	0.35	226	7.1	786	24.8	59.1	26
Census Tract 104	4,490	2,260	50.3	466	10	0	0	738	16.4	0	0	0	0	34	0.8	992	22.1	49.7	9.3
Census Tract 107	3,839	2,051	53.4	299	7.8	0	0	161	4.2	0	0	0	0	101	2.6	1,227	0	46.6	14.1
Census Tract 108	3,146	1,695	53.9	174	5.5	0	0	72	2.3	168	5.3	0	0	97	3.1	940	29.9	46.1	14.9

Geographic Area	Race and Ethnicity ¹⁸																		Individuals Below Poverty Level
	2016 Total	White		Black/ African American		American Indian/ Alaska Native		Asian		Native Hawaiian and Other Pacific Islander		Other		Two or More Races		Hispanic		Total Minority	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
City of Bayonne Census Tract and Total																			
Census Tract 109	2,149	1,268	59	138	6.4	0	0	170	7.9	0	0	11	0.5	16	0.7	546	25.4	41	28
Census Tract 112	6,689	4,389	65.6	438	6.6	0	0	232	3.5	0	0	153	2.3	145	2.2	1,332	19.9	34.4	10.9
Census Tract 113	2,755	1,121	40.7	376	13.7	0	0	156	5.7	0	0	0	0	39	1.4	1,063	38.6	59.3	24.2
Census Tract 114	3,794	2,277	60	100	2.6	0	0	551	14.5	0	0	0	0	106	2.8	760	20	40	3.7
Census Tract 115	3,484	1,937	55.6	259	7.4	0	0	266	7.6	0	0	113	3.2	0	0	909	26.1	44.4	14.8
City of Bayonne	65,772	34,488	52.4	6,086	9.3	33	0.1	6,360	9.7	200	0.3	309	0.5	1,207	1.8	17,089	26.0	47.6	15.5
Town of Union City Census Tract and Total																			
Census Tract 161	3,599	205	5.7	70	1.9	0	0	92	2.6	0	0	0	0	0	0	3,232	89.8	94.3	23
Census Tract 162	4,567	207	4.5	36	0.8	0	0	118	2.6	0	0	0	0	42	0.9	4,164	91.2	95.5	25.1
Census Tract 163	4,899	321	6.6	120	2.5	0	0	145	3	0	0	7	0.1	9	0.2	4,297	87.1	93.4	26.3
Census Tract 173	2,578	530	20.6	21	0.8	0	0	222	8.6	0	0	9	0	78	3	1,718	66.6	79.4	14.7
Census Tract 178	6,310	953	15.1	0	0	0	0	510	8.1	0	0	0	0	65	1	4,782	75.8	84.9	25.2
Union City	68,965	8,030	11.6	1,297	1.9	0	0	2,597	3.8	29	0	175	0.3	410	0.6	56,427	81.8	88.4	24.3

Geographic Area	Race and Ethnicity ¹⁸																		Individuals Below Poverty Level
	2016 Total	White		Black/ African American		American Indian/ Alaska Native		Asian		Native Hawaiian and Other Pacific Islander		Other		Two or More Races		Hispanic		Total Minority	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Town of Secaucus Census Tract and Total																			
Census Tract 199	4,856	2,243	46.2	40	0.8	0	0	1,503	31.0	0	0	0	0	54	1.1	1,016	20.9	53.8	4.6
Census Tract 201	1,860	492	26.5	194	10.4	0	0	855	46.0	0	0	0	0	17	0.9	302	16.2	73.5	9.6
Town of Secaucus	18,737	8,735	46.6	491	2.6	15	0.1	5,067	27.0	0	0	96	0.5	506	2.7	3,827	20.4	53.4	7.8
Regional and State Comparison																			
Hudson County	668,526	193,874	29.0	73,268	11.0	881	0.1	98,226	14.7	373	0.1	3,830	13.6	10,257	3.0	287,817	42.8	70.6	17.4
Essex County	792,586	249,787	31.5	308,463	38.9	1,155	0.1	39,264	5.0	214	0	7,208	0.9	12,081	1.5	174,414	22.0	68.5	17.2
Bergen County	930,310	546,048	58.7	49,047	5.3	1,065	0.1	146,592	15.8	248	0	2,022	0.2	14,087	1.5	171,201	18.4	41.3	7.5
State of New Jersey	8,915,456	5,054,611	56.7	1,133,918	12.7	9,509	0.1	813,826	9.1	2,158	0	37,978	0.4	143,625	1.6	1,719,831	19.3	43.3	10.9

Notes: Shading denotes environmental justice areas.
Percentages may not add up to 100 due to rounding.

Sources: U.S. Census Bureau, 2016 Census.

The census block groups adjacent to the Main Facility are located in the Town of Kearny. Although there are no residences in these census block groups, the population associated with census tract 127, block group 5 reflects the Hudson County Correctional Facility near the southern tip of the Kearny peninsula. For a conservative analysis, this population is considered to be an environmental justice community. According to census methodology, institutionalized populations, such as those associated with a correctional facility, are not part of the population for whom poverty status is determined.

Environmental justice populations are present in the Jersey City census tracts within the study area. All but two census tracts (census tracts 58.02 and 74) in the Jersey City section of the study area have a minority population that exceeds the 50 percent threshold, ranging from 36.1 percent to 98.5 percent. All but eight census tracts (census tracts 1, 58.02, 66, 73, 74, 75, 76 and 77) in Jersey City exceed the poverty rate for New Jersey, ranging from a rate of 2.4 to 42.3. Altogether, 45 out of the 46 census tracts with available data in Jersey City are considered to be environmental justice populations.

The census tracts in Hoboken have the lowest average percentage of minority populations compared to the other census tracts in the study area (approximately 28 percent). In addition, the census tracts within Hoboken have one of the lowest average poverty rates in the study area (approximately 9 percent). Two of the seven census tracts (census tracts 184 and 190) within the study area in Hoboken are considered to be environmental justice populations. Both census tracts exceed the poverty rate for New Jersey, while one (census tract 190) also exceeds the minority threshold.

The census tract in Lyndhurst is not considered to be an environmental justice population. This census tract has the second lowest average percentage of minority populations in the study area (approximately 47 percent) and the poverty rate does not exceed that of New Jersey.

The census tracts within the study area in Newark, West New York, North Bergen, Union City and Secaucus are all considered to be environmental justice populations. Both census tracts in the Newark portion of the study area have a minority population that exceeds the 50 percent threshold (approximately 70 and 80 percent). These census tracts have the highest average poverty rate in the study area (approximately 34 percent).

The two census tracts in West New York have the highest average percentage of minority populations in the study area (approximately 93 percent). Poverty rates for these census tracts also exceed that of New Jersey.

The census tract in North Bergen exceeds the minority threshold (approximately 87 percent) and exceeds the poverty rate threshold.

All five census tracts in Union City are considered to be environmental justice populations. The census tracts in Union City have the second highest average percentage of minority populations in the study area (approximately 90 percent). The census tracts in Union City also have the second highest average poverty rates compared to the other municipalities in the study area (approximately 23 percent).

The two census tracts in Secaucus exceed the minority threshold (approximately 54 and 74 percent) and are therefore considered to be environmental justice populations. However, the census tracts within Secaucus have the lowest average poverty rates in the study area (approximately 7 percent).

Two census tracts (census tracts 180 and 181) within the study area in Weehawken exceed the minority threshold and one census tract (census tract 182) exceeds the low-income threshold. Therefore, three of the four census tracts are considered to be environmental justice populations.

Six out of the nine census tracts within the study area in Bayonne are considered to be environmental justice communities. Two census tracts (census tracts 103 and 113) have a minority population that exceeds the 50 percent threshold (approximately 59 percent), while six census tracts exceed the poverty rate for New Jersey, ranging from a rate of 14.1 to 28.

Overall, of the 80 census tracts and 2 census block groups that fall within the study areas, 68 are considered to be environmental justice communities.

19.4 PROBABLE IMPACTS OF THE PROJECT ALTERNATIVES

19.4.1 No Action Alternative

Under the No Action Alternative, the proposed Project would not be constructed, and NJ TRANSIT and Amtrak would continue to be served by the existing commercial grid. Under the No Action Alternative, other planned transportation improvements would take place by 2021. These include projects in NJ TRANSIT's Resilience Program, Amtrak initiatives that will affect operations on the Northeast Corridor, and HCIA plans for warehousing development on portions of the Koppers Koke property.

In the absence of the proposed Project, Amtrak has plans to completely replace and rebuild Substation No. 41. Two existing lattice towers in Cedar Creek Marsh South will be replaced with monopoles. Amtrak is currently proceeding with reconstruction of certain elements of Substation No. 42, located east of the project area at the entrance to the North River Tunnels in Weehawken, NJ, including the installation of a new Control House. In addition, under the No Action Alternative, NJ TRANSIT intends to acquire the 20-acre parcel (Project Component A) on the Koppers Koke property as well as the six-acre parcel (Project Component B) located south of the Morris & Essex Line (due to a property settlement, as described in Chapter 2, "Project Alternatives"). Approximately two acres of wetlands (Cedar Creek Marsh South) would be impacted with construction of the new Kearny Substation to replace the existing Substation No. 41.

No substantial changes in the minority and low-income populations in the study areas would be expected under the No Action Alternative.

19.4.2 Build Alternative

As defined in FTA's guidance, based on DOT's Final Environmental Justice Order a disproportionately high and adverse effect on an environmental justice population is an adverse effect that is predominantly borne by a minority and/or low-income population, or would be appreciably greater for the minority and/or low-income population than for the non-minority and/or non-low-income population. Effects that

may occur as a result of a proposed action may be considered in the context of associated mitigation measures and offsetting benefits when determining whether disproportionately high and adverse effects would occur. The effects of the Build Alternative on each resource are discussed below, in the context of the potential effects on minority and low-income populations are discussed below.

LAND USE

Construction of the electrical lines and the new NJ TRANSITGRID East Hoboken Substation would take place within existing transportation rights-of-way or easements. Staging areas and construction employee parking areas would be accommodated within existing NJ TRANSIT and Amtrak properties and other transportation rights-of-way. The proposed Project would not require the acquisition of any residential properties or businesses. However, as discussed in Chapter 3, “Land Use,” the proposed Project will have an adverse effect on the land use and zoning for the approximately two acres of Cedar Creek Marsh South for construction of the new Kearny Substation. While no mitigation is required for land use or zoning, as discussed in Chapter 12, “Natural Resources,” wetland mitigation would be provided. Although this taking would result in a change in land use, it would not have an adverse effect on the local population, since this area is inaccessible to the public and the local population does not directly depend on these natural resources. As a result, the Build Alternative would not result in disproportionately high and adverse land use or zoning effects on minority or low-income populations.

COMMUNITY FACILITIES

There are no community facilities, parklands, or publicly accessible open space resources within the construction footprint of Preferred Alternative Project Components A through G. The Main Facility (Preferred Alternative Project Component A), natural gas pipeline connection (Preferred Alternative Project Component B), electrical lines to Mason Substation (Preferred Alternative Project Component C), and the electrical lines and the new Kearny Substation (Project Component D) would be located entirely within industrial areas. Community facility uses beyond the 500-foot study area, but within the two-mile study area are not considered in this chapter. Laurel Hill Park is the closest community facility to the Main Facility, approximately one mile away in Secaucus. The community facility closest to the new Kearny Substation is the Hudson County Correctional Center, approximately 1.3 miles away. The natural gas pipeline connection and the electrical lines associated with Project Components C and D would also not have the potential to affect any community facilities, based on the nature of these project components and the distances from resources. Therefore, Project Components A through D would not affect community facilities.

Community facilities, parklands, and publicly accessible open space resources within 500 feet of Preferred Alternative Project Components E through G are listed below and described in Chapter 4, “Community Facilities.”

Community Facilities

- Hoboken Fire Department Engine Company 1/ Ladder Company 2
- Grove Church Cemetery
- Hudson County Community College

- Union City Day Care Program, Inc.
- North Hudson Regional Fire and Rescue
- North Hudson Regional Fire and Rescue Ladder 3
- North Hudson Regional Fire and Rescue Squad 1
- The Learning Experience
- Smart Start Academy
- Viaquenti Academy
- River School Newport
- Bright Horizons at Plaza 3 – Waterfront
- Learning Ladders
- Waterfront Montessori
- Early Learning Academy
- Jersey City Medical Center
- Liberty Science Center
- Metropolitan Family Health Network
- Learning Tree
- Advanced Services International Daycare Center
- Bay View -New York Bay Cemetery
- Bayonne Medical Center
- Lincoln Community School #5
- Nicholas Oresko #14
- Beacon Christian Academy
- Bayonne Head Start Program
- Saint Peters Cemetery

Parkland and Open Space

- Old Glory Park
- Louisa Park
- Hamilton Park
- Weehawken Waterfront Park and Recreation Center
- Weehawken Pier and Lincoln Harbor Park
- 19th Street Basketball Courts
- Sixteen Hundred Park
- Louisa Park
- Washington Park
- Mama Johnson Park
- Newport Green Park
- J. Owen Grundy Park
- Township of Weehawken Veterans Park
- Liberty State Park

- Korean War Veterans Park
- Berry Lane Park
- Bayside Park
- Russell Golding Park
- Sister Mariam Theresa Park
- Sigmund Mackiewicz Park
- 11th Street Oval Park
- Edward F. Clark Park
- Southwest Resiliency Park
- Arthur Ashe Basketball Court
- Riverview-Fisk Park
- Virginia Avenue Park
- 28th Street Park

Where Preferred Alternative Project Component E passes through a residential area, all construction activities would be conducted in the interior of the Bergen Tunnel (i.e., threading electrical lines through newly installed pre-cast conduits) and would not affect nearby resources including the Jersey City Medical Center, Jersey City Fire Department Engine 7 Ladder 3, or Reservoir No. 3. The substation that would be constructed as part of Preferred Alternative Project Component E would be within 500 feet of the Hoboken Fire Department Engine Company 1/Ladder Company 2, but would not have the potential to affect the use and operation of that community facility. The nanogrid that would be constructed as part of Preferred Alternative Project Component F would be within 500 feet of the parking lot that serves Liberty State Park, but would not have the potential to affect the use and enjoyment of the park. The electrical lines and poles associated with Preferred Alternative Project Components F and G would be within 500 feet of a number of community facility and open space resources listed above but would not affect the use or operation of the community facilities or the public use and enjoyment of the parkland and open space.

Therefore, the Build Alternative would not result in an adverse effect to community facilities, parkland, or publicly-accessible open space and would not result in disproportionately high and adverse effects on minority or low-income populations.

SOCIOECONOMIC CONDITIONS

The Build Alternative would not increase commuter rail service or otherwise induce population growth. There would be no direct or indirect temporary or permanent displacement of businesses or residences in the study areas. As a result, no impact to population density, population projections, or the percentage of elderly/disabled populations is expected. As the proposed Project is located within an existing industrial area and railroad right-of-way, the proposed Project would not affect neighborhood cohesiveness or demographics. Construction of the Build Alternative would generate short-term economic benefits from the creation of temporary construction jobs, the wages paid to construction workers, and the indirect economic activity generated from the direct expenditures in the regional economy. The Build Alternative

would not result in adverse effects to socioeconomic conditions and would not result in disproportionately high and adverse socioeconomic effects on minority or low-income populations.

AIR QUALITY

Although the proposed Main Facility would use combined-cycle gas turbine technology and high-efficiency air emission control technology, overall air emissions would increase. However, air emissions would be minimized via state-of-the-art pollution controls (selective catalytic reduction [SCR] and oxidation catalyst systems) incorporated into the design of the Main Facility. Air quality modeling was conducted for the Project using standard EPA modeling techniques and applicable meteorological data. The study area for the air quality modeling analysis (receptor grid) extended approximately five miles from the Main Facility's stacks. Pollutant concentrations for all pollutants of concern were predicted to be below the applicable ambient air quality standards or thresholds, including the National Ambient Air Quality Standards (NAAQS). The NAAQS are set to be protective of public health. As designed, the preferred equipment option of the Build Alternative for the Main Facility (Preferred Alternative Project Component A) would not cause significant air quality impacts. The Hudson County Correctional Facility is the closest sensitive use and is more than 7,000 feet to the south of the Main Facility. Concentrations at this location would be well below the applicable NAAQS and impact thresholds. The nanogrid would operate only during emergencies and for monthly testing and maintenance. The short-term emissions associated with testing and maintenance would not notably affect daily and annual criteria pollutant levels and would not have the potential to exceed the NAAQS.

Based on the distance from the Main Facility to residential and other sensitive uses, the construction of the Main Facility would not have the potential to adversely affect air quality at those uses. Construction of all other Project Components would be of shorter duration. Based on the anticipated construction activities, distances to sensitive receptor locations, and air quality control measures that would be implemented, construction of Project Components C through G would not have the potential to adversely affect air quality. Therefore, the concentration increases associated with the operation of the Main Facility, testing and maintenance of the nanogrid, and the proposed Project construction would not be adverse and no disproportionately high and adverse air quality effects on minority or low-income populations would occur.

VISUAL

The Main Facility (Preferred Alternative Project Component A), and Project Components B, C, and D would be constructed in an existing industrial area and would not block any important views within the Hackensack River or Passaic River viewsheds or result in an adverse visual effect at residential locations.

The new substation associated with Preferred Alternative Project Component E would be consistent with the existing industrial and transportation infrastructure as well as the surrounding visual character. The nanogrid would be located in a highly-developed urban area, but would be similar in character with its surroundings, which already include industrial infrastructure, warehouses, and rail facilities. The equipment installed for the nanogrid would be up to 25 feet above the ground and smaller in scale than existing infrastructure in the study area, and therefore would not have an adverse visual effect.

Proposed monopoles east of the Hackensack River associated with Preferred Alternative Project Component E would be visible but would be no more than 65 feet tall. While the New Jersey Historic Preservation Office (NJHPO) found that Preferred Alternative Project Component E monopoles and other elements would result in a direct and cumulative visual adverse effect to the DL&W Railroad Historic District, this adverse effect would not affect the local population. The local population has limited opportunity to view this historic resource, which is part of an actively-used rail right-of-way outside of residential areas and for the most part not accessible to the public. In addition, the draft Programmatic Agreement (PA) between FTA, NJHPO and NJ TRANSIT includes measures to avoid, minimize, or mitigate adverse effects to historic resources.

The monopoles associated with Preferred Alternative Project Components F and G would not adversely affect visual quality, since they would be similar in scale and character to existing infrastructure prevalent throughout the study area.

Some aspects of the proposed construction activities would be visible to the public, but none of the construction activities or equipment would block sensitive views or result in a long-term adverse effect on any viewer groups. Therefore, the Build Alternative would not result in adverse visual effects and would not result in disproportionately high and adverse visual effects on minority or low-income populations.

HISTORIC RESOURCES

The Build Alternative would result in an adverse effect on historic properties, including the Old Main Delaware, Lackawanna and Western (DL&W) Railroad Historic District, the Bergen Tunnels western portal, the West End Through Truss Bridges, the West End Interlocking Tower, the Hackensack River Lift Bridges Historic District, the Lower Hack Draw Bridge and the DL&W Railroad Boonton Line Historic District. The draft PA between FTA, NJHPO and NJ TRANSIT includes measures to avoid, minimize, or mitigate adverse effects. The adversely affected historic properties are generally not accessible to the public, except while on board the trains that used the rail corridor in the study area. Although the Build Alternative would adversely affect historic properties, the effect on the local population would not be adverse and would not result in disproportionately high and adverse effects on minority or low-income populations.

TRAFFIC AND PUBLIC TRANSPORTATION

During operation, the traffic generated by the Main Facility (Preferred Alternative Project Component A) for approximately 30 full-time employees would be minimal and easily accommodated into the traffic network with little noticeable effect. Other Project Components would not be associated with full-time employment or regular employee commutes. The Build Alternative would provide resilient electric power to Amtrak and NJ TRANSIT rail lines, including emergency conditions that disrupt the commercial power grid, resulting in benefits to the public transportation system, as well as vehicle traffic during emergencies. Construction of the Main Facility and other Project Components would result in minor increases in vehicular traffic from workers traveling to and from the site and from deliveries of equipment and materials. These increases would be temporary and would not have a notable adverse effect on the regional highway and roadway network. Off-street parking would be available for construction workers

on NJ TRANSIT and Amtrak properties and other transportation rights-of-way. Existing NJ TRANSIT and Amtrak access points would be used to access the construction sites.

Work along the existing railroad rights-of-way would be closely coordinated with NJ TRANSIT and Amtrak to ensure continued passenger rail operations throughout construction. Some limited and planned service disruptions may be required to accommodate the construction activities; however, these would be infrequent and managed to minimize disruption to commuters. Overall, the Build Alternative would result in a transportation benefit to the public. The Build Alternative would not result in adverse effects to traffic and transportation and would not result in disproportionately high and adverse effects on minority or low-income populations.

NOISE AND VIBRATION

There are no land uses sensitive to noise or vibration within the distances that could be affected with the Build Alternative during operation, based on federal noise and vibration guidance, as discussed in Chapter 11, "Noise and Vibration." Noise and vibration levels at sensitive receptor locations (more than 0.7 miles away for the Main Facility [Preferred Alternative Project Component A] and new Kearny Substation [Preferred Alternative Project Component D], more than 330 feet away from the new NJ TRANSITGRID East Hoboken Substation [Preferred Alternative Project Component E], and more than 600 feet away from the nanogrid [Preferred Alternative Project Component F]), would not be affected by the Build Alternative during operation. Preferred Alternative Project Component B and electrical lines associated with Preferred Alternative Project Components C, D, E, and G would not generate notable noise or vibration. Once operational, noise from the proposed Project would be minimal in residential or other sensitive areas due to the industrial setting of the Main Facility and distance to sensitive receptors from the new NJ TRANSITGRID East Hoboken Substation and the nanogrid at HBLR Headquarters. Therefore, the Build Alternative would not result in adverse noise effects or disproportionately high and adverse noise and vibration effects on minority or low-income populations.

The noisiest construction activity would be the pile driving phases at the Main Facility [Preferred Alternative Project Component A] and new Kearny Substation [Preferred Alternative Project Component D], which would last approximately twelve months. While noise generated from pile driving would be audible at surrounding industrial properties, no noise-sensitive receptors are located near the Main Facility site or new Kearny Substation. The foundation for the nanogrid (Preferred Alternative Project Component F), which would be located over 600 feet from a residential area, may also require pile driving but would be of a shorter duration and would be performed during daytime hours. Construction of the electrical lines associated with Preferred Alternative Project Components E and G would entail some noise-generating activities, including excavation and boring with an auger. The noise would be audible to nearby residents and workers. This electrical line work would, however, proceed sequentially along the corridor and construction would not be sustained in any given location for an extended period of time (i.e., two weeks). Based on the typical construction equipment and methods proposed, vibration levels at sensitive receptors in the study area are expected to be well below levels that cause cosmetic and structural damage. Therefore, construction of the Build Alternative would not result in adverse noise

effects or disproportionately high and adverse noise and vibration effects on minority or low-income populations.

NATURAL RESOURCES

NJ TRANSIT proposes to install a new water supply line, with a connection to the existing main water line. No surface or ground water will be used for water supply under the Build Alternative. To ensure no potential soil or groundwater contamination migrates offsite during construction, preventative BMP measures will be applied along with the use of double/multi-cased piles for building foundation.

Once constructed sanitary wastewater generated by the Main Facility will be discharged directly into the closed loop local sewer system and stormwater will be discharged into the Hackensack River, following pre-treatment for suspended solids in a vortech filtering unit and settlement period in a detention basin, as discussed in Chapter 15, "Utilities." There are no USEPA sole source aquifers within the project area, and the Hackensack River is not a reservoir. All reservoirs within the Hackensack River Basin are located upstream. No significant adverse impacts would result to the public's potable water supply or water quality under the Build Alternative.

Although portions of the Build Alternative are within identified floodplains, project activities will be in compliance with the Flood Hazard Area (FHA) and NJDEP regulations to ensure no flood water displacement (zero net flood displacement). Pursuant to the FHA Control Act Rules (7 N.J.A.C. § 13), the proposed work in a tidally influenced floodplain will not cause significant floodplain impacts or loss of flood storage capacity.

Up to two acres of low resource value isolated wetlands would be lost as a result of the Build Alternative. Through mitigation, however, the project will support the restoration of up to five acres of high value, functional wetlands within a contiguous tidal marsh and aquatic nursery, located in the NJ Meadowlands. This Mitigation would support avian species that migrate to the Meadowlands via the Atlantic Flyway. The Atlantic Flyway encompasses some of the hemisphere's most productive ecosystems, including forests, beaches, and coastal wetlands. It is estimated that more than 285 species of birds visit the Meadowlands yearly. Improvements such as restoration of these resources will serve to continue localized environmental education programs in the NJSEA that service local and EJ communities that utilize the local and visiting school systems.

The two acres of wetlands/waters to be filled are isolated and provide minimal water quality benefits, and do not serve as a natural storm surge protection barrier from flooding or rising sea levels. In contrast the restored five acres of high value, functional wetlands located within a contiguous tidal marsh of the NJSEA will contribute to a larger system with water quality and collectively functions as the first natural defense for the surrounding communities to flooding and sea level rise.

This is a confined isolated wetland area of the NJ Meadowlands (NJSEA) that is proximal to rail traffic, electrification and therefore for safety reasons is not accessible by the public for fishing, birding, canoeing/kayaking, etc. The isolated nature of Cedar Creek Marsh South also prevents recreational navigation access from the Hackensack River to this area.

As discussed in Chapter 12, the Hackensack River in the proposed Project area was in non-attainment of SWQS for New Jersey Waters for aquatic life (general) and for fish consumption (NJDEP 2016). This means that relevant pollutant levels exceeded the NJDEP SWQS for these uses. Waters near the Koppers Koke Site are in full attainment for industrial water supply. According to NJDEP, insufficient data exist to designate attainment status for the Hackensack River near the proposed Project area for primary and secondary contact recreation, drinking water supply, or agricultural water supply (NJDEP 2016). Further concluding that filling wetland/waters in the project area will not eliminate a resource that is of current use to EJ communities or the general public for recreation or consumption.

As the local population does not directly depend on these natural resources, the adverse effects to natural resources would not have an adverse effect on the local population and would not result in disproportionately high and adverse effects on minority or low-income populations.

SOILS AND GEOLOGY

The Build Alternative would have no effects on soils and geology once constructed. The potential for erosion and sedimentation during construction activities will be addressed using Soil Erosion and Sediment Control (SESC) and Best Management Practices (BMPs), as discussed in Chapter 13, “Soils and Geology.” The Build Alternative would not result in adverse effects or disproportionately high and adverse soils and geology effects on minority or low-income populations.

CONTAMINATED MATERIALS

Construction of the Build Alternative has the potential to expose historic fill, contaminated soil and/or groundwater at several sites throughout the project corridor. A search of regulatory databases for contaminated materials indicated that four potentially contaminated sites would be affected by the proposed construction activities, including Koppers Koke Site, Meadowland Maintenance Complex (MMC), Hoboken Yard, and Hudson County Chromate 202 (Caven Point Avenue). Additionally, portions of Kearny peninsula are underlain by historic fill and chromite ore processing residue (COPR). This fill may contain elevated levels of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), dioxins and furans, heavy metals, and hexavalent chromium. There are several Hudson County Chromate Sites located in the immediate vicinity of Preferred Alternative Project Components. While there are numerous other hazardous sites listed by the NJDEP within the 500-foot study area, utility poles and duct banks would be installed within previously disturbed areas along the transportation right-of-way and limited excavation would be needed for the installation. Contaminated sites of greatest concern that would potentially be disturbed during construction are located in industrial areas, where construction would occur primarily in locations that are not accessible to the general public.

Construction plans and specifications would provide procedures for stockpiling, testing, loading, transportation, and proper disposal of excavated materials requiring off-site disposal. A Health and Safety Plan (HASP), which would describe the site-specific health and safety procedures to minimize exposure of contaminated materials to workers and the public would be prepared. The HASP would include specifications for training of appropriate personnel, monitoring for the presence of contamination (e.g., buried tanks, drums or other containers), sludges or soils that show evidence of potential contamination

(such as discoloration, staining, or odors), and approved response plans. With the implementation of safety and environmental protocols regarding contaminated materials, the Build Alternative would not have an adverse effect related to contaminated materials and would not result in disproportionately high and adverse effects on minority or low-income populations.

UTILITIES

There is capacity in the existing utilities infrastructure systems (natural gas, water, sanitary sewer, and stormwater) to provide the needed utility connections and supply the Build Alternative with utility services. Construction of the Build Alternative would not adversely affect utilities. Rather, the Build Alternative would provide more reliable electrical infrastructure, to support immediate and long-term electrical needs for public transportation by rail. Overall, the Build Alternative would not adversely affect utilities or result in disproportionately high and adverse effects on minority or low-income populations.

PUBLIC HEALTH AND SAFETY

The industrial locations and restricted access to the Main Facility (Preferred Alternative Project Component A), natural gas pipeline connection (Preferred Alternative Project Component B), substations (Preferred Alternative Project Component D and E), and the nanogrid (Preferred Alternative Project Component F), would limit the potential public exposure to health and safety risks. Chapter 16, "Safety and Security," discusses exposure to electromagnetic fields (EMFs) with the Build Alternative. The strength of EMFs decreases rapidly with increasing distance from the electric equipment and power lines. High voltage lines would be limited to Preferred Alternative Project Component C (230kV) and Preferred Alternative Project Component D (138kV), both of which are located in industrial areas, more than 500 feet away from residential and other sensitive uses. Preferred Alternative Project Component E is associated with a much lower voltage (27kV). As demonstrated in Chapter 16, "Safety and Security," the EMF associated with the maximum voltage (230kV) drops off rapidly and is within the New Jersey guidelines. Therefore, the lower voltage (27kV and 13.2kV) would also be in compliance with the guidelines. For the portion of the electrical lines that would be installed in duct banks or through the Bergen Tunnels, EMF levels at publicly accessible locations along the route would be indistinguishable from background levels. The 27kV electrical line between the Main Facility site and the new NJ TRANSITGRID East Hoboken Substation (Preferred Alternative Project Component E) in Jersey City would extend for a short distance above ground in areas of mixed-use development via the Morris & Essex Line right-of-way; however, there are no existing residential or other sensitive uses within a close distance to Preferred Alternative Project Component E in this section of the corridor. The electrical lines proposed along the HBLR right-of-way (Preferred Alternative Project Component G) would be relatively low voltage lines, in comparison to the other proposed electricals lines. The proposed locations of the electrical lines (on monopoles, in duct banks or attached to existing infrastructure) are within the New Jersey guidelines for EMFs. The Build Alternative would not result in high EMFs at residential and other sensitive receptors or disproportionately high fields in areas with minority or low-income populations.

The Build Alternative would improve safety and security in the region by providing reliable public transportation during widespread outages of the commercial power grid, and facilitating evacuation during a power outage, if it becomes necessary. Overall, the Build Alternative would not have an adverse

effect on public health and safety and would not result in disproportionately high and adverse health and safety effects on minority or low-income populations.

19.5 PUBLIC PARTICIPATION

As noted in FTA's environmental justice guidance, a key component of environmental justice is engaging environmental justice populations and considering said input as part of the transportation planning process. This allows project sponsors to understand the needs and priorities of environmental justice populations and to balance the benefits of a proposed Project against its adverse effects. Notice of availability of this DEIS was distributed widely in Spanish and English, as identified below. The notice includes information on where to view the document and how to provide comments during the public comment period.

A public scoping meeting was held on February 3, 2016 to provide information on the proposed Project, solicit input on the DEIS analysis, and respond to concerns and comments expressed by members of the local community. Full and fair participation by all potentially affected communities was encouraged in accordance with DOT's environmental justice policies. Targeted outreach to environmental justice communities included:

- Notice of the February 3, 2016 meeting was published in *the Jersey Journal*, *The Observer*, *The Star Ledger*, and *El Especialito* (in Spanish);
- Emails and fliers with February 3, 2016 public meeting information and availability of the scoping document in both English and Spanish were distributed to public libraries and the following Section 8 housing developments:
 - Montgomery Gardens, 563 Montgomery Street, Jersey City, NJ 07302
 - Booker T. Washington, 200 Colden Street, Bldg. #2, Jersey City, NJ 07302
 - Thomas J. Stewart, 88-92 Erie Street, Jersey City, NJ 07302
 - Barbara Place Terrace, 471 Pacific Avenue, Jersey City, NJ 07304
 - Glennview Townhouses I, 463 Pacific Avenue, Jersey City, NJ 07304
 - Lafayette Senior Living Center, 463 Pacific Avenue, Jersey City, NJ 07304
 - Lafayette Village, 579 Grand Street, Jersey City, NJ 07304
 - Pacific Court, 148 Bramhall Avenue, Jersey City, NJ 07304
 - Woodward Terrace, 148 Bramhall Avenue, Jersey City, NJ 07304
 - Berry Gardens, 199 Ocean Avenue, Jersey City, NJ 07305
 - Curries Woods, 3 New Heckman Drive, Jersey City, NJ 07305

- Dwight Street Homes, 315 Randolph Avenue, Jersey City, NJ 07305
 - Hudson Gardens, 27-29 Palisade Avenue, Jersey City, NJ 07305
 - Ocean Pointe East and West, 460 Ocean Avenue, Jersey City, NJ 07305
 - Gloria Robinson Court Homes, 348 Duncan Avenue, Jersey City, NJ 07306
 - Marion Gardens, 57 Dales Avenue, Jersey City, NJ 07306
 - Holland Gardens, 241 Sixteenth Street, Jersey City, NJ 07310
- For the public scoping meeting, email notifications were distributed to elected officials, and all parties who signed up via the NJ TRANSIT Resilience Program website to be on the NJ TRANSITGRID email distribution list;
 - Letter notifications for availability of this document were sent to local municipalities and elected officials; and
 - Project information on the NJ TRANSIT website was updated at <http://njtransitresilienceprogram.com>.

The scoping meeting occurred in an Americans with Disabilities (ADA)-compliant facility, and a Spanish interpreter was on-site. Information boards were posted and Project team members circulated among the boards, answering questions and describing the proposed Project to attendees. Comment forms (in English and Spanish) were available. The comment forms could be completed on site, but also included mailing and email addresses so that meeting attendees could send in comments after the meeting, if desired. Approximately eight people from the general public attended the information session, and one comment was submitted which contained no objections to the proposed Project. A summary of the comments received and meeting materials can be found in Appendix G.