SECTION 6-2-2
SOCIAL GROUPS BENEFITED OR HARMED

This section describes whether the Project may benefit or adversely affect elderly individuals, individuals with disabilities, and transit-dependent individuals (transit riders, pedestrians, and bicyclists). It also provides general demographic and household characteristics within the Project Area. The potential effects of the Project on minority and/or low-income populations are described in **Section 6-2-3, Environmental Justice**. This evaluation was conducted consistent with NYSDOT's TEM.

The analyses of elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists were based on data from the U.S. Census Bureau as well as information contained in other sections of this FDR/FEIS.

6-2-2.1 AFFECTED ENVIRONMENT

The study areas presented in **Section 6-1, Introduction** (Central Study Area, I-481 North Study Area, I-481 East Study Area, and I-481 South Study Area) were used for the assessment of effects to elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists.

- Identification of Elderly Individuals and Individuals with Disabilities: Elderly individuals (65 years and over) were identified using data from the U.S. Census Bureau's Census 2010 and the 2015-2019 American Community Survey (ACS) (see **Table 6-2-2-6** in **Section 6-2-2.1.2**). Individuals with disabilities were identified based on data from the U.S. Census Bureau's Census 2000, Summary File 3, and households with individuals with disabilities were identified based on data presented in the ACS 2015-2019.[1]
- Identification of Transit-Dependent Populations, Pedestrians, and Bicyclists: Transit-dependent populations, pedestrians, and bicyclists are qualitatively described based on available information about transportation in the area such as from the Central New York Regional Transit Authority (Centro) and Call-A-Bus, Centro's paratransit service.

6-2-2.1.1 DEMOGRAPHICS AND AFFECTED POPULATIONS

This section describes the population and household characteristics within the Central Study Area and its subareas as well as the I-481 North, South, and East Study Areas. The section outlines trends in data since 2010 in the census tracts within one-quarter mile of the project limits. Study area characteristics were also compared to those of the City of Syracuse, Onondaga County, and the 5-County Region comprised of Onondaga, Oswego, Cayuga, Cortland, and Madison Counties.

[1] Most recently updated U.S. Census data (ACS), 2015-2019, records households with individuals with disabilities, rather than individuals. Therefore, U.S. Census 2000 and ACS 2015-2019 data are used in this analysis.

Information used in the demographic analysis includes data from the U.S. Census Bureau's 2010 Census[2] and 2015-2019 ACS.[3] The data obtained were used to develop a profile of the locally affected environment as well as an understanding of the regional context of the study areas. Census tract data were aligned to the study areas and subarea limits as much as possible.

Population

In 2019, there were 55,851 people living in the Central Study Area, a 0.1 percent decrease since 2010. Within the Central Study Area, all Neighborhoods Subareas experienced population decline: the Southwest Neighborhoods Subarea, the Southeast Neighborhoods Subarea, and Northern Neighborhoods Subarea experienced population decreases of 0.4 percent, 2.5 percent, and 0.1 percent, respectively. The I-481 North Study Area population increased by 0.6 percent, and the I-481 South Study Area population decreased by 2.8 percent. Population in the I-481 East Study Area in DeWitt and East Syracuse declined by 4.1 percent. **Table 6-2-2-1** shows population change between 2010 and 2019 in the study areas.

Population within the City of Syracuse, which includes the Central Study Area and I-481 South Study Area, decreased 1.6 percent. Population in Onondaga County, which includes all study areas, decreased by 0.9 percent, while the 5-County Region experienced a decrease of 1.8 percent.

Age Distribution

Table 6-2-2-2 shows the age distribution for the study areas. Between 2010 and 2019, the Central Study Area had an increase in population of those 65 years and over (+5.2 percent). The Southwest Neighborhoods Subarea had an increase in the total number of 18- to 64-year-olds, generally considered the working age population (+7.3 percent). However, in the Southeast Neighborhoods Subarea, which includes Syracuse University and the Northern Neighborhoods Subarea, the number of 18- to 64-year-olds decreased (-4.6 percent and -1.2 percent, respectively). The number of school-aged children (under 18 years old) decreased in the Central Study Area in general (-5.1 percent), although it increased in the Southeast Neighborhoods Subarea (+4.2).

In the I-481 South Study Area, school age population and working age population declined by 4.4 percent and 7.0 percent, respectively, while the population 65 years and older increased by 13.3 percent. In the I-481 East Study Area, there were decreases in the school age and working age populations and a slight increase in the population 65 years and older. In the I-481 North Study Area, the school age population and working age population decreased from 2010 to 2019 (-10.6 percent and -0.8 percent, respectively), but the population 65 years and older increased (+19.9 percent).

Households

Table 6-2-2-3 displays the number of households and the average household size in the Project Area.

[2] https://www.census.gov/2010census.

[3] https://www.census.gov/programs-surveys/acs.

Table 6-2-2-1
Population in the Project Area

Geography	2010 Decennial Census	2015-2019 American Community Survey (ACS)	% Change
Central Study Area[1]	55,902	55,851	-0.1%
Southwest Neighborhoods Subarea[2]	16,384	16,322	-0.4%
Southeast Neighborhoods Subarea[3]	18,922	18,454	-2.5%
Northern Neighborhoods Subarea[4]	23,775	23,743	-0.1%
I-481 North Study Area[5]	11,616	11,682	0.6%
I-481 South Study Area[6]	17,136	16,661	-2.8%
I-481 East Study Area[7]	11,062	10,610	-4.1%
City of Syracuse	145,168	142,874	-1.6%
Onondaga County	467,026	462,872	-0.9%
5-County Region[8]	791,939	777,706	-1.8%

Notes:
[1] Central Study Area includes all Census Tracts (CTs) and Block Groups (BGs) within the neighborhoods' subareas with the exception of CT 59 BG 1 in the Southwest Neighborhoods Subarea and CT 55 BG 3 and CT 61.02 BG 1 in the Southeast Neighborhoods Subarea, all of which are in the I-481 South Study Area.
[2] Southwest Neighborhoods Subarea includes CT 20 BG 1; CT 21.01 BGs 1, 2, and 3; CT 30 BG 1; CT 32 BGs 1 and 2; CT 40 BG 1; CT 42 BGs 1 and 2; CT 53 BGs 1 and 2; CT 54 BGs 1, 2, 3, and 4; and CT 59 BG 1.
[3] Southeast Neighborhoods Subarea includes CT 34 BG 1; CT 35 BG 2; CT 36.01 BG 1; CT 36.02 BG 1; CT 43.01 BG 1; CT 43.02 BGs 1, 2, and 3; CT 55 BGs 1, 2, and 3; CT 56.01 BG 1; and CT 61.02 BG 1.
[4] Northern Neighborhoods Subarea includes CT 1 BG 1; CT 2 BG 2; CT 5.01 BGs 1 and 2; CT 6 BG 3; CT 14 BGs 1 and 2; CT 16 BGs 1 and 2; CT 17.01 BG 2; CT 17.02 BG 2; CT 18 BG 3; CT 19 BGs 2 and 3; CT 23 BGs 1 and 2; CT 24 BGs 1 and 2; and CT 137.01 BGs 1 and 2.
[5] I-481 North Study Area includes CT 103.01 BGs 2, 3, and 4; CT 104 BG 1; CT 105 BGs 1 and 2; CT 106 BGs 1 and 2; and CT 107 BGs 1 and 2.
[6] I-481 South Study Area includes CT 55 BG 3; CT 59 BGs 1 and 2; CT 61.01 BGs 1, 2, and 3; CT 61.02 BGs 1 and 2; CT 61.03 BG 1; CT 147 BG 5; CT 149 BG 1; and CT 161 BG 1.
[7] I-481 East Study Area includes CT 143 BG 1; CT 145 BGs 1 and 2; CT 146 BGs 3 and 4; CT 147 BG 1; and CT 148 BGs 1, 2, and 3.
[8] The 5-County Region includes Onondaga, Oswego, Cayuga, Cortland, and Madison Counties.

Source: U.S. Census 2010, Summary File 1; American Community Survey (ACS) 2015-2019 Estimates.

Table 6-2-2-2
Age Distribution in the Project Area

	School Age (Under 18)			Working Age (18-64)			65 and Over		
Geography	2010	2019	% Change	2010	2019	% Change	2010	2019	% Change
Central Study Area	12,490	11,847	-5.1%	37,793	38,093	0.8%	5,619	5,911	5.2%
Southwest Neighborhoods Subarea	5,088	4,139	-18.7%	10,038	10,772	7.3%	1,258	1,411	12.2%
Southeast Neighborhoods Subarea	2,316	2,413	4.2%	15,121	14,428	-4.6%	1,485	1,613	8.6%
Northern Neighborhoods Subarea	5,624	5,620	-0.1%	14,717	14,543	-1.2%	3,434	3,580	4.3%
I-481 North Study Area	2,506	2,240	-10.6%	7,155	7,098	-0.8%	1,955	2,344	19.9%
I-481 South Study Area	3,685	3,522	-4.4%	10,344	9,619	-7.0%	3,107	3,520	13.3%
I-481 East Study Area	2,437	2,281	-6.4%	6,538	6,240	-4.6%	2,087	2,089	0.1%
City of Syracuse	33,433	30,722	-8.1%	96,396	94,106	-2.4%	15,339	18,046	17.6%
Onondaga County	107,255	99,083	-7.6%	294,193	286,956	-2.5%	65,578	76,833	17.2%
5-County Region	179,192	162,581	-9.3%	502,837	485,194	-3.5%	109,910	129,931	18.2%

Source: U.S. Census 2010; American Community Survey (ACS) 2015-2019 Estimates.

Table 6-2-2-3
Households and Average Household Size

Geography	Households			Avg Household Size	
	2010	2019	% Change	2010	2019
Central Study Area	21,567	21,253	-1.5%	2.2	2.2
Southwest Neighborhoods Subarea	6,246	6,270	0.4%	2.4	2.4
Southeast Neighborhoods Subarea	6,421	6,158	-4.1%	2.0	1.9
Northern Neighborhoods Subarea	10,718	10,455	-2.5%	2.1	2.2
I-481 North Study Area	4,892	4,862	-0.6%	2.4	2.4
I-481 South Study Area	7,201	6,714	-6.8%	2.2	2.2
I-481 East Study Area	4,685	4,474	-4.5%	2.3	2.4
City of Syracuse	57,353	55,275	-3.6%	2.3	2.3
Onondaga County	187,686	185,324	-1.3%	2.4	2.4
5-County Region	311,956	306,246	-1.8%	2.4	2.4

Source: U.S. Census 2010; American Community Survey (ACS) 2015-2019 Estimates.

Between 2010 and 2019, the total number of households in the Central Study Area decreased by 1.5 percent, with losses occurring in two of the three neighborhood subareas. The Southeast Neighborhoods Subarea, which includes areas of Syracuse University, experienced the largest decline in households (4.1 percent). Households in the Southwest Neighborhoods Subarea, which includes Downtown and Southside, increased by 0.4 percent, but the Northern Neighborhoods Subarea decreased by 2.5 percent. Average household sizes in the Central Study Area overall did not change over the timeframe. In the Southeast Neighborhoods Subarea, average household size decreased from 2.0 to 1.9. In the Northern Neighborhoods Subarea, average household size increased from 2.1 to 2.2. This may indicate families that live in the area are having more children, more families with children have chosen to stay in the area, or families with more children have moved into the area.

Total number of households decreased in the North, East, and South I-481 Study Areas (0.6 percent, 4.5 percent, and 6.8 percent, respectively. Households within Onondaga County decreased 1.3 percent and households in the City of Syracuse decreased 3.6 percent.

Median Household Income

Table 6-2-2-4 presents median household income for the Central Study Area, its neighborhood subareas, and the I-481 North, South, and East Study Areas.

Year 2019 median household income within the Central Study Area was $30,002, increasing by 27.6 percent since 2010. Although the Southwest Neighborhoods Subarea did not have the highest median income of the subareas at $25,711, it experienced the highest growth by percentage, increasing by 44.8 percent. Incomes increased in Downtown, Census Tract 32 Block Group 1, by 337 percent over the timeframe. This may indicate that higher income households have moved into recent residential conversions within the Downtown area. The Northern Neighborhoods Subarea had the highest median income within the Central Study Area at $35,633, an increase of 30.1 percent. The median income in the Southeast Neighborhoods Subarea did not change over that timeframe. Median income in the Central Study Area and in each of its neighborhood subareas was lower than in the City of Syracuse ($38,276), and substantially lower than in all of Onondaga County ($61,359) and the 5-County Region ($59,879).

Table 6-2-2-4
Household Income

Geography	Median Household Income		
	2006-2010	2015-2019	% Change
Central Study Area	$23,517	$30,002	27.6%
Southwest Neighborhoods Subarea	$17,755	$25,711	44.8%
Southeast Neighborhoods Subarea	$22,254	$22,254	0.0%
Northern Neighborhoods Subarea	$27,398	$35,633	30.1%
I-481 North Study Area	$53,095	$63,482	19.6%
I-481 South Study Area	$35,497	$42,008	18.3%
I-481 East Study Area	$58,276	$73,791	26.6%
City of Syracuse	$30,797	$38,276	24.3%
Onondaga County	$50,615	$61,359	21.2%
5-County Region	$49,365	$59,879	21.3%

Source: U.S. Census Bureau, American Community Survey (ACS) 2006-2010 Estimates, 2015-2019 Estimates.

Median income in the I-481 North Study Area in 2019 ($63,482) was higher than in Onondaga County and the 5-County Region. Median income in the I-481 East Study Area ($73,791) increased substantially (by 26.6 percent). Incomes in the I-481 South Study Area ($42,008) were lower than in Onondaga County and the 5-County Region, but higher than the citywide median value.

Housing Unit Characteristics

Table 6-2-2-5 presents housing unit characteristics for the Central Study Area and its neighborhoods subareas and for the I-481 North, South, and East Study Areas. From 2010 to 2019, the Central Study Area experienced an increase of 1,600 housing units (6.4 percent).

Table 6-2-2-5
Housing Unit Characteristics

Geography	Housing Units			Occupancy Status 2019	Tenure (Occupied Units, 2019)	
	2010	2019	% Change	% Vacant	% Owner	% Renter
Central Study Area	24,866	26,466	6.4%	19.7%	19.1%	61.2%
Southwest Neighborhoods Subarea	7,545	8,007	6.1%	21.7%	18.8%	81.2%
Southeast Neighborhoods Subarea	6,850	7,581	10.7%	18.8%	18.8%	81.2%
Northern Neighborhoods Subarea	12,411	12,837	3.4%	18.6%	27.9%	72.1%
I-481 North Study Area	5,046	5,135	1.8%	5.3%	78.2%	21.8%
I-481 South Study Area	7,734	7,905	2.2%	15.1%	44.6%	55.4%
I-481 East Study Area	4,891	4,891	0.0%	8.5%	75.6%	24.4%
City of Syracuse	64,353	67,812	5.4%	18.5%	38.9%	61.1%
Onondaga County	202,357	208,376	3.0%	11.1%	64.7%	35.3%
5-County Region	344,778	352,979	2.4%	13.2%	67.8%	32.2%

Source: U.S. Census 2010; American Community Survey (ACS) 2015-2019 Estimates.

The number of housing units in the three Central Study Area subareas increased from 2010 to 2019, with the Southwest, Southeast, and Northern subareas increasing 6.1, 10.7, and 3.4 percent, respectively. The housing units increased for the City of Syracuse (5.4 percent), Onondaga County (3.0 percent), and the 5-County Region (2.4 percent). Vacancy rates in the Central Study Area and all

neighborhood subareas were higher compared to those in the City of Syracuse, Onondaga County, and the 5-County Region. There were also considerably more renter-occupied households in the Central Study Area and neighborhoods subareas compared to Onondaga County and the 5-County Region.

The number of housing units increased by 1.8 percent in the I-481 North Study Area, increased by 2.2 percent in the I-481 South Study Area, and experienced no change in the I-481 East Study Area. The 2019 vacancy rates were lower in the I-481 North and I-481 East Study Areas (5.3 and 8.5 percent, respectively) than in the I-481 South Study Area (15.1 percent). The I-481 South Study Area vacancy rate was similar to that of the 5-County Region (13.2 percent). Most housing units in the I-481 North and I-481 East Study Areas were occupied by owners, similar to all of Onondaga County and the 5-County Region, whereas the majority of housing units in the I-481 South Study Area were renter-occupied, similar to the City of Syracuse.

6-2-2.1.2 ELDERLY INDIVIDUALS AND INDIVIDUALS WITH DISABILITIES

As discussed in **Section 6-2-2.1.1**, the Central Study Area had a 5.2 percent increase in the population of those 65 years and over between 2010 and 2019. In the 2015-2019 ACS estimate, 10.6 percent (5,911 individuals) of that study area's population was over 65 years of age. The majority of this area's elderly population resides in the Northern Neighborhoods Subarea (60.6 percent), followed by the Southwest Neighborhoods Subarea (21.8 percent), and then the Southeast Neighborhoods Subarea (17.6 percent). From 2010 to 2019, the I-481 North, I-481 South, and I-481 East Study Areas showed a 19.9 percent, a 13.3 percent, and a 0.1 percent increase, respectively, in the population over 65 years.

The City of Syracuse had an increase in the population over 65 years (from 16.8 percent to 21.1 percent) from 2010 to 2019. Onondaga County and the 5-County Region also had an increase in its elderly population from 2010 to 2019 of 17.2 and 18.2 percent, respectively.

Table 6-2-2-6 shows the disabled population in the study areas in 2000 (no comparable table is available in the 2010 Census or the ACS). At that time, the largest number of individuals with disabilities (12,321) was in the Central Study Area. Of the Central Study Area subareas, the Northern Neighborhoods Subarea had the largest number of individuals with disabilities (5,582). However, the largest percentage lived in the Southwest Neighborhoods Subarea (32.2 percent). Of the I-481 Study Areas, the largest number of individuals with disabilities resided in the I-481 South Study Area (2,887 or 24.3 percent).

Table 6-2-2-6
Individuals with Disabilities, 2000 U.S. Census

Area	Civilian Non-institutionalized population 5 years and over[1]	Individuals with Disabilities	Percentage of Civilian Non-institutionalized population 5 years and over with a disability
Central Study Area	46,682	12,321	26.4%
Southwest Neighborhoods Subarea[2]	13,109	4,222	32.2%
Southeast Neighborhoods Subarea[3]	14,329	2,517	17.6%
Northern Neighborhoods Subarea[4]	19,244	5,582	29.0%
I-481 North Study Area[5]	11,353	2,316	20.4%
I-481 South Study Area[6]	11,868	2,887	24.3%
I-481 East Study Area[7]	10,343	1,679	16.2%
City of Syracuse	134,604	30,939	23.0%
Onondaga County	423,980	74,729	17.6%
5-County Region[8]	720,752	129,932	18.0%

Notes:
[1] The U.S. Census Bureau provides disability status for the civilian non-institutionalized population 5 years and over. The civilian population is the result of subtracting the military population from the resident population. The civilian non-institutionalized population is produced by subtracting the institutionalized group quarters population from the civilian population.
[2] Southwest Neighborhoods Subarea includes the following Census Tracts (CT) and Block Groups (BGs) from Census 2000: CT 20 BG 1; CT 21 BGs 1 and 2; CT 22 BG 1; CT 30 BG 1; CT 32 BGs 1 and 2; CT 40 BG 1; CT 42 BGs 1, 2, and 3; CT 53 BGs 1, 2, and 3; and CT 54 BGs 1, 2, 3, and 4.
[3] Southeast Neighborhoods Subarea includes the following CTs and BGs from Census 2000: CT 34 BGs 1 and 2; CT 35 BG 2; CT 36.01 BG 1; CT 36.02 BG 1; CT 43 BGs 1, 2, and 3; and CT 55 BGs 1 and 2.
[4] Northern Neighborhoods Subarea includes the following CTs and BGs from Census 2000: CT 1 BG 1; CT 2 BG 2; CT 5 BG 1; CT 6 BG 3; CT 13 BG 1; CT 14 BGs 1 and 2; CT 16 BGs 1, 2, and 3; CT 17.01 BG 2; CT 17.02 BG 3; CT 18 BG 4; CT 19 BGs 2 and 3; CT 23 BGs 1 and 2; CT 24 BGs 1 and 2; CT 137 BG 3; and CT 141 BG 1.
[5] I-481 North Study Area includes the following CTs and BGs from Census 2000: CT 103.01 BGs 2, 3, and 4; CT 104 BG 1; CT 105 BGs 1 and 9; CT 106 BGs 1, 2, and 3; and CT 107 BGs 1 and 2.
[6] I-481 South Study Area includes the following CTs and BGs from Census 2000: CT 55 BG 3; CT 56.01 BG 2; CT 59 BGs 1 and 2; CT 61.01 BGs 1 and 2; CT 61.02 BG 2; CT 61.03 BG 1; CT 147 BG 9; CT 149 BG 9; and CT 161 BG 1.
[7] I-481 East Study Area the following CTs and BGs from Census 2000: CT 143 BG 1; CT 145 BGs 1, 2, and 9; CT 146 BGs 3 and 4; CT 147 BG 1; and CT 148 BGs 1, 2, and 3.
[8] The 5-County Region includes Onondaga, Cayuga, Oswego, Madison, and Cortland Counties.

Source: U.S. Census Bureau, Census 2000, Summary File 3.

The ACS (2015-2019) data present the number of households with one or more persons with a disability (see **Table 6-2-2-7**). In the Central Study Area 32.2 percent of the total households contained one or more persons with a disability. Of the Central Study Area subareas, the Northern Neighborhoods Subarea had the largest number of households with one or more persons with disabilities (3,581 or 34.3 percent of total households). Of the I-481 study areas, the largest number of households with one or more persons with disabilities resided in the I-481 South Study Area (2,391 or 35.6 percent).

Many parts of the study area include PROWAG-compliant sidewalks, but there are some locations within the Project Area, in particular, the Central Study Area along and underneath the I-81 viaduct, where these facilities are not provided.[4]

[4] A site assessment was done of selected sidewalks in the Project Area. In some instances, new construction was observed, which appeared consistent with PROWAG.

Table 6-2-2-7
Households with One or More Persons with a Disability, 2015-2019 Estimates

Area	Total Households	Households with 1 or more persons with a disability	Percentage
Central Study Area	21,253	6,848	32.2%
Southwest Neighborhoods Subarea	6,270	2,081	33.2%
Southeast Neighborhoods Subarea	6,158	1,805	29.3%
Northern Neighborhoods Subarea	10,455	3,581	34.3%
I-481 North Study Area	4,862	1,528	31.4%
I-481 South Study Area	6,714	2,391	35.6%
I-481 East Study Area	4,474	1,123	25.1%
City of Syracuse	55,275	16,801	30.4%
Onondaga County	185,324	46,088	24.9%
5-County Region	306,246	79,935	26.1%

Source: American Community Survey (ACS) 2015-2019 estimate.

6-2-2.1.3 TRANSIT-DEPENDENT POPULATIONS, PEDESTRIANS, AND BICYCLISTS

The Project Area has services and facilities for transit-dependent individuals, pedestrians, and bicyclists (**Figure 6-2-2-1** shows bus routes in the Project Area). Downtown Syracuse and some communities along I-481 are served by Centro buses, and many bus routes serve the Central Study Area. There is also at least one route operating within or very near the I-481 South, I-481 East, and I-481 North Study Areas.[5]

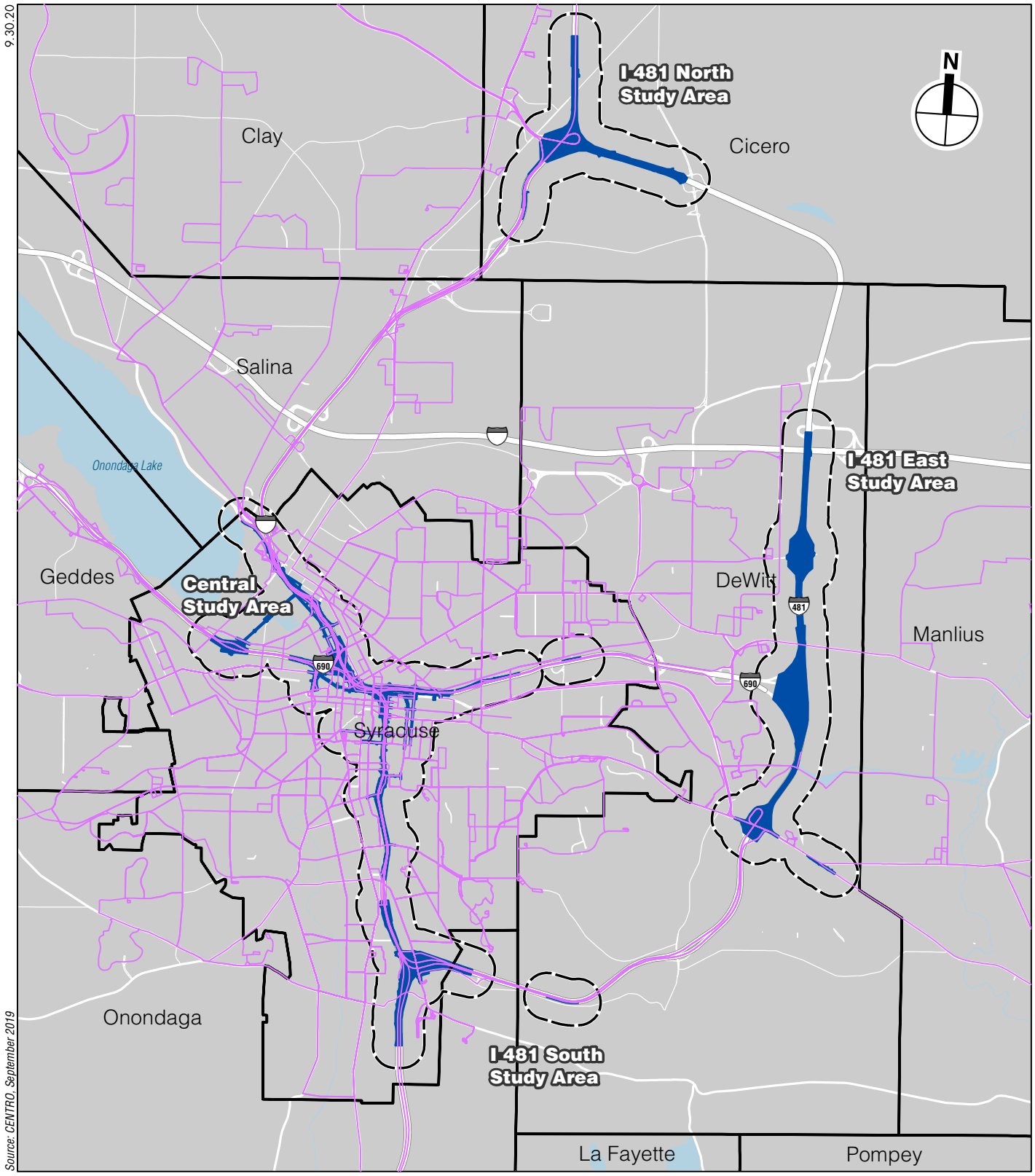
Call-A-Bus, Centro's paratransit service, provides coordinated ridesharing for people with disabilities who are unable to use public buses. Eligible people can request Call-A-Bus service in any area that is also covered by Centro bus routes and in areas that are ¾-mile beyond the Centro bus routes.[6] Call-A-Ride vehicles do not use specific routes and make stops based only on the pre-arranged requests by customers.

Downtown Syracuse and the adjacent neighborhoods are generally accessible by bicycle and on foot. There are sidewalks along most city streets, and the City's network of bicycle routes continues to expand. Communities along I-481 have less pedestrian and bicycle infrastructure, but many residential and commercial areas have sidewalks. Based on observations of the sidewalks and bike lanes during Project site visits, most sidewalks and bike lanes have regular but not heavy use, meaning there is plenty of capacity for additional users. Sidewalks near Syracuse University and the hospital complexes are more heavily used during the day, including east-west movement along Harrison and Adams Streets beneath I-81.

---

5 Central New York Regional Transportation Authority (Centro). Centro System Map. https://www.centro.org/docs/default-source/System-Maps/centro_systemmapfinallayout_opt.pdf?sfvrsn=2. Accessed September 8, 2017.

6 The Central New York Regional Transportation Authority (Centro). https://www.centro.org/specialized-transit. Accessed September 5, 2017.



Bus Service in the Study Area

Figure 6-2-2-1

Near-term planning efforts have focused on identifying the existing conditions of pedestrian and bicycle infrastructure in and near the I-81 corridor as well as improvements to those facilities (see **Section 6-2-1, Neighborhood Character**). Several initiatives have been underway in the City of Syracuse to enhance bicycle and pedestrian connectivity. Designated bicycle infrastructure has been established (or is planned) throughout the City. Some of these routes are part of local bicycle and pedestrian initiatives, such as the City/SMTC Bikeway and Onondaga Creekwalk, while others are part of larger regional routes, such as the New York State Bicycle Route 11 and the Empire State Trail. Syracuse University has also worked to enhance bicycle and pedestrian infrastructure by developing the Connective Corridor between University Hill and Downtown with designated bike lanes on local streets, including Genesee Street, which passes under the I-81 viaduct.

Representatives of the potentially affected communities raised concerns about the need for transit services. Syracuse Housing Authority also expressed concern about the embankment that would have been created along Almond Street in the Southside within an earlier version of the Community Grid Alternative. These concerns were considered in the development of the project objectives and refinement of alternatives.[7] Public involvement activities have included specific efforts to reach out to communities. Please refer to **Chapter 9, Agency Coordination and Public Outreach** for further details.

6-2-2.2 NO BUILD ALTERNATIVE

The No Build Alternative would maintain the highway in its existing configuration with ongoing maintenance and repairs. The No Build Alternative would not change I-81 or roadways within the project limits and would not change existing conditions for elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists. The No Build Alternative would not provide any benefits that could be achieved by the build alternatives. The No Build Alternative would leave I-81 as a hindrance to pedestrian and bicyclist mobility and the existing infrastructure, which is not adequate for those groups. Moreover, the alternative would not include any improvements that would accommodate an anticipated increase in pedestrian traffic in that area.

6-2-2.3 ENVIRONMENTAL CONSEQUENCES OF THE VIADUCT ALTERNATIVE

6-2-2.3.1 PERMANENT/OPERATIONAL EFFECTS

Demographics and Affected Populations

The Viaduct Alternative would result in the acquisition of 24 buildings, resulting in the displacement of 95 dwelling units (see **Section 6-3-1, Land Acquisition, Displacement, and Relocation**). These displacements would occur in the Central Study Area, and the 95 units represent less than one percent of the total housing units in the Central Study Area. The housing units that would be removed are not officially designated for special populations. As the Viaduct Alternative would not result in residential

[7] In response to the input received, FHWA and NYSDOT added a new project objective related to transit amenities and developed a new concept, involving the roadway passing beneath rather than on top of the railroad, that was incorporated into the Community Grid Alternative (see **Chapter 3, Alternatives**, for details about this concept).

displacements in the I-481 South, I-481 East, or I-481 North Study Areas, it would not result in substantial changes in the demographics characteristics of these study areas.

Elderly Individuals and Individuals with Disabilities

The Viaduct Alternative would reconstruct sections of I-81, I-690, and some local roadways within the project limits. Elderly individuals and individuals with disabilities would benefit from enhanced streets, sidewalks, and median along the reconstructed Almond Street, which would include safety and mobility improvements included in the Viaduct Alternative, such as PROWAG-compliant facilities in areas where they currently do not exist or are inadequate. The Viaduct Alternative would also provide pedestrian amenities in compliance with NYSDOT design standards and PROWAG.

Transit-Dependent Individuals, Pedestrians, and Bicyclists

The Viaduct Alternative would provide bicycle and pedestrian operational improvements, which would not be implemented under the No Build Alternative. The rebuilt streets would be designed in compliance with New York State Complete Streets requirements.[8] Efforts would be made to create a distinctive identity through design that provides elements of a unified appearance and measures to improve safety. Special pavements, planting areas, medians, pedestrian refuge areas, site furnishings, and green infrastructure would be considered. Local street improvements would include pedestrian and bicycle safety and connectivity enhancements in the study area, such as:

- Distinctive pavement markings, materials, and/or color to define space for bicyclists and pedestrians and promote driver awareness;
- Signals to facilitate pedestrian crossings while encouraging bicycle use;
- Bollards and traffic islands to provide protection and safe refuge for pedestrians; and
- "Bump-outs," or extensions, of the sidewalk corners, to narrow the roadway crossing distance for pedestrians.

Newly created bicycle facilities along Almond Street would connect to existing bicycle facilities at Water Street and East Genesee Street (Connective Corridor) and allow future connections to bicycle facilities at Burnet Avenue, Burt Street, and MLK, Jr. East, as identified in the Syracuse Bicycle Plan.[9]

NYSDOT would continue to coordinate with Centro regarding potential street improvements that include transit amenities to enhance transit accessibility and support Centro's transit initiatives such as bus stops and shelters, bus turnouts, and layover and turnaround places.

---

[8] The Complete Streets Act (Chapter 398, Laws of New York, August 2011) requires state, county, and local agencies to consider all roadway users in the development of transportation projects, such as the inclusion of sidewalks, bicycle lanes, crosswalks, and signage.

[9] City of Syracuse. Syracuse Bicycle Plan 2040, A Component of the Syracuse Comprehensive Plan. November 2012.

6-2-2.3.2 CONSTRUCTION EFFECTS

As described in **Chapter 4, Construction Means and Methods**, construction of the Viaduct Alternative would occur over a seven-year period and would include construction activity throughout the Central Study Area.

Implementation of the Viaduct Alternative would result in temporary adverse construction effects, which would be minimized, as practicable. There could be restricted access to sidewalks and crosswalks during periods of construction. Where a sidewalk or crosswalk would be closed, NYSDOT would strive to maintain an alternative crossing at the same intersection. In some cases, NYSDOT may need to direct pedestrians to alternative intersections. While these sidewalk and crosswalk detours would likely be implemented for short periods of time (two to three days), it is possible that they could be in place for up to three weeks at some locations. Pedestrian detours would be designed in compliance with PROWAG. NYSDOT would inform the public of these detours through the overall construction communications protocol (see **Chapter 4, Construction Means and Methods**).

As described in this FDR/FEIS, construction would result in traffic detours, increases in traffic on certain roadways, and emissions and noise from construction equipment. While these may have isolated impacts and temporary detours, broad effects to social groups are not anticipated. The Contractor would undertake measures to minimize these effects to the extent practicable, such as signage, detours, and limiting work to specified hours. Roadway construction and resultant detours have the potential to affect the routing of emergency vehicles through or around the construction zones. To help minimize and mitigate the adverse effects of construction activities on elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists, NYSDOT would require its Contractor to comply with measures listed in **Table 4-7** (see **Chapter 4, Construction Means and Methods**).

NYSDOT would require its Contractor to prepare a communication and outreach plan, and NYSDOT would oversee its implementation throughout the seven-year construction period. It is anticipated that the plan would include outreach to notify affected parties of construction activities and mitigation efforts (see **Chapter 4, Construction Means and Methods**). This plan will include a communications protocol to reach out to residents and businesses, including community facilities such as hospitals and emergency services, regarding pertinent construction and traffic information.

6-2-2.3.3 INDIRECT EFFECTS

The Viaduct Alternative would not impede or prevent planned development within the I-81 or I-481 Study Areas, and it is unlikely to induce development in a manner that would meaningfully alter the experience of social groups, including elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists within the Central Study Area. Upon the completion of construction, any new development would comply with the City's vision for the area as described in the City of Syracuse Comprehensive Plan 2040, which includes the Syracuse Bicycle Plan (see **Section 6-2-1**). Construction impacts affecting elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists would be temporary. As described in **Chapter 5, Transportation and Engineering Considerations**, travel patterns would not change substantively under the Viaduct Alternative, and they would not adversely affect the accessibility of public or private facilities.

6-2-2.3.4 CUMULATIVE EFFECTS

Enhancements to pedestrian and bicycle facilities under the Viaduct Alternative, in combination with other conceptualized and planned improvements by the City of Syracuse, would enhance accessibility to public and private facilities within the Project Area. Bicycle and pedestrian improvements included in the Viaduct Alternative, combined with those planned by the City of Syracuse, would improve connections between neighborhoods on either side of the highway. Therefore, the Viaduct Alternative would not result in adverse cumulative effects to elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists.

6-2-2.3.5 MITIGATION

The Viaduct Alternative would not result in adverse permanent/operational, indirect, or cumulative effects to elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists. During construction, NYSDOT and the Contractor would undertake measures to minimize or otherwise mitigate effects, as listed in **Table 4-7** (**Chapter 4, Construction Means and Methods**), such as staggering construction along roadways, limiting work to specified hours, posting appropriate signage, and implementing detours. Also, the Contractor would provide new connections/accessibility when other neighborhood connections are disrupted during construction.

In addition, the Contractor would be required to prepare an approved communication and outreach plan for implementation throughout the construction period. The plan would include outreach to notify affected parties of construction activities and mitigation efforts (see **Chapter 4, Construction Means and Methods** and **Table 4-7**). Measures in the plan may include public notices, flyers, and roadway signage to notify area residents and businesses and to inform drivers, bicyclists, and pedestrians about upcoming and ongoing work.

6-2-2.4 ENVIRONMENTAL CONSEQUENCES OF THE COMMUNITY GRID ALTERNATIVE

6-2-2.4.1 PERMANENT/OPERATIONAL EFFECTS

Demographics and Affected Populations

The Community Grid Alternative would not displace residents and would not result in substantial changes in the demographics characteristics of the Project Area.

Elderly Individuals and Individuals with Disabilities

The Community Grid Alternative would demolish the existing I-81 viaduct; implement operational and safety improvements along other existing sections of I-81; reconstruct I-690; add auxiliary lanes and make interchange and other modifications on I-481; and reconstruct or enhance some local roadways in the project limits. Elderly and disabled populations would benefit from the safety and mobility improvements included in the Community Grid Alternative, such as:

- Transit amenities that would be coordinated with Centro. NYSDOT will continue to coordinate with Centro regarding potential street improvements that include transit amenities to enhance

transit accessibility and support Centro's transit initiatives, such as bus stops and shelters, bus turnouts, and layover and turnaround places;

- New or reconstructed sidewalks and crosswalks built to NYSDOT design standards and PROWAG. For example, widened or continuous sidewalks would be constructed along Almond Street, Genesee Street, and the east side of West Street. The Butternut Street overpass would also be reconstructed to include wider sidewalks on both sides; and
- PROWAG-compliant facilities in areas where they currently do not exist or are inadequate. For example, at the proposed I-690 interchange at Crouse and Irving Avenues, sidewalk ramps would be reconstructed to meet accessibility standards.

Transit-Dependent Individuals, Pedestrians, and Bicyclists

The Community Grid Alternative would include new sidewalks and other pedestrian and bicycle infrastructure to improve connectivity between existing shared use paths in the project limits (see also **Chapter 3, Alternatives**). Streets would be designed in compliance with New York State Complete Streets requirements, incorporating a unified appearance and measures to improve safety. Special pavements, planting areas, medians, pedestrian refuge areas, site furnishings, and green infrastructure would be considered. Local street improvements would include pedestrian and bicycle safety and connectivity enhancements, such as:

- Distinctive pavement markings, materials, and/or color to define space for bicyclists and pedestrians and promote driver awareness;
- Signals to facilitate pedestrian crossings and bicycle use;
- Bollards and traffic islands to provide safe refuge for pedestrians; and
- "Bump-outs," or extensions, of the sidewalk corners to narrow roadway crossing distance for pedestrians.

Newly created bicycle facilities along Almond Street, Crouse Avenue, State Street, Clinton Street, and other local streets would connect to existing and planned bicycle facilities such as those at Water Street and East Genesee Street (Connective Corridor) and allow future connections to bicycle facilities at Burnet Avenue, Burt Street, MLK, Jr. East, and other local streets as identified in the Syracuse Bicycle Plan.

NYSDOT will continue to coordinate with Centro regarding potential street improvements to enhance transit accessibility and support Centro's transit initiatives.

6-2-2.4.2 CONSTRUCTION EFFECTS

As described in **Chapter 4, Construction Means and Methods**, construction of the Community Grid Alternative would occur over a six-year period. During that time, there would be construction activity throughout the Central Study Area as well as roadway work in the I-481 South, I-481 East, and I-481 North Study Areas.

Implementation of the Community Grid Alternative would result in temporary adverse construction effects, which would be minimized as practicable. There would be restricted access to sidewalks and

crosswalks during periods of construction. Where a sidewalk or crosswalk would be closed, NYSDOT would strive to maintain an alternative crossing at the same intersection. In some cases, NYSDOT may need to direct pedestrians to alternative intersections. While these sidewalk/crosswalk detours would likely be implemented for short periods of time (two to three days), it is possible that they could be in place for up to three weeks at some locations. Pedestrian detours would be designed in compliance with the PROWAG. NYSDOT would inform the public of these detours through the overall construction communications protocol (see **Chapter 4, Construction Means and Methods**).

As described in this FDR/FEIS, construction would result in traffic detours, increases in traffic on certain roadways, and emissions and noise from construction equipment. While these may have isolated impacts and temporary detours, broad effects to social groups are not anticipated. The Contractor would undertake measures to minimize these effects to the extent practicable, such as signage, detours, and limiting work to specified hours. Roadway construction and resultant detours have the potential to affect the routing of emergency vehicles through or around the construction zones. To help minimize and mitigate the adverse effects of construction activities on elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists, NYSDOT would require its Contractor to comply with measures listed in **Table 4-7** (**Chapter 4, Construction Means and Methods**).

NYSDOT would require its Contractor to prepare a communication and outreach plan, and NYSDOT would oversee its implementation throughout the six-year construction period. It is anticipated that the plan would include outreach to notify affected parties of construction activities and mitigation efforts (see **Chapter 4, Construction Means and Methods**). This plan will include communications protocols to reach out to residents and businesses, hospitals and emergency services, and schools and places of worship regarding pertinent construction and traffic information.

6-2-2.4.3 INDIRECT EFFECTS

As further described in **Section 6-2-1, Neighborhood** Character, the Community Grid Alternative would improve neighborhood cohesion in the Central Study Area by removing the viaduct structure and providing improved pedestrian and bicycle amenities and connections between Downtown/Southside and University Hill/Near Eastside neighborhoods.

As described in **Section 6-3-1, Land Acquisition, Displacement, and Relocation**, the Community Grid Alternative would not displace residents. Changes in travel patterns or roadway operations associated with the Community Grid Alternative would also not adversely affect the accessibility or operation of private or public facilities in the study area. These facilities are located along, and accessible via, the local street network that would be enhanced through improved local connections in the study area under the Community Grid Alternative.

6-2-2.4.4 CUMULATIVE EFFECTS

As described in **Chapter 5, Transportation and Engineering Considerations**, the Community Grid Alternative would meet regional travel needs well into the future, accounting for existing travel demand, proposed development, and land use plans identified above. The Community Grid Alternative would not result in adverse indirect effects to elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists in the study area, and could

produce community benefits through potential new development opportunities and improved connections between existing neighborhoods. In addition, recent, conceptualized, or planned City bicycle improvements connecting directly to those proposed as part of the Community Grid Alternative would improve connections between neighborhoods on either side of Almond Street. The area would also be attractive to development due to its proximity to, and improved pedestrian and visual connections between, Downtown and University Hill job centers. Thus, the Community Grid Alternative would not result in adverse cumulative effects with respect to social groups in the area.

6-2-2.4.5 MITIGATION

The Community Grid Alternative would not result in adverse permanent/operational, indirect, or cumulative effects on elderly individuals, individuals with disabilities, transit-dependent individuals, pedestrians, and bicyclists.

As previously noted, during construction the Contractor would be required to comply with measures, as listed in **Table 4-7** (**Chapter 4, Construction Means and Methods**), to minimize or otherwise mitigate effects to the extent practicable, such as signage, detours, staggering construction along roadways, and limiting work to specified hours to minimize impacts. The Contractor would provide new connections/accessibility as necessary when other neighborhood connections are disrupted during construction, which would be determined as design progresses. In addition, NYSDOT and the Contractor would carry out a communication and outreach plan for implementation throughout the six-year construction period. It is anticipated that the plan would include outreach to notify affected parties of construction activities and mitigation efforts. Measures in the plan may include public notices, flyers, and roadway signage to notify area residents and businesses and to inform drivers, bicyclists, and pedestrians about upcoming and ongoing work.

This page is intentionally left blank.