

DRAFT FOR AGENCY REVIEW

EXECUTIVE SUMMARY

This Draft Design Report/Draft Environmental Impact Statement/Draft Section 4(f) Evaluation documents the social, economic, and environmental effects of the Interstate 81 (I-81) Viaduct Project. The purpose of the I-81 Viaduct Project is to address the structural deficiencies and non-standard highway features in the I-81 corridor while creating an improved corridor through the City of Syracuse that meets transportation needs and provides the transportation infrastructure to support long-range planning efforts. The project alternatives consist of the No Build Alternative, the Viaduct Alternative, and the Community Grid Alternative. The Federal Highway Administration and NYSDOT will consider all comments received on this document before selecting an alternative.

1 INTRODUCTION

The New York State Department of Transportation (NYSDOT), in cooperation with the Federal Highway Administration (FHWA), have prepared this Draft Design Report/Draft Environmental Impact Statement (DDR/Draft EIS) for the Interstate 81 (I-81) Viaduct Project (the “Project”) in accordance with the requirements of the Council on Environmental Quality’s regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA) (40 CFR §1500-1508), the FHWA’s *Environmental Impact and Related Procedures: Final Rule* (23 CFR §771), the NYSDOT *Procedures for Implementation of the State Environmental Quality Review Act* (17 NYCRR Part 15), and the NYSDOT Project Development Manual.

The Project is classified as a NEPA Class I project in accordance with 23 CFR 771. NEPA Class I projects require the preparation of an Environmental Impact Statement (EIS) to determine the likely impact that project alternatives would have on the environment. FHWA, serving as the Federal Lead Agency, and NYSDOT, serving as Joint Lead Agency, are progressing the development of the EIS. In accordance with NYSDOT’s SEQRA regulations, the Project is classified as a “non-Type II” action, indicating that it has the potential for significant environmental impacts or substantial controversy on environmental grounds. In accordance with 17 NYCRR Part 15, given that a Federal EIS is being prepared, NYSDOT and other New York State agencies undertaking a discretionary action for the Project have no obligation to prepare a separate EIS under SEQRA. NYSDOT will give full consideration to the Federal Final EIS and will prepare a Record of Decision (ROD) in accordance with Section 15.9 of 17 NYCRR Part 15.

2 PURPOSE AND NEED

PROJECT LOCATION

I-81 is an approximately 850-mile-long highway in the eastern United States. It begins at Interstate 40 in Dandridge, Tennessee, and extends northeasterly through Tennessee, Virginia, Maryland, West Virginia, Pennsylvania, and New York, terminating at Highway 401 in Ontario, Canada. It is the primary north-south highway through Central New York, serving Binghamton, Cortland, Syracuse, and Watertown, and provides an international crossing into Canada at the Thousand Islands Bridge.

The Project is located in Onondaga County, New York and involves segments of I-81, Interstate 690 (I-690), NYS Route 370 (Onondaga Lake Parkway), and local streets, and potentially Interstate 481 (I-481), depending on the project alternative. The Project Area is within the City of Syracuse and the Towns of DeWitt, Salina, and Cicero, depending on the Project Alternative. The Project Area is shown on **Figure S-1**. It includes the southern and northern interchanges of I-81 with I-481 (Exits 16A and 29, respectively); the portion of I-81 between Colvin Street and Hiawatha Boulevard, including the I-81 viaduct and the I-81/I-690 interchange in Downtown Syracuse; I-690 between Leavenworth Street and Beech Street; and I-481 between I-690 and the New York State Thruway (I-90). It also includes some local roads in Downtown Syracuse.

PROJECT NEED

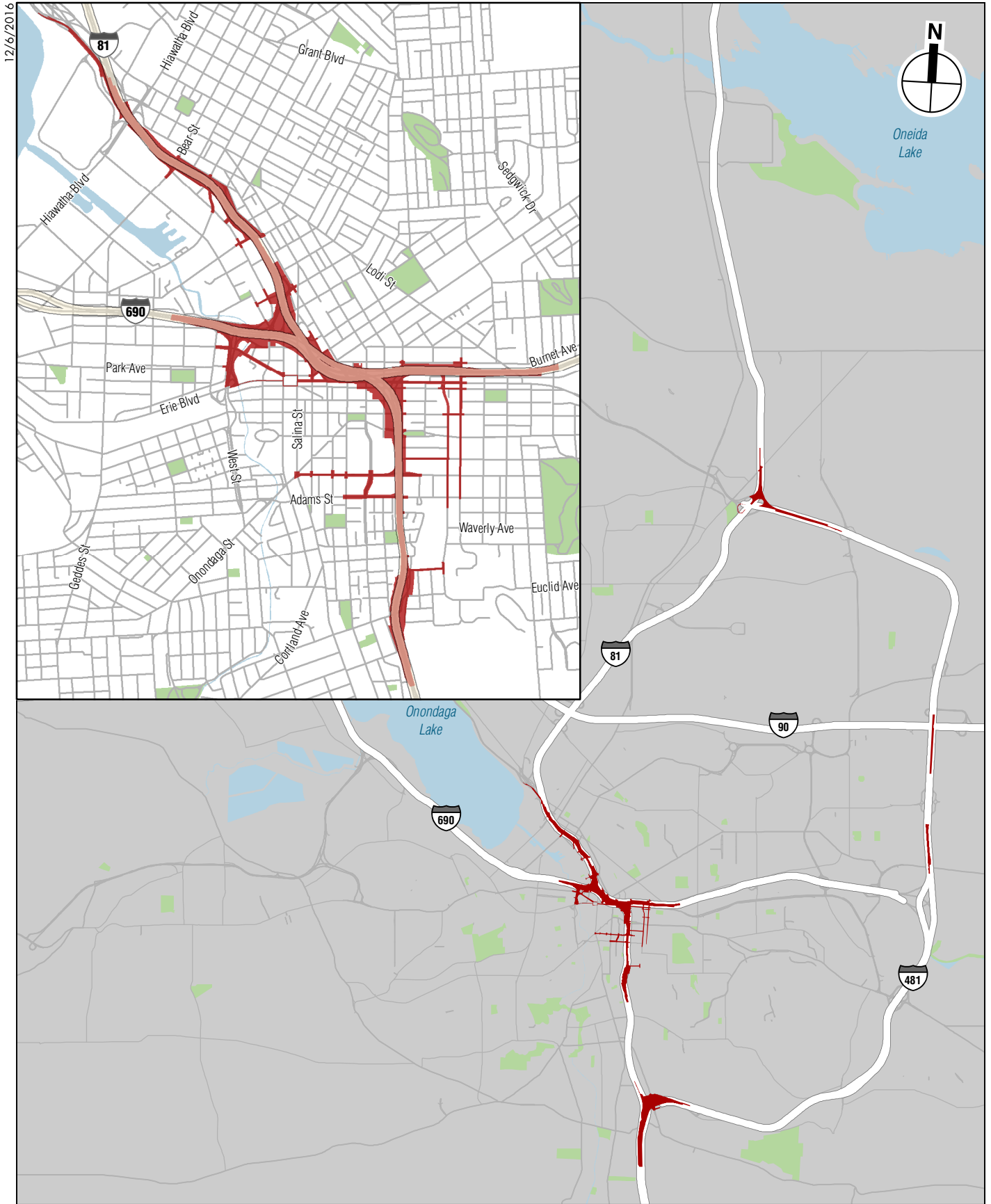
I-81 and I-690 are elevated through Downtown Syracuse. Their interchange and viaducts comprise multiple highway bridges. These bridge structures were constructed primarily in the 1960s, and many of their components are nearing the end of their design service life. Over time, these structures have experienced varying levels of deterioration from exposure to weather, de-icing salts, and heavy vehicle use. Bridges are particularly susceptible to wear and tear because many of their structural elements are directly exposed to weather conditions. The I-81 and I-690 corridors are characterized by high traffic volumes and reduced travel speeds; notable delays and queues are common in some sections near the I-81/I-690 interchange.

Specifically, the Project would address the following identified needs:

- The need to improve traffic safety and flow;
- The need to correct non-standard and non-conforming highway features;
- The need to improve highway bridge infrastructure; and
- The need for transportation infrastructure to support long-range planning efforts.

PROJECT PURPOSE AND OBJECTIVES

The purpose of the I-81 Viaduct Project is to address the structural deficiencies and non-standard highway features in the I-81 corridor while creating an improved corridor through the City of Syracuse that meets transportation needs and provides the transportation infrastructure to support long-range planning efforts.



Project Limits

I-81 Viaduct Project

Project Area
Figure S-1

The project objectives are to:

- Address vehicular, pedestrian, and bicycle geometric and operational deficiencies in the I-81 viaduct priority area¹.
- Maintain or enhance vehicle access to the interstate highway network and key destinations (i.e., Downtown business district, hospitals, and institutions) within neighborhoods along the I-81 viaduct priority area.
- Address structural deficiencies in the I-81 viaduct priority area.
- Maintain or enhance the vehicular, pedestrian, and bicycle connections in the local street network within the Project Area to allow for connectivity between neighborhoods, the Downtown business district, and other key destinations.
- Maintain access to existing local bus service and enhance transit amenities within and adjacent to the I-81 viaduct priority area.

3 PROJECT ALTERNATIVES

NO BUILD ALTERNATIVE

The National Environmental Policy Act (NEPA) requires examination of a No Build Alternative. The No Build Alternative serves as the baseline condition against which the potential benefits and effects of the build alternatives are evaluated. The No Build Alternative would maintain I-81 and I-690 in their existing configurations through Syracuse, although ongoing maintenance and repairs to ensure the safety of the traveling public would continue. In addition, NYSDOT would implement safety measures to the extent practicable. To keep it serviceable, I-81 through Downtown Syracuse has required an increasing number of emergency repairs of increasing magnitude, and over time under the No Build Alternative, these repairs would become more costly as the highway continues to deteriorate.

VIADUCT ALTERNATIVE

Figures S-2a and S2b identifies the key features of the Viaduct Alternative. The Viaduct Alternative would involve a full reconstruction of I-81 between approximately Colvin Street and Spencer Street, as well as modifications to highway features north of Spencer Street to Hiawatha Boulevard and along I-690 between Leavenworth Street and Lodi Street. The new viaduct would provide four 12-foot travel lanes (a minimum of two in each direction), as well as inside shoulders (a minimum of four feet in each direction) and outside shoulders (a minimum of 10 feet in each direction). Other improvements under the Viaduct Alternative would include a new partial I-81 interchange at Dr. Martin Luther King, Jr. East (MLK, Jr. East); the removal of the West Street overpass, allowing West Street to intersect with Genesee Street at grade; the conversion of Crouse Avenue between Genesee Street and

¹ The I-81 viaduct priority area includes the section of I-81 between Dr. Martin Luther King, Jr. East (MLK, Jr. East) and Spencer Street and the portion of I-690 approximately between the West Street interchange and Beech Street.



Viaduct Alternative:
Overview
Figure S-2a



Viaduct and Community Grid Alternatives:
Northern Segment Overview

Adams Street from one-way to two-way operation; and provision of pedestrian and bicycle facilities along Almond Street and portions of Lodi, McBride, and Salina Streets (see **Chapter 3, Alternatives**, for further details).

From the south, the Viaduct Alternative alignment would begin as I-81 approaches the city near Colvin Street. Near Van Buren Street, the interstate would pass over the bridge carrying the New York, Susquehanna and Western Railway at approximately the same elevation as the existing I-81 viaduct, and begin to climb until nearby Adams Street, where it would be approximately 10 to 15 feet higher than the existing 20-foot-tall viaduct. This increased height generally would be maintained throughout the length of the viaduct.

South of Harrison Street, the new viaduct generally would be approximately 10 to 20 feet wider, depending on the section, than the 66-foot-wide existing viaduct. Between Harrison and Genesee Streets, the viaduct would begin to split into two separate bridges, with the bridge on the west carrying two southbound I-81 through lanes and lanes for ramp connections, and the bridge on the east carrying two lanes for northbound I-81 and lanes for ramp connections. As a result of these connections, separate bridges, wider shoulders, and other improvements, the transportation footprint above Almond Street would be substantially wider than the existing footprint, ranging from approximately 84 feet at Harrison Street (20 feet wider than existing) to 280 feet north of East Genesee Street (150 feet wider than existing).

From East Genesee Street to the I-690 interchange, I-81 would continue on separate bridges, which would join and end around Salina Street (for comparison, the existing I-81 viaduct rejoins at approximately State Street). From Salina Street northward, the interstate would be carried on an embankment. Elevations would match those of the existing interstate near existing Butternut Street.

The Viaduct Alternative would provide connecting ramps from southbound I-81 to westbound I-690 and from eastbound I-690 to northbound I-81, and it would correct most non-standard and non-conforming highway features within the I-81 viaduct priority area. The alternative would meet 60 mph design standards except for horizontal stopping sight distance² at five curves. Three curves would meet 55 mph design standards and two curves would meet 50 mph design standards. The sight distance restriction would apply to only the inside lane of the five curves. The posted speed limit on the viaduct would be 55 mph, but warning signs to encourage motorists to reduce speed would be installed at the five curves.

² As defined by FHWA, “stopping sight distance is the distance needed for drivers to see an object on the roadway ahead and bring their vehicles to a safe stop before colliding with the object.” “Horizontal stopping sight distance” refers to the distance that a motorist needs to see around horizontal curves at a given speed.

COMMUNITY GRID ALTERNATIVE

Figure S-3 identifies the key features of the Community Grid Alternative. The Community Grid Alternative would involve demolition of the existing viaduct between the New York, Susquehanna and Western Railway bridge and the I-81/I-690 interchange. The section of I-81 between the southern I-81/I-481 interchange and the I-81/I-690 interchange in Downtown Syracuse would be de-designated as an interstate, and existing I-481 would be re-designated as the new I-81. The portion of former I-81 south of MLK, Jr. East to the former I-481 interchange would be reclassified from an interstate to a State route. North of MLK, Jr. East, the State route would transition to a two-way street with signalized intersections (“urban arterial”) to become integrated into the city street system. The section of I-81 between the I-81/I-690 interchange and the northern I-81/I-481 interchange would remain a limited-access roadway, but it would carry a different route designation.

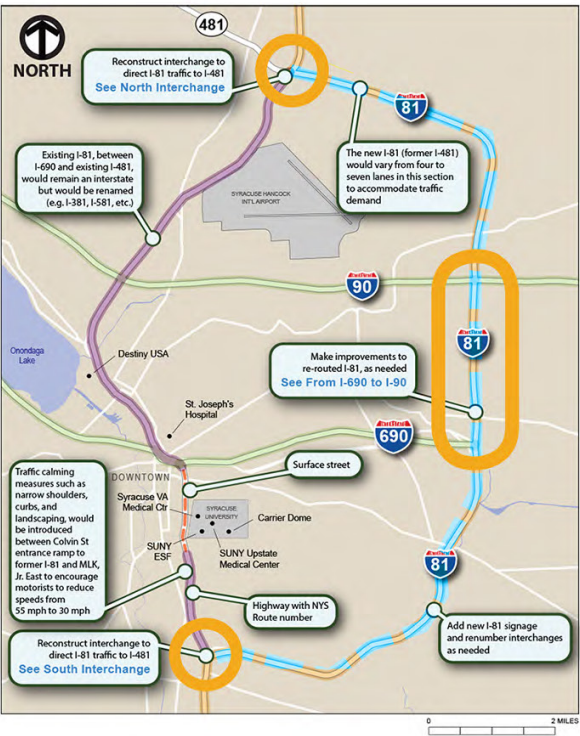
The Community Grid Alternative would disperse traffic throughout the city street grid by promoting broader use of the existing street network. Vehicular traffic would be channeled through Almond Street, Oswego Boulevard, and parallel corridors, such as Crouse Avenue, Irving Avenue, State Street, and Townsend Street, as well as other local streets that would have the capacity to accommodate this traffic. New interchanges would be constructed from I-690 at Crouse Avenue and Irving Avenue, as well as new entrance and exit ramps to/from the former I-81 connecting with Willow Street, James Street, and Erie Boulevard. A portion of Crouse Avenue, as well as Harrison Street and Adams Street west of Almond Street, would be converted from one-way streets to two-way streets. West Street would be lowered to intersect with Genesee Street at grade. By dispersing traffic to these other streets, the reconstructed Almond Street would maintain a narrow vehicular traffic footprint (with generally two lanes, as well as turn bays when needed, in each direction). Streets incorporated into the Community Grid Alternative would be designed to meet Federal, State, and local design standards consistent with their anticipated function.

The section of the existing I-81 between its southern interchange with I-481 (Exit 16A) and MLK, Jr. East, which would be renamed as a New York State Route, is referred to herein as the “State route.” The section of I-81 between Butternut Street and its northern interchange with I-481 (Exit 29), which would be renumbered as another interstate (e.g., I-581), is referred to herein as the “former I-81 northern segment.”

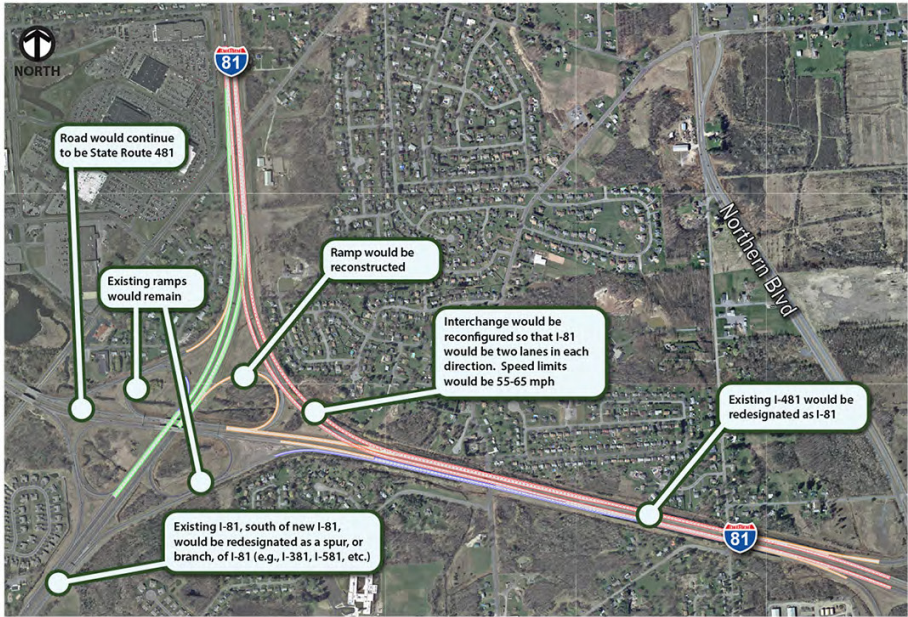
Between East Kennedy Street and MLK, Jr. East, the State route would transition from a highway to an urban arterial, intersecting with MLK, Jr. East at grade. The roadway would then descend to pass beneath the New York, Susquehanna and Western Railway and return to street level at Van Buren Street.

Almond Street would provide two 11-foot³ travel lanes in each direction, turning lanes at intersections (where needed), widened sidewalks, a landscaped median, and bicycle facilities. Bicycle facilities would include bicycle lanes, raised cycle tracks, and shared use (bicycle and

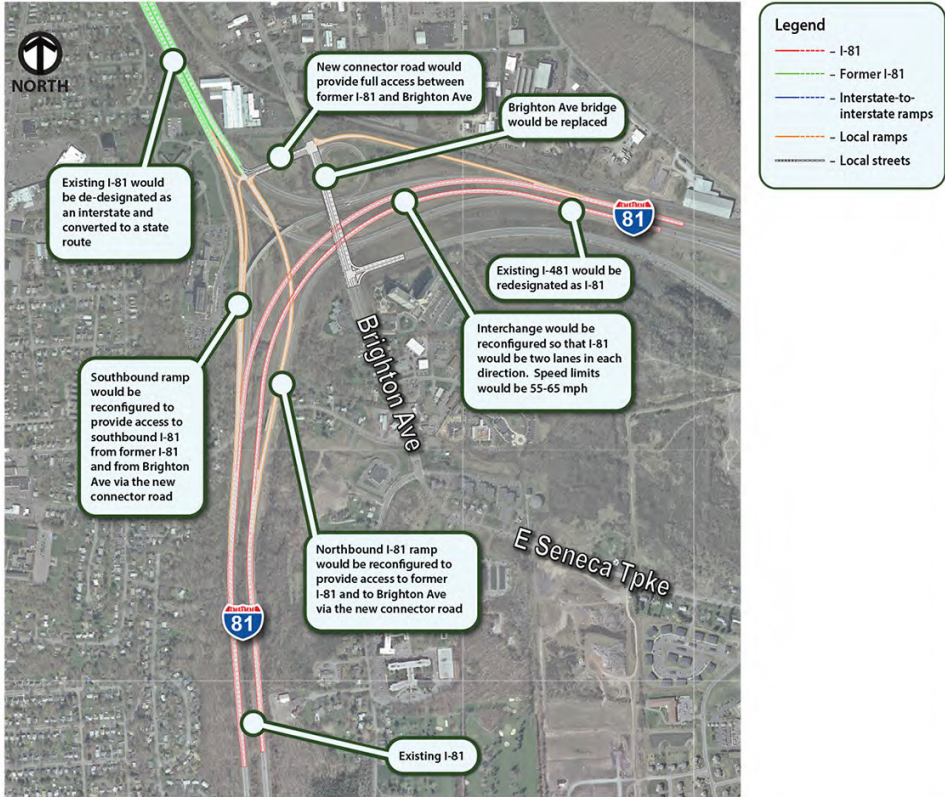
³ To clarify, these 11-foot lanes would have a one-foot curb offset, therefore, any lane adjacent to a curb would be 12 feet wide, and “interior lanes” (which would exist where there are two lanes plus turning lanes if needed) would be 11 feet wide.⁴ Table S-1 can be found starting on page S-13.



North Interchange



South Interchange



From I-690 to I-90



pedestrian) paths in various segments along Almond Street, as well as other local streets (see **Chapter 3, Alternatives** for further details). Curbside parking lanes would be provided, except in the portion between East Adams Street and MLK, Jr.

The new Almond Street would provide vehicular access to all existing intersections between Van Buren Street and Erie Boulevard. However, only right turns would be possible to and from Madison and Monroe Streets because of the presence of a continuous median on this portion of Almond Street. Only access to and from northbound Almond Street would be available at these two intersections; access to and from southbound Almond Street would not be available.

The former I-481, once designated as the new I-81, would carry a minimum of four lanes (two in each direction) of through traffic. Interstate re-designation and associated numbering must meet American Association of State Highway Transportation Officials (AASHTO) protocols and receive approval from FHWA. The change in highway designation and associated changes in traffic volumes would require modifications to the new I-81. These modifications would include:

- I-81/I-481 South Interchange (Interchange 16A): Reconstruction of this interchange would involve re-routing existing I-81 to connect with existing I-481, which would serve as the new I-81. The new I-81 would meet 70 MPH design standards. The existing ramps that connect northbound I-81 to northbound I-481 and southbound I-481 to southbound I-81 would be demolished, and these movements would be made on the main line of re-designated I-81. The East Brighton Avenue bridge over the interchange would be reconstructed. The intersection of East Brighton Avenue and Rock Cut Road would be maintained.

Motorists traveling north on I-81 south of Interchange 16A who are headed to Downtown Syracuse would exit the interstate to the State route, while through travelers would continue onto the re-designated I-81. Travelers on the southbound State route headed to the re-designated northbound I-81 would turn left at a new signalized intersection with a new road, which would connect to Brighton Avenue.

- I-81/I-481 North Interchange (Interchange 29): This interchange would be reconstructed to connect the re-designated I-81 with the existing I-81. The existing ramps that connect northbound I-481 to northbound I-81 and southbound I-81 to southbound I-481 would be demolished, and these movements would be made on the main line of re-designated I-81.

Appendix A includes plans and profiles of the Community Grid Alternative. **Chapter 5, Transportation and Engineering Considerations**, provides an in-depth discussion of the design criteria and nonstandard features (see **Section 5.4**).

4 ENVIRONMENTAL CONSIDERATIONS

Table S-1⁴ briefly describes the affected environment and the environmental consequences for the Viaduct and Community Grid Alternatives. Refer to **Chapter 6, Social, Economic, and Environmental Considerations** for description of the evaluation of effects and identification of mitigation measures for the Project.

This assessment of social, economic, and environmental considerations in this Draft EIS considers the following four study areas: I-81 Viaduct Study Area, I-481 North Study Area, I-481 South Study Area, and I-481 East Study Area (see **Figure 6.1-1**). The study areas were established because the Project has the potential to result in temporary (construction) or permanent (operation) effects within these locations. Collectively, the four study areas are referred to as the “Project Area.” The limits of these study areas are defined below.

- **I-81 Viaduct Study Area.** The I-81 Viaduct Study Area is located mostly within the City of Syracuse, with a small area north of the city in the Town of Salina. The study area extends north to south along the location of existing I-81 from approximately the City of Syracuse/Town of Salina border to approximately East Colvin Street, and west to east along the location of I-690 from approximately North Geddes Street to Teall Avenue.
- **I-481 South Study Area.** The I-481 South Study Area is located around the I-481 South interchange with I-81. The majority of the I-481 South Study Area is located in the City of Syracuse; however, the easternmost reach is in the Town of Onondaga.
- **I-481 East Study Area.** The I-481 East Study Area includes land within one-quarter mile of the two segments of I-481 where auxiliary lanes would be added, which is roughly between the I-690 and I-90 interchanges in the Town of DeWitt.
- **I-481 North Study Area.** The I-481 North Study Area includes all areas within one-quarter mile of the I-481 northern interchange with I-81 in the Town of Cicero and the Village of North Syracuse.

For some topics, a special study area is defined for consistency with regulatory requirements or to capture a larger or smaller area of potential effects for the Project.

Table S-2 identifies the permits and approvals that are anticipated for the Project.

Table S-2
Potential Permits and Approvals

Permit or Approval	Approving Agency	Regulatory Authority
Interstate Highway Deletion*	Federal Highway Administration	23 CFR 658.11
Interstate Highway Designation*	Federal Highway Administration	23 CFR 103(c)(4)(B)
Interstate Access Modification	Federal Highway Administration	23 USC 109 and 111, 23 C.F.R. 625.4, and 49 C.F.R. 1.48(b)(1)
Floodplains Determination	Federal Highway Administration	Executive Order 11988 of 1977; USDOT Order 5650-2, “Floodplain Management and Protection,” April 23, 1979

⁴ Table S-1 can be found starting on page S-13.

Table S-2
Potential Permits and Approvals

Permit or Approval	Approving Agency	Regulatory Authority
Wetlands Finding	Federal Highway Administration	Executive Order 11990 of 1977; USDOT Order 5660.1A, "Preservation of the Nation's Wetlands," August 24, 1978.
Section 4(f) Finding pursuant to Section 4(f) of the USDOT Act	Federal Highway Administration in consultation with the U.S. Department of Interior and the State Historic Preservation Office	49 USC § 303; 23 CFR § 774
Section 7 Consultation pursuant to the Endangered Species Act	U.S. Fish and Wildlife Service	16 USC §§ 1531-1544; 50 CFR Part 402
Section 106 Effect Finding pursuant to the National Historic Preservation Act	Federal Highway Administration in consultation with the Advisory Council on Historic Preservation and the State Historic Preservation Office	16 USC § 470A; 36 CFR Part 800
Section 404 Permit pursuant to the Clean Water Act	U.S. Army Corps of Engineers	33 USC §§ 1251-1387 and 33 CFR 320-330
Section 401 Water Quality Certification pursuant to the Clean Water Act	U.S. Army Corps of Engineers and New York State Department of Environmental Conservation	33 USC §§ 1251-1387 and 33 CFR 320-330
Environmental Justice Compliance	Federal Highway Administration	Executive Order 12898 of 1994, 59 CFR Part 7629, February 16, 1994; 1997 USDOT Order 5610.2[a], May 2, 2012; FHWA Order 6640.23A, June 14, 2012
State Pollutant Discharge Elimination System (SPDES) Permit	New York State Department of Environmental Conservation	State Pollutant Discharge Elimination System (ECL Article 3, Title 3; Article 15; Article 17, Titles 3, 5, 7, and 8; Article 21; Article 70, Title 1; Article 71, Title 19; 6 NYCRR Part 750).
Individual or Programmatic Protection of Waters / Freshwater Wetlands Permit	New York State Department of Environmental Conservation	NYSDEC/NYS DOT Memorandum of Understanding Regarding ECL Articles 15 and 24 (February 19, 1997); ECL Article 15, Title 5; 6 NYCRR Part 608; ECL Article 24; 6 NYCRR 663
Consistency with Smart Growth Public Infrastructure Policy Act	New York State Department of Transportation	ECL § 6-0101 et seq.
Note: * Community Grid Alternative only.		

5 PROJECT SCHEDULE AND COSTS

Table S-3 shows the anticipated schedule for each project alternative, and the potential construction costs are shown in **Table S-4**.

Table S-3
Anticipated Project Schedule

Milestone	Viaduct Alternative	Community Grid Alternative
Record of Decision	Summer 2017	Summer 2017
Design Approval	Fall 2017	Fall 2017
Right-of-way Acquisition	Summer 2018	Summary 2018
Construction Start	Before the end of 2018*	Before the end of 2018*
Construction Completion	December 2024	December 2023
Notes: Preparatory construction phases are anticipated to begin in 2018.		

Table S-4
Total Project Costs

	Viaduct Alternative	Community Grid Alternative
Total Cost	\$1,700,000,000	\$1,300,000,000

6 PREFERRED ALTERNATIVE

FHWA and NYSDOT will identify the preferred alternative in the Final EIS in consideration of comments received on this DDR/Draft EIS, including those received at the public hearing.

7 PUBLIC AND AGENCY INVOLVEMENT

PUBLIC INVOLVEMENT ACTIVITIES

Table S-5 lists the opportunities for public involvement that have or will occur.

Table S-5
Public Involvement Meetings and Key Milestones

Milestone	Date
Publication of Notice of Intent	August 26, 2013
Community Meeting – Toomey Abbott, Syracuse	September 25, 2013
Community Meeting – Dr. Weeks Elementary School, Syracuse	October 22, 2013
Community Meeting – Everson Museum, Syracuse	October 23, 2013
Community Meeting – Fowler High School, Syracuse	October 29, 2013
Community Meeting – DeWitt Community Room, DeWitt	October 30, 2013
Publication of Initial Scoping Packet	November 2013
Scoping Meeting, Oncenter, Syracuse	November 13, 2013
Project Update Presentation, Everson Museum, Syracuse	May 1, 2014
Publication of Draft Scoping Report	June 2014

Table S-5 (cont'd)
Public Involvement Meetings and Key Milestones

Milestone	Date
Stakeholders' Committee Meeting	June 24, 2014
Scoping Meeting, Oncenter, Syracuse	June 26, 2014
Community Meeting – Southwest Community Center, Syracuse	July 16, 2014
Community Meeting – The MOST, Syracuse	July 23, 2014
Community Meeting – HW Smith School, Syracuse	July 24, 2014
Community Meeting – Toomey Abbott, Syracuse	July 29, 2014
Community Meeting – St. Lucy's, Syracuse	July 30, 2014
Community Meeting – Dr. Weeks Elementary School, Syracuse	July 31, 2014
Community Meeting – St. Peter's Parish Center, Syracuse	July 31, 2014
Community Meeting – City Hall Commons, Syracuse	August 14, 2014
Publication of Scoping Report	April 2015
Capital for a Day, SkyArmory, Syracuse	September 30, 2015
Community Meeting, Liverpool Middle School, Liverpool	December 3, 2015
Real Property Rights Acquisition Information Sessions 335 Montgomery Street, Syracuse Assumption Church Parish Center, Syracuse Boys and Girls Club, Syracuse	June 1 and 2, 2016
Stakeholders' Committee Meeting	June 9, 2016
Public Open House, Oncenter, Syracuse	October 6, 2016
Community Meeting – Henninger High School, Syracuse	October 18, 2016
Community Meeting – Skaneateles High School, Skaneateles	October 19, 2016
Community Meeting – Grant Middle School, Syracuse	October 20, 2016
Community Meeting – Syracuse Institute of Technology, Syracuse	October 26, 2016
Community Meeting – Fowler High School, Syracuse	November 1, 2016
Community Meeting – Dr. King Elementary School, Syracuse	November 3, 2016
Community Meeting – Jamesville-DeWitt High School, DeWitt	November 16, 2016
Community Meeting – Cicero-North Syracuse High School, Cicero	December 6, 2016
Publish Draft EIS	TBD
Draft EIS Public Hearing	TBD

In addition, there have been multiple meetings of the Project Stakeholders' Advisory Working Groups and the Urban Design Technical Advisory Panel, as well as numerous one-on-one or small group meetings with the interested public, stakeholders, community groups, and elected officials.

Refer to **Chapter 9, Agency Coordination and Public Outreach**, for more information on public involvement.

COOPERATING AND PARTICIPATING AGENCY INVOLVEMENT

Cooperating and Participating Agencies are responsible for identifying, as early as practicable, any issues of concern regarding a project's potential environmental or

socioeconomic effects that could substantially delay or prevent an agency from granting a permit or other approval.

The following agencies were invited to serve as Cooperating and/or Participating Agencies on this Project:

- **Cooperating Agencies:**

- Advisory Council on Historic Preservation
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- New York State Office of Parks, Recreation, and Historic Preservation
- New York State Department of Environmental Conservation

- **Participating Agencies:**

- Syracuse Metropolitan Transportation Council (SMTC)
- CNY Centro, Inc.⁵
- New York, Susquehanna and Western Railway⁵
- CSX⁵
- Onondaga County
- City of Syracuse
- Town of Cicero
- Town of DeWitt
- Town of Salina
- Village of East Syracuse
- Village of North Syracuse

The FHWA and NYSDOT have collaborated with the Cooperating and Participating Agencies during the preparation of this DDR/Draft EIS and assessment of effects, including monthly conference calls with the Cooperating Agencies and a meeting with Participating Agencies. All agencies will be notified of the availability of this DDR/Draft EIS and given appropriate opportunities to comment. Following the Record of Decision, the NYSDOT would coordinate with the appropriate agencies to complete any necessary permit(s) for the Project.

⁵ Non-government entity that was invited as a Participating Agency.

CONTACT INFORMATION

Individuals may offer comments on the DDR/Draft EIS in a variety of ways:

- A public hearing will be held on **DATE (TO COME)** where individuals may discuss the Project with FHWA and NYSDOT representatives, give oral comments to a stenographer (in public or privately), or provide comments in writing.
- Individuals may submit written comments by mail to:

Mark Frechette, PE, Project Director
New York State Department of Transportation, Region 3
333 East Washington Street
Syracuse, New York 13202

- Or, individuals may email comments via the Project's website:
www.i81opportunities.com

The deadline for submitting comments on this DDR/Draft EIS is 5 PM Eastern Standard Time on **DATE (TO COME)**.

For more information, contact NYSDOT at 315-428-4351 or via the Project's toll-free hotline, 1-855-I81-TALK (855-481-8255).

Table S-1
Summary of Environmental Effects

Topic	Affected Environment Summary	Effects	
		Viaduct Alternative	Community Grid Alternative
SOCIAL CONSIDERATIONS			
Land Use	Land uses near the existing I-81 viaduct are characteristic of a downtown urban environment, with a mix of institutional uses, commercial office and retail space, residences, parking areas, and transportation uses. Land uses along the I-481 project limits are more suburban and rural, with a less dense mix of land uses. A number of local and regional plans have established goals for land use, economic development, and transportation facilities involving the I-81 corridor in Syracuse.	The project would convert 29 acres of non-NYSDOT right-of-way to state right-of-way. Affected properties include vacant parcels and structures, surface parking areas, and commercial and industrial land uses. Conditions would remain similar to today, as the viaduct would be reconstructed and remain in the same general alignment through Downtown Syracuse. Except for property acquisitions and displacements (discussed below), land use would not be affected. The Viaduct Alternative would be consistent with local and regional plans that call for replacing the viaduct, but would be inconsistent with local plans that call for its removal to improve connectivity between areas east and west of it.	The project would convert 26.3 acres of non-NYSDOT right-of-way to state right-of-way, but the area of the removed viaduct and former right-of-way could be available for future development. Most affected properties include vacant lots and surface parking areas, but also include some commercial and industrial land uses. Land uses would not be adversely affected by removal of the viaduct, and potentially developable land may be created under this alternative. The Community Grid Alternative would be consistent with the local plans that call for the viaduct to be removed to improve connectivity between areas east and west of the existing viaduct. Other plans have called for the replacement of the viaduct due to disrepair. The Community Grid Alternative is not necessarily inconsistent with those plans as the purpose and need was for the replacement to maintain a functioning transportation network, which the Community Grid Alternative would also provide.
Neighborhoods and Community Cohesion	The Project Area is comprised of several distinct neighborhoods. The existing I-81 viaduct demarcates neighborhoods east and west of the highway, and has been identified by some local plans as a barrier that impedes connectivity between these areas.	The viaduct would remain, but would be 10 to 15 higher than the existing viaduct. Pedestrian and bicycle facilities would be installed along Almond Street under the viaduct and improved between areas east and west of the viaduct. The viaduct and its ramps would limit the extent of pedestrian and bicycle improvements in some areas.	The viaduct would be removed and Almond Street would be reconstructed as a “complete street” for users (vehicles, bicycles, and pedestrians). Connectivity between areas east and west of Almond Street would be improved.
Social Groups Benefitted or Harmed / Environmental Justice	Areas near the I-81 viaduct in Downtown Syracuse are more densely populated than the outlying areas along I-481. Since 2000, many of the census block group populations in the Project Area have remained fairly steady, with more notable growth in northern parts of Downtown and near the I-481 northern interchange. Areas near the I-81 viaduct generally have higher levels of households with poverty status, which has increased since 2000. In the Project Area, 60 census block groups (mostly near Downtown Syracuse) are considered minority communities, and 55 are considered low-income communities. Of these, 38 census block groups comprise both minority and low-income communities.	Elderly individuals and individuals with disabilities would benefit from safety and mobility improvements and new facilities compliant with the Americans with Disabilities Act (ADA) in the Almond Street corridor under the new viaduct and along West Street. However, the Viaduct Alternative would limit pedestrian and bicycle improvements in some areas. Transit-dependent individuals, pedestrians, and bicyclists would benefit from the improved pedestrian and bicycle facilities in the Almond Street corridor under the new viaduct, as well as potential transit amenities incorporated into the project in coordination with Centro (such as bus stops and shelters, and designs to facilitate bus maneuvering). While the project would result in adverse effects, minority and low-income populations would not bear a disproportionately high and adverse share of effects. Construction-related effects would occur in minority and low-income areas and would be mitigated to the extent practicable.	Elderly individuals and individuals with disabilities would benefit from the safety and mobility improvements and new facilities compliant with the Americans with Disabilities Act (ADA) in the Almond Street corridor and adjacent streets, and the east side of West Street. Transit-dependent individuals, pedestrians, and bicyclists would benefit from the improved pedestrian and bicycle facilities in the Almond Street corridor, as well as potential transit amenities incorporated into the project in coordination with Centro (such as bus stops and shelters, and designs to facilitate bus maneuvering). While the project would result in adverse effects, minority and low-income populations would not bear a disproportionately high and adverse share of effects. Construction-related effects would occur in minority and low-income areas near the construction areas and would be mitigated to the extent practicable.
Schools and Places of Worship	Three public schools are located within the Project Area. One private school and two universities are also within the Project Area. In addition, 26 places of worship were identified in the Project Area.	No schools or places of worship would be acquired, and none would be adversely affected. An existing driveway to Dr. King Elementary School would be closed, but another existing driveway would remain open.	No schools or places of worship would be acquired, and none would be adversely affected. Pedestrian and bicycle enhancements would benefit students and workers along the Almond Street corridor.
ECONOMIC CONSIDERATIONS			
Land Acquisition, Displacement, and Relocation	The Project is located in a dense urban environment where many properties and structures are adjacent to the state right-of-way.	Full/Partial Land Acquisition: 28.9 acres Full Acquisitions: 56 properties Partial Acquisitions: 97 properties Buildings Acquired: 22 (occupied); 2 (vacant) Displaced Residents: 49 Displaced Employees: 622 Approximate loss in Annual Tax Revenue: \$699,327	Full/Partial Land Acquisition: 26.3 acres Full Acquisitions: 28 properties Partial Acquisitions: 136 properties Buildings Acquired: 5 (occupied) Displaced Residents: 0 Displaced Employees: 83 Approximate loss in Annual Tax Revenue: \$245,401

Table S-1 (cont'd) Summary of Environmental Effects			
Topic	Affected Environment Summary	Environmental Consequences	
		Viaduct Alternative	Community Grid Alternative
Local and Regional Economy	Downtown Syracuse is the commercial center for the city and region, with a typical mix of office, commercial, and ground-floor retail. Educational and health service facilities are dominant employers. The I-481 study areas have lower-scale commercial, industrial, and retail uses. The labor force has grown in some areas and declined in others. Overall, there was a 1.4 percent decline in the Project Area's employment from 2010 to 2014. The I-81 Viaduct Study Area comprises over 80,000 employees of the total 114,000 in the Project Area, 44 percent of which are in the educational, health, and social services fields.	Displacement: 38 businesses with a total of 622 employees; this represents 0.8 percent of total I-81 Viaduct Study Area employment. I-81 would remain in its current alignment and land use patterns would not be affected. Some businesses in the I-81 Viaduct Study Area would be displaced, but could potentially be relocated within this study area.	Displacement: 8 businesses with of total of 83 employees, representing 0.1 percent of total I-81 Viaduct Study Area employment The viaduct would be removed and the street grid would be re-established. Land may become available for new development. Traffic would be dispersed on local roads, which would change delivery patterns.
ENVIRONMENTAL CONSIDERATIONS			
Historic and Cultural Resources	The project is located in a dense urban environment with a number of historic properties. In addition, potential archaeological resources are located within areas of potential ground disturbance.	There is potential to disturb archaeologically sensitive areas by construction of the Viaduct Alternative. Adverse effects would occur to 10 properties listed or eligible for listing on the National Register of Historic Places A Memorandum of Agreement has been developed, under Section 106 of the National Historic Preservation Act, which identifies measures to avoid, minimize, or mitigate these adverse effects as the project progresses.	There is potential to disturb archaeologically sensitive areas by construction of the Community Grid Alternative. Adverse effects would occur to 2 properties listed or eligible for listing on the National Register of Historic Places A Memorandum of Agreement has been developed, under Section 106 of the National Historic Preservation Act, which identifies measures to avoid, minimize, or mitigate these adverse effects as the project progresses.
Parks and Recreational Resources	Twenty-nine (29) parks and recreational resources exist in the study areas. Seven resources are within close proximity to the project limits, and have the greatest potential to be affected by the project. Recreational resources include local and state trails and bicycle routes, and urban and suburban community parks.	The new viaduct would be wider than the existing viaduct and overhang the edge of Wilson Park, including a basketball court, but would not adversely affect use of the park or basketball court. During construction, a temporary easement on 0.12 acres within Wilson Park would be needed for three years; one of the two basketball courts would be unavailable during this time.	The existing viaduct would be removed, thereby removing the overhead structure near Wilson Park. During construction, a temporary easement on 0.12 acres within Wilson Park would be needed for two years; one of the two basketball courts would be unavailable during this time.
Visual Resources and Aesthetic Considerations	The Project is located in a dense urban environment that is visually dominated by built forms and transportation infrastructure. Topography ranges from relatively flat along the interstate corridors in Downtown to more varied terrain, with increased elevations in the outer portions of the corridors and surrounding neighborhoods. Vegetation is sparse in Downtown areas, with increases in density and canopy away from the city center.	The new viaduct would be 10-15 feet higher than the existing viaduct, with the new I-81/I-690 interchange about 20 feet taller than the existing interchange. - Adverse effects would occur at 11 viewpoints - Neutral effects would occur at 10 viewpoints - Beneficial effects would occur at 5 viewpoints	The existing viaduct would be removed. - Adverse effects would occur at 3 viewpoints - Neutral effects would occur at 3 viewpoint - Beneficial effects would occur at 20 viewpoints
Air Quality	Pursuant to the National Ambient Air Quality Standards (NAAQS), Onondaga County is currently in attainment for all standards of particulate matter (PM; both PM _{2.5} and PM ₁₀), ozone, lead, carbon monoxide, nitrogen dioxide, and sulfur dioxide.	Mesoscale: There would be no adverse increases in area wide emissions. Compared with the No Build Alternative, in year 2020, the Viaduct Alternative would result in marginally higher emissions of CO (nearly 0.0% increase) and lower emissions (less than 1 % decrease) of all other modeled criteria pollutants (see Table 6.4.4-3). Microscale: PM concentrations would be below NAAQS and would be similar to conditions under the No Build Alternative. Construction: Pollutant concentrations would not exceed the NAAQS.	Mesoscale: There would be no adverse increases in area wide emissions. Compared with the No Build Alternative in year 2020, the Community Grid Alternative would result in higher emissions of VOCs (3.5% increase) and lower emissions (less than 1% decrease) of all other modeled criteria pollutants as a result of the steeper projected improvements in emissions, as projected in the emission rates of the USEPA MOVES2014a emissions model, offsetting the increase in VMT (see Table 6.4.4-9). Microscale: PM concentrations would be below NAAQS and would be similar to conditions under the No Build Alternative. Construction: Pollutant concentrations would not exceed the NAAQS.

Table S-1 (cont'd) Summary of Environmental Effects			
Topic	Affected Environment Summary	Environmental Consequences	
		Viaduct Alternative	Community Grid Alternative
Energy and Climate Change	All of New York State is subject to potential effects of climate change, and projections for the project region indicate steady increases in temperature and precipitation through the 2080s.	<p>Regarding emissions associated with grid power to be used for lighting, message boards, and signals, since the Viaduct Alternative would replace some existing roadway components and the new components would be more energy efficient, it is anticipated that the Viaduct Alternative would reduce electricity use and associated emissions relative to the No Build Alternative.</p> <p>Operational GHG emissions and energy use would increase under the Viaduct Alternative. The changes in GHG emissions and energy use over the years are driven by two opposing processes: 1) decreases in overall fleet-wide average emissions per vehicle-mile over time as engine technology and efficiency improve, and 2) increases in traffic volumes due to growth. The change in engine emissions is projected to be more pronounced in earlier years, while growth in traffic is more steady; thus the overall increase from 2020 to 2030 is much less than from 2030 to 2050. The project would be designed to achieve certification at the Silver level under NYSDOT's GreenLITES project design certification program.</p> <p>Enhancements to pedestrian and bicycle infrastructure could encourage non-motorized modes of transportation and reduce emissions associated with driving.</p>	<p>Regarding emissions associated with grid power to be used for lighting, message boards, and signals, since the Community Grid Alternative would replace some existing roadway components and the new components would be more energy efficient, it is anticipated that the Community Grid Alternative would reduce electricity use and associated emissions relative to the No Build Alternative.</p> <p>Operational GHG emissions and energy use would increase under the Community Grid Alternative in analysis years 2020 and 2050, but would decrease over the No Build Alternative in 2030. The changes in GHG emissions and energy use over the years are driven by two opposing processes: 1) decreases in overall fleet-wide average emissions per vehicle-mile over time as engine technology and efficiency improves, and 2) increases in traffic volumes due to growth. The change in engine emissions is projected to be more pronounced in earlier years, while growth in traffic is more steady; thus the net change from 2020 to 2030 is a decrease, while the net change from 2030 to 2050 shows considerable increase. The project would be designed to achieve certification at the Silver level under NYSDOT's GreenLITES project design certification program.</p> <p>Enhancements to pedestrian and bicycle infrastructure could encourage non-motorized modes of transportation and reduce emissions associated with driving.</p>
Noise	Existing ambient noise conditions in the study areas are largely influenced by traffic along I-81, I-690, I-481, and some local roadways.	<p>Impacted receivers: 764 (out of 2,240)</p> <p>The viaduct would be reconstructed generally in its current alignment, but the change in height, width, and curve alignment would change noise levels. As such, the number of impacted receivers would increase from 696 under 2013 existing conditions to 764 under the Viaduct Alternative. Where feasible and reasonable, noise barriers are recommended in impacted locations to provide noise abatement.</p>	<p>Impacted receivers: 679 (out of 2,240)</p> <p>The removal of the elevated viaduct, new traffic patterns on the local street grid, and increase of traffic volumes on former I-481 would result in lower noise levels in some areas and higher noise levels in other areas as compared to existing conditions. Where feasible and reasonable, noise barriers are recommended in impacted locations to provide noise abatement.</p>
Water Resources	The Project is located in a largely urban environment with limited water resources. Water resources in the study areas include Onondaga Lake, Onondaga Creek, Ley Creek, North Branch of Ley Creek, Mud Creek, Butternut Creek, and several unnamed streams.	<p>Best management practices would be implemented to meet water quality standards.</p> <p>The wider viaduct would increase impervious surface. State and federal stormwater runoff management requirements would be followed to protect water quality and ensure adequate drainage.</p>	<p>Best management practices would be implemented to meet water quality standards.</p> <p>Removal of the viaduct and replacement with an urban arterial would reduce overall impervious surface coverage. State and federal stormwater runoff management requirements would be followed to protect water quality and ensure adequate drainage.</p>

Table S-1 (cont'd) Summary of Environmental Effects			
Topic	Affected Environment Summary	Environmental Consequences	
		Viaduct Alternative	Community Grid Alternative
General Ecology and Wildlife Resources	<p>The Project is located in a largely urban environment with limited natural habitat and wildlife. Within the Project Area, there are 13 state and federal freshwater wetlands, five ecological communities totaling approximately 765 acres, and largely fragmented or urban-adapted wildlife habitats.</p> <p>State and federal endangered, threatened, and other protected species were identified as having the potential to occur in the area based on federal and state data sources, including: Indiana bat; Northern long-eared bat; Eastern massasauga; -American hart's-tongue fern; Peregrine falcon; Least bittern; Lake sturgeon; Seaside bulrush; Midland sedge; Saltmarsh aster; Reflexed sedge; Straight-leaf pondweed; and Inland salt pond</p>	Area of wetland disturbance: 0.5 acres . 0.9 acres of NYSDEC-regulated adjacent areas are within the limits of disturbance, but all construction activities would occur on existing roadways and pavements, and not result in additional disturbance to these areas.	Area of wetland disturbance: 2.37 acres and 0.54 acres (operation/ construction – direct footprint and shading, respectively). 7.4 acres of NYSDEC-regulated adjacent areas would be in the limits of disturbance (much of which includes maintained right-of-way and pavement).
		Removal of habitat: 233 acres total - 223 acres of terrestrial cultural communities - 10 acres of successional southern hardwood communities	Removal of habitat: 418 acres total - 371 acres of terrestrial cultural communities - 29 acres of successional southern hardwood communities - 10 acres of successional shrubland communities - 7 acres of successional old field communities - 2 acres of floodplain forest communities
		While several threatened and endangered plant and wildlife species may occur in the I-81 Viaduct Study Area, this area does not provide ideal habitat for these wildlife species. Surveys would be conducted prior to construction to identify protected plant species so they may be handled properly, and construction activities would be timed to avoid or minimize potential adverse effects on species. As such, no significant adverse impacts to threatened or endangered species are anticipated.	While several threatened and endangered plant and wildlife species may occur in the Project Area, this area does not provide ideal habitat for these wildlife species. Surveys would be conducted prior to construction to identify protected plant species so they may be handled properly, and construction activities would be timed to avoid or minimize potential adverse effects on species. As such, no significant adverse impacts to threatened or endangered species are anticipated.
Asbestos	Based on the age of transportation infrastructure and buildings in the Project Area, some structures to be removed likely possess asbestos containing materials (ACM).	The Viaduct Alternative would involve removing buildings and rebuilding ramps and bridges. These structures may contain ACM. Any asbestos containing material (ACM) would be abated and handled in accordance with applicable state and federal regulations.	The Community Grid Alternative would involve removing buildings and removing or rebuilding 63 ramp and bridge structures. These structures may contain ACM. Any ACM would be abated and handled in accordance with applicable state and federal regulations.
Hazardous Waste and Contaminated Materials	Over 200 sites of potential concern related to hazardous waste and contaminated materials were identified in the Project Area.	The Viaduct Alternative would remove 24 buildings and a smokestack, and rebuild 46 ramps and bridges. A detailed assessment of each affected property and building structure would be completed prior to its acquisition and removal. All ground disturbance and structure demolition would be conducted or remediated in accordance with applicable state and federal regulations, and standard NYSDOT roadway operating procedures.	The Community Grid Alternative would remove 5 buildings and a smokestack, and remove or rebuild 63 ramp and bridge structures. A detailed assessment of each affected structure would be completed prior to its acquisition and removal. All ground disturbance and structure demolition would be conducted or remediated in accordance with applicable state and federal regulations, and standard NYSDOT roadway operating procedures.