

## **5-1 INTRODUCTION**

This chapter evaluates the potential impacts of the Tappan Zee Hudson River Crossing Project related to land use, zoning, public policy, neighborhood character, and community facilities and services. Because the project would replace and continue an existing use, and the majority of work would occur within the existing Interstate 87/287 right-of-way and the Hudson River, potential adverse impacts would be primarily short-term during construction (see Chapter 18, “Construction Impacts”). Therefore, this chapter evaluates whether the operation of the project would adversely alter community character, or affect operation and functionality of any community facilities and services. This chapter also analyzes the compatibility of the project with local zoning ordinances, and other applicable local or regional public policy documents. As part of this analysis, future development plans and anticipated public policy actions that would affect land use and development trends in the study area are described herein. In addition, this chapter has been updated to analyze changes to public policy documents since the issuance of the Draft Environmental Impact Statement (DEIS).

As discussed below, the community character of the study area is currently shaped by the presence of the Tappan Zee Bridge. Since the Replacement Bridge Alternative would maintain a similar alignment to the existing bridge, and would ensure the functionality of this integral regional transportation corridor, the following analysis does not identify any adverse community character impacts related to the project.

## **5-2 REGULATORY CONTEXT**

Guidance for consideration of the project’s impacts on community character is derived from the Federal Highway Administration’s (FHWA) Environmental Review Toolkit, Land Use and Transportation Coordination: Lessons Learned from the Domestic Scan Tour (FHWA, 2004), Visualization in Transportation (American Association of State Highway Transportation Officials [AASHTO], 2003), and the New York State Department of Transportation (NYSDOT) Project Development Manual. The project’s compatibility with local land use regulations and land use planning policy documents is also analyzed in this chapter. The following section identifies the policy document that guides the analysis of potentially adverse impacts of the project. Section 5-4, “Affected Environment,” provides an analysis of how specific policy documents and zoning laws apply to the project.

Historic properties and parklands are protected under Section 106 of the National Historic Preservation Act and Section 4(f) of the U.S. Department of Transportation Act. Potential impacts to these resources are further analyzed in the Chapter 7, “Parklands and Recreational Resources,” Chapter 10, “Historic and Cultural Resources,” and Chapter 23, “Final Section 4(f) Evaluation.”

#### **5-2-1 FHWA TECHNICAL ADVISORY T6640.8A**

Pursuant to the FHWA Technical Advisory document T6640.8A, potential impacts on social groups, neighborhoods, and housing are evaluated based on changes in the neighborhoods or community cohesion for the various social groups as a result of the project. These changes may be beneficial or adverse, and may include splitting neighborhoods, isolating a portion of a neighborhood or an ethnic group, generating new development, changing property values, or separating residents from community facilities, etc. Changes in travel patterns and accessibility (e.g., vehicular, commuter, bicycle, or pedestrian), as well as impacts on school districts, recreation areas, churches, businesses, police, and fire protection, are also to be considered.

### **5-3 METHODOLOGY**

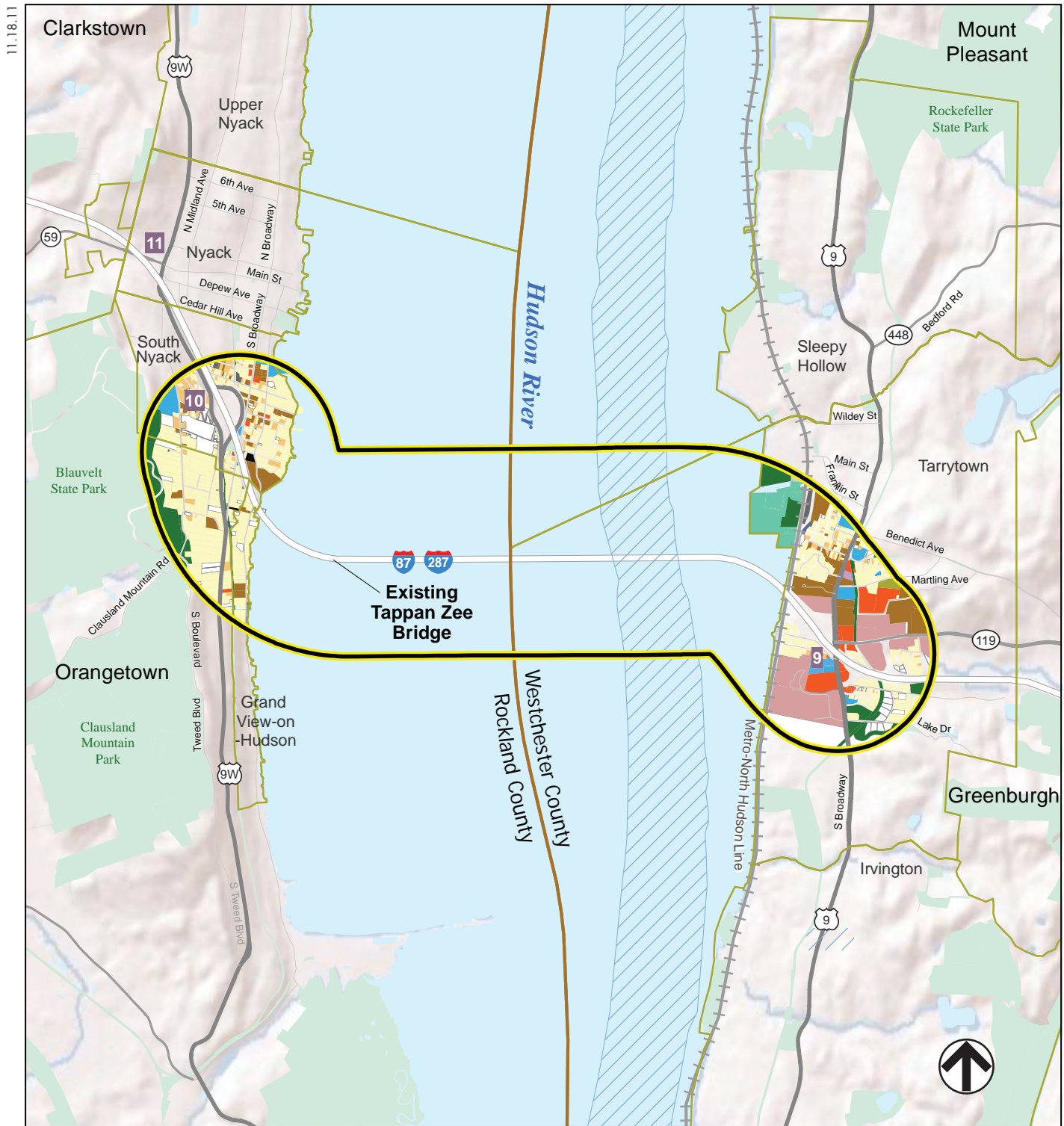
The study area for the community character analysis extends to areas along the Tappan Zee Bridge/I-87/287 Corridor that would potentially be affected by the project. To account for both the in-water and upland effects of the project's construction and operation, the study area has been generally defined as the area along and extending ½ mile north and south of the Interstate 87/287 (New York State Thruway) right-of-way generally between Interchange 10 (Route 9W) in Rockland County and Interchange 9 (Route 9) in Westchester County. The study area identifies the limits of areas in which the community character impacts of the project could potentially occur.

In Rockland County, the study area traverses three jurisdictions, including the Town of Orangetown and the Villages of South Nyack and Grand View-on-Hudson, both of which are incorporated villages within the Town of Orangetown. In Westchester County, the study area is entirely within the Village of Tarrytown, which is an incorporated village in the Town of Greenburgh (see **Figure 5-1**, "Study Area Land Use."). The Hudson River itself is regulated by a number of federal and state programs.

Baseline data for existing land uses, zoning, land use policies, neighborhood character, and community facilities and services within the corridor were developed based on Geographic Information Systems (GIS) data at the county level for Rockland and Westchester Counties, as well as Village or Town data, as available. Land use regulations and patterns within the study area were compiled based on reviews of local zoning ordinances and comprehensive plans for the jurisdictions within the corridor, as well as field inspections. This information assisted in assessing the project's potential impacts on and compatibility with land use plans, policies, and planned developments.

### **5-4 AFFECTED ENVIRONMENT**

The affected environment focuses on the existing community character of the study area, including land use, zoning, public policy, neighborhood character, and community facilities and services. This section summarizes the relevant land use plans and policies, zoning, neighborhood character, and community facilities and services within the study area of each jurisdiction. Planned development projects within the study area are also identified.



- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| Study Area Boundary                   | Institutional/Quasi-Public            |
| One Family Residential                | Public Park/Open Space                |
| Two Family Residential                | Private Recreation/Private Open Space |
| Multi Family Residential              | Transportation                        |
| Rural Residential                     | Utility                               |
| Mixed Use                             | Vacant/Undeveloped                    |
| Commercial-Retail                     | Not Yet Classified                    |
| Manufacturing, Industrial & Warehouse |                                       |
| Office and Research                   |                                       |

Note: GIS land use databases from Rockland County (2005) and Westchester County (2009).

0 1/2 1 MILE  
SCALE

**5-4-1 EXISTING LAND USES AND NEIGHBORHOOD CHARACTER**

**Figure 5-2**, “Rockland County Land Use,” and **Figure 5-3**, “Westchester County Land Use,” present the land uses within the study area defined above. Land use and neighborhood character can be described as a blend of various elements that give neighborhoods their distinct personalities. These elements can include land use patterns; development density; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; and noise.

**5-4-1-1 TOWN OF ORANGETOWN, ROCKLAND COUNTY**

The Town of Orangetown is 24.2 square miles and is located on the Hudson River in the southeastern corner of County. The study area includes a small unincorporated part of the town west of Grand View-on-Hudson (approximately 0.3 square miles). This area is located to the southwest of Interstate 87/287, south of South Nyack, and west of Grand View-on-Hudson.

Land use in this area is dominated by low-density residential uses on Route 9W and Highland Avenue on the Palisades Ridge. Defining elements of neighborhood character in this area are the Hudson River, the Palisades, and the scenic and sometimes steeply winding residential roads with abundant vegetation. The remainder of the study area encompasses small portions of Blauvelt State Park and Clausland Mountain Park, both of which are in the Town of Orangetown.

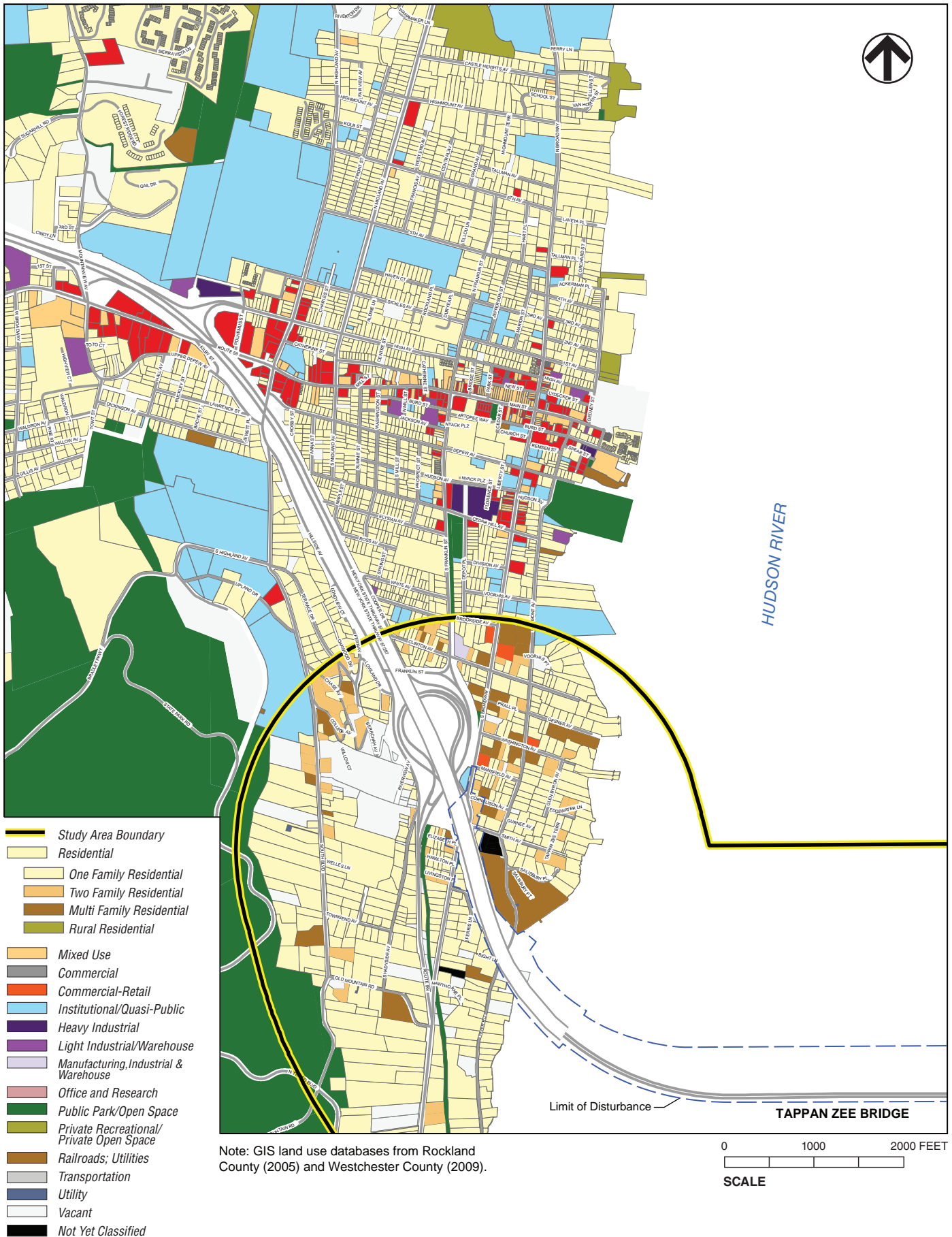
**5-4-1-2 VILLAGE OF SOUTH NYACK, ROCKLAND COUNTY**

The study area includes approximately half of the Village of South Nyack’s land area. It is within the Village of South Nyack that the Tappan Zee Bridge meets the west shore of the Hudson River. The Village of South Nyack is located south of the Village of Nyack, north of the Village of Grand View-on-Hudson, west of the Hudson River, and east of the Town of Orangetown. The Hudson River is a defining element of South Nyack’s neighborhood character and is at least partially visible from most locations in the Village. However, public access to the river’s edge is limited, as much of the shoreline is privately owned.

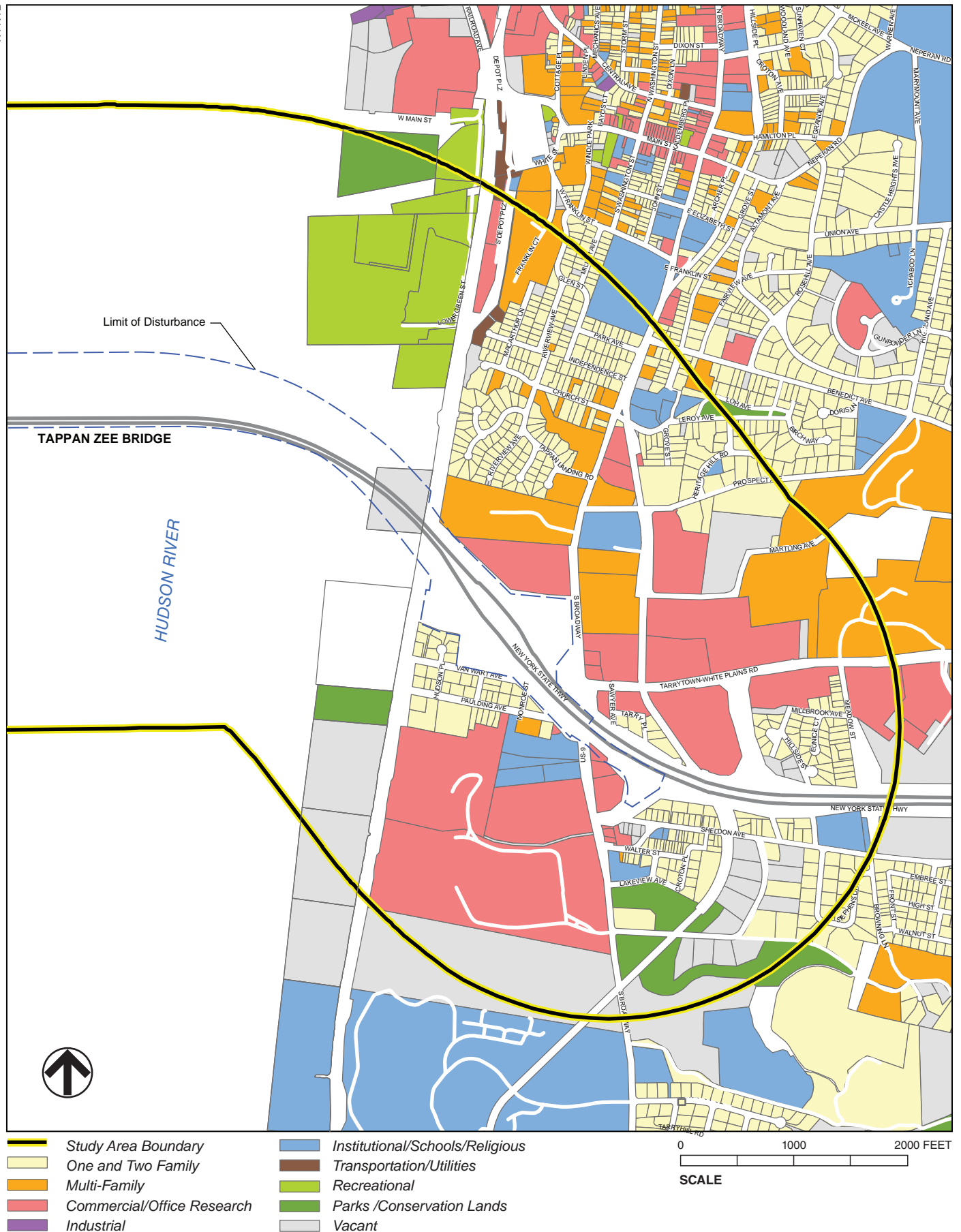
The Village of South Nyack totals 0.61 square miles, of which 28.8 percent is dedicated to transportation infrastructure (Interstate 87/287 right-of-way and local roadways). The Village is bisected by Interstate 87/287, which runs from the northwest to the southeast, where the Tappan Zee Bridge begins at the boundary with Grand View-on-Hudson. The historic center of the Village was demolished in the mid-1950s for the construction of the original Tappan Zee Bridge structure and Interchange 10 (Route 9W).

Land use within the Village and the study area is primarily residential, and includes some multi-family developments such as the Salisbury Point Cooperative and Bradford Mews Apartments immediately adjacent to Interstate 87/287 north of the Tappan Zee Bridge. There are no heavy industrial uses, and very few commercial uses within South Nyack.

Prominent land uses within the study area include Village Hall, which is located at 282 South Broadway, South Nyack, NY, and is adjacent to Interstate 87/287 at Interchange 10 (Route 9W). In addition, a rail-to-trail park (Raymond G. Esposito Memorial Trail) extends north-south through the village, crossing Interstate 87/287 at Route 9W, where its northbound lanes cross over Interstate 87/287 as part of the ramps at Interchange







## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

10 (Route 9W). Adjacent to Interstate 87/287 and the rail-to-trail is the small (0.81-acre) Elizabeth Place Park.

### **5-4-1-3 VILLAGE OF GRAND VIEW-ON-HUDSON, ROCKLAND COUNTY**

The Village of Grand View-on-Hudson is approximately 0.2 square miles. It is a small, incorporated municipality within the Town of Orangetown that encompasses a 0.25-mile-wide row strip of Hudson River waterfront, centered on River Road, which extends 1.6 miles from the Tappan Zee Bridge south to the Village of Piermont. Other than the roadways, Village Hall, and the property directly under the Tappan Zee Bridge landing, its land uses are exclusively residential, almost all as single-family housing. According to the 2010 U.S. Census, the Village of Grand View-on-Hudson has a population of 285 residents living in 139 housing units. The Village is bounded by the Hudson River to the east, the Tappan Zee Bridge to the north, the Village of Piermont to the south, and the Town of Orangetown to the west.

River Road, Hader Park, and the Hudson River form the defining elements of neighborhood character in Grand View-on-Hudson. River Road is a narrow residential street that runs parallel to the Hudson River shoreline. Pedestrian activity and vehicular traffic are relatively light since the road primarily serves residents. Vehicles and pedestrians traveling along River Road have scenic views of the Hudson River and the Tappan Zee Bridge. East of River Road, the land gently slopes down to the river. West of River Road, the topography is steeply sloped and the homes are generally elevated high above the Hudson River. The steep topography allows at least partial river views to almost all of the Village residences, practically all of which are located along River Road. Hader Park, a linear park, serves as the western boundary for the Village and connects to the Hudson River Valley Greenway Trail System.

### **5-4-1-4 VILLAGE OF TARRYTOWN, WESTCHESTER COUNTY**

The Village of Tarrytown is located on the eastern shore of the Hudson River in Westchester County approximately 22 miles north of New York City. It is an incorporated village within the Town of Greenburgh and covers 2.93 square miles of land area. According to the 2010 U.S. Census, the overall population density of the village is 3,854 people per square mile, which is high relative to the average density of the County.

A defining element of Tarrytown's neighborhood character is the Hudson River and the Tappan Zee Bridge, which are visible from most locations in the Village. Tarrytown is a historic river town with a mixed-use village center surrounded by an established residential suburban community. The Village is bordered by the Village of Sleepy Hollow to the north, Village of Irvington to the south and the Hudson River to the west.

The existing Tappan Zee Bridge lands in the Village to the west of where Route 119 intersects Route 9. From this landing, Interstate 87/287 continues east, bisecting the village into a northern portion and a southern portion. The northern portion includes the traditional village core, Main Street, and the Metro-North Railroad train station; and the southern portion includes a variety of uses including corporate, commercial, and residential uses.

Interstate 87/287 at the bridge landing accommodates the toll plaza, maintenance operations, and a State Trooper barracks (Troop T). Metro-North Railroad and Amtrak

run services on tracks alongside the Hudson River beneath the bridge. To the north of Interstate 87/287 on Route 9 is a five-story office building (303 Broadway). Farther north and west of Route 9 are two multi-family residential developments (The Quay of Tarrytown and Tappan Court), while still farther north and west is a more traditional village area of single-family homes in the Tappan Landing Historic District.

Along the river and west of the Metro-North Railroad tracks are the 10-acre Losee Park, a public village park, and the private Irving Boat Club on land leased from the Village. North of Interstate 87/287 and on the east side of Route 9, land uses are mostly residential; in particular, the Tappan Manor condominiums (three- and six-story structures) are opposite Interstate 87/287 maintenance facility and the 303 Broadway office building. The Church of the Transfiguration and Transfiguration School is located north of Tappan Manor. The northeast corner of the intersection of Routes 9 and 119 features a local shopping center, including a supermarket, bank, and gas station.

Route 119 is an east-west road that generally parallels Interstate 87/287 and extends from the Village of Tarrytown in the west to the Town of Greenburgh in the east. Within the study area, the Route 119 corridor includes a number of commercial properties including retail, office, and restaurant uses. Just east of the study area, Route 119 includes several large-scale office park developments, hotels, and town house/condominium developments.

South of Interstate 87/287 and west of Route 9 are a variety of land uses, beginning adjacent to Interstate 87/287 with the Irving Historic District residential neighborhood centered on Van Wart Avenue and Paulding Street. While this neighborhood consists of predominantly older homes, there are some newer homes adjacent to the toll plaza. Where Van Wart Avenue intersects Route 9 is the former and now vacant GM auto-mechanic training facility, and farther south is the Jewish Community Center. South of this is the Doubletree Hotel, and the Kraft Foods offices and research facility. Farther to the south is a 34-acre undeveloped parcel that separates the Kraft Foods complex from the historic Lyndhurst estate.

Land uses to the east of Route 9, near the ramps to Interstate 87/287, are the Tarrytown Diner, a gas station, an automobile dealership, and a church. Farther east, along Sheldon Avenue, is the older Pennybridge neighborhood that also includes the Lagana Field Park.

The Old Croton Aqueduct State Trailway, is a linear park that traverses the study area in a north-south direction from Van Cortlandt Park at the Bronx/City of Yonkers, NY, border in the south, to the Croton Dam in the Town of Cortlandt, NY, in the north. The trail enters the study area from the south, near Lyndhurst, and traverses north on the east side of Route 9, crossing beneath Interstate 87/287 near Interchange 9 (Route 9), and exiting the study area near Benedict Avenue. The Village of Tarrytown 2007 Comprehensive Plan, discussed below, notes that the creation of Interstate 87/287 interrupted the trail between Route 119 and Lyndhurst, and recommends that the future replacement of the Tappan Zee Bridge includes a bridge overpass, reconnecting the northern and southern sections of the Old Croton Aqueduct.

In addition, RiverWalk is proposed to traverse through the study area in a north-south direction. RiverWalk is a shared-use path that is part of the Hudson River Valley Greenway system, which once complete, will span 51.5 miles within 14 municipalities in Westchester County. It is being developed through a series of discrete projects



## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

constructed by the county, local municipalities and other entities, including private developers. Although currently not constructed, it is proposed that RiverWalk traverse under the Tappan Zee Bridge.

### **5-4-1-5 HUDSON RIVER**

The Hudson River is a defining element of the neighborhood character within the study area. The character of the Hudson River has historically dominated and continues to shape the communities on its shores, including those of the villages and towns within the study area. The development of land along the Hudson was influenced by the river's value to commerce, transportation and industry. Within the study area itself, the river creates a well-defined border between Westchester County and Rockland County, which, until the construction of the Tappan Zee Bridge in the 1950s, was traversable only by boat or ferry.

The Hudson River also provides recreational boating opportunities and inspiration for artists, and is a source of fascination for nature lovers. Although not a "neighborhood" in the strict sense, the Hudson River supports a variety of communities based around and dependent on its use for recreation and transportation. Marinas, restaurants, boat clubs, and public parks dot the shoreline and, through the efforts of local municipalities and regional not-for-profit organizations, vacant waterfront properties are increasingly being converted to new recreational and residential uses.

Today the Hudson River is characterized by its unique scenic, ecological, and historic qualities. It continues to provide definition, orientation, and character to the towns and villages located along its shoreline.

### **5-4-2 REGIONAL LAND USE PLANS AND POLICIES**

#### **5-4-2-1 NEW YORK METROPOLITAN TRANSPORTATION COUNCIL**

The New York Metropolitan Transportation Council (NYMTC), as the federally designated Metropolitan Planning Organization (MPO) for New York City, Long Island, and the lower Hudson Valley, is required by federal regulations (23 U.S.C. § 134–135) to develop a 25-year regional transportation plan that guides long-range transportation decision-making in the NYMTC region. The regional transportation plan is updated every 4 years. The 2010-2035 Regional Transportation Plan "A Shared Vision for a Shared Future" (RTP), lays out the region's transportation needs and desires over the years 2010 to 2035, and covers the major aspects of transportation from a regional perspective, including highways, streets, public transit, ridesharing and demand management, bicycles, pedestrian facilities, goods movement and special needs transportation. The RTP includes the following main components:

- Five Regional Shared Goals that lay the foundation for the region's decision-making framework;
- 10 Regional Desired Growth Areas that represent the region's consensus vision for guiding future growth and development;
- A set of Strategic Regional Transportation Investments, including four foundation improvement projects that are a first step toward improving long-term mobility in the region; and

- A set of 10 Strategic Regional Policy Guidelines that together will help NYMTC's member agencies and partners achieve the Regional Shared Goals.

The RTP is based on five Regional Shared Goals, which lay the foundation for the region's decision-making framework:

- Enhance the regional environment;
- Improve the regional economy;
- Improve the regional quality of life;
- Provide convenient, flexible transportation access within the region; and
- Build the case for obtaining resources to implement regional investments.

The Strategic Regional Policy Guidelines identified in the RTP directs how the region should grow and how investments should be made. The policies affect the selection of investments, such as the replacement of the Tappan Zee Bridge, as well as guide the implementation of investments as the system is designed, operated, and maintained. The RTP identifies constructing a replacement for the Tappan Zee Bridge and commuter rail and bus-rapid transit systems in the Interstate 87/287 Corridor in Westchester and Rockland counties as a "Strategic Regional Investment Option." The plan notes that the strategic regional investment projects impact the region's ability to grow in the future. However, it also recognizes that these projects are long-term investments and "are somewhat fluid and may change over time as planning work proceeds, specific alternatives are chosen and conditions change"<sup>1</sup>.

The RTP and Transportation Improvement Program (TIP) are to be amended to include the Replacement Bridge Alternative prior to issuance of a Record of Decision.

On February 23, 2012, following the issuance of the Tappan Zee Hudson River Crossing Project Draft Environmental Impact Statement for public comment, NYMTC's Program Finance and Administration Committee (PFAC) adopted a resolution to amend the Regional Transportation Plan (2010-2035) to include a feasibility study for the "Tappan Zee Interstate 287 Cap Project," also known as the South Nyack Lid Park initiative. The amendment responded to a request for \$500,000 to fund a feasibility study to construct a "lid" or deck over Interstate 87/287 as it bisects the Village of South Nyack. As envisioned by the Village of South Nyack, the "lid" and Thruway-owned land in the vicinity of Interchange 10 (Route 9W) would be used to create an environmental, recreational, and light commercial asset. The goal of the project is to promote economic revitalization for the river villages region through the conversion of unutilized space above a major urban freeway, in an ecologically sensitive manner, to promote local sustainable community development, setting a new standard for sustainable urban parks.

---

<sup>1</sup> 2010-2035 Regional Transportation Plan, pages 6-7.

## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

### **5-4-2-2 HUDSON RIVER VALLEY GREENWAY ACT<sup>1</sup>**

The Hudson River Valley Greenway Act of 1991 fosters voluntary regional cooperation among 259 communities and 13 counties of the Hudson River Valley in New York State. The act was created to facilitate the development of a regional strategy for preserving scenic, natural, historic, cultural, and recreational resources, while encouraging compatible economic development and maintaining the tradition of home rule for land use decision-making.

The Hudson River Greenway Act created two organizations to facilitate the Greenway process: the Hudson River Valley Greenway Communities Council and the Greenway Conservancy for the Hudson River Valley. The Hudson River Valley Greenway Communities Council functions like a state agency, and works with local and county governments to enhance local land use planning and to create a voluntary regional planning compact, whereas the Greenway Conservancy for the Hudson River Valley is a public-benefit corporation that works with local governments, organizations, and individuals to establish a Hudson River Valley Trail system, promote the Hudson River Valley as a tourist destination area, assist in the preservation of agriculture, and work with the Greenway Council and communities to strengthen state agency cooperation with local governments.

The Hudson River Greenway Act is based on five Greenway Criteria that are used for attaining the goals of the Hudson River Valley Greenway. The general nature of the criteria allows communities to develop projects that address community concerns, while contributing to the overall framework of the Hudson River Valley Greenway. The Greenway Criteria are:

- Natural and cultural resource protection;
- Regional planning;
- Economic development;
- Public access; and
- Heritage and environmental education.

The Greenway Council approaches planning on a regional basis as communities plan locally. It includes physical connections and linkages between communities for regional and local benefit. Additionally, this planning process addresses issues of collective concern and promotes mutually beneficial regional solutions. The entire study area is located within the Hudson River Valley Greenway Area. Rockland and Westchester Counties, the Town of Orangetown, and the Villages of South Nyack, Grand View-on-Hudson, and Tarrytown are all Greenway Communities.

#### *Greenway Compact Communities*

As discussed above, the Hudson River Valley Greenway Act was adopted to give municipalities in the Hudson Valley a voluntary opportunity to collectively work toward preserving scenic and cultural resources that define the region. All counties within the

---

<sup>1</sup> Hudson River Valley Greenway website,  
<http://www.hudsongreenway.state.ny.us/AbouttheGreenway/OverviewandMission.aspx>, accessed 10/13/11.

valley are eligible to participate in the Greenway program, and participation would make communities eligible for related funding and planning guidance. To further promote regional planning cooperation on the county level, the Greenway Compact program was established. The Greenway Compact program increases the variety of financial and procedural benefits available, as Greenway Compact Communities are eligible for additional benefits over Greenway Communities.

Westchester County became a Greenway Compact County with the adoption of its compact plan, *The Greenprint for a Sustainable Future...the Westchester Way*, ("The Greenprint") by the Hudson River Valley Greenway Communities Council in June 2004. The Village of Tarrytown adopted the policies set forth in the Westchester County Greenway Compact Plan through the recognition of Greenway policies in its Village Code, thereby making it a Greenway Compact Community.

Principles of The Greenprint align with principles in other policy documents governing Westchester County. A primary objective of this compact plan and the Greenway in general, is to strengthen the economic base of municipalities while preserving environmental and historic resources that characterize many Hudson Valley communities. Greenway initiatives promote development that takes advantage of the natural and scenic resources of the region and/or development that is concentrated in centers and areas best able to support development to minimize sprawl. The Greenway program encourages preservation of important environmental and scenic resources while strengthening economic centers, such as the Village of Tarrytown.

Rockland County became a Greenway Compact County on January 18, 2012, with the adoption of its compact plan, "Rockland Tomorrow," by the Hudson River Valley Greenway Communities Council.<sup>1</sup>

### *Hudson River Valley Greenway Trail System*

The Hudson River Valley Greenway was created in part to establish a network of multi-use trails along both sides of the Hudson River. There are currently several designated Greenway trails and connector trails<sup>2</sup> within the study area.

Within the Rockland County portion of the study area, the Greenway-designated trails include the Hader Park Trail (Village of Grand View-on-Hudson), Raymond G. Esposito (Village of South Nyack), Esposito-Hader Link (Town of Orangetown), and Esposito-Gesner Avenue Park Link (Village of South Nyack).

The Hudson River Greenway Water Trail follows the Hudson River through the study area. This water-based trail runs the length of the Hudson River, from Hadley in the Adirondack Park and Whitehall on the Champlain Canal to Battery Park City in Manhattan. The Water Trail features kayak and canoe launch points every 10 miles, and campsites every 15 miles. There are six launch points within or in close proximity to the study area, the Nyack Beach State Park (Upper Nyack), Memorial Park (Nyack),

---

<sup>1</sup> Minutes of the Hudson River Valley Greenway Communities Council, January 18, 2012, Wallace Center, Hyde Park, New York.

<sup>2</sup> A connector trail provides a link to the main Greenway Trail from a place of interest, such as a public park or another trail system.

## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

Gesner Avenue Park (South Nyack), Parelli Park (Orangetown), Horan's Landing (Sleepy Hollow), and Scenic Hudson Park (Irvington). Canoeists and kayakers using the Hudson River Greenway Water Trail traverse beneath the existing Tappan Zee Bridge to access these landing sites.

Within the Westchester County portion of the study area, the proposed RiverWalk will be part of the Hudson River Valley Greenway system. Once complete, this trail will span 51.5 miles and 14 municipalities in Westchester. As currently proposed, the RiverWalk would traverse beneath the Tappan Zee Bridge. However, this section has not yet been constructed. Sections have recently opened to the north and south of the Interstate 87/287 right-of-way.

### **5-4-2-3 HUDSON RIVER VALLEY NATIONAL HERITAGE AREA MANAGEMENT PLAN**

The Hudson River Valley is a National Heritage Area (NHA), as established by Congress in Title IX of Public Law 104-333 (1996) and as amended by Section 324 of Public Law 105-83 (1997). The mission of the NHA program is to recognize, preserve, promote, and interpret the natural and cultural resources of the Hudson River Valley for the benefit of the nation. The designation authorizes federal financial and technical assistance to serve these purposes. The Hudson River Valley NHA is managed by the Greenway Conservancy for the Hudson River Valley and the Hudson River Valley Greenway Communities Council. The Heritage Area comprises Westchester and Rockland, in addition to Albany, Rensselaer, Columbia, Greene, Ulster, Dutchess, Orange, and Putnam Counties, and the Village of Waterford in Saratoga County.

The Hudson River Valley National Heritage Area Management Plan, prepared for the Hudson River Valley Greenway Communities Council and Greenway Conservancy for the Hudson River Valley, Inc., and approved by the Secretary of the Interior April 17, 2002, addresses community character as it relates to land use, zoning, neighborhood character, and community facilities and services in two sections:

- **Framework for the National Heritage Area:** Discusses freedom and dignity, nature and culture, corridor of commerce, and trails. Themes presented in the discussion of the corridor of commerce are the community, agricultural and settled landscapes, labor movements, and technological and industrial innovations.
- **Managing the Heritage Area:** Presents the duty of the management entities. The management plan encourages local jurisdictions to adopt land use policies consistent with the goals of the plan and encourage economic viability by appropriate means.

The Hudson River Valley National Heritage Area Management Plan does not make any specific recommendations with regards to the Tappan Zee Bridge or its replacement.

### **5-4-3 LOCAL LAND USE PLANS AND POLICIES**

Local governments use several tools to direct and manage the growth and development that occur within their jurisdictional boundaries. These tools include comprehensive plans, building codes, specific plans, comprehensive transportation plans, eminent domain, zoning ordinances, overlay districts, redevelopment and revitalization plans.

New York State law regulates the preparation of local comprehensive plans, which identify what the community looks like now, what it should look like in the future (goals, objectives, principles), how the community intends to get there (regulatory standards, devices, and legal instruments), and why it should be done (protection, preservation, conservation, enhancement, growth, and development). The plans provide for inter-jurisdictional projects, regional compacts, and shared jurisdictional services. Preparation of a comprehensive plan is not mandatory. However, if prepared and adopted by a village board of trustees, subsequent land use regulations must be in accord with an adopted comprehensive plan. Similar language applies to the state's laws for towns and cities.

According to New York State (Town Law § 263; Village Law § 7-704, and General City Law § 20 [25]), zoning in towns, villages, and cities in New York must be enacted in accordance with a “comprehensive plan” or a “well-considered plan.” In the absence of a written comprehensive plan document, “zoning must be consonant with a total planning strategy, reflecting consideration of the needs of the community.”

County governments have no direct zoning and land use powers, but do have review authority when projects are located within 500 feet of an existing or proposed county/state highway, park or facility, county-designated or proposed stream, or jurisdictional boundary. For a jurisdiction to override a county disapproval or proposed modification to a project, the municipal board must at least have a majority plus one vote (i.e., “supermajority”) to do so.

Incorporated local jurisdictions such as villages operate their land use powers independently from the larger towns in which they may be located. Such towns have land use authority only over the “unincorporated” areas of the town, which in certain cases may be discrete, non-contiguous sections of the town. The following section identifies the relevant land use plans and policies of each jurisdiction within the study area.

#### **5-4-3-1 ROCKLAND COUNTY**

Rockland County adopted a new comprehensive Plan, “Rockland Tomorrow-Rockland County Comprehensive Plan,” (the Plan) on March 1, 2011. The Plan was written and adopted while the Tappan Zee Bridge/I-287 Corridor Project was being considered. As such, the Plan makes recommendations specific to that project. Subsequent to the adoption of the Plan, the project was modified to become the Tappan Zee Hudson River Crossing Project.

The Plan recognizes the importance of the Tappan Zee Bridge as a transportation corridor, stating that “no modern transportation development has had a greater impact on Rockland than the opening of the Tappan Zee Bridge in 1955...the bridge also altered the way residents of Rockland County interacted with New York east of the Hudson River.” Prior to the opening of the Tappan Zee Bridge, many Rockland residents would commute to New York City through New Jersey. The opening of the Tappan Zee Bridge changed commuting patterns for Rockland County residents. The Tappan Zee Bridge shifted the commuting pattern to Westchester County, a trend that



## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

continues today. The Plan also states that the bridge “facilitated the growth in corporate uses, casual travel in Rockland, and more intensive development along the I-87/287 corridor, culminating with the opening of the Palisades Center Mall in 1998.”<sup>1</sup>

The Plan emphasizes the importance of transportation connections such as the Tappan Zee Bridge that provide access to important commercial and regional infrastructure, including access to Midtown Manhattan, Westchester County, and Stewart International Airport.<sup>2</sup>

Regarding the Tappan Zee Bridge, Chapter 6.0, “Transportation,” of the Plan recommends the following (these are reiterated in Chapter 14.0, “Summary of Recommendations & Implementation,” of the Plan):

- **“Ensure that Necessary Funding is Secured for Replacement of the Tappan Zee Bridge.”** The Plan notes that the capacity and functioning of the Tappan Zee Bridge and Interstate 87/287 is the single most important transportation issue facing Rockland County, and that several adverse impacts could result from it not functioning properly. It recommends that Rockland County work with state, regional, and federal officials to secure necessary financing for replacement of a bridge that is “BRT ready,” and is designed for commuter rail, should transit be available in the future. It further states that the impact of the project on local community character must be fully studied and addressed.<sup>3</sup>
- **“Support Bus Rapid Transit and High Occupancy Vehicle Lanes in the Tappan Zee Bridge/Interstate 287 Corridor.”** The Plan expresses a preference for high-occupancy vehicle (HOV) lanes, and Bus Rapid Transit (BRT) on the Tappan Zee Bridge due to its ability to provide additional capacity for vehicles, its flexibility for long-term transportation needs, and cost.<sup>4</sup>
- **“Support “Early Action Projects” for the Tappan Zee Bridge/Interstate 287 Corridor.”** The Plan recommends the following “early action projects” be implemented to help alleviate existing traffic congestion, as well as mitigate potential future increases in congestion and adverse land use impacts on the adjacent communities of the bridge corridor itself.
  - Enhance Tappan Zee Express (TZx) bus service and work with Westchester County Bee-Line to provide shuttle buses to/from major employment destinations.
  - Improve Intelligent Transportation System (ITS) in the corridor. Enhance real-time traffic information for drivers and transportation agencies.
  - Improve park and ride lots outside the Interstate 287 corridor to reduce single occupancy vehicles and traffic passing through Rockland County.

---

<sup>1</sup> Rockland County Comprehensive Plan, page 12.

<sup>2</sup> Rockland County Comprehensive Plan, page 13.

<sup>3</sup> Rockland County Comprehensive Plan, page 96.

<sup>4</sup> Rockland County Comprehensive Plan, page 96.

- Examine the feasibility of a fifth lane on the Tappan Zee Bridge (peak direction) as an exclusive bus, high-occupancy toll (HOT), or HOV lane.
  - Examine the feasibility of allowing “buses in the shoulder,” a traffic management tool used in other states that allows buses to use shoulders to bypass congestion, in this case at the approach to the Tappan Zee Bridge.
  - Examine the feasibility of a direct bus connection, including “slip ramps” for TZx buses traveling across the Tappan Zee Bridge to provide more efficient service to the Tarrytown’s Metro North Railroad station.
  - Have the New York State Thruway Authority (NYSTA) increase marketing and use of E-ZPass to improve mobility for commuters during peak travel times, as well as for weekend users and holiday travelers.
  - Enhance the existing Haverstraw Ossining ferry with midday and weekend service to help relieve vehicular traffic on Hudson River crossings.
  - Improve bus travel times along Route 59.
  - Study ways to reduce truck traffic in the Interstate 287 corridor, especially during peak AM and PM travel times. Identify ways to divert New England bound truck traffic north, toward Interstate 87 and Interstate 84.<sup>1</sup>
- **“Improve the Pedestrian and Bicycle Circulation System.”** The Plan recommends that the future Tappan Zee Bridge include bicycle and pedestrian lanes that could be tied into existing pedestrian and bicycle trail networks in Rockland County.<sup>2</sup>

The Plan also identifies roadway traffic, especially noise from Interstate 287, as the major cause of noise pollution in Rockland County. The plan encourages the use of sound barrier walls to help reduce the amount of noise that enters residential areas, including the need for additional sound barrier walls along Interstate 87/287 once the replacement Tappan Zee Bridge construction is complete.<sup>3</sup>

Chapter 7.0, “Natural & Environmental Resources,” of the Plan encourages the continued use of falcon-nesting boxes on the Tappan Zee Bridge, which NYSTA added in the late 1980s. It states that, “the bridge and the falcons have a symbiotic relationship: the nesting boxes provide falcons with a high perch, and the falcons keep away pigeons, which can be detrimental to the paint, and consequently, the steel on the bridge.”<sup>4</sup>

The Plan recommends that open space be integrated into the Tappan Zee Corridor Project. In particular, it recommends examining the feasibility of reconnecting parkland or open space properties that were divided by the construction of Interstate 87/287 in the 1950s. One idea being studied by the Village of South Nyack as part of their Comprehensive Plan is the construction of a partial “cap” or deck over a segment of a

---

<sup>1</sup> Rockland County Comprehensive Plan, page 96-97.

<sup>2</sup> Rockland County Comprehensive Plan page 102.

<sup>3</sup> Rockland County Comprehensive Plan page 132.

<sup>4</sup> Rockland County Comprehensive Plan page 136.

## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

rebuilt Interstate 87 approach to the Tappan Zee Bridge that would connect existing trails and create new open space. The Plan states that the “addition of new green space will help mitigate potential negative impacts associated with the Interstate 287/Tappan Zee Bridge Corridor.”<sup>1</sup>

The Plan also supports funding for a Rockland County visitor center and countywide signage and way finding program for major cultural and historic destinations. It identifies the Tappan Zee Bridge as a gateway location where a visitor center with knowledgeable volunteers; municipal, nonprofit, or retail partners; a mini museum and art exhibition space; parking; phone; and restroom facilities could be located.<sup>2</sup>

### **5-4-3-2 TOWN OF ORANGETOWN, ROCKLAND COUNTY**

The Town of Orangetown Comprehensive Plan was adopted in 2003. The Town’s plan presents possible zoning and environmental conservation implementation tools to be used to guide land use and development. It seeks to preserve the existing character of the town by preserving open space and promoting specific types of development through various zoning techniques and plans. One focus of the plan is proposed road improvements to alleviate congestion in the short term, including the reconstruction of River Road from Stevenson Street to the Tappan Zee Bridge in the Village of Grand View-on-Hudson. It also considers that an additional rail line, either as part of the West Shore Line or as a component of the Tappan Zee Bridge, could potentially alleviate traffic and congestion, and encourage increased mass transit use within the county and the New York area.

### **5-4-3-3 VILLAGE OF SOUTH NYACK, ROCKLAND COUNTY**

The Village of South Nyack’s Comprehensive Plan was adopted in 1969. The Village is currently drafting a new comprehensive plan as the existing plan is considered by the Village Board of Trustees too outdated to be “updated.”<sup>3</sup> A draft of this plan, which was not available for public review prior to the issuance of the Tappan Zee Hudson River Crossing Project Environmental Impact Statement on January 18, 2012, was submitted by the Village of South Nyack as a public comment. The Village’s Draft Comprehensive Plan identifies the following goals, strategies, and objectives related to the replacement of the Tappan Zee Bridge:

- Maximize opportunities for economic development, with or without the new Tappan Zee Bridge, that are fiscally responsible for the Village and ease the tax burden of residents.
- Leverage future redevelopment of the Tappan Zee Bridge and New York State Thruway to maximize economic development opportunities.
- Advocate for the return of New York State land to the Village around Interchange 10 (Route 9W).

---

<sup>1</sup> Rockland County Comprehensive Plan, page 165.

<sup>2</sup> Rockland County Comprehensive Plan, page 192.

<sup>3</sup> Village of South Nyack website, <http://www.southnyack.info/9.php>, accessed 10/13/11.

- Investigate charging the New York State Thruway Authority a “hosting fee” for the bridge.
- Prepare a feasibility study for a “lid” park over Interstate 87/287, and work with local, State and Federal politicians to advocate on the Village’s behalf for a “lid” park over Interstate 87/287. Of particular importance is getting Federal funds allocated towards investigating the feasibility of such a park by including the project in the NYMTC Transportation Improvement Program (TIP).
- Investigate rezoning the west side of South Broadway impacted by Tappan Zee Bridge rebuild. The Village should consider rezoning current residential zones adjacent to Interchange 10 (Route 9W) to allow for non-residential uses that could capitalize on the pass-by traffic from Interstate 87/287.
- Investigate putting Village services on New York State land around Interchange 10 (Route 9W). In the event that the land around Interchange 10 (Route 9W) is not returned to the Village, the Village should: (1) Investigate asking the State if the Village can house its DPW, fire, police, and other emergency services on the land around Interchange 10 (Route 9W), currently slated for highway support uses by the NYSDOT. This would free up other Village land, such as the DPW site and police station, for other uses, including multi-family residential uses or a pocket park (particularly if the State takes Elizabeth Place Park).
- Leverage future redevelopment of the Tappan Zee Bridge to advocate for air quality improvements, such as additional air quality monitoring in the Village.
- Ensure that the redesign of the Tappan Zee Bridge addresses impacts to the Village’s CEAs.
- Review feasibility of adding bike lanes to select routes. The redesign of the Tappan Zee Bridge to accommodate bike and pedestrian traffic may provide opportunities to better manage bike traffic in the Village.
- Ensure that the bicycle and pedestrian lanes of the new Tappan Zee Bridge are well connected to the transportation network and to a possible cycling hub in South Nyack. For example, creating direct access to the bridge from River Road would help connect a major existing bike route with the future route over the bridge. Cyclists and walkers should be able to tap into an entire network of trails from the new hub in South Nyack: Esposito Trail, Long Path and a new bike/walking route to the new BRT station at Exit 11. In addition, trail users should be able to ride directly into downtown Nyack with an extension of Esposito Trail to the Village of Nyack. The stream that runs parallel to the trail could be day-lighted to create an attractive greenway.
- Use the redevelopment of the Tappan Zee Bridge as an opportunity to improve the appearance of Esposito Trail where it crosses Interstate 87/287, such as the use of enhanced fencing and landscaping to better buffer pedestrians from traffic.

## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

- Hire independent consultants to evaluate traffic impacts of the Tappan Zee Bridge redesign.<sup>1</sup>

### **5-4-3-4 VILLAGE OF GRAND VIEW-ON-HUDSON, ROCKLAND COUNTY**

The Village of Grand View-on-Hudson does not have a comprehensive master plan or other planning documents. The village regulates land use by Village Law and a Zoning Law adopted in February 1999.

### **5-4-3-5 WESTCHESTER COUNTY**

Westchester County recently launched Westchester 2025, a web-based format of its countywide planning policies to demonstrate the importance of working together to shape and grow the county's infrastructure (roads, trains, sewers, etc.) and communications capabilities (wider bandwidths, GIS technology, etc.). Part of the Westchester 2025 planning effort includes the "Context for County and Municipal Planning in Westchester County and Policies to Guide County Planning" which was adopted by the Westchester County Planning Board May 6, 2008 and amended January 5, 2010. "Patterns for Westchester: The Land and the People," which was adopted December 5, 1995, is still the adopted plan for Westchester County and has guided the County since then. Only the "Assumptions and Policies" sections of "Patterns" have been replaced by Westchester 2025's "Context for County and Municipal Planning and Policies to Guide County Planning."

Westchester 2025 builds on the Patterns for Westchester document. Both documents establish a set of standards for the Westchester County Planning Board as it carries out its three principal county charter responsibilities: long-range planning; advising the county executive and legislature on capital spending, infrastructure, land acquisition, and other public facilities; and bringing the county's perspective to bear on planning and zoning referrals from jurisdictional governments.

The following policies were originally developed for Patterns for Westchester and then modified for Westchester 2025, and are intended to guide municipalities in their own decision-making.

- Channel development whenever possible to centers where infrastructure can support growth, where public transportation can be provided efficiently, and where redevelopment can enhance economic vitality.
- Enhance the appropriate functions of the county's transportation corridors. The quality of scenic routes should be protected. Traffic management, transit improvements, and systematic maintenance should be implemented on travel routes to reduce congestion, ease movement, increase mobility options and ensure public safety.
- Nurture the economic climate of the county with the use of municipal, county, state, and federal resources to improve infrastructure, housing, and programs that attract and support business enterprise, with consideration of intermunicipal impacts.

---

<sup>1</sup> Draft Comprehensive Plan, Village of South Nyack, New York, May 2011.

- Support transportation alternatives that improve the mobility choices of workers, consumers, and residents and that improve air quality by enhancing the efficiency and effectiveness of public transportation and reducing solo-driving.
- Work with neighboring jurisdictions in the Hudson Valley, Connecticut, New Jersey, Long Island, and New York City in planning initiatives aimed at sound land use, transportation, economic development, housing, and environmental policies.

#### 5-4-3-6 VILLAGE OF TARRYTOWN, WESTCHESTER COUNTY

The Village of Tarrytown adopted its Comprehensive Plan in March 2007. The Plan was written and adopted while the Environmental Impact Statement (EIS) for the previous Tappan Zee Bridge/I-287 Corridor Project was being prepared. As such, it references that project and the recommendations regarding the replacement of the Tappan Zee Bridge are broader than the project that is the subject of this Final EIS (FEIS).

The Plan addresses the following six goals which reflect wide-ranging areas of concerns within the Village:

- Land Use: Provide for a balanced mix of land uses within Tarrytown and ensure that new development respects and contributes to Tarrytown's character.
- Housing: Maintain and preserve the character of existing neighborhoods and encourage housing affordable to seniors and working families.
- Environmental Preservation: Ensure that new development respects environmentally sensitive areas—particularly water resources—and preserves the scenic quality of the community.
- Open Space: Upgrade and increase/acquire open space and recreational facilities to enhance their function and appearance.
- Community Facilities and Services: Upgrade and expand services and facilities to enhance their function and appearance.
- Transportation, Circulation, and Parking: Enhance traffic circulation, public transportation, and parking facilities to better serve the Village's population in a manner compatible with the character of the community.

In relation to the project, the Plan makes the following recommendations:

- Since the Old Croton Aqueduct Trailway is interrupted by Interstate 87/287 near Interchange 9 (Route 9), the Village should request that the State consider an Interstate 87/287 overpass to reconnect the Old Croton Aqueduct Trailway as part of the Tappan Zee Bridge replacement project.<sup>1</sup>
- The replacement of the Tappan Zee Bridge should include plans for the accommodation of the RiverWalk under the new bridge.

---

<sup>1</sup> Village of Tarrytown Comprehensive Plan, page 7-6.



## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

- As plans for the replacement of the Tappan Zee Bridge move forward, the Village should continue to work with NYSDOT to ensure that potential impacts on Village neighborhoods are minimized.<sup>1</sup>
- Examine impacts of the re-alignment of the Tappan Zee Bridge on the Village and ensure a consistent approach in all policy documents regarding this issue.<sup>2</sup>

### **5-4-4 CRITICAL ENVIRONMENTAL AREAS**

Local agencies may designate specific geographic areas within their boundaries as a Critical Environmental Area (CEA) under the New York State Department of Environmental Conservation's (NYSDEC) program. To qualify as a CEA, an area must have an exceptional or unique character with respect to one or more of the following:

- a benefit or threat to human health;
- a natural setting (e.g., fish and wildlife habitat, forest and vegetation, open space, and areas of important aesthetic or scenic quality);
- agricultural, social, cultural, historic, archaeological, recreational, or educational values; or
- an inherent ecological, geological, or hydrological sensitivity to change that may be adversely affected by any change.

There are two CEAs within the study area, "Upper Grandview and Environs,"<sup>3</sup> which was designated by the Town of Orangetown in 1988 (see **Figure 5-4**), and the "Hudson River," which was designated by Westchester County in 1990 (see **Figure 5-5**).

#### **5-4-4-1 UPPER GRANDVIEW AND ENVIRONS**

The Upper Grandview and Environs Critical Environmental Area was designated by the Town of Orangetown in 1988 for its exceptional or unique character as a natural setting and geological sensitivity. Upper Grandview and Environs is part of the Palisades, which overlooks the Hudson River.

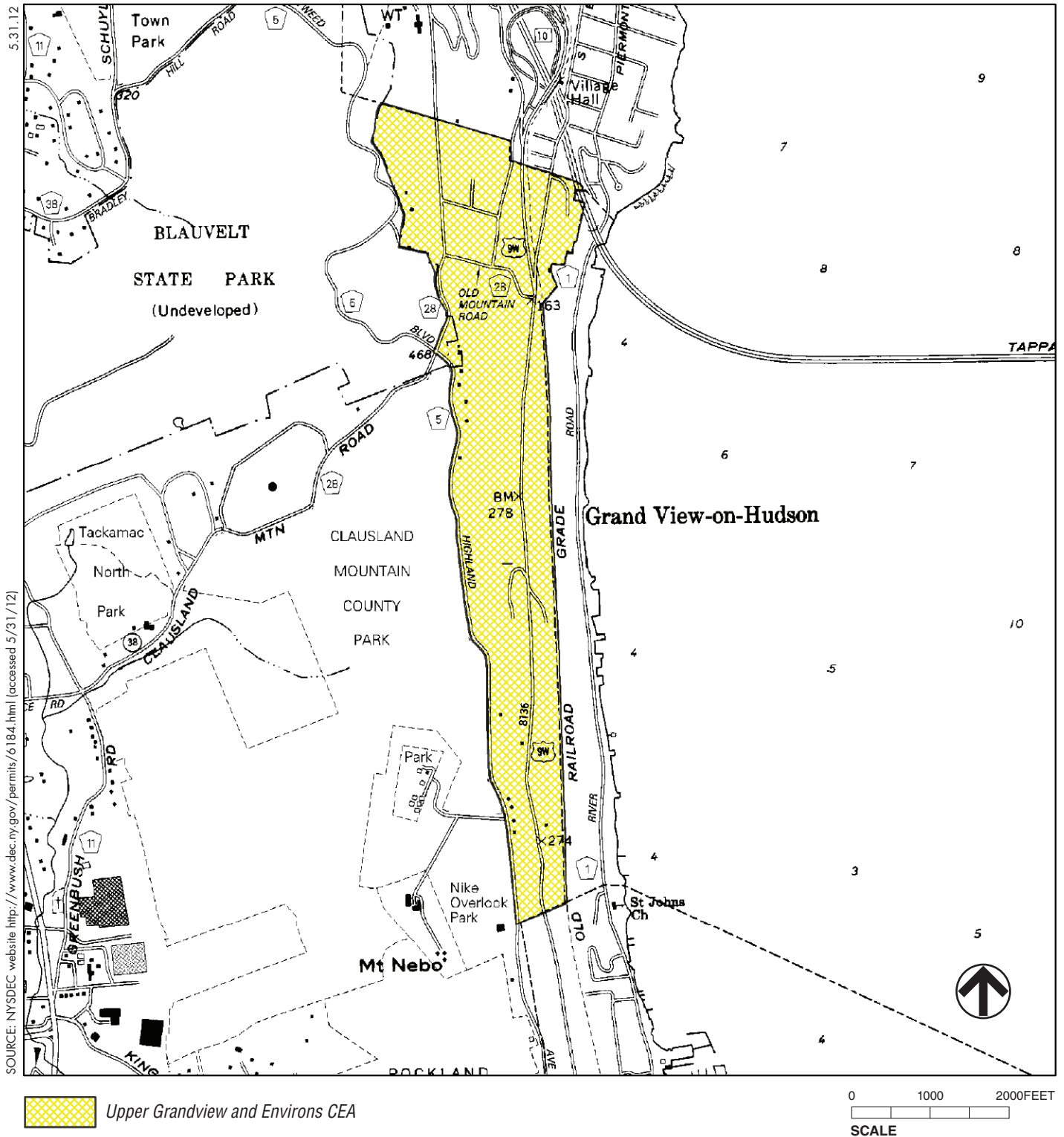
Chapter 42, ARTICLE II, "Critical Environmental Area" of the Town Code, which was adopted in 1990, set forth a moratorium within the CEA on the issuance of building permits for construction, both residential and nonresidential. It further prohibited the Planning Board from accepting or taking action on any subdivision application which had not received preliminary approval, or accepting or taking any action on site plan review, for any project located within the CEA. Per §42-10, the moratorium shall continue in effect until the happening of either of the following events, whichever event occurs first: (A) The adoption by the Town Board of the Town of Orangetown of a revised local law amending the Orangetown Code to implement changes dealing with

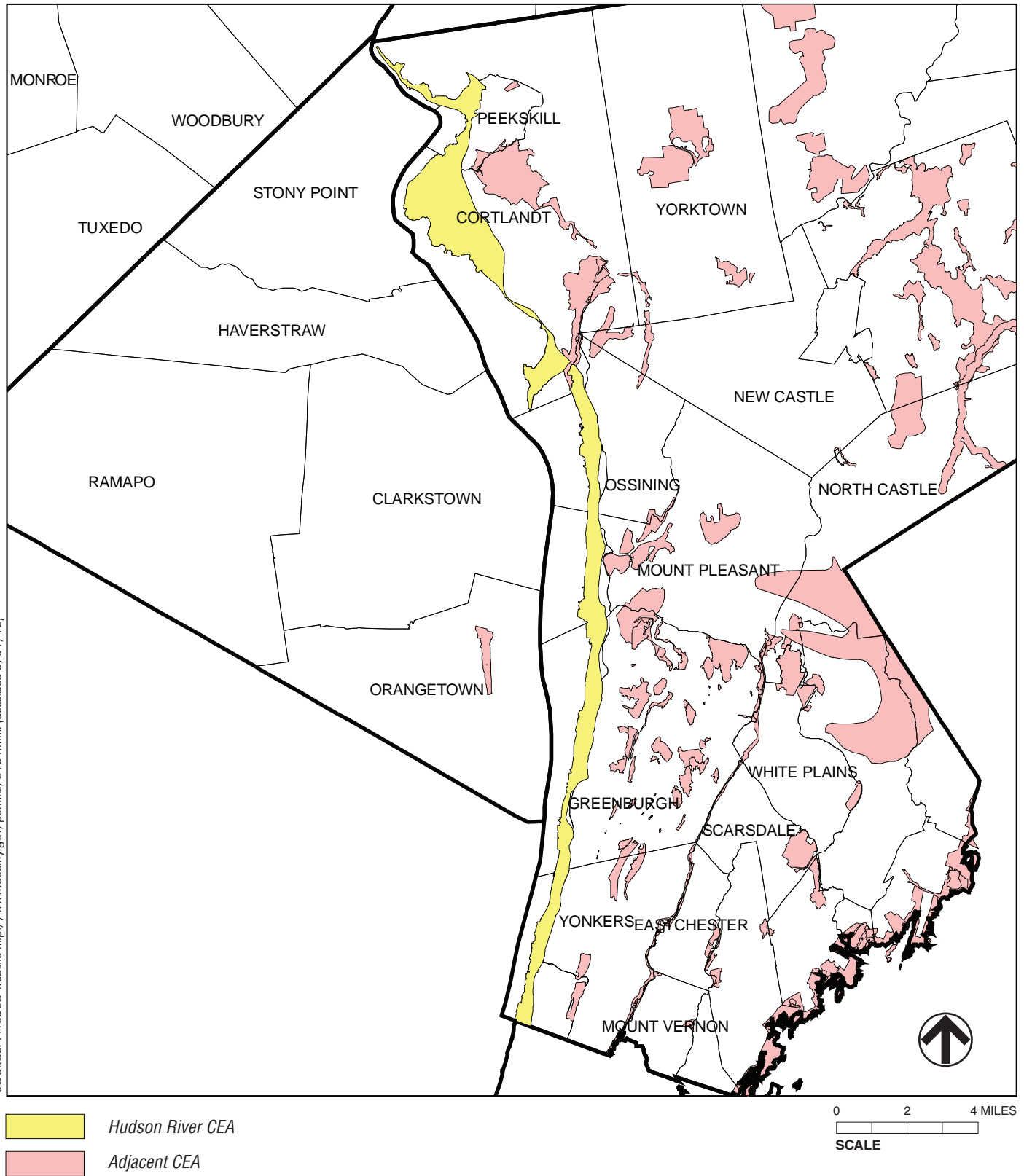
---

<sup>1</sup> Village of Tarrytown Comprehensive Plan, page 8-8.

<sup>2</sup> Village of Tarrytown Comprehensive Plan, page 8-1.

<sup>3</sup> "Upper Grandview" is a hamlet within the Town of Orangetown and is separate and distinct from the Village of Grand View-on-Hudson.





construction and development in the designated critical environmental area; (B) The expiration of a ninety-day period after the effective date of the local law.

In addition, the Town of Orangetown Town Code has the following provisions to further protect the CEA: restrictions on blasting (Chapter 13, "Explosives," adopted 1998); restrictions on land clearing and tree removal (Chapter 21, "Land Development Regulations," amended 1999); and requirement of site-plan approval by the Planning Board and review by the Rockland County Soil and Water Conservation District for applications for a permit for new construction, additions, or exterior modifications within the CEA (Chapter 43, "Zoning," Section 10.223.(g), amended 1994). Since ninety days have passed since the moratorium was adopted in 1990, and the above sections of the Code relating to the CEA were subsequently amended, the moratorium should no longer be in effect.

### 5-4-4-2 HUDSON RIVER CRITICAL ENVIRONMENTAL AREA

The Hudson River was designated by Westchester County as a CEA in 1990. The Hudson River is a natural resource that supports fish and wildlife habitat. It is also an area of important aesthetic or scenic quality; a social, cultural, and historic resource; and a recreational resource.

### 5-4-4-3 VILLAGE OF SOUTH NYACK CEAS

Section 110-4.5 "Critical Environmental Areas" of the Village of South Nyack Code breaks up the entire Village into three CEAs: CEA 1 – Hudson River Area; CEA 2 – Run-Off Area; and CEA 3 – Mountainous Area. These CEAs are not identified on NYSDEC's list of CEAs in Rockland County.<sup>1</sup>

CEA 1 – Hudson River Area is the area bounded by the entire easterly length of the Village along the Hudson River, by the northern boundary of the Village, on the western side by the centerline of South Broadway, and by the southern boundary of the Village of South Nyack. The Village designated this area as a CEA to protect the following exceptional and unique characteristics:

*"a. this area includes unusual proximity to the Hudson River and the protection, preservation and enhancement of the important aesthetic and scenic qualities associated with such proximity is a primary goal.*

*b. the historic significance of this area, including its architecture should be protected for future generations.*

*c. the Hudson River's ecological, geological and hydrological sensitivity may be adversely affected by any change, development or disturbance in the area and must be scrutinized carefully and thoroughly so as to protect and preserve not only the environmental integrity of the riverfront area, but the appearance of the shoreline from the river itself."*

CEA 2 – Run-Off Area includes the area to the west of the centerline of South Broadway and east of the westerly line of Route 9W within the Village of South Nyack.

---

<sup>1</sup> <http://www.dec.ny.gov/permits/25145.html> accessed 5/31/12

## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

The Village designated this area as a CEA because its proximity to the steep hillsides to the west makes it subject to water run-off and drainage concerns. The Village also identified this area as being affected by the pollution, noise, and traffic generated by the New York State Thruway. The goal of this CEA designation is to address the following characteristics:

“a. in order to benefit and protect human health, this designation should address the specific issues associated with the noise and air pollution associated with the area’s proximity to the New York State Thruway; and,

b. the inherent ecological, geological and hydrological sensitivity of this area due to its susceptibility to drainage and water run-off problems must be scrutinized carefully and thoroughly so as to protect against erosion and damage caused by water and drainage problems.”

CEA 3 – Mountainous Area includes the area to the west of Route 9W to the western boundary line of the Village. The Village designated this area as a CEA because of the steepness of the slopes on the mountainside and the area’s natural beauty, particularly in light of its importance as the gateway to Rockland County and the entire Ramapo and Catskill Mountain regions to the west and north. The purpose of this designation is to address the following characteristics:

“a. due to its natural setting, this area possesses unique and important aesthetic and scenic qualities and value which must be preserved and enhanced for both the residents of South Nyack and visitors to the area.

b. the historic, archeological and recreational significance of the mountainside can never be replicated and must be preserved.

c. the steepness of this area produces inherent ecological, geological and hydrological sensitivity to the environment that may be adversely affected by any change and, consequently, any development or disturbance in this area must be scrutinized carefully and thoroughly so as to protect and preserve this area, including but not limited to its visual and aesthetic qualities, its vegetation, and the control of water drainage and run-off.”

### **5-4-5      ZONING ORDINANCES**

The zoning ordinance is the principal tool in implementing a community’s adopted comprehensive plan and defines the site plan and subdivision requirements for each land use. Zoning ordinances establish districts to promote compatibility between land uses, buildings and structures, efficient use of land, and accessibility. The districts classify, regulate, and restrict uses, as well as combine uses and encourage the location of compatible land uses close to one another. District regulations provide development standards pertaining to the intensity of land uses and development, height and bulk of buildings and structures, and area of yards and other open areas between buildings and structures.

Each jurisdiction in the study area has a zoning ordinance that regulates land use, and while each community uses the same broad district categories (e.g., residential, commercial, industrial, etc.); the specific designations of these districts differ for each. The zoning within the Rockland County portion of the study area is shown in **Figure 5-**

6. and the zoning within the Westchester County portion of the study area is shown in **Figure 5-7**. However, since the replacement of the Tappan Zee Bridge and any associated improvements as part of a federal highway is exempt from local zoning, a detailed analysis of each jurisdiction's zoning regulations is not required.

#### 5-4-6 COMMUNITY FACILITIES AND SERVICES

A project can affect community facilities and services when it physically displaces or alters a community facility or causes a change in population that may affect the services delivered by a community facility. This section identifies and describes the existing community facilities and services found within the study area. Community facilities include public and private education facilities, libraries, community centers and religious institutions, government facilities, and emergency and health care facilities and services. **Table 5-1** below identifies all of the community facilities within the study area. Please refer to Chapter 7, "Parklands and Recreational Resources," for an evaluation of parks within the study area.

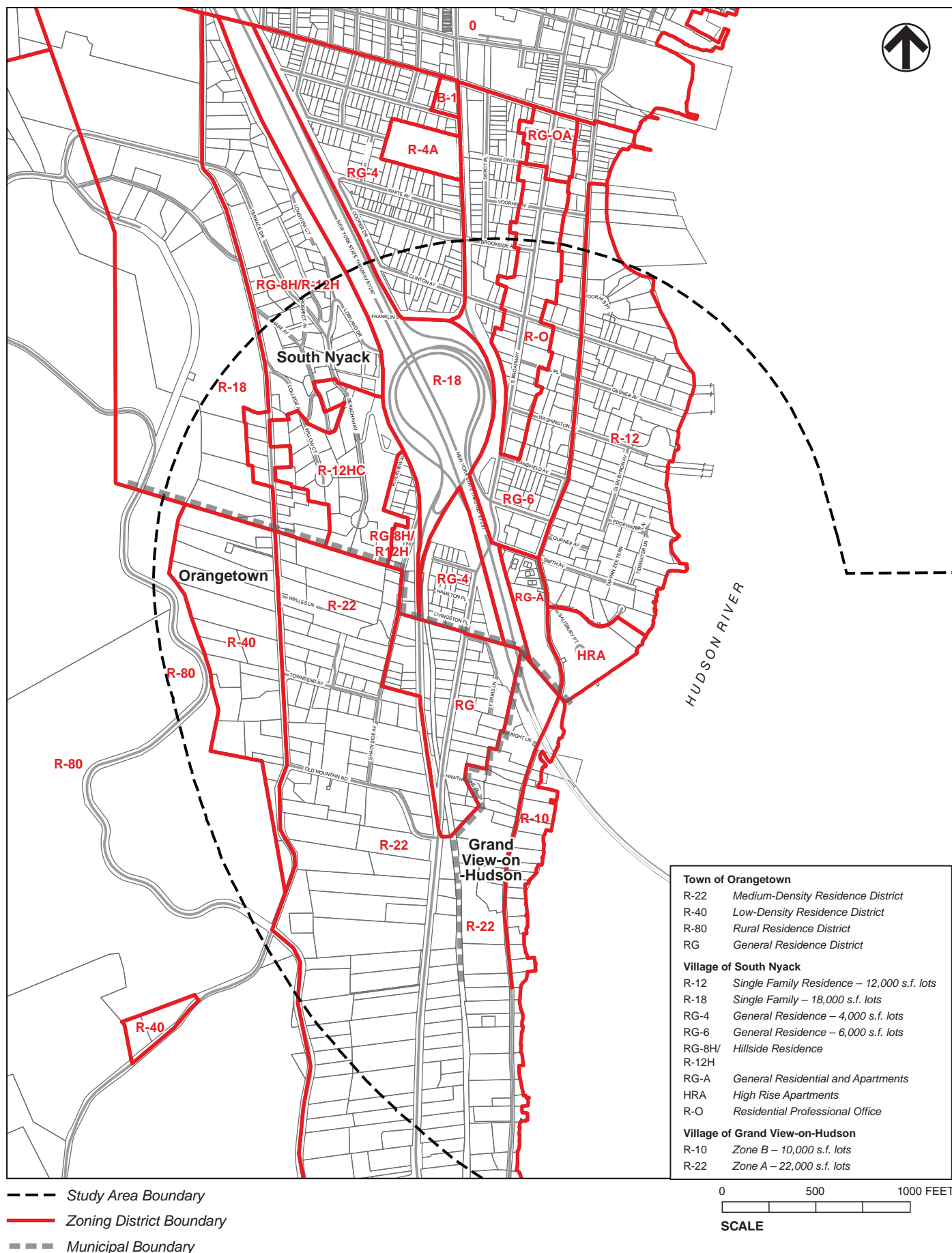
**Table 5-1**  
**Community Facilities**

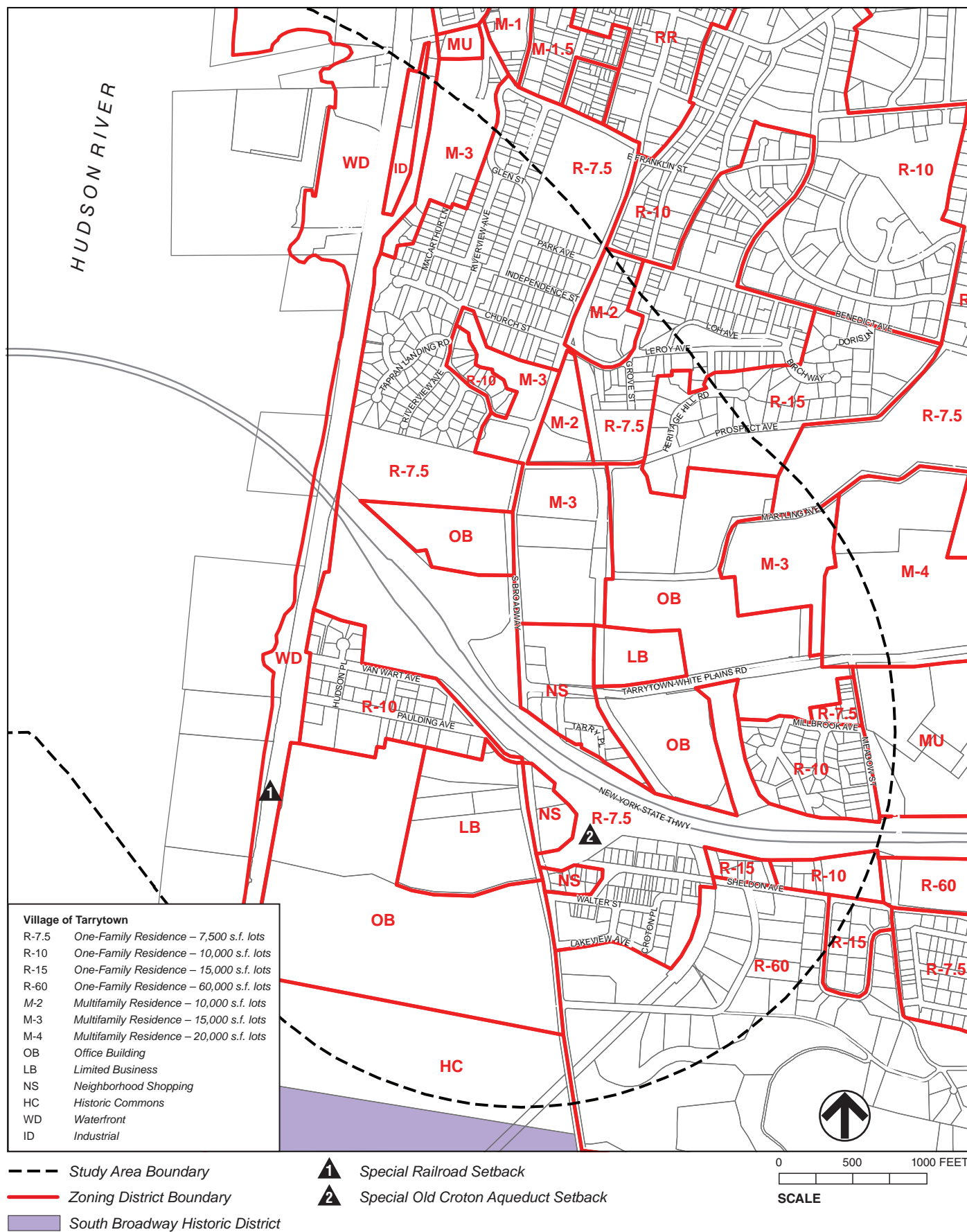
Name	Type	Description	Map Code
<b>Rockland County</b>			
South Nyack Village Hall	Government	Village Hall	1
South Nyack-Grand View Police Department	Emergency	Villages of South Nyack and Grand View-on-Hudson share a joint Police Department adjacent to the Village of South Nyack Village Hall.	2
Nyack College	Educational	Private, not-for-profit 4-year college and graduate school.	3
Nyack Joint Fire District	Emergency	Fire Department	4
Grand View-on-Hudson Village Hall	Government	Village Hall	5
Living Christ/Simpson Memorial Church	Religious	Located at 150 Piermont Avenue, South Nyack, NY	6
<b>Westchester County</b>			
Washington Irving Intermediate School	Educational	Public upper elementary school (grades 3-5) serving parts of Tarrytown, Sleepy Hollow, and unincorporated areas within the Town of Greenburgh.	7
Church of the Transfiguration	Religious	Located at 268 South Broadway, this Catholic church shares property with the Transfiguration School.	8
Transfiguration School	Private Education	Parochial primary/secondary school (pre-K to grade 8).	9
New York State Police (NYSP) Troop T Interstate 87/287 Facility	Emergency	The NYSP Troop T Interstate 87/287 facility is located within the study area at 333 South Broadway in the Village of Tarrytown, immediately north of the existing Tappan Zee Bridge toll plaza. The NYSP Troop T provides support for motorists on Interstate 87/287 in both Rockland and Westchester Counties.	10
Washington Engine Company No.2	Emergency	Part of the Tarrytown Fire District, located approximately 0.5 miles from the Tappan Zee Bridge approach at 157 White Plains Road (Route 119)	11
Jewish Community Center on the Hudson	Religious	Jewish community center located at 371 South Broadway.	12
First Korean Methodist Church	Religious	Methodist church located at 500 South Broadway.	13
Consolidated Engine Company No.1	Emergency	Part of the Tarrytown Fire District, located approximately 0.8 miles from the Tappan Zee Bridge approach at 177 Sheldon Avenue.	14
<b>Notes:</b> See Figure 5-8			

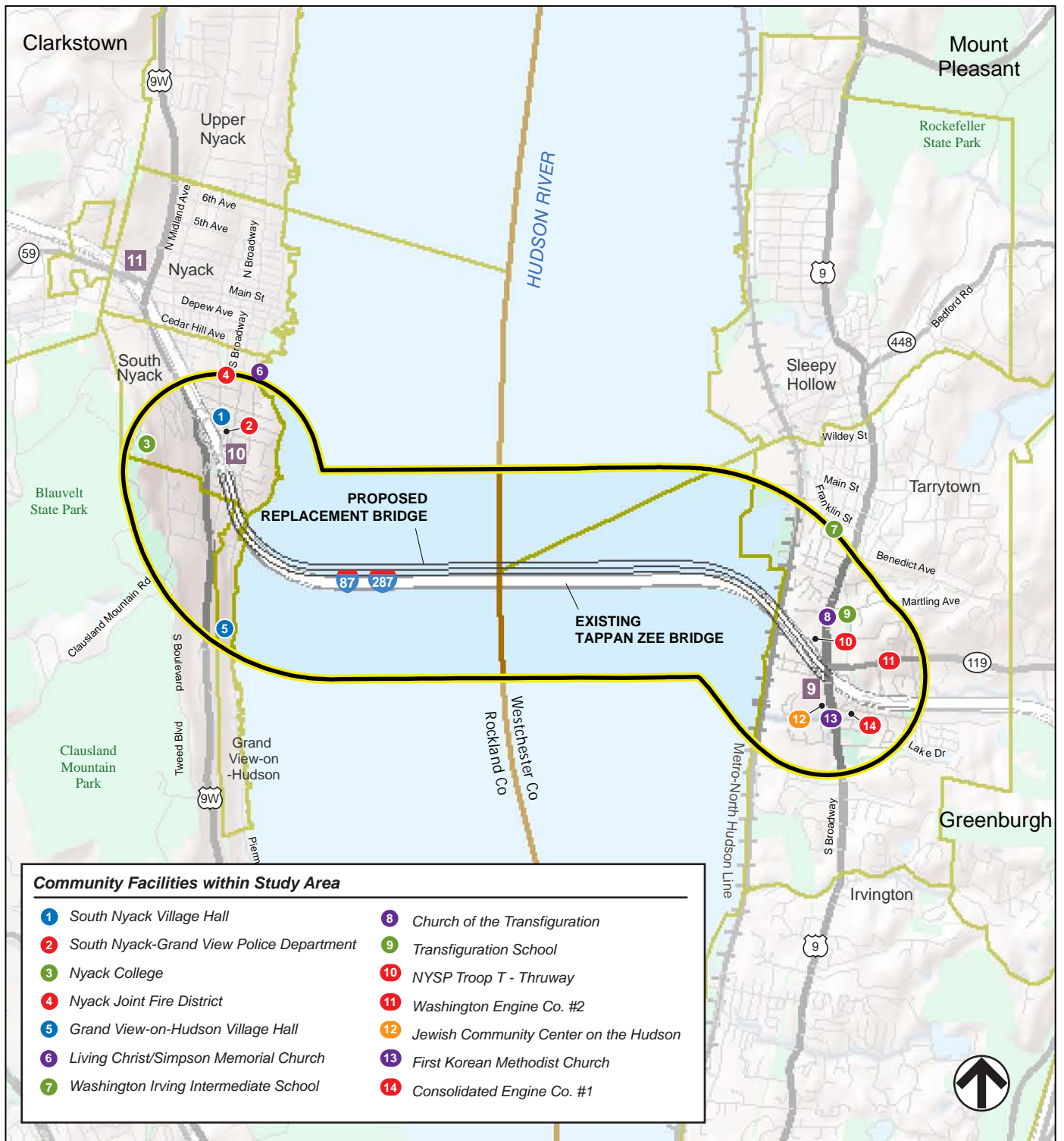
#### 5-4-7 PLANNED DEVELOPMENTS

Development projects in the corridor occur continuously. The larger projects in various stages of review that are in the vicinity of the project are listed in **Table 5-2**. These planned developments also provide input to the cumulative effects analysis found in Chapter 21, "Indirect and Cumulative Effects."









- Study Area Boundary
- Community Center/Service
- Educational Facility
- Emergency Service
- Government Facility
- Religious Facility

0 1/2 1 MILE  
SCALE

**Table 5-2  
Planned Developments Within the Study Area**

<b>Jurisdiction</b>	<b>Development Name</b>	<b>Development Description</b>	<b>Status</b>
Tarrytown	Crescent Associates	60,000 sq. ft., 3-story office building, with accessory parking to join two existing office buildings; located opposite Interstate 87/287 ramps at 155 White Plains Road	Approved
Tarrytown	Jewish Community Center on the Hudson (JCC)	The JCC purchased the adjacent property, the former GM Training Center at 425 South Broadway, and plans to expand with the creation of a new campus on the two properties (approximately 75,000 square feet on 6.6 acres). The campus is located 500 feet south of the New York State Interstate 87/287 on Route 9.	Approved
Tarrytown	Jardim Estates	Subdivision of up to 50 single family residences	In approvals process

## **5-5 ENVIRONMENTAL EFFECTS**

This section presents the analysis of potential impacts to existing land use, zoning, land use policies, neighborhood character, and community facilities and services from the No Build Alternative and the project alternatives.

### **5-5-1 NO BUILD ALTERNATIVE**

The No Build Alternative would involve capital improvements to the Tappan Zee Bridge in the study area. As such, no project-related influences on land use and planning in the study area would occur, and no land would be acquired for right-of-way purposes. Existing residential land use patterns and trends would be maintained, subject to future modification by individual jurisdictions. Under the No Build Alternative, no impacts to community facilities would result, and the improvements associated with the Replacement Bridge Alternative would not occur.

However, other existing trends and economic forces may influence changes within the study area in the No Build Alternative. For example, projected traffic growth on Interstate 87/287 and other highways would cause increased congestion throughout the transportation system. The majority of the policy documents and comprehensive plans of jurisdictions within the study area acknowledge the importance of replacing the Tappan Zee Bridge in a cost- and time-efficient manner. As such, the No Build Alternative would be inconsistent with these policies.

### **5-5-2 REPLACEMENT BRIDGE ALTERNATIVE**

The Replacement Bridge Alternative would result in the construction of a new bridge crossing over the Hudson River between Rockland and Westchester Counties. The replacement bridge would have a similar alignment to the existing bridge and would maximize the use of existing NYSTA right-of-way while minimizing effects on existing highway infrastructure in Rockland and Westchester Counties. The Long Span and Short Span Options are not anticipated to result in separate or distinct community character impacts. As such, the potential impacts of both alternatives are analyzed together below.



**5-5-2-1 LAND USE AND NEIGHBORHOOD CHARACTER**

Land use and neighborhood character is already influenced by the presence of Interstate 87/287 in the study area. As discussed below, although some individual properties along the highway and approach to the replacement bridge would be affected by new right-of-way acquisition, these properties would primarily be distributed alongside the existing highway, resulting in a narrow band of impact (see Chapter 6, “Land Acquisition, Displacement, and Relocation,” for a description of the right-of-way impacts). Substantial reduction in the physical size of a community or neighborhood in the study area would not occur. Portions of the existing study area are already dominated by transportation-related uses. The project would not cause a substantial change in the type or intensity of land uses in the study area. However, in some locations, the project would reduce the distance between the highway and adjacent land uses.

Overall, the project would be expected to preserve and enhance the quality of life and character of the communities and neighborhoods in the study area as a result of the improvements to access, mobility, and safety as well as fewer instances of travel delays because of the addition of shoulder and emergency access (see Chapter 4, “Transportation”).

*Town of Orangetown, Rockland County*

The Town of Orangetown is not within the limits of disturbance of the project; as such, the project is not expected to adversely impact land uses within the Town of Orangetown. While some views of the Hudson River from homes within this upland portion of the study area may be expected to change, the presence of a new bridge in place of the existing Tappan Zee Bridge would not be considered an adverse change.

*Village of South Nyack, Rockland County*

The project would alter land uses within the study area in the Village of South Nyack. As discussed in Chapter 6, “Land Acquisition, Displacement, and Relocation,” 0.073 acres of the Bradford Mews Apartments parking area would be taken as fee, and 0.126 acres of land as permanent easement (PE). No structures, public parkland, or other properties would be taken as part of the project.

While this small acquisition would represent a change in land use, and the Bradford Mews Apartments would be located closer to the bridge landing than it currently is, it is not anticipated to result in any adverse land use impacts to the existing residential area as a whole. As discussed above, the existing residential area is already affected by the presence of Interstate 87/287 and the Tappan Zee Bridge landing. The minor land acquisition required to construct the project would not meaningfully alter the balance of land uses within the Village of South Nyack. In addition, the conversion of existing parking to Interstate 87/287 right-of-way would also not be considered a substantial adverse land use impact.

*Village of Grand View-on-Hudson, Rockland County*

The project would not affect land use in the Village of Grand View-on-Hudson. Interstate 87/287 would remain in a similar alignment to the existing approach, roadway, and abutment, and would be within the existing NYSTA right-of-way in the

## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

Village of Grand View-on-Hudson. The highway would be at a higher elevation than it is today, which would alter views from residences south of Interstate 87/287 (see Chapter 9, "Visual and Aesthetic Resources"). While there would be a change in views from existing residences, the presence of Interstate 87/287 and the Tappan Zee Bridge already influences the character of this area. Therefore, the project would not result in any adverse effects on land use and neighborhood character in Grand View-on-Hudson.

### *Village of Tarrytown, Westchester County*

As discussed in Chapter 6, "Land Acquisition, Displacement, and Relocation," the project would require 0.050 acres in fee and 0.084 acres in PE of lawn area associated with a multi-family residential property in the Village of Tarrytown. The roadway would be elevated over this area and would not be expected to result in any adverse land use impacts.

As further discussed in Chapter 7, "Parklands and Recreational Resources," the Replacement Bridge Alternative may require modifications to the conceptually planned route of RiverWalk due to engineering constraints beneath the bridge. However, since the Replacement Bridge Alternative would not preclude the future construction of RiverWalk, it is not considered an adverse impact.

In addition, the existing land uses within the Interstate 87/287 right-of-way at the bridge landing would continue as part of the project, but would be relocated elsewhere within the Interstate 87/287 right-of-way. These land uses include the toll plaza, maintenance operations, and a State Trooper barracks (Troop T). The relocation of these existing land uses within the same general vicinity is not considered a substantial adverse land use impact.

## **5-5-2-2 REGIONAL LAND USE PLANS AND POLICIES**

### *New York Metropolitan Transportation Council*

The project is consistent with the NYMTC 2010-2035 Regional Transportation Plan, "A Shared Vision for a Shared Future." The plan identifies the replacement of the Tappan Zee Bridge as a "Strategic Regional Investment Option." Although the 2010-2035 Regional Transportation Plan conceives of this replacement as including bus rapid transit, commuter rail components, and Interstate 87/287 corridor improvements, it specifically notes that these projects are long-term investments and "are somewhat fluid and may change over time as planning work proceeds, specific alternatives are chosen, and conditions change." The Replacement Bridge Alternative would not preclude the future integration of transit.

Since issuance of the DEIS, the Regional Transportation Plan has been amended to recommend further study of a conceptual "lid" park over Interstate 87/287 in the vicinity of Interchange 10 (Route 9W). The Replacement Bridge Alternative does not include a "lid" park; however, it would not preclude it from future development.

The Regional Transportation Plan and TIP are to be amended to include the Replacement Bridge Alternative prior to issuance of a Record of Decision.



### *Hudson River Valley Greenway Act*

The project is consistent with the regional objectives of the Hudson River Valley Greenway Act. The replacement of the Tappan Zee Bridge would be considered a regional planning project that would benefit the local and regional populations and workforce in terms of improved operational mobility and safety (see Chapter 4, “Transportation”). As reiterated in Rockland and Westchester’s respective comprehensive plans, the replacement of the Tappan Zee Bridge is critical to the economic health of the region.

In addition, specific to the Greenway programs the project includes a shared-use path that would connect pedestrians and bicyclists to the existing Hudson River Valley Greenway Trail System. As further discussed in Chapter 7, “Parklands and Recreational Resources,” the project would not result in any long-term impacts to the Hudson River Valley Greenway Water Trail. Also, as discussed above, the project would not preclude the future construction of RiverWalk beneath the replacement bridge, which is intended to become part of the Hudson River Greenway Trail System.

### *Hudson River Valley National Heritage Area Management Plan*

The Hudson River Valley National Heritage Area Management Plan does not make any specific recommendations with regards to the Tappan Zee Bridge or its replacement. Therefore, the project is not inconsistent with this regional planning document.

## **5-5-2-3 LOCAL LAND USE PLANS AND POLICIES**

### *Rockland County*

The Rockland County Comprehensive Plan was written and adopted while the EIS for the previous Tappan Zee Bridge/I-287 Corridor Project was being prepared, and makes a number of recommendations specific to that former project. As such, the inconsistencies between the current project and the Plan adopted on March 1, 2011 need to be considered in that context. Nonetheless, the Plan recognizes the importance of the Tappan Zee Bridge as a regional transportation corridor, and notes that adverse impacts could result from it not functioning properly. The project is therefore consistent with this overarching goal of replacing the Tappan Zee Bridge in a time- and cost-effective manner.

While the project does not include a BRT or HOV component, as recommended by the Plan, it would not preclude these elements from being integrated into the bridge in the future if the Tappan Zee corridor should be selected for such a project. In addition, the project would not preclude the implementation of the short-term “early action” projects detailed in the Plan (see Section 5-4-3 above). In addition, the project includes a shared-use path over the replacement Tappan Zee Bridge. This shared-use path would improve the regional pedestrian and bicycle circulation system, and is consistent with this stated goal of the Plan.

The Plan also identifies roadway traffic as the major cause of noise pollution in Rockland County, especially that from Interstate 287. The Plan encourages the use of sound barrier walls to help reduce the amount of noise that enters residential areas. Consistent with this goal, the project considers the use of noise walls to shield residential neighborhoods from the noise generated by the wider right-of-way, pursuant to federal regulations and state policy.

## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

Consistent with the Plan, the project would propose to relocate falcon-nesting boxes in consultation with NYSDEC. As noted in the Plan, the use of falcon-nesting boxes on the Tappan Zee Bridge provides falcons with a high perch, and the falcons keep away pigeons, which can be detrimental to the paint, and consequently, the steel on the bridge. Therefore, the project anticipates the continuation of this program

In addition, the Plan recommends examining the feasibility of re-connecting parkland or open space properties that were divided by the original construction of Interstate 87/287 in the 1950s, such as the “lid” park suggested by residents of the Village of South Nyack in the Village’s Draft Comprehensive Plan. The Plan states that the “addition of new green space will help mitigate potential negative impacts associated with the Interstate 287/Tappan Zee Bridge Corridor.” While a “lid” park is not included as part of the project, the project would not preclude the future development of such a park. Furthermore, the Replacement Bridge Alternative includes a four-acre shared-use path for pedestrians and bicyclists to cross the Hudson River. This shared-use path would serve as new open space, and would increase the public’s access to trail systems and bicycle routes on both sides of the Hudson River, offering new direct and on-street connections to existing systems.

Finally, the Plan supports funding for a Rockland County visitor center and countywide signage and way-finding program for major cultural and historic destinations and identifies the Tappan Zee Bridge as a gateway location where a visitor center could be located. While a visitor center is not proposed as part of the project, the project would not preclude the future development of a visitor center in the vicinity of the bridge landing.

### **Town of Orangetown, Rockland County**

The Town of Orangetown Comprehensive Plan considers the construction of an additional rail line, either as part of the West Shore Line or as a component of the Tappan Zee Bridge, to alleviate traffic and congestion and encourage increased mass transit use within the county and the New York area. While the project does not include a rail line, it does not preclude a rail line from being constructed in the future. Therefore, the project does not conflict with the goals and objectives of the Town of Orangetown Comprehensive Plan.

### **Village of South Nyack, Rockland County**

The Village of South Nyack’s Draft Comprehensive Plan includes specific considerations with regard to the replacement of the Tappan Zee Bridge. The Village’s Draft Comprehensive Plan suggests leveraging future redevelopment of the Tappan Zee Bridge and New York State Thruway to maximize economic development opportunities; advocating the return of New York State land to the Village around Interchange 10 (Route 9W) or use of that land by Village community services; investigating charging the New York State Thruway Authority a “hosting fee” for the bridge; developing a “lid” park; and encouraging bike and pedestrian route linkages.

The Replacement Bridge Alternative would not involve any changes to Interchange 10 (Route 9W), and would not substantially alter traffic flows from their existing condition. The New York State Thruway Authority does not intend to transfer ownership of its land in the vicinity of Interchange 10 (Route 9W) at this time, nor will it consider a “hosting

fee.” In addition, the project does not contemplate a “lid” park over the Interstate 87/287 right-of-way. The project does, however, include a shared-use path that will facilitate pedestrian and bicycle access to the existing Greenway Trail System in the Village of South Nyack.

#### Village of Grand View-on-Hudson, Rockland County

The Village of Grand View-on-Hudson does not have a comprehensive master plan or other planning documents.

#### *Westchester County*

The project is consistent with the goals and objectives of “Westchester 2025” and “Patterns for Westchester: The Land and the People.” The project would replace the Tappan Zee Bridge, which is an integral infrastructure component of Westchester County and the region.

As stated in the county’s Plan, the Tappan Zee Bridge provides a critical connection between Rockland and Westchester Counties. The replacement of the bridge in a time- and cost-effective manner is consistent with the goals of Westchester 2025, as this transportation corridor is important to the economic well being of the region. While the project would not facilitate Westchester County’s public transit objectives, the project would not preclude the integration of a transit component in the future.

#### Village Of Tarrytown, Westchester County

The Village of Tarrytown Comprehensive Plan was written and adopted while the previous EIS for the Tappan Zee Bridge/I-287 Corridor was being prepared for the more extensive corridor project. While the Comprehensive Plan references that project, the recommendations regarding the replacement of the Tappan Zee Bridge are broader. As such, the project is generally consistent with the goals of the Village of Tarrytown Comprehensive Plan.

Unlike the previous proposal which included Interstate 87/287 corridor improvements, the limits of disturbance for the project would not extend as far as the Old Croton Aqueduct Trailway. Therefore, although the project does not include an overpass for the Old Croton Aqueduct Trailway, it does not preclude one from being constructed in the future. As such, it does not conflict with that goal of the Village of Tarrytown Comprehensive Plan.

As previously discussed, while the project anticipates that most segments of the RiverWalk would be constructed by others, it could accommodate the proposed RiverWalk under the replacement Tappan Zee Bridge. Therefore, it does not conflict with that goal of the Village of Tarrytown Comprehensive Plan.

Consistent with the Village of Tarrytown Comprehensive Plan, the National Environmental Policy Act (NEPA) review of the project will include a public comment period during which the Village of Tarrytown and other interested agencies may comment on the project to ensure that potential impacts on Village neighborhoods are minimized.

**Tappan Zee Hudson River Crossing Project**  
**Environmental Impact Statement**

---

**5-5-2-4 CRITICAL ENVIRONMENTAL AREAS**

Approximately 200 linear feet of Interstate 87/287 traverses the northeast corner of the Upper Grandview and Environs CEA. This section of Interstate 87/287 is located within the limits of construction of the Replacement Bridge Alternative. However, since this portion of the Upper Grandview and Environs CEA is already affected by the presence of Interstate 87/287, the project would not substantially alter existing conditions or the character of this CEA. Furthermore, the construction of the Replacement Bridge Alternative would not involve blasting or substantial tree removal within the Upper Grandview and Environs CEA.

Potential impacts to the Hudson River as a natural resource that supports fish and wildlife habitat—an area of important aesthetic or scenic quality; a social, cultural, and historic resource; and a recreational resource—have been thoroughly analyzed in this FEIS. With the mitigation measures proposed as part of the Replacement Bridge Alternative, any substantial impacts to the Hudson River CEA would be offset or minimized. The limits of construction of the Replacement Bridge Alternative would affect the Village of South Nyack designated CEA 1 – Hudson River Area. The Replacement Bridge Alternative would be designed to protect, preserve, and enhance the aesthetic and scenic qualities of the Hudson River to the greatest extent practicable. In addition, the shared-use path would offer the public new views of the Hudson River. The Replacement Bridge Alternative would not involve the taking of any historic properties or structures, other than the existing bridge, which would be demolished. The construction of the Replacement Bridge Alternative would protect the ecological, geological and hydrological sensitivity of the Hudson River through measures further discussed in Chapters 14, 15, 16, and 18 of this FEIS. Therefore, adverse impacts to the CEA 1 – Hudson River Area are not anticipated.

The CEA 2 – Run-Off Area, the boundary of which is South Broadway, would not fall within the limits of construction, but is considered substantially contiguous to the project site. Since no air quality impacts are projected to result from the Replacement Bridge Alternative; noise walls would be utilized to mitigate noise levels; and stormwater runoff would be treated in accordance with all applicable New York State standards, no substantial impacts are anticipated to the CEA 2 – Run-Off Area. CEA 3 – Mountainous Area is not substantially contiguous to the project area; as such, no impacts are anticipated to this CEA.

**5-5-2-5 ZONING**

The replacement of the Tappan Zee Bridge and any associated improvements as part of a federal highway is exempt from local zoning. Therefore, the project is not required to comply with any local Zoning Codes.

While these municipalities may choose to assign the Interstate 87/287 right-of-way a local zoning district designation, the widening of Interstate 87/287, the construction of any bridge elements, and the construction of any related improvements would not be subject to local land use controls. In addition, although the conversion of land to a transportation use through the proposed right-of-way acquisitions would affect specific properties, it would not change the zoning of these properties. The ability to apply a zoning district designation to properties within the municipality's boundaries would not

change. As such, minor changes in land use as a result of the project would not change or affect the broad patterns of zoning within the study area.

### **5-5-3 COMMUNITY FACILITIES AND SERVICES**

The project would not introduce any new residents or permanent workers to the surrounding area. Therefore, demand on educational facilities, religious facilities and community centers, government facilities, and emergency services would not be expected to increase as a result of the project.

The operation of the bridge would not result in the displacement of any existing community facilities. Any temporary displacement of community facilities will be discussed in Chapter 18, "Construction Impacts."

The project would improve the structural and operational redundancy of the bridge making it less likely the bridge would sustain damage from extreme natural events such as hurricanes and earthquakes or man-made events such as fires or vessel collision. By improving the structural and operational redundancies, the bridge would not be as vulnerable to damage from such events, and as a consequence, traffic disruption or full closure to facilitate repairs would be less likely.

While the proposed shared-use path would add new pedestrian and bicycle users to the bridge, these users are not anticipated to substantially increase the need for community facilities. As further discussed in Chapter 4, "Transportation," as required by the Design-Build Contract Documents (Part 3 § 21.3), the design of the shared-use path would conform with the Americans with Disabilities Act Design Guidelines and AASHTO design guidelines. Specific design issues, such as traffic control at the access to the shared-use path from Smith Avenue and Route 9 (South Broadway) and signage and pavement markings on the shared-use path would be addressed as part of the design-build process. While on the bridge, the shared-use path users would be separated from Interstate 87/287 traffic at all times.

The proposed shared-use path is anticipated to serve primarily as a transportation route rather than as a destination park. As it would not include recreational amenities such as restrooms, concessions, or parking, its primary users are expected to be visitors from the local communities and recreational bicyclists. The shared-use path would not begin or end within parklands on either side of the Hudson River, nor would it directly connect with recreational trail systems. While some emergency service response to Shared-Use Path users can be anticipated, the demand for these services would be offset by the decreased demand resulting from the safety improvements to the vehicular use of the bridge discussed below. In addition, the existing Tappan Zee Bridge does not meet current NYSDOT bridge and highway standards with respect to lane and shoulder widths. Some of the lanes are narrower than the standard 12-foot lane and the bridge has no shoulders. Lacking shoulders or dedicated emergency lanes, responders must use the heavily traveled general traffic lanes to reach the accident scene. This delays response times considerably. Since damaged or disabled vehicles cannot be moved to a shoulder, they block the general traffic lanes until they can be removed from the bridge, resulting in lengthy traffic delays. Heavy congestion on the existing bridge and its lack of emergency lanes and shoulders currently adversely affects emergency calls and response times between Rockland and Westchester Counties.

## **Tappan Zee Hudson River Crossing Project Environmental Impact Statement**

---

The project would address the deficiencies of the existing bridge described above and would have the following beneficial effects on community facilities and services:

- Provide for a robust and redundant structure to survive extreme natural events, including earthquakes and hurricanes;
- Provide for a robust and redundant structure to survive extreme manmade events, including fires, vessel collisions, vehicular overloads, and vehicular accidents;
- Ensure compliance with NYSTA operational requirements including the installation of emergency turnarounds on the bridge; and
- Improve transportation operations and safety on the crossing by:
  - Ensuring compliance of horizontal and vertical geometry with current engineering design standards, as practicable;
  - Providing for horizontal geometry that maximizes sight distances;
  - Providing for vertical geometry that minimizes grade changes;
  - Providing for standard, 12-foot traffic lanes;
  - Providing for adequate separation of eastbound and westbound traffic;
  - Providing for shoulders that meet current engineering design standards;
  - Eliminating reversible traffic lanes;
  - Providing for security infrastructure to monitor bridge operations; and
  - Providing for improved emergency response.

In summary, the operation of the project would not result in any increase in demand or permanent displacement of any community facilities, and no adverse impacts to community facilities or services would occur as a result of the project. In addition, the structural, operational, mobility, safety, and security improvements associated with the project would have a beneficial impact on safety and emergency response times.

### **5-6 MITIGATION**

Since the Replacement Bridge Alternative would not result in any adverse impacts on community character, no mitigation measures are required.