# Modernization of Briarcliff-Peekskill Parkway Engineering Scoping Study

# **Draft Executive Summary**

### January 2024



www.dot.ny.gov/briarcliffpeekskillparkwayreport

### **Study Overview**

The New York State Department of Transportation (NYSDOT) conducted an Engineering Scoping Study to examine a six-mile segment of the Briarcliff-Peekskill Parkway (BPP) between the junction with Route 9 to the north and the Taconic State Parkway to the south.

The study examined the corridor in a broad context, developed and analyzed concept level transportation alternatives, and proposed recommendations to modernize the facility. The feasible concepts recommended by the study may be advanced for further evaluation by future engineering projects. Funding has not yet been identified for future engineering or construction phases.

The BPP, designated State Route 9A, in the study area connects the Saw Mill River Parkway, Taconic State Parkway and Route 100 in Hawthorne to Route 9 in Ossining. Although the roadway has retained the low-clearance, stone arch overpasses, and limited sight lines of a traditional parkway, it does not have any commercial traffic restrictions typically associated with parkways.



# Study Overview, continued

Today, the heavily congested BPP carries approximately 50,000 passenger and commercial vehicles per day through several congested at-grade signalized intersections.

This study was conducted in cooperation with the Transportation Partnering Committee (TPC) with involvement from the community and other stakeholders. Public outreach and community involvement were integral to each step of the study's development process. The goal of the public outreach process was to obtain valuable input from committee members, key stakeholders and the public. The public outreach process included an Elected Officials Kick-off Meeting, the formation of a TPC, two Public Workshops, and the creation of a study website. More specifically the public outreach process included:

**Elected Officials Meeting** – A meeting was held on March 28, 2023, to introduce the study team and provide background information on the corridor and the history of the study's origin. The study schedule and public outreach process were also discussed.

**Transportation Partnering Committee (TPC) Meetings** – The TPC was a working committee comprised of representatives from the Town of Ossining, the Town of Mount Pleasant, the Village of Ossining, the Village of Briarcliff Manor, Westchester County, and other State government representatives. A series of six TPC meetings were held throughout the study period so committee members could provide timely feedback and guidance.

**Public Workshops** - Two Public Workshops were also advertised and held to collect valuable information from the public. The first of two scheduled Public Workshops was held on June 21, 2023, to introduce the public to the study and gain input on existing conditions, needs and establish a corridor vision and corridor goals. The second public workshop was held on November 16, 2023, where feasible transportation concepts were presented to attendees using group exercises that allowed attendees to actively discuss ideas and provide meaningful feedback. The following page provides an overview of the public process and study development process:

### **Study Development Process**

Step 1: Existing Conditions & Corridor Vision & Goals May – July 2023, Public Workshop I June 21, 2023

Step 2: Feasible Concepts Development & Evaluated July – Jan. 2024, Public Workshop II Nov. 16, 2023

Step 3: Final Study Recommendations January – February 2024

# Step 1—Corridor Vision and Transportation Goals

During the study's Step 1, the study team, working with the TPC and the public developed a corridor vision statement and corridor transportation goals to help guide the development and screening of transportation concepts developed as part of the study. The corridor vision statement and transportation goals are as follows:

#### **Corridor Vision Statement**

The Briarcliff-Peekskill Parkway in northern Westchester County will support safe, efficient, reliable, and environmentally sound movement of people and goods, minimizing diversions to secondary roadways while maintaining its aesthetic values. Regional and local trips will enjoy a modern, sustainable, and well-maintained facility that promotes strong community cohesion and accommodates all roadway users including pedestrians and bicyclists traversing the corridor

# Step 1—Corridor Vision and Transportation Goals

#### **Corridor Transportation Goals:**

- Goal 1: Improve overall corridor safety for all users.
- Goal 2: Support efficient and safe community connections traversing the parkway.
- Goal 3: Improve traffic operations, providing a reliable system that supports efficient movement of vehicles, pedestrians, cyclists, and transit operations.
- Goal 4: Modernize roadway.
- Goal 5: Maintain parkway aesthetics and minimize environmental/social impacts.

### Step 2—Feasible Concepts

During the study's Step 2, several feasible and practical transportation concepts that reasonably met the screening criteria were developed around the corridor goals. A comprehensive evaluation was conducted in cooperation with the TPC, corridor stakeholders, and the public.

Feasible concepts were developed for the BPP mainline and five intersecting roadway areas:

- Stormytown Road-Hawkes Avenue-Route 134
- Ryder Road-Route 133
- Chappaqua Road
- North State Road
- Route 100-Pleasantville Road

The following pages provide an overview of the feasible concepts developed during the study and vetted by the TPC

and the public. The following concepts require further evaluation as part of subsequent projects through more in-depth engineering, environmental review, and continued public involvement at the regional, community and neighborhood levels.



#### **BPP** Mainline

The feasible concept for the Mainline incorporated several roadway improvements that include:

- Replacing the existing box beam median guiderail with a concrete median barrier.
- Widening the mainline travel lanes in both directions, providing consistent shoulders, and installing typical "parkway" traversable curbs at the edge of widened shoulders.
- Replacing existing low-clearance bridges spanning the BPP to allow trucks to safely use the right lane.
- Reconstructing the pavement to provide a durable, long-lasting riding surface.
- Cleaning or replacing/resizing all roadside drainage features to provide optimized stormwater conveyance and management.

These changes would help upgrade the roadway to meet today's standards and provide safer and more efficient travel throughout the corridor while maintaining the parkway aesthetic.



**Rendering of BPP Mainline Modernization** 

#### **Stormytown Road-Hawkes Avenue-Route 134**

Two concepts were developed for this section of the BPP.

In the first concept, a new bridge crossing over the BPP would be placed at Stormytown Road. For northbound BPP connections, motorists would use the new bridge and bridge ramps. Southbound BPP access to and from Stormytown Road would remain similar to existing condition utilizing right turns in and right turns out only. The deceleration and acceleration lanes would be maximized to provide safer operation.

The second concept would be very similar to the above concept, maintaining the exact proposed layout for Stormytown and peanut configuration at Hawkes Avenue. This concept, however, would utilize a single roundabout placed on the southbound side of the BPP with direct ramps placed on the northbound side. Also, this concept would divide the two-way Route 134 between Hawkes Avenue and Croton Dam Road into two separate one-way service roads that run on alternate sides of the BPP. This option would simplify the Route 134 through movements and would provide direct access from northbound BPP to Route 134. Access from Croton Dam Road to northbound BPP would use the ramp at the roundabout at Hawkes Avenue.

Both concepts met the corridor goals, as evaluated by the TPC and the public. The following pages include graphics of the concepts and results of the public evaluation conducted during the November 16, 2023 public workshop.

#### **Stormytown Road-Hawkes Avenue-Route 134**



**Existing Route 134 Concept** 

#### **Stormytown Road-Hawkes Avenue-Route 134**



**New Service Road Concept** 

#### **Stormytown Road-Hawkes Avenue-Route 134**

CONCEPT Stormytown/Hawkes Ave/Rt 134 Briarcliff-Peekskill Parkway					Goal #1 Improve overall corridor safety for all users.		nd sing	Goal #3 Improve traffic operations, providing a reliable system that supports efficient movement of vehicles, pedestrians and cyclists, and transit operations.		Goal #4 Modernize roadway.		Goal #5 Maintain parkway aesthetics and minimize environmental /social impacts.
		the goals, li	sted above, met by Strategies at Chappaqua Road?									
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Goal #1	Goal #2	Goa	l #3	Goal #4	Goal #5	Goal #1		Goal #2	Goa	#3	Goal #4	Goal #5
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ADV	ANTAGES			DISADVAN	TAGES	ADVANTAGES			DISADVANTAGES			
<ul> <li>Eliminates signal on parkway.</li> <li>Improves overall safety.</li> <li>Provides full access to the parkway.</li> </ul>			• SB • Rig im	Route 134 to NB ght of way and en pacts	<ul> <li>Eliminates signal on parkway.</li> <li>Improves overall safety.</li> <li>Provides full access to the parkway.</li> </ul>				<ul> <li>High cost to build</li> <li>Significant right of way and environmental impacts</li> </ul>			

Concept met the corridor goal:

: HIGH indicated by: MEDIUM indicated by: Low indicated by:



**Public Input Results** 

#### **Ryder Road-Route 133**

Two concepts were developed for this section of the BPP.

The first concept would maintain the existing access ramps in their current configuration but would improve operations and safety by extending the deceleration and acceleration lengths to meet modern standards. By replacing the existing bridge at Ryder Road, a full deceleration lane would be placed on the southbound BPP prior to the Ryder Road exit ramp. This would allow motorists to adequately slow down before approaching the existing ramp curve. Similarly, the BPP bridge over Route 133 would be widened to carry a full deceleration lane prior to the existing ramp curve at the southbound Route 133 exit. Acceleration and deceleration lane improvements would be included for the remaining ramps to Route 133.

The second option would create a Split Diamond Interchange at Route 133 and Ryder Road, creating full access to both crossing roads by way of one-way service roads. To access northbound BPP, motorists from Route 133 would utilize the one-way service road to the Ryder Road intersection, then take the new northbound ramp from Ryder Road. To access southbound BPP, motorists from Ryder Road would utilize the southbound service road to the Route 133 intersection, then take the new southbound ramp from Route 133. This option would simplify access to and from the mainline and would create safer entrance/exit ramps. Access from the nearby local street, Belle Avenue, would be modified to connect into the one-way southbound service road. Motorists that would need to access Belle Avenue from northbound BPP would use the service roads to and from Ryder Road. This would potentially decrease the amount of bypass traffic using Belle Avenue. This concept would require retaining walls for the new ramps to minimize impacts to the adjacent properties.

Both concepts generally met the corridor goals, as evaluated by the TPC and the public. Although residents of the Belle Avenue neighborhood expressed concern with the second option resulting in increased through traffic in their neighborhood. The following pages include graphics of the concepts and results of the public evaluation.

#### **Ryder Road-Route 133**



**Maintain Existing Access Concept** 

Briarcliff—Peekskill Parkway Modernization—Engineering Scoping Study

### Feasible Concepts

#### **Ryder Road-Route 133**



**Split Diamond Interchange Concept** 

#### Ryder Road—Route 133

Bria	CON Route arcliff-Peek	CEPT • <b>133</b> skill Park	way	Goal #1 Improve overall corridor safety for all users.	Goal #2 Support efficient and safe community connections traversing the parkway.	and Improve traffic operations, providing a reliable system that supports efficient movement of vehicles, pedestrians and cyclists, and transit operations.		Goal #4 Modernize roadway.		Goal #5 Maintain parkway aesthetics and minimize environmental /social mpacts.	
		How a	re the goals, li Ci	sted above, met rcle High, Mediu	by Strategies m or Low belo	at Chappaqu w	ua Road	?			
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ADV	ANTAGES		DISADVAN	TAGES	ADVA		DISADVANTAGES				
<ul> <li>Improves safety by extending on and off lanes on the parkway.</li> <li>Maintains existing access.</li> <li>Minimizes Right of Way impacts.</li> </ul>			Retains sharp exit cu	irves.	<ul> <li>Provides full ac</li> <li>Improves safet curve</li> </ul>	cess at Ryder Roa y by eliminating s	ad sharp	<ul> <li>Higher</li> <li>Right of</li> </ul>	cost f way and er	vironmental impacts	

Concept met the corridor goal: HIGH indicated by: MEDIUM indicated by:



**Public Input Results** 

#### Chappaqua Road

Two concepts were developed for Chappaqua Road, one with full access to the BPP and one with no access to the BPP.

The first concept, providing full access to the BPP would create a new bridge carrying Chappaqua Road over the BPP and construct a full diamond interchange with full ramp access to the BPP. Retaining walls would be required for the new approach ramps. To minimize visual impacts to adjacent properties, the profile of the BPP could be lowered to minimize the height of the walls. The advantage of this concept would be to allow driver access to Chappaqua Road, which decreases demand on the local roadway system, Pleasantville Road, and on the nearby North State Road interchange.

The second concept, providing no access would create a bridge and eliminate direct access to and from BPP. The BPP mainline will operate more efficiently without an additional access point at Chappaqua Road. Motorists would no longer exit at Chappaqua Road and use Pleasantville Road to bypass backups on BPP, thus eliminating through traffic within the community. Further, the neighborhood would see less overall volume as traffic would be diverted to North State and Route 133 for access to the BPP. Although the overall detoured distance would be relatively minimal, travel times to and from this community to the BPP would need to be further studied to determine its feasibility, for the residents as well as emergency services.

The first concept retaining BPP access was found to meet corridor goals more highly by the public. The following pages include graphics of the concepts and the results of the public evaluation.

### Feasible Concepts Chappaqua Road

**Maintain Access to BPP Concept** 



### Feasible Concepts Chappaqua Road

No Access to BPP Concept



#### **Chappaqua Road**

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Goal #1	Goal #2	Goa	II #3	Goal #4	Goal #5	Goal #1	Goal #2	Goal #	#3 Goal #	:4	Goal #5	
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Concept met the corridor goal: HIGH indicated by: MEDIUM indicated by:



**Public Input Results** 

#### **North State Road**

The North State Road intersection must be grade separated to meet the corridor goals. Two concepts were developed, one concept would carry BPP over North State Road and the other concept would carry North State Road over the BPP.

The first concept would carry the BPP over North State Road utilizing a new bridge spanning a single-lane roundabout that connects North State Road with new ramps to and from the BPP. This concept would require extensive reconstruction of the mainline approaches. Multiple retaining walls would be necessary to support the new ramps and to minimize impacts to the adjacent properties.

Single-lane roundabouts would also be placed at Pleasantville/ North State Road and North State Road/Old Saw Mill River Road to eliminate traffic signals and improve pedestrian and bicycle safety and operations.

The second concept would carry North State Road over the BPP. The bridge would be designed with sufficient width to carry

sidewalks and bicycle accommodations. New ramps would be provided for full access to the BPP in each direction.

This concept would require multiple retaining walls and re-grading of the North State Road approaches to minimize the impacts to the adjacent properties. The grade changes on North State Road would require the existing access to Mrs. Green's be relocated to Old Saw Mill River Road and access to the auto body shop to be relocated to Pleasantville Road. Roundabouts are proposed at Old Saw Mill River Road and Pleasantville Road to improve traffic operations, access and safety. The access to shopping plaza from northbound BPP would be relocated to Old Saw Mill River Road similar to the first concept.

Both concepts generally met the corridor goals, as evaluated by the TPC and the public. The second concept with North State Road over the BPP was more favorably evaluated. The following pages include graphics of the concepts and results of public evaluation.

### Feasible Concepts North State Road

**BPP over North State Road Concept** 



### Feasible Concepts North State Road

North State Road over BPP Concept



#### Briarcliff—Peekskill Parkway Modernization—Engineering Scoping Study

#### **North State Road**

CONCEPT North State Road Briarcliff-Peekskill Parkway					Goal #1 Improve overall corridor safety for all users.	Goal #2 Support efficient and safe community connections traversing the parkway.	Goal #3 Improve traffic operations, providing a reliable system that supports efficient movement of vehicles, pedestrians and cyclists, and transit operations.		Goal #4 Modernize roadway.		Goal #5 Maintain parkway aesthetics and minimize environmental /social impacts.			
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	COST	: \$120	-150 Millior	ו		COST: \$80-100 Million								
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Concept met the corridor goal:



**Public Input Results** 

#### **Route 100/Pleasantville Road**

Two concepts were developed for this area.

The first concept separated northbound and southbound BPP traffic and created a roundabout to provide a central point to access all local roads. Northbound would follow the existing alignment, and southbound would be realigned to follow the existing Route 100 southbound alignment. The existing bridge carrying BPP over Route 100 would be replaced and widened and new ramps would be constructed to provide access from Pleasantville Road to the BPP and Route 100. Access at Pleasantville Road would be enhanced to allow all turning movements with a new traffic signal. The existing bridges carrying Pleasantville Road over the BPP would be replaced, and the non-standard vertical clearance issues would be eliminated. The shared-use path will follow the general alignment of southbound BPP and cross under northbound BPP, southbound BPP, and Pleasantville Road.

The second concept, developed after the Public Workshop provides access to Pleasantville Road through a new Single-Point Urban Interchange (SPUI). The mainline BPP would be shifted west to create the footprint for the new ramps and Interchange at Pleasantville Road. The existing bridge carrying Pleasantville Road over the BPP would be replaced with a wider bridge to accommodate the intersection.

Under this concept a new bridge would be constructed offline to carry the BPP over Route 100 and the shared-use path. The southbound Route 100 ramp to the northbound BPP would be removed and this connection would be made through the proposed SPUI at Pleasantville Road. The southbound BPP ramp to northbound Route 100 would be removed and this connection will be made through the SPUI at Pleasantville Road to make a U-turn to northbound BPP and Route 100

The first concept was shared with the public and generally met the corridor goals. Based on public feedback the second concept was developed. The following pages include graphics of the concepts. Briarcliff—Peekskill Parkway Modernization—Engineering Scoping Study

### **Feasible Concepts**

#### **Route 100/Pleasantville Road**

**Concept I** 



Briarcliff—Peekskill Parkway Modernization—Engineering Scoping Study

### Feasible Concepts

#### **Route 100/Pleasantville Road**

Concept II



# Study Recommendations and Next Steps

It is recommended that the transportation concepts outlined in this study move into preliminary engineering as funding becomes available.

A corridor phased approach to implementing the identified improvements is recommended due to the length of the project corridor, potential construction impacts and the required capital investment. Over the past 30 years, similar phased approaches along major state highways in the Hudson Valley have been taken, including the Taconic State Parkway and the Cross Westchester County Expressway with much success.

A phased approach provides the greatest flexibly for capital program funding and the progression of individual projects in the corridor. The principles followed for each identified potential project are to:

- Provide independent utility for function and environmental processing
- Provide value to the public
- Consider the sensitivity of construction impacts to

adjacent communities and neighborhoods

- Ensure flexibility to capitalize on future funding opportunities
- Consider complexity of the proposed project segment

The following is a recommended phasing plan for the study area to help guide future investment decisions:

**Project Phase 1** Mainline BPP from just south of the Route 134/Croton Dam Road intersection to Route 133 including replacement of the low clearance bridge at Ryder Road, including Ryder Road and Route 133 Interchange improvements. Phase I's estimated construction cost is between \$45 to \$75 million in 2024 dollars.

**Project Phase 2** Mainline BPP from south of Route 133 to Route 100 including the Chappaqua Road and North/South State Street Intersections. While this location is the most complex, it will provide the most significant improvement to the

# Study Recommendations and Next Steps

corridor operations and connectivity of adjacent communities. Phase 2's estimated construction cost is between \$110 to \$160 million in 2024 dollars.

**Project Phase 3** Mainline BPP from Route 9 to south of Route 134 Croton Dam Road including the intersections at Stormytown Road and Hawkes Ave/Route 134/Croton Dam Road. This phase will replace the existing low clearance bridge at Hawkes. Phase 3's estimated construction cost is between \$90 to \$120 million in 2024 dollars.

**Project Phase 4** Mainline BPP from the Route 9A/Route 100 merge south to the Taconic State Parkway ramps including the Route 100/Pleasantville Road interchange. Phase 4's estimated construction cost is between \$95 to \$120 million in 2024 dollars.

Each of these proposed capital improvements projects would undergo required environmental reviews in accordance with State Environmental Quality Review Act (SEQRA) and/or National Environmental Policy Act (NEPA) depending on the source of funding.

The following page illustrates the potential project areas that could be further engineered and constructed while demonstrating independent project utility.

Based on traffic safety, operational priorities, and construction impacts, a proposed phasing plan built around the mainline sections is recommended. Within these segments the low clearance bridges, interchange and intersections improvements would be included with the mainline. Including all the improvements along the mainline sections will reduce the impact of construction to the adjacent residences and communities. However, if funding is limited the interchange work could be deferred to a separate project.

The total cost for all capital improvements would vary depending on which concepts are selected to be advanced to final design and construction. The range of total investment would be somewhere between \$340 and \$475 million in 2024 dollars.

### Study Recommendations and Next Steps Potential Project Areas

