



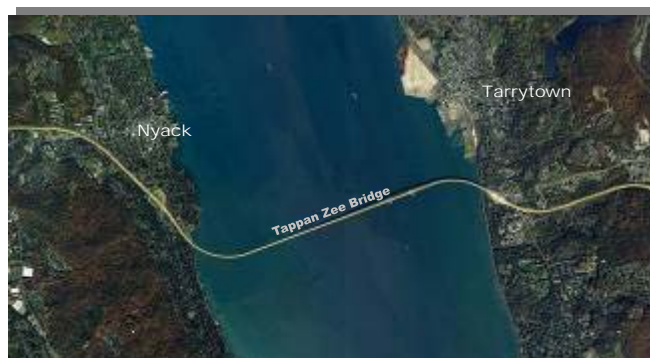
TAPPAN ZEE BRIDGE/I-287
ENVIRONMENTAL REVIEW

**New York State Department of Transportation
Metropolitan Transportation Authority Metro-North Railroad
New York State Thruway Authority**





Presentation

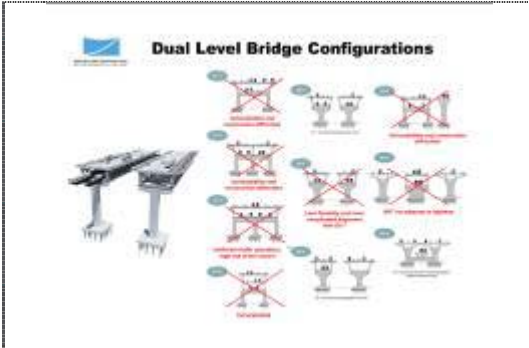
***Stakeholders' Advisory Working Group
Bridge SAWG (#17)***

Tappan Zee Bridge/I-287 Corridor Project



April 20, 2010

	<p>Slide 1. Kristine Edwards, NYSDOT, welcomed all members to the meeting and explained its structure. The meeting consisted of a presentation as well as discussion centered on several engineering drawings. Together these materials provide an update to SAWG members on the status of the bridge design development, the shared use path, and the major constraints and challenges at the Rockland and Westchester landings.</p>
	<p>Slide 2. This slide lists the topics that were covered.</p>
	<p>Slide 3: This slide shows the 6 options that remain under consideration; many options presented at earlier SAWGS have now been screened out. A report summarizing the evaluation and screening currently is under review by the Agencies, so the conclusions presented to members tonight are “draft” or “preliminary.” We have recommended 3 single-level bridge options and 3 dual-level options for further evaluation. The major differences among the single-level options relate to the placement of commuter rail transit (CRT) in the cross section and the number of piers (either 3 piers or 2 piers) in the Hudson River bottom supporting the structure. The dual-level options all locate the CRT on the bridge’s lower level; these options differ in where they locate the bus rapid transit (BRT) system. All dual-level options are expected to have 2 piers.</p>
	<p>Slide 4: This slide shows the larger set of single-level options that were identified in the earlier SAWG meetings and considered. The reasons for the elimination of those 7 with red x’s were explained. A brief explanation of why each of the 7 options was eliminated is contained on the slide.</p>



Slide 5: This slide shows the larger set of dual-level options that were identified in the earlier SAWG meetings and considered. The reasons for the elimination of those 7 with red x's were explained. A brief explanation of why each option was eliminated is contained on the slide.



Slide 6: A number of “rules” emerged that were good characteristics to start with. These structural and operational requirements helped us organize our process and allowed us to reduce the number of configuration options. The key configuration requirements were reviewed. All of the 6 options that remain are positive on these issues.



Slide 7: What were the common issues of the remaining 6 bridges? The major difference between the single-level structures is the location of CRT in the cross-section. There also is a difference in the number of piers. The major difference in the dual-level structures is the location of BRT and the structural form – note the differences between #4 and # 5 and #6.



Slide 8: We are currently evaluating the 6 bridge option configurations. We’re applying environmental, transportation, and cost criteria—which you will see in the next slide--to screen the remaining 6 options.

Engineering	Environmental	Transportation	Cost
Structure Integrity	Land Use	Capacity	Capital Cost
Utility	Displacement and Acquisitions	Operational Status in Mass Transit	Operating & Maintenance Cost
Redundancy	Historic and Archaeological Resources	Mode Split	Life Cycle Cost
Emergency Response	Accessibility & Safety/Security	Station Reliability	
Navigation	Displacement & Acquisitions	Non-Service Impact	
Construction Impacts	Competition & Water Resources	Resource Capacity	
Life Cycle	Visual Resources & Aesthetics	Transportation System Integration	

Slide 9: These are all the evaluation criteria we are using to perform the screening. The 4 boxes in white are the criteria we have already evaluated to narrow down the larger set of options to 6 configurations. It was noted that most are in the “Engineering” area. We also considered excessive displacements and acquisitions. The remaining boxes (gray) will be the basis for the next phase of evaluations of the remaining configurations.



Slide 10: The remaining bridge configuration options were presented as a reminder.



Slide 11: To further the development of the 6 options, we will be examining a list of issues that includes the various constraints and challenges at the Rockland landing. We need to consider these issues as we refine the possible configurations within the project alternatives. It was commented that there should be a provision for emergency services on the Raymond G. Esposito Trail in South Nyack.



Slide 12: We also have a list of constraints and challenges at the Westchester landing. These issues need to be considered as we further the development of the 6 options and refine the possible configurations within the project alternatives.



Slide 13: Finally, we also have a list of constraints, challenges, and/or issues on the Hudson River that we need to consider as we further develop the 6 options and refine the possible configurations within the project alternatives. In the coming weeks, we expect to add and resolve these, as well as other, issues.



Slide 15: This slide introduces the discussion on the shared use path on the replacement Tappan Zee Bridge.

The project formed a Bicycle/Pedestrian Advisory Panel consisting of representatives from bicycle groups and from the communities adjacent to the bridge. The panel members were tasked with looking at existing facilities and considering bike and pedestrian options for the replacement bridge.



Slide 16: The panel went on an optional field trip in February. The following are images from the local facilities they visited.

The first image is of the High Line in Manhattan, and shows some of the various amenities and design elements that could be added to the shared use path.



Slide 17: This image shows panel members walking along the High Line in Manhattan.



Slide 18: The panel also visited the path on the Williamsburg Bridge connecting Manhattan to Brooklyn. They examined the width, separation, and location of this shared use path over the East River.



Slide 19: This image shows one of the two paths on the Williamsburg Bridge.



Slide 20: This photo shows the area in which the Williamsburg Bridge shared use path splits into two narrower paths.



Slide 21: This is a photo of one of the narrower paths on the Williamsburg Bridge.



Slide 22: Panel members are shown on the Williamsburg Bridge path.



Slide 23: Some of the Bicycle/Pedestrian Advisory Panel discussions were reviewed for Bridge SAWG members. The panel was presented with several connection options at the Rockland landing. The first connection to the bridge's shared use path could be made at River Road, although that would require a drop of 30-50 feet (depending on whether the new bridge has a single or dual level) as well as a sizable structure to carry the bike/ped path. Another connection could be at Broadway Bridge, but there are steep slopes north of the Thruway. Therefore, it seems most reasonable to continue the shared use path to connect in the area of Interchange 10, which would lead to the Raymond G. Esposito Trail, Franklin Street, and South Broadway, with a connection on local streets to River Road. This also provided the best connection to Nyack. Based on this analysis, a path on the north side of the bridge seems to offer the best connectivity at the landings. The grades along this path would meet both AASHTO (American Association of State Highway and Transportation Officials) and ADA (Americans With Disabilities Act) standards.



Slide 24: This aerial view shows the proposed shared use path at the Westchester landing of the replacement bridge. A path on the north side of the bridge would provide access to the proposed BRT station on Broadway in Tarrytown as well as to the existing streets along Route 119 (White Plains Road) and Broadway. From Broadway, path users can travel along the street grid to Van Wart Avenue, where they may access the Westchester RiverWalk.

We did consider crossing under the toll plaza to provide more direct access to Van Wart, but this could be a potential security problem because of the proximity to the toll plaza facility. It would also pose a possible safety concern given the long tunnel under the plaza.



Slide 25: This is a rendering of the San Francisco/Oakland Bay Bridge bicycle/pedestrian path. The path, which is planned to be 15.5 foot wide was favored because it is wide enough to provide sufficient separation between bikers and pedestrians.

Based on other similar examples as well as input from the panel, it is expected that the replacement Tappan Zee Bridge will include a somewhat larger path than shown located on the north side of the new bridge.



Slide 26: This slide shows some of the proposed amenities on the Oakland Bay Bridge that we could consider when the path is designed in the future. Amenities might include special lighting fixtures, belvederes (sited to command great views), distinctive pavement, benches or other seating, railings, and interpretive signage. The path would allow sufficient separation between bicyclists and pedestrians.



Slide 27: This slide illustrating the proposed bridge options to be considered in the DEIS was displayed for reference during the discussion of the Rockland landing that followed.