



Tappan Zee Bridge / I-287 Corridor Study

Scoping Update Session Level Three Screening February 26, 27, 28, 2008



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1. Good evening. I am Michael Anderson, project director of the Tappan Zee Bridge / I – 287 Corridor Environmental Review Project. On behalf on Commissioner Astrid Glynn, Executive Director Michael Fleischer and President Peter Cannito, I want to welcome you to this scoping update session.

I am joined this evening by my colleagues from our partner agencies, Ms. Carrie Laney of the Thruway Authority and Dr. Martin Huss of the MTA/Metro North Railroad.

The purpose of this scoping update session is to refresh the record and bring new information to the cooperating / participating agencies, and to the public, for their collective consideration and comment.

This is a very significant and positive development which we believe will result in a better process and substantive progress in moving this critically important project to implementation.



Agenda

- Process – SAFETEA-LU / NEPA
- Project Schedule
- Alternatives
- Evaluation Criteria
- Path Forward

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2. The information we are bringing to your attention involves important adjustments in the federal process, adjustments which enhance public involvement and bring better efficiency to the study.

These process adjustments have made it possible to update our schedule which leads to a final record of decision in early 2010.

We have enhanced the alternatives to include some different options in transit and we have expanded the range of potential bridge rehabilitation options.

We are going to explain how we will be narrowing the range of alternatives to be considered in the DEIS.

We will also explain the steps which lead to the conclusion of the study.



Project Goals

- Improve mobility and accessibility
- Meet travel demand (include transit)
- Maintain infrastructure
- Improve safety and security
- Avoid/minimize/mitigate adverse impacts
- Provide cost-effective solutions

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3. From the beginning the project goals have been:
We are as committed to those goals as ever.



Project History

- Notice of Intent published in Dec. 2002
- Considerable work done to date
 - Initial Scoping activity (2003-2004)
 - Alternatives Analysis Study (2004-2005)
 - Engineering & Environmental (2006-2007)

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4. The study had its beginnings in the mid to late 1990s but it became a formal federal action in December 2002 when the NYSTA and MTA/Metro North, working with the FHWA and FTA, filed a notice of intent in the federal register.

Since that time a considerable amount of work has been accomplished; in 2003-2004 considerable effort was dedicated to the initial scoping. Two levels of screening were accomplished, starting with 150 ideas, leading to 6 alternatives.

In 2004 -2005 efforts were focused on the alternatives analysis report which documented the basis for the decisions leading to the six alternatives.

That study was published in January 2006.

Since, then, in 2006-2007, the team has been doing the engineering and environmental research necessary to advance the DEIS.

All of the work done since December 2002 remains a critical component of this study. All of that work is incorporated into the record moving forward.



SAFETEA-LU

- August 10, 2005 SAFTEA-LU enacted Reauthorization Federal Transportation Bill
- Major modification of federal law governing the planning and implementation of surface transportation projects
- Section 6002 features a revised environmental review process

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5. In the summer of 2005 the reauthorization of the federal transportation bill was passed.

That bill included important revisions to the process to advance federal transportation projects.

The specific part of that law is known as Section 6002.

Because this study began in 2002, before the new law, the new provisions were optional. For reason we will now explain, we have decided to implement those new procedures.



SAFETEA-LU Section 6002

Purpose:

- Streamlines the environmental review process and expedites project delivery
- Focuses on early and frequent public involvement
- Limits the potential for project delays

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6. There are three main benefits associated with 6002.

It has the effect to streamline the process by laying out explicit rules for all agencies to follow. The rules involve formal acknowledgement and timely responses by all agencies.

Public involvement is enhanced by requiring public review and comment on all aspects of the project, specifically, purpose and need, range of alternatives, agency / public coordination plan, evaluation methodologies. We are presenting these items today for your consideration and comment.

The potential for delays is reduced because agencies can no longer revisit issues after the fact. This is sometimes a problem when projects are approved but questions are raised when permits are required. This is eliminated under 6002.

We have decided to adopt 6002 for these inherently positive benefits.



Specific Project Issues

Transit System Integration Complexities:

- Operating systems, service plans, station types/locations, etc. requires extensive additional detailed design effort
- Advancing transit designs and impact analyses requires extensive community input; must also meet community planning objectives

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7. The progress of the study has been impeded for a number of reasons, most significantly due to the intricacies of the details required for the development of new transit systems.

These details take an inordinate amount of time and cover a wide range of issues. There are questions of station operations power systems, signal systems, depot locations, etc, etc.

This takes tremendous effort for any single system; we are advancing no less than 4 different transit alternatives. We are still far from that level of development.

The more important requirement is for the transit systems to be properly integrated into the communities they will serve. That level of coordination takes even more effort and time and is absolutely necessary and appropriate in order to ensure the optimum system which works best for all interests.



Specific Project Issues

Significant Timing Consequences:

- Affiliating the transit planning process with highway and bridge design negatively impacts the overall schedule
- Every year of additional effort costs \$ 100s Millions in escalation through inflation
- Federal transit funding applications require an iterative review process that negatively impacts the overall project schedule

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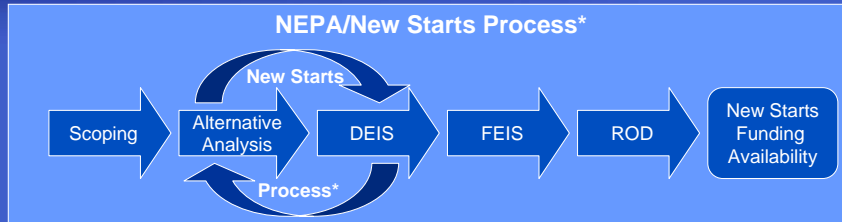
8. There are significant timing consequences. While we need to take the time to properly develop the transit design, and we need to take even more time to perfect the design based on community needs and desires, it has the unintended result of delaying the project while costs escalate significantly.

At 10% inflation, a \$10 billion project increases \$1.0 billion per year inflation in heavy construction is running much higher than 10%.

The federal process to apply for transit funding is complex and time consuming.



NEPA Strategy



- Requires an innovative approach addressing:
 - Project's complex issues (coordination with local planning entities, funding and timing)
 - National average for New Starts Projects is approximately 8 years

Tiering Transit & Highway/Bridge Elements Accomplishes this Strategy



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9. The funding application starts during the DEIS phase.

It is an iterative, time consuming process.

Nationally, an average transit aid project requires approximately 8 years from start to determination. We have yet to start that process.

Our challenge: how do we overcome these complexities of timing, costly escalation and funding?

Working with our federal partners FHWA, NAD FTA, we have decided to implement a tiered approach for advancement of the study.



Revised NEPA Approach

DEIS document and FEIS document resulting in:

- Transit Tier I ROD
 - ROD (Tier 1) identifying the preferred transit mode, termini and alignment
 - Planning level scenario
 - Sets groundwork for future Tier 2 ROD for Transit
- Highway/Bridge Tier 2 ROD
 - ROD (Tier 2) will advance Bridge and Highway work
 - Accommodate reasonable improvements identified within the Tier 1 Transit Analysis
 - Address detailed transit needs and impacts in the Highway/Bridge Corridor

Assured Advancement of Comprehensive Multi-Modal Project Preserves potential New Starts funding opportunity

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10. Tiering is not new in the federal NEPA process.

It was developed in the 1970's and has been used successfully on many complex projects.

In the tiered approach, projects are developed in tiered steps, beginning with the basic planning level decisions in tier 1, followed by the detailed fully developed design and analysis studies in tier 2.

It is almost always done sequentially, i.e. tier 1 EIS followed by tier 2 EIS.

This is unique because we will advance the tier 1 transit simultaneous with the tier 2 highway and bridge analysis.

This single document will result in a tier 1 transit record of decision and a tier 2 record of decision in early 2010.

This allows advancement of the critical bridge and highway work, which will make accommodation for the transit system while the detailed development and community coordination of the transit component advances. The tier 2 transit study will begin immediately upon receipt of the tier 1 transit record of decision. This also preserves our options for federal transit funding.

We believe that the timing of the highway bridge work in advance of the transit works ideally. It is expected that development and finalization of the transit components will be ready for implementation as work on the highway bridge reaches completion.



Reasons for Change

- Agencies Reissued Notice of Intent:
 - Addition of NYSDOT as a co-lead agency
 - Desire to adopt Section 6002
 - Need to narrow the range of Alternatives
 - Necessary phasing of bridge, highway, transit improvements through Tiering

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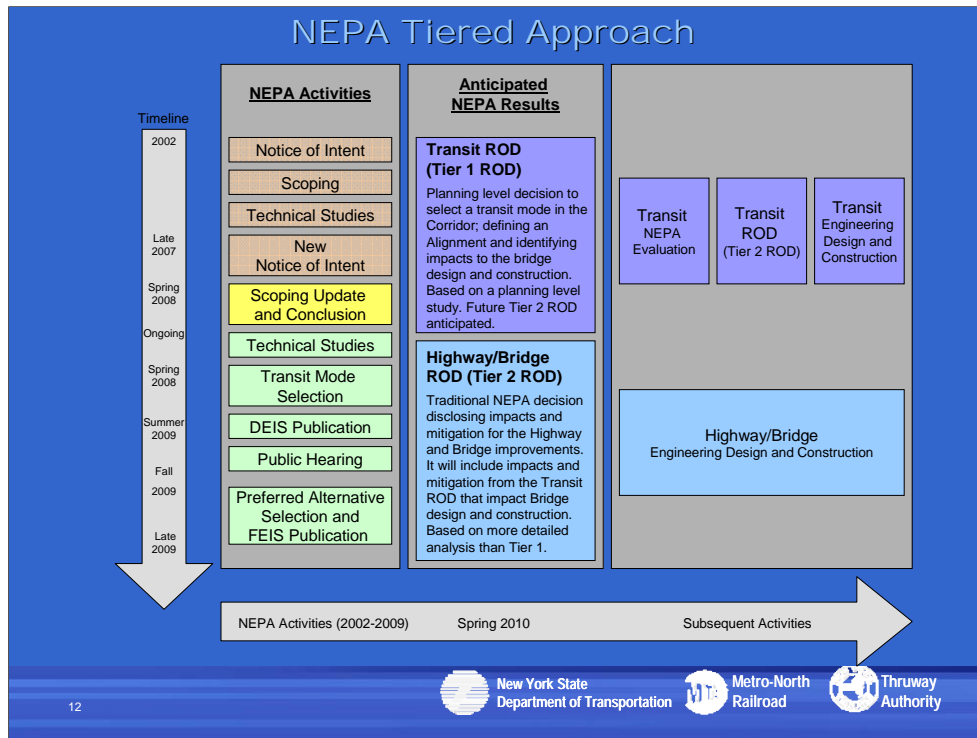


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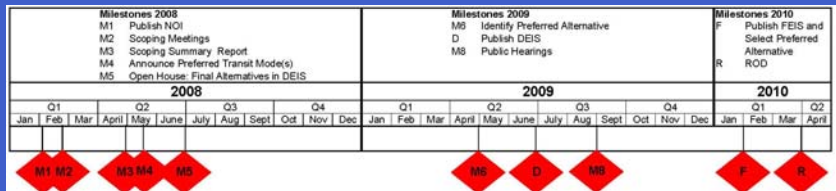
11. As previously indicated the revised NOI was published in the federal register on February 14, 2008.



12. This graphic depicts the current study effort, the issuance of records of decision, and the simultaneous highway / bridge design and construction with tier 2 transit EIS.



Project Milestones



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13. This schedule represents the project milestones that reflect the tiering approach and the regulations of SAFETEA-LU, Section 6002.

Key milestones include:

Milestone 4: the announcement of the preferred transit mode which is anticipated in may 2008.

Milestone d: the publication of the DEIS, which is anticipated in late June 2009.

Milestone 7: the public hearings for the DEIS which are anticipated to be held in early September 2009.

Milestone f: the publication of the FEIS and announcement of the selected alternative which is anticipated in late January 2010.

Milestone r: the publication of the rod which is anticipated in early April 2010.

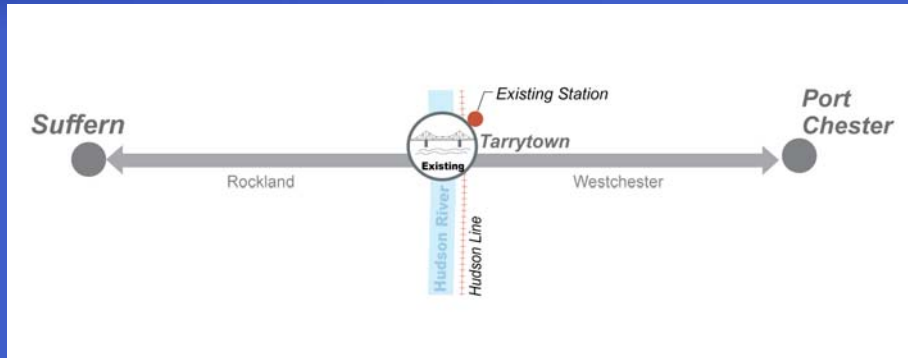
Alternatives/Options Under Consideration



14. Here is a summary of the alternatives which were delineated in the January 2006 alternatives analysis report.



No Build Alternative 1

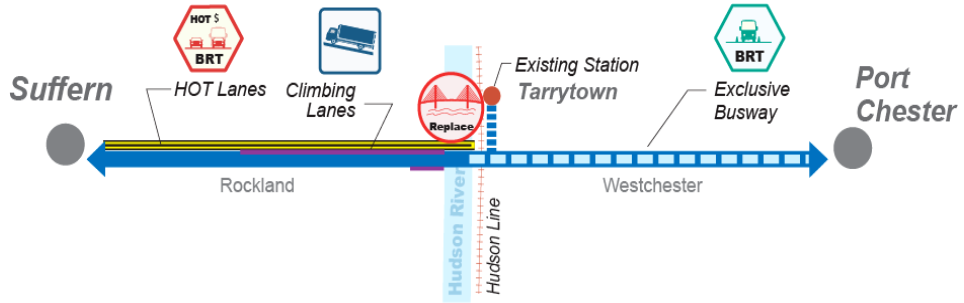




Bridge Rehab Alternative 2

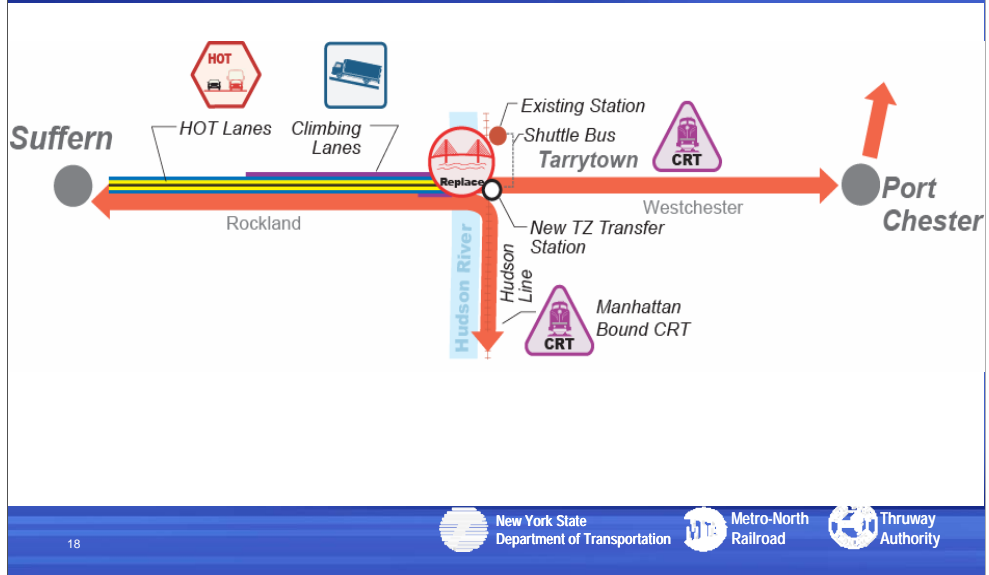


BRT Alternative 3



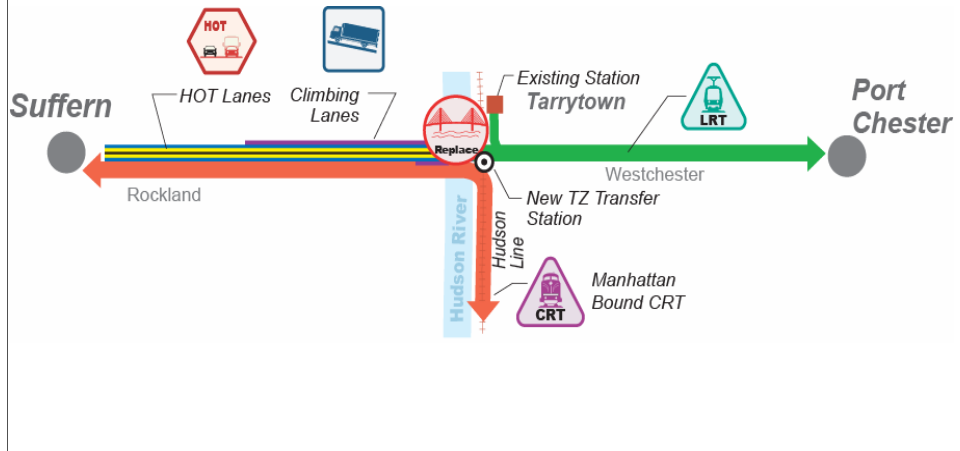


Alternative 4A Full Corridor CRT



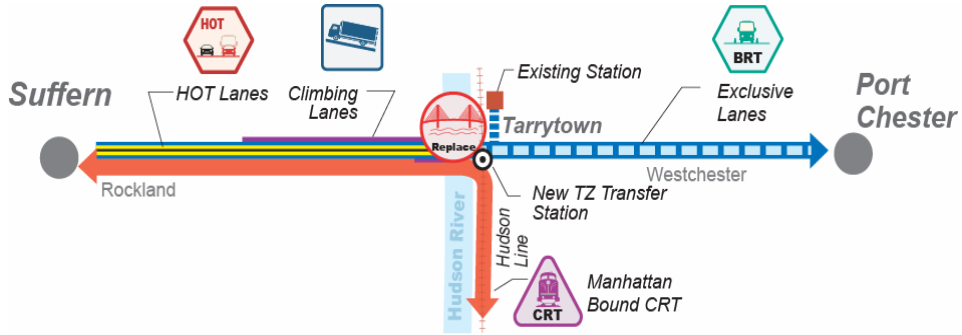


Alternative 4B Manhattan Bound CRT with LRT in Westchester





Alternative 4C Manhattan Bound CRT with BRT in Westchester



TAPPAN ZEE BRIDGE I-997 ENVIRONMENTAL REVIEW

Level 3 Transit Mode Evaluation Criteria

- **Transportation**
 - Transit Ridership
 - Roadway Congestion
 - Capacity
 - Travel Time
- **Environmental**
 - Land Use, Transit Oriented Development
 - Wetlands, Parkland, Historic/Archaeological
- **Cost**
 - Capital Costs
 - Operating Costs
 - Costs per passengers/passenger mile
 - Benefit savings

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21. We have compiled criteria to guide the selection of the appropriate transit mode.

Those detailed criteria are available for review and comment.

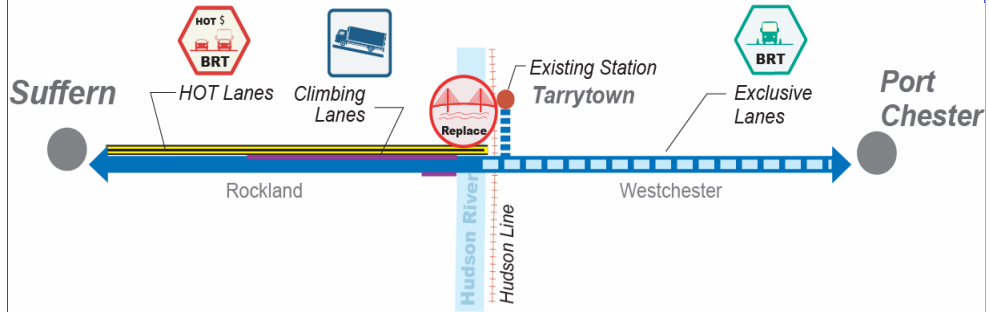
The document is the transit mode implementation plan and it is included in the update packet.

In general, the criteria follow these categories and sub issues.

The review of these alternatives includes consideration of feedback from the public. Based on that feedback and our detailed studies, we have developed 3 additional transit options which come from the general alternatives described in the alternatives analysis. They are described as follows: 3a, 3b, 4d.



Option 3A Full Corridor BRT

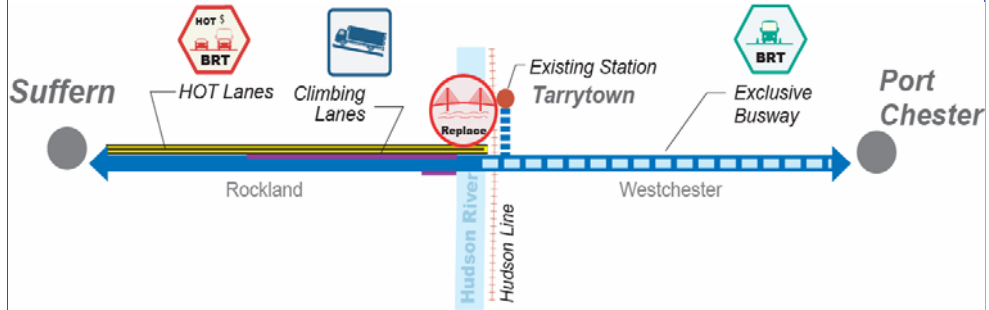


With an enhanced service plan, additional stations, extended bus lanes on Westchester Ave., and busway connection to Port Chester Station





Option 3B Full Corridor BRT

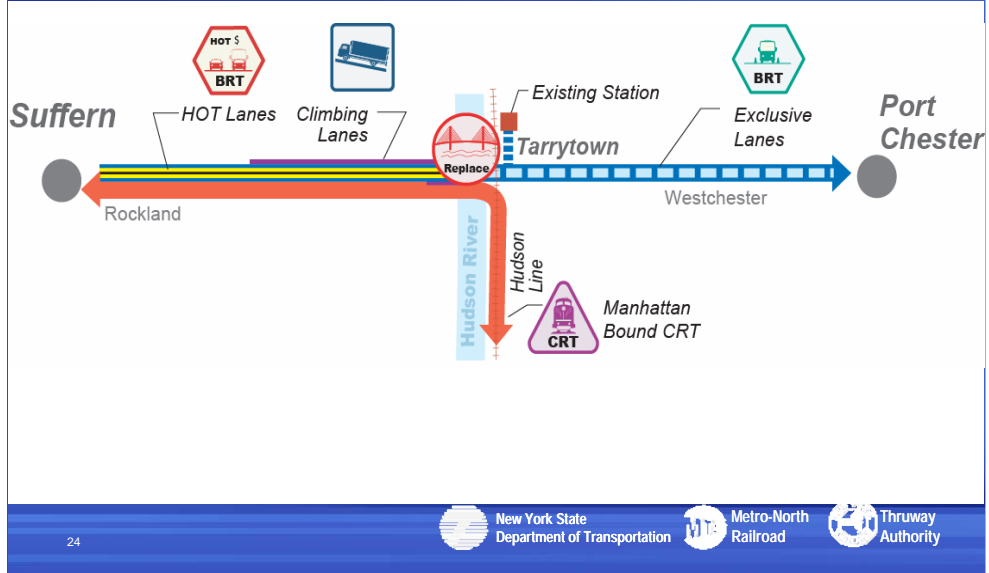


Dedicated busway in Westchester





Option 4D Manhattan Bound CRT with full corridor BRT





Finalize Transit Mode

- **Update analyses from Stage 1**
 - 2035 vs 2025
 - Other projects like ARC
- **Test some new options based on public comments**
- **Compile results based on criteria to guide decision on final mode or modes**
- **Select Transit Mode in Spring '08**

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25. The transit selection will be based upon;
Updated forecasts for the alternatives in the BPM model,
Analysis includes 3a, 3b, 4d,
Present results to executive management,
Announce transit decision in May.



Bridge Rehab/Replacement Evaluation Criteria

ENVIRONMENTAL

- River Ecosystems
- Water Resources
- Parks and Historic
- Land Use
- Acquisitions

TRANSPORTATION

- Transit Capabilities
- Congestion
- Traffic Safety
- Pedestrian / Cyclists



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26. We have compiled criteria to guide the selection of a bridge rehabilitation or replacement solution.

Those detailed criteria are available for review and comment.

The document is included in the update packet.



Bridge Rehab/Replacement Evaluation Criteria

ENGINEERING

- Structural Integrity
- Seismic Stability
- Navigation
- Construction Impacts

COST EFFECTIVENESS

- Capital cost
- Operating / Maintenance Costs
- Life Cycle Costs



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27. In general, the criteria follow these 4 categories and sub issues.

The review of these alternatives includes consideration of feedback from the public. Based on that feedback and our detailed studies, we have developed a total of 4 bridge rehabilitation options. They are described as follows:

Rehabilitation Options



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28. Top left is alternate 2 rehabilitate in kind.

This alternative could address the stability issues, but does not permit accommodation of transit of any kind and does not address significant operational problems such as lack of shoulders and movable barrier.

The next three options do meet all project goals;

Top right depict widening the existing bridge. This could accommodate BRT or LRT, but not CRT.

Lower left depicts a rehabilitated bridge plus a new supplemental bridge. The additional bridge is necessary to accommodate BRT / LRT shoulders, etc.

Lower right depicts rehabilitated bridge plus supplemental bridge which would accommodate CRT.



29. These are the three general replacement options which we shared last year in the open houses.

The top left depicts a single level bridge which accommodates BRT.

The top right depicts a single level bridge which accommodates CRT.

The lower image depicts CRT accommodated on a lower level.



Finalize Bridge Process

- Develop details of options
- Develop cost estimates
- Evaluate options against criteria
- Solicit input from various sources
- Determine Rehabilitation or Replacement
- Develop and Analyze in DEIS

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30. A detailed analysis is underway which will consider the details of the options, cost out the options, perform comparative analyses based upon aforementioned criteria.

Consult with agencies, stakeholders, et al.

Determine rehabilitation or replacement solution this spring.

Advance results for detailed development in DEIS.



Path Forward....

- Scoping Update Sessions and Comment Period
- Address agency and public comments:
 - Scoping Update Summary Report
 - Level 3 Transit Mode Analysis
 - Bridge Rehab/Replacement Criteria
- Select transit mode(s) for evaluation in DEIS
- Determine Rehabilitation or Replacement solution
- Complete DEIS per project schedule





Outcomes

- Ensures a multimodal solution
- Ensures transit is developed properly with extensive community involvement
- Ensures critical work on bridge starts sooner, mitigating cost escalations
- Ensures earlier completion and implementation of the complete project

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I thank you for your interest.

Project team members are available in the display areas to take your questions.

You can make public comment tonight, leave written comment tonight, or send us comments to the project office in Tarrytown or to our website.



Public Comment Period

Please Follow
Facilitator Instructions
For Public Commentary

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