

## **SUMMARY OF MITIGATION OF CONCERNS RAISED IN FINAL ENVIRONMENTAL IMPACT STATEMENT**

### **Summary:**

Building a new bridge is necessary to replace the aging and obsolete Tappan Zee which serves as a critical Hudson River crossing. The new bridge will be capable of supporting the future transit needs of a growing metropolitan area, reduce congestion, improve driver safety, provide jobs and secure the economic vitality of the region. As the project moves forward, we are committed to implementing measures to minimize the impact of project construction on the quality of life of nearby residents and protect the natural environment.

Over the last six months, we have received over 3,000 public comments and held public hearings that were attended by over 1,100 people.

The majority of public comments involved four areas:

- Construction Impacts: Noise, Air/Dust, Traffic
- Design Aesthetics of the New Bridge
- Impacts on River Environment
- Additional Transit Capability

Highlights of the biggest mitigation steps taken in response to concerns that were raised, include new actions we are taking to reduce the impact of construction on local communities and open up the design selection process to the public.

In mitigating these concerns, we sought to make sure requirements on the selected Design-Builder were extensive to ensure a minimum disruption to the public, especially during the construction process. A main feature of this effort will be contract requirements for extensive monitoring of the construction process in order to provide minute by minute information on activities to community residents. This includes installing 24-hour video cameras to document the project, noise monitors to measure construction noise and air quality monitors to assess emissions. The public will be able to access real-time video, construction noise levels and air quality measurements at [www.newNYBridge.com](http://www.newNYBridge.com).

Separate from the FEIS process, we are taking steps to open the design and procurement process to the maximum extent allowable by law. In order to ensure transparency and solicit public feedback, all bidders will be invited to voluntarily make a public presentation of their general design concepts subject to Federal approval. In addition, a Blue Ribbon Selection Committee will be formed with representatives from Westchester and Rockland counties to engage public input and weigh in on the final selection.

### **Mitigating Concerns on Construction Impacts: Noise, Air/Dust, Traffic**

#### **Construction Noise**

Through the installation of noise monitors in areas around the project, the public will be able to track in real-time the noise being produced by construction. Residents will be consulted on location of noise monitors before, during and after the project. They will also have 24-hour access to real-time data from the monitors on our website, [www.newNYBridge.com](http://www.newNYBridge.com).

This extensive monitoring, internal reporting, and management of noise levels will ensure that the Design-Builder does not exceed strict noise level requirements:

- Any time noise levels exceed the maximum noise permitted, the Design-Builder is required to identify them within 30 minutes of the occurrence;
- The activity causing the excess noise will be mitigated within one (1) hour of the first occurrence to ensure it's not repeated.

In addition to extensive monitoring, there will be restrictions on noise levels and work hours. Pile driving would only be generally allowed at a maximum from 7:00am – 7:00pm.

Noisy activities will be restricted on late nights during the week, Saturday mornings until midday and Sunday all day at set distances from homes or at the nearest point of the shoreline, if the work is in the water.

Temporary noise walls will be provided by the Design-Builder to shield residences from construction staging areas, platforms and construction work.

#### Air Pollution/Dust from Construction Activities

Emissions of pollutants, including particulate matter, will be controlled under a comprehensive plan including state-of-the-art exhaust controls and strict dust suppression.

The impact of the construction on air quality, including dust, has been studied in detail and is not expected to exceed federal air quality standards.

In addition, an aggressive emissions control plan will be in place during the construction period which would include vehicle idling restrictions and electric powered equipment where practical.

Residents will be consulted on location of air quality monitors before, during and after the project. They will also have 24-hour access to real-time data from the monitors at [www.newNYBridge.com](http://www.newNYBridge.com).

#### Traffic During Construction

Two important aspects of the project would minimize adverse effects on traffic on local roads as compared to projects of similar size:

- The project's location on the river provides the ability to transport much of the material by barge directly to and from the construction site.
- The use of the Thruway itself to access the work platforms for the bridge.

Therefore, traffic diversions through residential neighborhoods will be avoided and minimized to the greatest extent feasible.

All construction workers will park at designated off-site staging areas and be brought in by bus. No extra vehicles should be parked in residential neighborhoods surrounding the bridge.

### **Mitigating Concerns on Design Aesthetics of the New Bridge**

In addition to steps taken in the FEIS, the procurement process will be conducted in a way to allow for the maximum public participation and transparency allowable under the law.

Before the final bid is chosen, all bidders will be invited to voluntarily make a public presentation of their general design concepts, road operations, and qualifications, subject to Federal approval.

In addition, a Blue Ribbon Selection Committee, which will include representatives of Westchester and Rockland Counties, as well as design, transportation and environmental experts, will be appointed to make the final selection.

Once a final proposal is chosen, the panel will seek public input on several design elements including lighting, material and color. These elements may be modified based on public input.

### **Mitigating Concerns on Impacts on River Environment**

The National Marine Fisheries Service issued a biological opinion on 6/22/12 stating the project will not be likely result in jeopardy to the endangered shortnose or Atlantic sturgeon.

The project will be constructed using a number of resource protection measures and conservation measures which will minimize any adverse effects on fish such as:

- Limits on the time of year that dredging can occur in order to avoid times of peak fish migration and spawning in the river; (Dredging will only be done August 1- November 1)
- During the dredge operation, a NMFS approved species observer will be present to ensure that any sturgeon captured by the dredge are documented and released
- Use of silt curtains and cofferdams to minimize the discharge of sediments into the river
- Use of bubble curtains and other technologies to minimize acoustic effects of piles driving on the fish
- Builders will be required to use vibration techniques to install pilings in river bed whenever possible instead of much louder pile driving resulting in less impact on fish and other aquatic life

The FEIS shows the potential impacts of the underwater work were overstated in the DEIS. The actual impact will be lower than originally expected according to the NMFS.

### Navigation

The ability for boats to travel along the Hudson River would be maintained throughout the construction period.

The work zone would be clearly marked with U.S. Coast Guard approved signage and other indicators to alert boaters of potential navigation hazards.

Navigational aids, also approved by the USCG, would be implemented to guide marine traffic safely through the work zone.

Sections of the Hudson River would remain navigable for recreational boats during a substantial portion of the construction period.

Recreational vessels will be permitted to pass through areas identified for safe passage.

### **Mitigating Concerns on Additional Transit Capability**

The Replacement Bridge Alternative will be designed so that it could accommodate transit in the future. The proposed project will not preclude any future planning for, or implementation of, a mass transit system.

### Transit Cost

Bus rapid transit (BRT) for this corridor has been studied since 2002 by the Thruway, DOT and a team of transportation consultants. In 2007 a panel of international experts reviewed the concepts and recommended improvements. The full 30 mile BRT corridor study was completed in 2011.

A Bus Rapid Transit (BRT) system across the entire 30-mile corridor from Suffern to Port Chester as proposed in the previous I-287 Corridor Project would add \$4.6 to \$5.2 billion to this project's total cost.

The true cost of transit must consider, not only the cost associated with providing it on the bridge, but also the connecting service and all the facilities along the routes in Rockland and Westchester Counties. High cost items include roadway widening and likely property acquisitions necessary for dedicated bus lanes along the corridor to ensure BRT service would be reliable, with set schedules much like those of Metro North Trains commuters can count on.

Additional information can be found at the project's website [www.newNYBridge.com](http://www.newNYBridge.com).

### BRT/CRT Ready

Consideration for future transit is being incorporated into the design of the project by the addition of likely transit add-on space and extra strengthening of the structure to accept the increased loads of transit which is estimated to cost \$300 million.

### Express Bus Lanes

The new bridge could support the ability for express bus services to utilize the extra wide shoulders on the bridge. Use of the extra wide shoulders could occur during peak hours to reduce travel time across the bridge.

### Tunnel and Other Alternatives Considered

The tunnel alternative would require extensive disruption to upland communities and would cost at least double the current estimate of \$5.4 billion for the proposed project and would most likely still involve significant work in the river. The tunnel would need to be twice as long as the current length of the proposed new bridge and result in far more extensive construction in local communities on either side of the river because of the construction of entrances and exits.

The rehabilitation alternative at a minimum would be \$3-4 billion for the existing 7-lane bridge that will preclude the addition of transit.

These alternatives both fail to meet a number of critical goals and objectives of the project.

For a detailed description of the tunnel and rehabilitation alternatives, see *Alternatives Analysis for Rehabilitation and Replacement of the Tappan Zee Bridge Report* (March 2009) and *Alternatives Analysis for Hudson River Highway Crossing* (July 2007).