



New Jersey Turnpike Authority Newark Bay–Hudson County Extension (Extension) Interchanges 14 to 14A Improvements/Newark Bay Bridge Replacement Draft Environmental Impact Statement (EIS) Summary

October 11, 2023

BACKGROUND

The draft EIS was prepared in accordance with New Jersey Executive Order No. 215 and related requirements. Executive Order No. 215 requires that state agencies and authorities prepare and submit environmental impact statements to the New Jersey Department of Environmental Protection (NJDEP) for major construction projects. The goal of Executive Order No. 215 is to reduce or eliminate potential negative environmental impacts of projects initiated or funded by the State.

- o The draft EIS analysis scope and methods were coordinated with the NJDEP Office of Permitting and Project Navigation (OPPN) and with other NJDEP units through OPPN.
- o The New Jersey Turnpike Authority (NJTA) has had eight (8) coordination meetings with OPPN and other NJDEP units to date.
- o Feedback from meetings with Newark, Bayonne, and Jersey City, and Essex and Hudson Counties, also informed preparation of the draft EIS.

The planning and development for the reconstruction between Interchanges 14 to 14A (Project) stemmed from various factors.

- o 80% of the four-mile-long Extension between Interchanges 14 and 14A is on viaduct or bridge structure, notably, the nearly two-mile-long Vincent Robert Casciano Bridge (Newark Bay Bridge) and its approaches.
- o The Newark Bay Bridge and other structures were constructed circa 1956 and now carry vehicle loads that substantially exceed their design capacity. Moreover, they are approaching the end of the life of bridges constructed in the 1950s.
- o The Newark Bay Bridge and other structures require regular, extensive, and costly maintenance and rehabilitation, which cause substantial delays, inconvenience to motorists, and negative impacts on the surrounding communities.
- o Meanwhile, increasing traffic volumes from the substantial population and employment growth in the cities served by the Extension, combined with the substantial growth in port traffic, has led to rush hour breakdowns in traffic flow, or level-of-service (LOS) F conditions.

Addressing the Project Purpose and Need is a fundamental requirement of planning any transportation improvement project. The Purpose of this Project is to:

- o Improve the long-term integrity of the Extension structures between Interchanges 14 and 14A by replacing all bridges and incorporating designs and details to resolve the factors that have contributed to the deterioration of existing structures, and in so doing minimize the frequency of disruptions to the roadway's users from future bridge maintenance and repair.
- o Improve mobility for users of the Extension between Interchanges 14 and 14A by attaining LOS D or better traffic flow quality and in so doing enhance access to



communities, small businesses, and port facilities served by the Extension near the interchanges, while safely, efficiently, and sustainably accommodating growing vehicular demand on this portion of the Extension into the foreseeable future (at least the next 30 years).

The resulting Project addresses the Purpose and Need by:

- o Replacing all existing structures, including the Newark Bay Bridge, to address the underlying structural integrity issues.
- o Increasing the number of travel lanes in each direction from two (2) to four (4) to address the underlying need to provide travel lane capacity sufficient to carry existing and future traffic volumes with uncongested traffic flow.
- o Providing a 12-foot-wide left roadway shoulder area to improve safety, accommodate future maintenance, and facilitate emergency vehicle passage.

Eight (8) alternatives to the Project were considered by NJTA, including doing nothing (No Action Alternative), constructing other Newark Bay Bridge replacement designs, rehabilitating the existing structure, and employing travel lane management, as well as combinations of alternatives, but were rejected for not meeting the Purpose and Need and/or meeting current design standards or the standards governing the Newark Bay Federal navigation channel.

RESULTS AND CONCLUSIONS

Land Use

- o The Project will not encroach on, affect access to, or otherwise affect parks, community facilities, or places of worship.
- o The Project will not displace any residences or businesses.
- o The Project will not conflict with State or local plans.

Socioeconomics

- o The Project will not affect community character or community cohesion.
- o The Project is estimated to create over 25,000 jobs during its construction period.
- o The Project will support a major industry sector in the area: port and associated warehousing and distribution supply chain activities.

Environmental Justice

- o The Project lies within or near 13 Census Block Group geographies defined by NJDEP as meeting one or more Overburdened Community thresholds.
- o As a highway project, the Project is not subject to New Jersey's Environmental Justice Act. Nevertheless, the draft EIS includes analyses of the Project for relevant stressors (e.g., health and other risks) and the analyses demonstrate that the Project will not disproportionately affect the Overburdened Communities and will not create high and adverse environmental and public health impacts.
- o Residents and workers in the Overburdened Communities will benefit from the Project's improvement to mobility, safety, and community access.



Historic Architecture and Archaeology

- o The NJ Historic Preservation Office (NJHPO) has recommended the Newark Bay Bridge as meeting eligibility criteria for listing on the National Register of Historic Places.
- o As is often the case with older, long-span bridges, preserving the Bridge in place through rehabilitation is not practical. NJTA will ensure that recordation of the Bridge is performed in accordance with Historic American Bridge Survey and Historic American Engineering Record standards.
- o The Project will have an adverse effect on historic properties due to project-related excavations within the footprint of a potentially intact, buried section of the Morris Canal traversed by the Extension. The effect will be mitigated through archaeological monitoring during construction excavations that adhere to monitoring protocol approved by the NJHPO.

Visual

- o While the overall visual experience of the proposed Project over Newark Bay will be notably different from the existing one, the overall character of this transportation infrastructure would not be changed significantly. The Newark Bay Bridge replacement will become a notable visual element reinforcing the commercial and transportation character of the visual environment.

Traffic and Transportation

- o Traffic counts were obtained for the Project's analysis and traffic growth was forecast using the Federally-approved North Jersey Regional Transportation Model – Enhanced software tool. The model encompasses the major roadway and transit network of the 13-county North Jersey region, and its travel projections account for expected population and employment growth.
- o Capacity analysis using the model results shows that the Extension between Interchanges 14 and 14A currently operates at a LOS E (at capacity) or worse at LOS F (exceeds capacity): the eastbound roadway operates at LOS F in the AM and PM peak hours and the westbound roadway operates at LOS F in the AM peak hour and LOS E in the PM peak hour.
- o By 2050, traffic volumes will substantially exceed the roadway's capacity and, similar to today, result in LOS F conditions in both directions during the AM and PM peak hours.
- o The Project will eliminate congestion between Interchanges 14 and 14A, providing LOS C (free flow) and LOS D (minimally disrupted flow) conditions to 2050.
- o The Project will not permanently or adversely impact railroads, critical State, County, or local roadways, major utility systems, waterborne navigation, or navigable airspace. The Newark Bay Bridge replacement bridges will provide 6.1 feet of additional clearance over the navigation channel to account for the effects of projected sea level rise, thereby maintaining marine traffic.
- o NJTA will obtain a Bridge Permit from the U.S. Coast Guard and otherwise coordinate with owners and regulators to minimize any disruption to infrastructure and maintain service and safety during the Project's construction.



Air Quality

- o Motor vehicle emissions associated with Extension traffic and speeds were modeled using the U.S. Environmental Protection Agency's (EPA) current version of the Motor Vehicle Emission Simulator (MOVES3) model for air sensitive locations near the Extension and the results were compared with EPA's National Ambient Air Quality Standards for protecting public health.
- o The analysis demonstrates that air pollutant concentrations near the Extension following implementation of the Project will be well below the standards for those pollutants for which standards have been established: carbon monoxide and fine particulate matter.
- o Emissions of other air pollutants for which standards have not been established, mobile source air toxics (MSATs) and greenhouse gases (GHG), were also modeled. These pollutants were appropriately measured over a larger area encompassing the transportation network extending out to I-287 to capture the Project's effects. The analyses of MSAT and GHG pollutants demonstrate that the Project's effects on emissions of these pollutants will not be meaningfully different from emissions that would occur should the Project not be implemented. For example, the Project could increase GHG emissions in the area by up to 0.17%. Accordingly, no mitigation of these effects is necessary or required.
- o It is noted that the MOVES3 model has not been updated to account for recent and planned Federal and State regulations that will reduce motor vehicle emissions in the future through changes in engine technologies, e.g., zero-emissions vehicles. Consequently, the actual air pollutant emissions and concentrations with adoption of the regulations are expected to be substantially lower than the air pollutant emission levels presented in the draft EIS.
- o Aggregate emissions from equipment used to construct the Project were also analyzed and found to be below EPA *de minimis* levels.

Noise

- o The noise effects of the Project on residences and parks near the Extension were analyzed using the Federal Highway Administration's (FHWA) Transportation Noise Model and the results compared with FHWA and NJTA noise abatement criteria.
- o The existing noise barrier along the eastbound Extension in Bayonne will need to be removed to construct the Project and it will be replaced by the Project with a longer and higher noise barrier.
- o The analysis demonstrated that sound levels at other locations will not warrant construction of a noise barrier, primarily because the residences and parks in other locations are far enough away from the Extension to be impacted by its noise.

Hazardous Materials

- o Extensive records searches and analysis conducted for the draft EIS found that 22 sites in and near the Extension between Interchanges 14 and 14A are identified as areas of potential environmental concern. The contamination is generally due to extensive past and present industrial and manufacturing activities in the area surrounding the



Extension. Sites include chromate sites, Superfund site-related issues, and the presence of contaminated historic fill.

- o NJTA will retain a Licensed Site Remediation Professional (LSRP) to oversee the management of contamination encountered during construction of the Project. Coordination with and approvals from NJDEP and LSRPs who certified past remediation for impacted contaminated areas will occur prior to the disturbance, handling, and disposal of contaminated materials, and appropriate preventive measures will be undertaken to protect the safety of the public, construction workers, and the greater environment from exposure to contaminated materials.

Natural Resources

- o Field delineation of wetlands and other habitat, coordination with DEP and other agencies, and referencing of mapped data were used to identify wetlands, aquatic and terrestrial habitat (including, potential habitat of threatened and endangered species), floodplains, geology and soils, water resources, waterfront development area, and other natural resources protected by State and Federal laws in preparing the draft EIS.
- o The Project's design has sought to avoid and minimize impacts where practical. The Project's construction will have the following unavoidable permanent impacts: approximately 2.5 acres of intertidal and subtidal shallows in Newark Bay, approximately 8.9 acres of freshwater wetlands, approximately 3.2 acres of freshwater wetlands transition areas, and approximately 4.3 acres of riparian zone. NJTA will ensure that adequate compensatory mitigation is provided to address these impacts.
- o The Project will incorporate measures to avoid impacting seasonal passage of threatened and endangered fishes in Newark Bay and avoid impacting the State-endangered peregrine falcon, which has been observed nesting on the Newark Bay Bridge.
- o The Extension was constructed prior to water pollution control regulations. The Project will incorporate stormwater management measures to detain runoff from the Extension, address runoff volume and quality in accordance with regulations, and provide an improvement over the existing condition.
- o NJTA will apply for all necessary State and Federal permits to address regulatory requirements, including incorporation of impact avoidance, minimization, and mitigation measures into the Project.

OVERALL DRAFT EIS SUMMARY

- o The Project is needed to address urgent structural integrity, traffic flow, and safety issues.
- o The Project will maintain or improve community and environmental quality.
- o The Project will produce local and regional transportation and economic benefits.
- o The Project's planning and design have sought to avoid and minimize adverse impacts. The Project will mitigate unavoidable adverse impacts. The Project will comply with all regulatory requirements.
- o The Project's planning and design have been coordinated with local, State, and Federal agency representatives. Additional coordination with these agencies and the public will



continue to occur as the Project advances through design and construction to ensure that concerns are addressed.

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