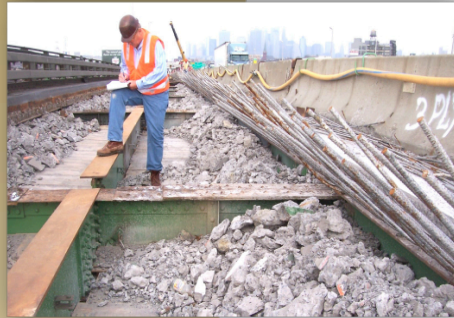
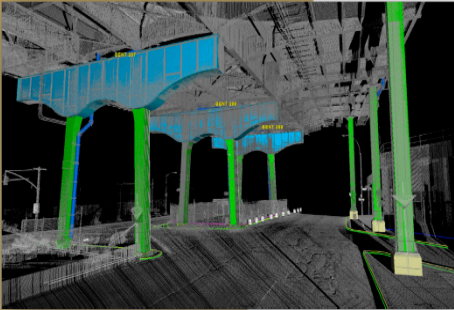


# Gowanus Expressway Viaduct Rehabilitation

Brooklyn, New York



Naik Consulting Group, P.C. (**NAIK**) has provided and is providing various engineering services for the ongoing reconstruction of the Gowanus Expressway Viaduct. Both its steel structure and roadway had not undergone a major rehabilitation in more than 40 years. The project involves reconstruction of this 6.1-mile stretch of elevated and subgrade roadway connecting the Verrazano-Narrows Bridge to the Hugh L. Carey (Brooklyn-Battery) Tunnel. The lower portion is below grade and the upper portion consists of a 3.8 mile long viaduct above 65<sup>th</sup> Street, Third Avenue, and Hamilton Avenue to the Hugh L. Carey Tunnel. **NAIK's** services included structural inspection and assistance in the design of emergency repairs. These repairs included replacing floor beams and stringers and the replacement or strengthening of deteriorated bolted, riveted and/or welded connections with new high-strength fasteners. Deck repair involved full- and partial-depth deck repairs, including deck profiling and saw cut grooving, as well as deck joint reconstruction and joint sealer replacements. Naik was also responsible for performing the overall survey, deck level, street level, and utility survey of the Brooklyn-Queens Expressway, Shore Parkway, and Prospect Parkway connectors, as well as of the viaduct itself. The work has been ongoing and is let out in "PINS".

**PIN 81(Bents 54 thru 96) Replacement of Deck Slabs:** Reconstruction of 3 lanes wide, 2100' long, or approx. 96,000 SF of existing bridge deck slabs. \$13M Construction Cost.

**PIN 19 Replacement & Rehabilitation of Superstructure Steel Framing and Concrete Decks (Bents 237 thru 297 & Bents 308 thru 313):** Replacement and rehabilitation of 5 lanes wide, 1500' long, or approx. 82,000 SF of existing steel cross girders, floor beams, stringers, columns and diaphragms, replacement of concrete decks. \$12 M Construction Cost.

**PIN 10 (Bents 54 thru 247):** Inspection & replacement/rehabilitation of existing steel cross girders, floor beams, stringers, columns, and diaphragms; replacement of concrete decks; replacement/strengthening of deteriorated bolted, riveted and/or welded connections with new high-strength fasteners; deck repairs (full or partial) including deck profiling and saw cut grooving, deck joint reconstruction, and sealer replacement. \$50M Construction Cost.

**PIN 28 Steel Stringer Repair Contract:** Design, detailing, and estimating for structural steel stringer end repairs. The repairs are located at various locations along the Gowanus Viaduct. Naik's responsibility includes the verification and applicability of the specific repair template to each repair location which includes inspection photos and field documentation. Repair groups were received by the Joint Venture in packets of approximately 20 repair locations and expected to be evaluated and produced into lucid contract repair details in a timely manner. When repair detail drawings reach the concept phase, they are expected to be uploaded into ProjectWise.

**Agency/Owner:**  
NYSDOT

**Client:**  
Joint Venture: Bechtel,  
WSP and  
URS Corporation

**Construction Cost:**  
\$75M

**Project Duration:**  
2004 - Present