New York State’s Bridge Inspection Program in Brief

New York State is home to approximately 17,450 highway bridges, about 44 percent of them owned by the State Department of Transportation (NYSDOT), roughly 50 percent owned by municipalities, and the rest owned by state and local authorities (such as the State Thruway Authority), commissions (such as the Capital District State Park Commission), and private railroads.

NYSDOT is responsible for making sure all the highway bridges in the state are inspected following state and federal mandates. NYSDOT inspects its own highway bridges, as well as highway bridges owned by localities and commissions that do not collect tolls, ultimately inspecting about 94 percent of the highway bridges in the state. Tolling authorities and commissions are responsible for their own inspections and are required to submit their inspection data to NYSDOT.

NYSDOT’s bridge inspection program meets or exceeds federal requirements and consistently receives high marks in annual Federal Highway Administration management reviews. The state requires all highway bridges to be inspected at least every two years and is one of the few states in the nation that requires bridge inspection teams to be headed by licensed professional engineers who have undergone specific training.

In New York State, bridge inspectors assess all bridge components. They are required to evaluate, assign a condition score and associated quantities, and document the condition of structural elements on a span basis, in addition to general components common to all bridges. All bridges are analyzed for their capacity to carry vehicular loads. Bridges that cannot safely carry heavy vehicles, such as some tractor trailers, are posted with weight limits. Based upon inspection and load capacity analysis, any bridge deemed unsafe gets closed. There is an established procedure for responding to inspection findings by increasing the inspection frequency, if appropriate, or reporting conditions requiring maintenance or additional review.

Bridge inspectors also assign federal ratings based on overall average condition assessments of each bridge’s three or four major components and do not require the multi-element evaluations. These federal ratings are used to identify bridges that are considered “Poor” (previously known as “Structurally Deficient”). The fact that a bridge is in poor condition does not imply that it is unsafe or likely to collapse. A poor bridge, when left open to traffic, typically requires posting for weight limits, significant maintenance and repair to remain in service and eventual rehabilitation or replacement to address deficiencies. Based upon data submitted to the FHWA in April 2017, about 10.5 percent of the highway bridges in New York State are classified as poor. As noted above, this classification does not mean the bridges are unsafe, rather that they would require repairs or modifications to restore their condition or improve their functionality. Again, if a bridge is deemed unsafe, it is closed to traffic. These statistics help highlight bridges that should be considered for further review, maintenance, repair, rehabilitation or replacement.

Bridge condition information is used to establish preventative and corrective maintenance programs, as well as bridge rehabilitation and replacement programs. Decisions on specific bridge improvements are made after detailed evaluations of inspection reports and other information, such as traffic volumes and loads.