
**BRIDGE STREET BRIDGE OVER PASSAIC RIVER,
STRUCTURE NUMBER 0700-H03**

PROJECT PURPOSE & NEED STATEMENT

The purpose of this project is to address the deficiencies of the structure carrying Bridge Street over the Passaic River in order to provide a safer and more efficient crossing for all modes of transportation.

The bridge provides an important transportation connection for residents, commuters, and students in both Essex and Hudson County. The Average Daily Traffic (ADT) volume along Bridge Street is 22,165 vehicles per day based on Year 2016 traffic count data. The bridge was built in 1913 and has a Sufficiency Rating of 48.5. The existing bridge is rated in overall poor condition due to the localized advanced material losses to the steel truss members, above and below the deck level; localized advanced material losses to end floor beams and girders in the approach spans; and holed through truss connection gusset plates in the swing span. The bridge is structurally deficient due to the condition of the superstructure, which is rated in poor condition. The existing bridge does not currently meet seismic design standards and the bridge opening duration does not meet desirable criteria. Additionally, the bottom chord of the swing span trusses are fracture critical members.

The project goals and objectives are a compendium of statements made by Essex and Hudson Counties, local elected officials, businesses and residents of the City of Newark and the Town of Harrison, and other stakeholders involved in the project. While the project may not be able to satisfy all goals and objectives listed herein, the Preferred Alternative seeks to address as many as possible. The project's goals and objectives are identified as follows:

- Provide bicycle compatibility and connectivity to the approach roadways
- Provide ADA compliant pedestrian facilities and crossings as well as connectivity to the approach roadways
- Upgrade bridge and approach roadway conditions to meet AASHTO and NJDOT safety standards including new parapets and guide rail
- Correct the controlling substandard design elements
- Avoid or minimize social, economic and environmental impacts

- Provide for earthquake resistance of the structure so as to meet current design standards
- Modernize bridge mechanical and electrical components to meet current standards
- Reduce the frequency of major bridge maintenance activities that result in detours and/or disruption of traffic flow
- Maintain traffic operations and volume with minimum disruption and delay during construction; maintain pedestrian and vehicular access to properties at all times during construction and minimize detours
- Provide accommodations for current and future users of the Passaic River in accordance with the completed Navigation Impact Report
- Address the high rate of vehicular crashes occurring at the Bridge Street/Harrison Avenue & Passaic Avenue intersection
- Address the traffic signal operating with peak hour congestion at the Bridge Street/Harrison Avenue & Passaic Avenue intersection
- The proposed improvements should be compatible with the City of Newark's Waterfront Development Project and the Passaic River Waterfront Walkway