
**KINGSLAND AVENUE BRIDGE OVER PASSAIC RIVER,
STRUCTURE NUMBER 0200-32A**

PROJECT PURPOSE & NEED STATEMENT

The purpose of this project is to address the deficiencies of the structure carrying Kingsland Avenue 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 and commuters in both Bergen and Essex County who travel to and from businesses and residential areas on both sides of the Passaic River. The Average Daily Traffic (ADT) volume along Kingsland Avenue is 20,808 vehicles per day based on Year 2016 traffic count data. The bridge was built in 1905, has a Sufficiency Rating of 24.3, and has continually needed structural and mechanical repairs in recent years. The existing bridge is rated in overall poor condition due to severe corrosion and/or loss of section of below deck truss members, gusset plates, floor beams, and stringers. The bridge is structurally deficient due to the condition of the superstructure, which is rated in poor condition; and is functionally obsolete due to inadequate deck geometry. The mechanical and span drive machinery is in poor condition; and many of the electric and control system parts do not conform or are in violation of current standards. The existing bridge does not currently meet seismic design standards and the 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 Bergen and Essex Counties, local elected officials, businesses and residents of the Townships of Nutley and Lyndhurst, 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:

- Upgrade bridge and approach roadway conditions to meet AASHTO and NJDOT safety standards including new parapets and guide rail
- Provide bicycle compatibility and connectivity to the approach roadways
- Provide ADA compliant pedestrian facilities and crossings as well as connectivity to the approach roadways

- 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 Kingsland Avenue & Riverside Avenue intersection
- Address the high rate of vehicular crashes occurring at the Park Avenue & River Road intersection
- Address the traffic signals operating with peak hour congestion at the Park Avenue and River Road intersection; the Kingsland Avenue and Riverside Avenue intersection; and at the Route 21 Ramps and Park Avenue intersection
- Address the deteriorating public boat ramp located along the river at the foot of the bridge at the northwest approach
- The proposed improvements should be compatible with the Passaic River Waterfront Walkway