



OneRail

America's future is riding on it.

The Span at Niantic River before renovation.



Success Stories in Rail Investment

Niantic River Bridge

Overview

Applying \$154 in federal funding, including approximately \$77 million in ARRA stimulus funding, Amtrak installed the new Niantic River Bridge on the Northeast Corridor to replace one of the oldest movable bridges in the country. A two-track, bascule (rolling lift) bridge, "Old Nan" was built in 1907 and had operated continuously until it was replaced in 2013.

Because it was no longer economical to repair the bridge, Amtrak fully replaced the old bridge to provide more reliable rail operations, increase train speeds on and near the bridge, and minimize delays.

Among Amtrak's most complex capital projects, the Niantic River Bridge replacement was partially funded by the American Recovery and Reinvestment Act and was successfully completed in May 2013.

RESULTS

Increased Speed and Reliability

The new Niantic River Bridge allows travel at speeds of 70 mph, up from 45 mph on the old span. The new bridge also provides greater reliability and reduces the risk of delays associated with mechanical failures.

Jobs

During peak construction, the Niantic bridge project directly employed 64 people full-time, including Amtrak and contracted work forces, with a peak of 120 workers during the height of the project.

Off site fabrication employed an average of 32 people over an 18-month period.

Funding

The total project cost to replace the Niantic River Bridge was \$154 million, with approximately \$77 million supported by the American Recovery and Reinvestment Act, and the remainder from Amtrak's federal capital funds.

A Higher Span & Broader Channel For Maritime Traffic

The new bridge broadens the navigation channel beneath the bridge from 45 ft. to 100 ft. and raises the vertical under-clearance above the water from 11.5 ft. to 16 ft. in the closed position. This allows more vessels to travel under the bridge without a bridge opening. As a result, there has been a 28% reduction in openings during the non-summer months, when the bridge is not required to stay open for boat traffic between trains.

PROJECT ELEMENTS

Construction of a new electrified two-track bascule bridge across the Niantic River between East Lyme and Waterford, Connecticut included such elements such as:

- New track alignments on the East and West approaches to the bridge;
- Expansion of the navigation channel beneath the bridge from 45 feet to 100 feet;
- Reconstructed boardwalk sections of the Niantic Bay Overlook and a replenished beach with 76,000 cubic yards of sand;
- Demolition of the old span.



The completed bridge at Niantic River.

Partners

U.S. Department of Transportation Federal Railroad Administration, Town of East Lyme, East Lyme Public Trust, Town of Waterford, and the U.S. Coast Guard

