



# Walk Bridge Replacement Project

## Movable Bridge Alternative

Environmental Footprint

The 240' Vertical Lift Span requires two new piers to be constructed in the water but outside of the existing navigation channel, resulting in the smallest environmental footprint of the alternatives analyzed in the conceptual engineering phase. Also, temporary work trestles are required to access construction of the new bridge piers in the water, modestly increasing the environmental footprint when compared with other alternatives having shorter movable span lengths and more piers.

*The environmental footprint refers to the areas of permanent construction, the limits of construction activity, and the impacts along the corridor.*

Construction

The two movable spans will be constructed off-site and float-in by barge, resulting in less disruption to the public and navigation. The areas adjacent to the construction will be affected by noise, vibration, and other impacts typically associated with heavy bridge construction, but plans are being developed to mitigate these affects. The new main span length and other design features do not require the construction (and removal) of a temporary run-around bridge to the north, reducing construction costs, construction duration, and environmental and local roadway impacts.

Rail Service

With the exception of brief, pre-planned outages, rail traffic will be maintained throughout construction with two tracks being out of service for approximately 30 months total. Post construction, the preferred alternative offers enhanced safety and reliability of rail service.

Properties

Approximately 22 properties are affected including the total acquisition of the Marina at 11 Goldstein Place, the relocation of the IMAX, and temporary impacts to the Maritime Aquarium. These properties are necessary for contractor staging and access to the river in vicinity of the Bridge.

River Navigation



*The existing swing span provides two navigation channels on either side of the center pivot pier.*

One channel will remain open during construction, except for short, discrete periods during installation of the new lift spans. Because of the new lift span pier locations, the existing swing span can continue to open and close, allowing waterway traffic to continue while the new bridge foundations and towers are constructed. Approximately one month of vertical restriction is anticipated to make each new movable span operable. Post construction, the new bridge will improve the horizontal channel alignment with the Stroffolino and I-95 bridges and will promote safer movements of both small and large waterway vessels.

Resiliency

The bridge would be built to withstand extreme weather and environmental events due to the movable span components being in secure enclosures above the railroad tracks. The 240' Vertical Lift Bridge will provide operational redundancy, with two independent movable lift spans. The bridge and its associated elements are being designed for a 100- year service life.

**A movable bridge** is a structure that can raise and lower to accommodate the passage of waterway vessels. In the closed position, the Preferred Alternative will maintain the current four-track train service that crosses the river. In the raised position, the bridge allows for boats and barges to travel along the Norwalk River like the current conditions. The movable bridge retains the existing height of the railroad tracks over the Norwalk River.

The Walk Bridge Program has selected a 240' Vertical Lift Span bridge over other movable bridge alternatives because of benefits that include shorter construction duration, lower construction risk, and shorter rail and navigational impacts.

**Estimated Construction Cost**  
*(Conceptual Design Estimate from the Environmental Assessment)*

Approx. \$425 – 460 million  
Movable bridge features represent approx. 10-15% of the total cost.

**Construction Duration**

Approx. 48 months

**Vertical Clearance**

60 feet (open) 26 feet (closed)

**Horizontal Clearance**

Approx. 170 feet

