

# Portal Bridge



## LOCATION

New Jersey

## CLIENT

STV Inc.

## COST

USD 20mm

## REPRESENTATIVE SERVICES

Rendering; 3D modelling; Construction Documents

The Portal Bridge is a critical tributary on the most heavily trafficked railway in the Western Hemisphere. Every day, it sees upwards of 200,000 passengers.

By virtue of this, it plays a critical role in the commercial operations of North America and beyond. That said, the bridge is also a relic of the Second Industrial Revolution.

Millions per year are required to ensure it remains safe and operating to code, and FSC, under the direction of STV Inc., has played a key role in ensuring the continued safety of Portal Bridge passengers.

To understand in granular detail the risks involved, FSC started with a 3D rendering of the entire system. By modelling the weights, counterweights, gearing, and fluid forces across the full range of movement, engineers could then become qualified to make the necessary adjustments to extend the service life of the asset.

It should be stated that the 3D model took over three months to build and earned awards for its' complexity and accuracy.

