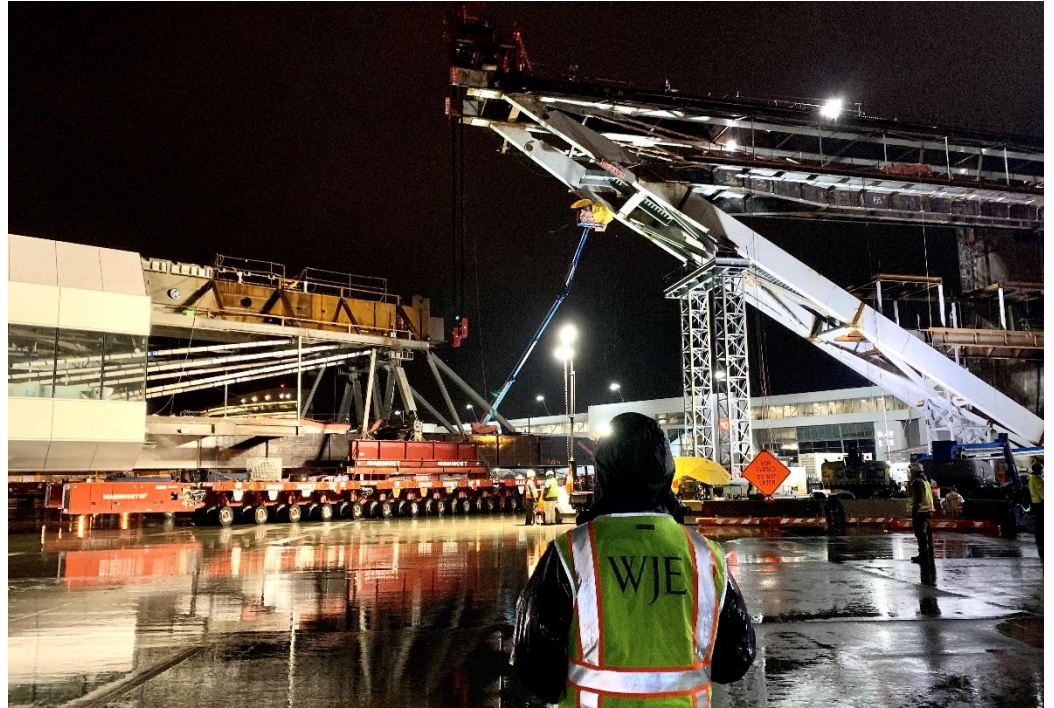




PROJECT PROFILE

IAF Pedestrian Walkway

Instrumentation and Monitoring | Seattle, WA



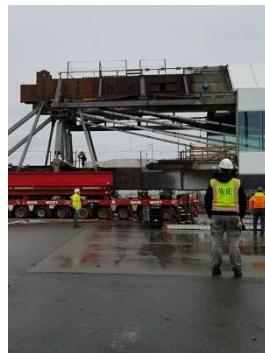
CLIENT

Clark Construction Group, LLC

BACKGROUND

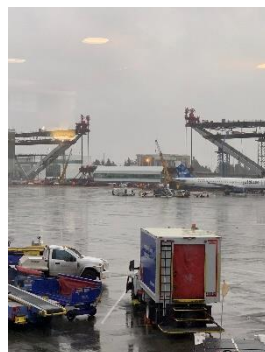
The Port of Seattle's International Arrivals Facility (IAF) Pedestrian Bridge is the world's longest structure over an active taxi line and one of the tallest structures in the region, exceeding the iconic Space Needle.

As part of the expansion of the IAF, Clark and their design-build team planned to move the center span of the pedestrian bridge across more than two miles of Seattle-Tacoma International Airport's runways. They engaged WJE to instrument and monitor the structure during its placement and haul with four self-propelled modular transporters.



SOLUTION

Working with KPFF, the project's structural engineer, WJE's team met the demands of a dynamic construction schedule and the wet and cold northwest winter weather to install more than one hundred strain gages and four tilt meters on the structure. Data was collected and transmitted via cellular modem to a custom-built website that made strain and tilt measurements nearly instantly available to the move operators, Clark, the design team, and port personnel. WJE was on-site throughout the overnight move, ready to assist with data translation and troubleshoot any potential issues with the equipment.



The center span reached its destination, and data collected by WJE gave the Port and project team confidence that the move was not detrimental to the structure and that the bridge was safe and ready to lift to its final position eighty-five feet above the Sea-Tac taxiway.

