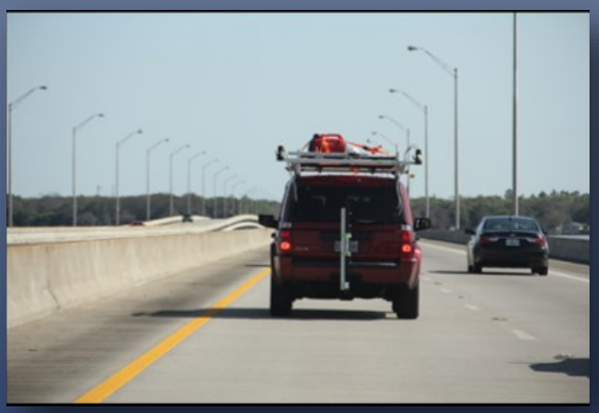
Florida Turnpike Enterprise
Bridge Inspection at Lake Jessup

SUMMARY

In 2014, NEXCO-West USA worked with the Florida Turnpike Enterprise for research purposes. Lake Jessup's bridge condition assessment was performed with the goal of evaluating NEXCO's digital imaging and infrared (IR) technology capabilities.

In order to detect surface and subsurface indications within the concrete structure for the bridge deck, railings, and beams; two different strategies were employed. The element condition state for the reinforced concrete deck was determined based on the information collected by the vehicle-mounted cameras at a speed of 50 mph. The condition state for reinforced concrete bridge railings and prestressed concrete beams were determined based on the information collected from a stationary system placed on a pontoon boat.

After collecting visual and infrared data from the bridge, the AASHTO element level condition state guidelines were used to evaluate the structure. Comparison of crack widths detected by different technologies proved the accuracy of NEXCO's high resolution digital imaging technologies.



OVERVIEW

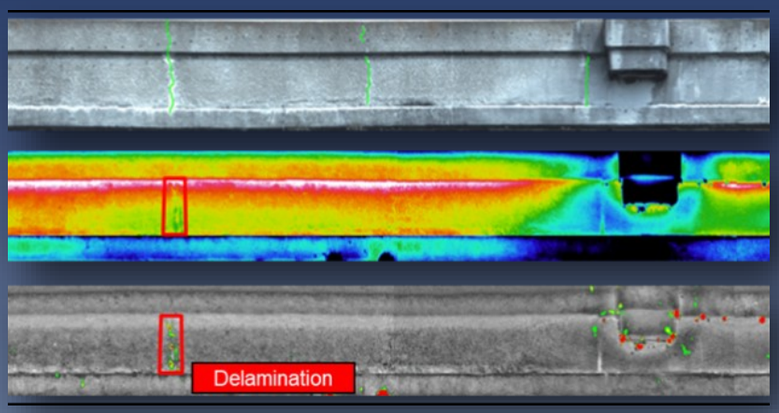
Client:
Florida Turnpike Enterprise

Contact info:
Mr. Aran M. Lessard
(954-934-1234)

Contract amount:
Research project with Florida's Turnpike Enterprise and UCF (University of Central Florida)

Quantity:
The total length of bridges is 1.5 miles.

Project period:
Jan. 2014 - Jun. 2014



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