



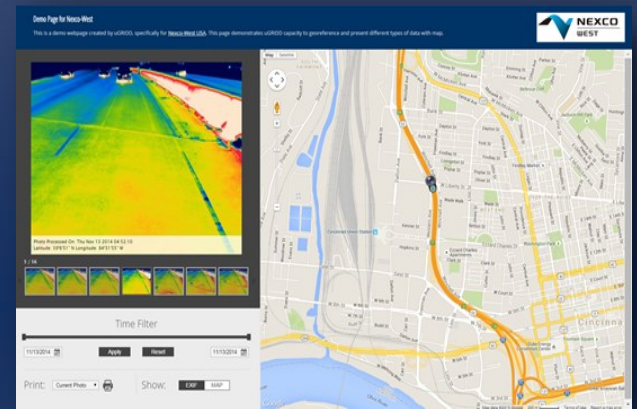
# PennDOT Infrared Bridge Deck Scanning

## SUMMARY

In 2015, NEXCO-West USA worked with the Pennsylvania Department of Transportation (PennDOT) to demonstrate the practical usage of bridge deck scanning by infrared thermography at highway speeds. The purpose of this project was to use infrared to diagnose the condition of nine bridge decks which are part of Route 283 in Lancaster, PA.

By using NEXCO's Deck Top Scanning System (DTSS), cracks, spalls, patches, and delamination could be found, all satisfying the needs for AASHTO element level inspection. A summary reporting the data collection methods, testing conditions, test results, delaminated/spalled/patched area quantities, and plan area figures of each bridge deck was developed and presented to PennDOT.

NEXCO aimed to highlight the advantages of using infrared as an efficient tool to perform both surface and sub-surface inspections while also recording accurate information about the findings. Furthermore, this project was an ideal application of the system because the nine bridges were in close proximity: all were scanned on the same day.



## OVERVIEW

**Client:**

PennDOT  
SAI Consulting Engineers, Inc

**Contact info:**

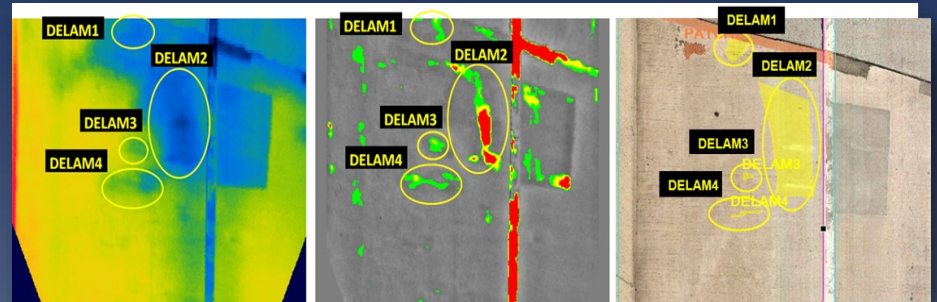
Mr. Michael D. Newman  
MNewman@saiengr.com  
(412-392-8750)

**Quantity:**

The total deck area is  
34,869 sqft.

**Project period:**

Apr. 2015 - Jun. 2015



Original Infrared Data    Processed Infrared Data    High Resolution Visual Data

**NEXCO - West USA**

**8300 Boone Blvd. Suite 260**

**Vienna, VA 22182**

**+1 (703) 734 - 0281**

**info@w-nexco-usa.com**

**www.w-nexco-usa.com**