WMATA
Viaduct Crack Mapping

SUMMARY

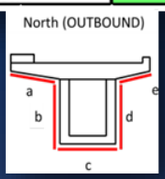
In 2015, NEXCO performed a bridge inspection using its Universal Scanning System (U3S) at the Bush Hill Viaduct owned by the Washington Metropolitan Area Transit Authority (WMATA). The objective of this project was to generate a map of deficient findings for both girders and piers. This included crack notation and quantity summaries for each target element.

The surface defects were identified using visual and infrared imagery. The dimensions were shown visually in the maps, quantified in a spreadsheet, and illustrated in bar graphs by span/element. Detailed information about the current state of the structure can be referenced to future inspections, now that the results were saved in the above format types.

With NEXCO's technology, the structural concrete was able to be safely evaluated in many locations that are very difficult to access. This project was an objective assessment that can contribute to making better cost-effective decisions for safety and serviceability of the bridge in coming years.

(North Girder)

FACE	Crack summary			
	Narrow (-1/16")	Medium (1/16"-1/8")	Wide (1/8")	Total Crack Length
NORTH OVERHANG	63	0	0	63
NORTH WEB	53	0	0	53
BOTTOM	125	0	0	125
SOUTH WEB	13	0	0	13
SOUTH OVERHANG	63	0	0	63
Total	317	0	0	317



IN/OUTBOUND	Faces	
NORTH (OUTBOUND)	a	NORTH OVERHANG
	b	NORTH WEB
	c	BOTTOM
	d	SOUTH WEB
	e	SOUTH OVERHANG

OVERVIEW

Client:

WMATA
Gannett Fleming Parsons

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Quantity:

Total target length: 965 ft.

Project period:

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