

# Nondestructive Testing (NDT) of Dallas County Bridge



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**Sponsored by:** MoDOT, UTC, RB<sup>2</sup>C



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## Objectives:

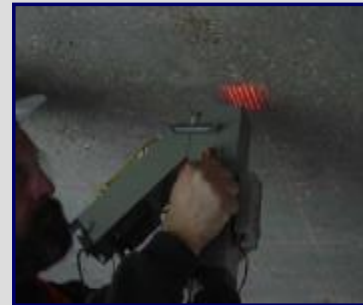
- 1) Investigation of the long-term behavior and durability of CFRP and SRP strengthened RC bridge members.

## Research Topics:

- 1) Microwave, Ultrasonic, and Echo-Impact NDT of delaminations
- 2) Surface roughness measurements
- 3) Fiber alignment measurements
- 4) Bond strength measurements
- 5) Strain measurements
- 6) Damage detection.



View of the Dallas County Bridge, MO



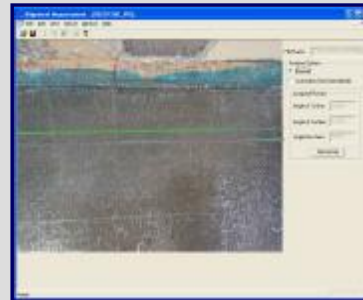
Surface Roughness Measurements



Bond Str. Measurements by Pull-out Tests



Fiber Optic Installment for Strain Measurements



Fiber Alignment Measurements



Damage Detection via Coaxial Crack Sensors



Echo-Impact NDT of Delaminations



Acousto-Ultrasonic NDT of Delaminations



Microwave NDT of Delaminations