Bridge Load Testing in Rural Michigan

House Transportation & Infrastructure Committee

March 20, 2018

SOY TRANSPORTATION
COALITION

The Soy Transportation Coalition – Farmer funded & farmer led

Established in 2007. Comprised of the Michigan Soybean Promotion Committee, 12 other state soybean organizations, the United Soybean Board, & American Soybean Association.

Our Soy Checkoff

ASA American Soybean Association

Illinois Soybean Association

Indiana Soybean Alliance

Iowa Soybean Association
Expanding Opportunities. Delivering Results.

Kansas Soybean Commission

Kentucky Soybean Board

Michigan Soybean Promotion Committee

Minnesota Soybean Growers

Missouri Soybeans

Nebraska Soybean Board

North Dakota Soybean Council
Our World Is Growing.

Ohio Soybean Council

South Dakota Soybean Research & Promotion Council

tn soybean board

Soy Transportation Coalition

Bridge Load Testing Initiative

- Working with local & state government & universities to promote rural areas having greater access to load testing technology. The greater utilization of this technology will:
  1. Reduce the likelihood of rural bridges being unnecessarily load restricted
  2. Increase the likelihood of taxpayer funding being allocated more strategically to those bridges in greatest need of repair or replacement
- STC has authorized $10,000 to facilitate bridge load testing projects in each of the 13 states (including Michigan) that comprise the organization. Total funding allocated: $130,000. Tested bridges must be located in rural areas in which soybeans are transported.

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Bridge Load Testing Initiative: Midland County, Michigan

- Project agreed to with Midland County Road Commission; Contract signed; Lifespan Technologies traveled to Midland County to conduct training on the equipment
- Total up front cost of the project: $22,000
  - Sensor kit with covers, training manuals, & shipping
  - On site training (approximately 6 hours)
  - Calibration spreadsheet (sensor kit, on-site training, etc.)
- $22,000 - $10,000 (STC contribution) = $12,000 total up front cost to Midland County

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Bridge Load Testing Initiative: Midland County, Michigan

- 3 bridges tested summer – fall of 2017; Bridge #1: 10% increase; Bridge #2: 30% increase; Bridge #3: 30% increase; Load postings on all three bridges have been removed
- Additional bridges will be tested in the county
- Officials who evaluate bridges in adjacent counties were trained; Reciprocal arrangement with equipment among adjacent counties; Bridge load testing will be accessible in additional counties

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What I want a county/state to be able to say…

- "We are providing savings to our constituents who paid for & use our rural bridges."
  - On average, weight restricted bridges tested in Midland County resulted in a 5 mile detour
    - Bridge #1: On average, 6 trucks were impacted each day & were therefore subject to the detour
      - 30 miles of detour were incurred each day (6 trucks X 5 miles)
      - 10,950 miles of detour were incurred each year (30 miles X 365 days)
      - $13,688 annual cost of the detour to affected constituents (10,950 miles X $1.25 cost per mile)
    - Bridge #2: On average, 13 trucks were impacted each day
      - 65 miles of detour were incurred each day (13 trucks X 5 miles)
      - 23,725 miles of detour were incurred each year (65 miles X 365 days)
      - $29,656 annual cost of the detour to affected constituents (23,725 miles X $1.25 cost per mile)

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