IMPACT OF ELEMENT LEVEL INSPECTION ON COUNTIES

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OHIO BRIDGE OWNERSHIP
28,200 bridges
Bridges Posted, Closed or SD

- Counties: 78%
- DOT: 14%
- Municipalities: 7%
- Other State: 1%

Legend:
- Counties
- DOT
- Municipalities
- Other State
COUNTY BRIDGE REPLACEMENT

# per year

![Bar chart showing current and recommended number of bridge replacements per year. Current: 175, Recommended: 280.](chart.png)
COUNTY POSITION on
ELEMENT LEVEL INSPECTION

Element Level inspection is not necessary, not beneficial, and too costly for local entities.
2011 AASHTO Guide Manual for Bridge Element Inspection (BEM):

Introduction:

“Bridge owners nationwide have recognized the benefits of detailed condition assessments through the use of the raw inspection information, expanded performance measures, and bridge management system deterioration forecasting and evaluation.”
BEM:

“The goal of this manual is to completely capture the condition of bridges in a simple way that can be standardized across the nation while providing the flexibility to be adapted to both large and small agency settings.”
BEM:

“This manual is not intended to supplant proper training or the exercise of engineering judgment by the inspector or professional engineer.”
Current County inspections exceed NBIS

1. All Bridges are inspected or reviewed by a PE (by state law).

2. Inspections done annually by state law, (not every 2 years). This means a PE checks each bridge each year.

3. Engineer in charge of inspection, is also involved in budgeting, thereby using firsthand knowledge of his bridges and their problems to assign funding where it is needed.
The best action for each bridge, considered alone, is not necessarily the best action for the bridge system when faced with funding constraints. … Bridge engineers, administrators, and public officials have acknowledged the need for new analytical methods and procedures to assess the current and future conditions of bridges and to determine the best possible allocation of funds within a system of bridges among various types of bridge maintenance, repair, rehabilitation, and replacement choices. “
MBE:

“BMS helps engineers and decision-makers determine the best action to take on long- and short-term capital improvement and maintenance programs in the face of fiscal constraints. It enables the optimum or near-optimum use of funding by enabling decision-makers to understand the essential trade-offs concerning large numbers of bridges.”
COST:

1. Element Level inspection estimated to cost $22 million in first year of data collection

2. Counties spend average $60 million per year statewide. (175 county bridges replaced per year)

3. First year of data collection counties would lose 1/3 of our bridge program, approximately 65 bridges would not be built

4. Result would be a Sacrifice in bridge safety from reduction in bridge replacements
SUMMARY:

Element Level inspection does not fit the county bridge management system.