

# 2013 Midwest Bridge Preservation Partnership Indianapolis, Indiana

Balancing Preservation with Realistic  
Strategies: (When Preservation is No  
Longer Effective)



**Not Enough Funds**

# Example of Where Preservation Activity is Warranted

Bridges built in 80's, small portion of expansion joint leaking, NBI ratings for deck, superstructure, and substructure are still 7 or more which is considered to be good condition



**Only one bay is leaking**



**Armoring needs to be replaced**

# **Bridges Built in 80's**

**Recommended Preservation activities:  
Seal Joints, apply deck sealer, washing  
and painting as needed**

- (1) Epoxy rebar and prior sealer application  
(Bridge deck life projected to last over 50  
years without repair)**
- (2) No functional issues**
- (3) No strength issues**
- (4) High ADTT**
- (5) Long detour length**

**Note epoxy / sealer policy started in 1980**

# Example of Where Preservation Activity is not Warranted

Bridges which have various combinations of functional issues (vertical and horizontal clearances), metal fatigue, strength, and poor condition (section loss).



**Limited clearances**



**Metal fatigue cracks due to square coping**

# Problem Bridges

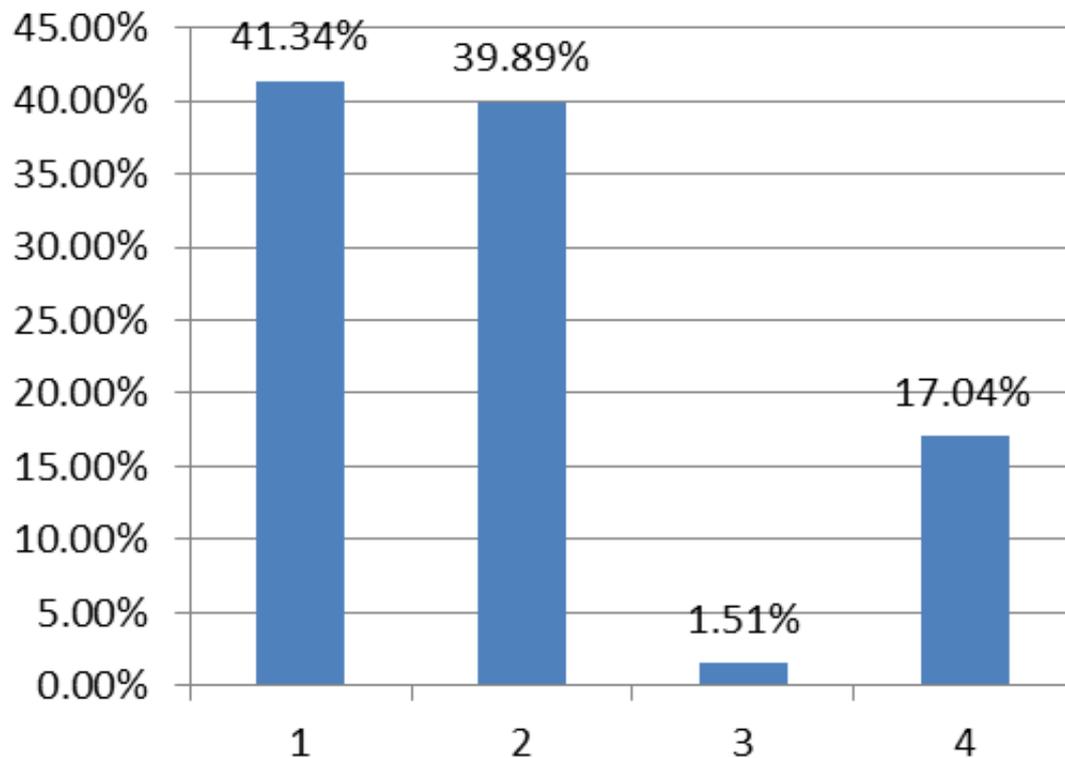
Recommended Preservation activities:

**NONE: Replace**

- (1) Numerous deck patches**
- (2) Vertical and/or horizontal clearance issues**
- (3) Strength issues**
- (4) Metal Fatigue**
- (5) Condition issues (section loss)**

# Expansion Joints on Bridges Built in the 80's

## Expansion Joints Built in 80's



PONTIS condition  
state 1 is the best

■ PONTIS  
Condition  
State

**Due to under reporting, We estimate that as many as 60% of the joints could be leaking.**



# Dilemma: Funding is targeting Structurally Deficient Bridges

- (1) Delaying preservation activities on bridges built in the 80's places beam ends and substructure elements at risk**
- (2) Doing preservation activities on structurally deficient bridges is ineffective and a waste of funds (replacement or rehabilitation is preferred to preservation)**
- (3) There is a need to Balance Preservation needs with Realistic Strategies with rehabilitation and replacement – Funding is Limited**



# Discussion

## How does your State address joints?