

# **Upgrading Bridge Durability - Protective Coatings for Concrete Structures**

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# Innovation

- Design
- Materials
- Construction



# How do we manage risk?

## Corrosion Protection



# How do we inspect for corrosion?

- Before we have to do extensive repair -



# Challenges

- Design Life.....

What is the target??

- Aging Infrastructure

Anybody got a spare \$1.7 Trillion??



# Basic Concrete Coating Technologies

- Waterproofing
- Sealers
- Thick Film Barrier Coatings

Maintenance issues

Value??

# Engineered Concrete Coating Technologies

- Breathable Waterborne Epoxies
- Polyureas
- Polyurethanes

Application to 'Green' Concrete

UV Stability

Elongation

Variable Application Thickness

Zero VOCs

# Coordinated Evaluation Effort

- **AASHTO**

- Building on the current successful steel coatings evaluation program, within NTPEP, will launch a testing program for Concrete Coatings in 2012.





# Questions?

