

Moving Bridge Painting Into The 21st Century

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Why Do We Need To Move?

- New Focus on Bridge Preservation
 - Painting is recognized as a preservation action
- Increasing bridge painting needs
- No new/added funding
- Emerging issues
 - Changes in DOT workforce
 - Reduction in skilled craftsmen
- Promising new technologies
- We need to use new approaches and technologies to move bridge painting into the 21st Century

TECHNICAL ISSUES

PRESENT

- Lists of Approved Materials
- Approved Products
- Commodity Materials

FUTURE

- High Performance Coatings
- Designed Coating Systems



TECHNICAL ISSUES

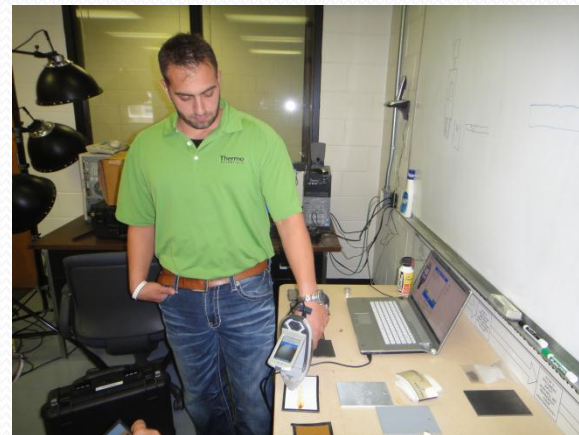
PRESENT

- Traditional Tools
 - Replica Tape
 - Soluble Salt Methods
 - Film Thickness Gages



FUTURE

- Emerging Technology
 - x-ray fluorescence
 - FTIR
 - Thermography
 - 3-D Optical Scanning



PROGRAMMATIC ISSUES

PRESENT

- Standardized painting practice (one approach fits all)



FUTURE

- Designed bridge coatings practice (customized for each bridge location)



PROGRAMMATIC ISSUES

PRESENT

- Bridge painting as a treatment

FUTURE

- Bridge painting as an element to be preserved (by washing and spot/zone painting)

PROGRAMMATIC ISSUES

PRESENT

- Focus on painting bridge steel

FUTURE

- Paint reinforced and pre-stressed concrete



PROGRAMMATIC ISSUES

PRESENT

- Reliance on state forces for inspections

FUTURE

- Use of 3rd party inspectors as DOT inspection personnel (to get qualified people)

PROGRAMMATIC ISSUES

PRESENT

- Conventional QC/QA

FUTURE

- Self-inspection, mutual 3rd party, auditing

PROGRAMMATIC ISSUES

PRESENT

- Contractor qualifications primarily tied to bonding capacity

FUTURE

- Contractor/worker qualifications & certifications, work history with DOT

PROGRAMATIC ISSUES

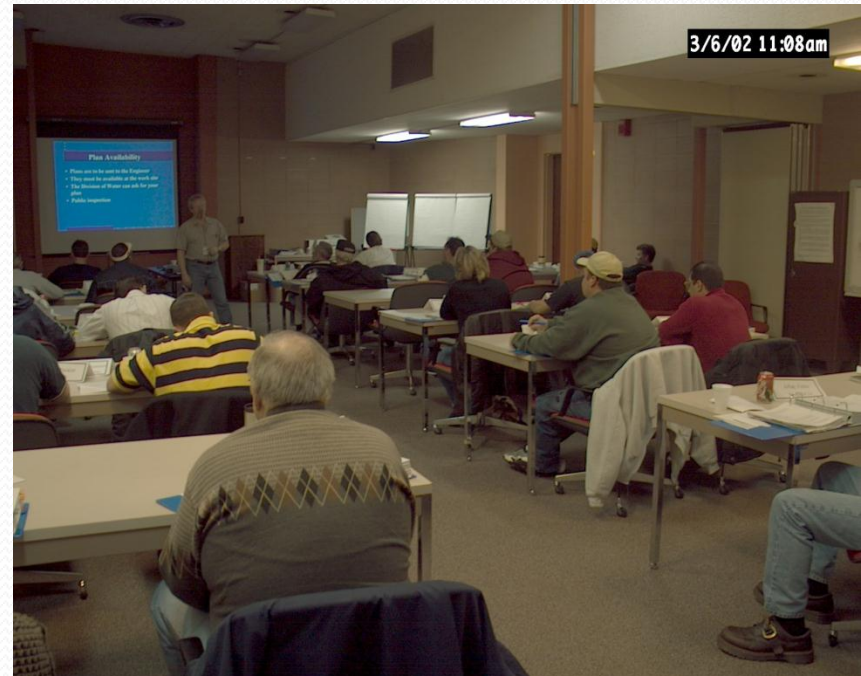
PRESENT

- NACE/SSPC Inspector certifications



FUTURE

- DOT specification-procedure specific inspection qualifications



PROGRAMMATIC ISSUES

PRESENT

- DOT divisions (e.g. Construction, Maintenance, Materials, Environmental) working in silos

FUTURE

- DOT multi-disciplinary paint teams

PROGRAMMATIC ISSUES

PRESENT

- Each DOT acting alone relative to painting issues

FUTURE

- National/regional paint committees, teams, working groups of multiple DOTs

PROGRAMMATIC ISSUES

PRESENT

- DOTs passive with technical societies, vendors, regulatory agencies

FUTURE

- DOTs proactively engaging technical societies, vendors and regulatory agencies

LEGISLATIVE ISSUES

PRESENT

- Low Bid Contracting

FUTURE

- Design-build, A+B, warranty, reliability based contracting

LEGISLATIVE ISSUES

PRESENT

- Painting budget set by “available funds”

FUTURE

- DOT actively pursuing needs based budget (to fund 20-30 year painting cycle)

Thank You

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