Bridge Preservation in Asset Management

FROM BRIDGE INSPECTION TO BRIDGE PRESERVATION

Presentation Outline

- ► FDOT Process
- ► FDOT District 2
- District 2 FARC Meeting
- Office of Maintenance Role
- Conclusions

FDOT Process

- Decentralized Varies between Districts
- ► Inspectors make Recommendations
- Feasible Action Review Committee (FARC) reviews
- Determination of Actions
 - Routine Maintenance (Preservation)
 - ► Repair (Preservation)
 - ► Rehabilitation or Replacement
- Appropriate Feedback provided to Inspectors

FDOT Work Order Priorities

- Priority 1 Emergency Perform in 60 days
- Priority 2 Urgent Perform in 180 days
- Priority 3 Routine Perform in 365 days
- Priority 4 Informational no time limit
- Priority 4 Work Orders may be used to build contracts

FDOT District 2



D2 Northeast Florida

- ► Approximately 29 Million square feet of bridge deck
- ▶ 14 states have less bridge deck area than District 2



District 2 Stats

- ▶ 1236 State Bridges and 692 Local Government Bridges
- ► 6 Movable Bridges
- 2 Major Steel Trusses
- ▶ 1 Cable Stay Bridge
- ▶ 1 Suspension Bridge
- ▶ 1 Steel Tied Arch
- ► 6 Segmental Bridges





D2 FARC Meeting 2/23/16



FARC Members

- ▶ District Structures Maintenance Engineer
- ► Engineering Section Manager
- Bridge Inspection Supervisor
- Fixed Bridge Manager
- Movable Bridge Manager
- Consultant Inspection Program Manager



Preparation

- ► Inspection Reports and 5 year Work Program Reviewed by
 - ► Engineering Section Manager
 - Bridge Inspection Supervisor
- Agenda Created consisting of all Inspector Recommendations
 - Priority Proposed by Inspector
 - ► Inspector Recommendation
 - Relevant Inspection Notes
- Committee members review agenda prior to meeting

Inspector Recommendation Example

- Replace strip seal with pourable seal at Pier 4
- Priority 3
- ► Inspector Notes Strip Seal is leaking at Pier 4

Meeting Details

- ► Held every 2 weeks
- ▶ 9 of 18 bridge inspections had inspector recommendations
- 30 inspector recommendations

Meeting Results

- ▶ 3 recommendations were given to roadway maintenance
- No inspector priorities were changed
- ► Feedback to inspectors was required in 1 area
- 1 recommendation required additional investigation
- 1 recommendation required engineering analysis
- ▶ No Work Program (Major Repair, Rehabilitation or Replacement) needs identified

Inspector Feedback

Sealing in Some Slope Pavement Joints not required



Further Investigation Required







Engineering Review

► Spalled concrete at Pot Bearing



Possible Preventative Maintenance (PM)

- Certain recurring deficiencies may result in PM
- Accumulated Debris in deck drains or deck joints
- Schedule PM every 6 months



Office Of Maintenance Role

- Provides Budget
- Makes Policies and Procedures
- Conducts annual Quality Assessment Reviews
 - ✓ What gets measured gets done
- Provides assistance upon request

Conclusions

- Decision Making at District Level
- Involvement of Inspection and Engineering Staffs
- Good Communications between all parties

Questions?

- ► Richard I. Kerr, P.E.
- Bridge Management Inspection Engineer
- Richard.kerr@dot.state.fl.us