A Program Approach to Bridge Building

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Bridging Kentucky Overview

Major undertaking

• Improve safety and soundness of Kentucky bridges
• Focus on protecting current structures
• State, county and municipal bridges
Program Overview

Significant impact

• Estimated $700 million over six years
• Rehabilitate, repair, or replace more than 1,000 critical structures
• Deliver all bridges for construction by 2024
Program Overview

Statewide Initiative

- Bridges in all 120 counties
- Distributed across the Commonwealth
Program Overview

KYTC BRIDGE SPENDING
2018-20 BIENNIAL

- Maintenance and Inspection: $148 million
- Complex Bridges: $60 million
- Bridging Kentucky: $340 million (over 350 projects)
Bridges in Program

Bridging KY is *not*: 

- Complex bridges
- Major river bridges
- Interstate bridges
- Bridge projects with non-structural goals
Bridges in Program

What is a typical Bridging KY Bridge?

• 18.5’ wide x 60’ long
• Local bridge (60% locally owned)
• < 900 vehicles per day
• Weight restrictions (posted)
Why these bridges?

- 14,272 bridges in Kentucky
- More than 1,000 posted or rated “poor”
- Growing backlog of bridge needs
Bridges in Program

What we are doing

- Replacements
- Rehabs
  - Typical
  - Superstructure strengthening
  - Superstructure replacement
Bridging Kentucky Program

Program management team

Cabinet Leadership

FHWA

KYTC Bridging Kentucky Program Manager

Bridging Kentucky Consultant Team

Program Steering Committee

KYTC Legacy Projects
Progress to Date

Building the program

- Assembled strong team
- Quick-start, 120-day plan
- Setting up program and systems
- Starting evaluations simultaneously
Successes

120-day progress

• Program management structure and systems
• Streamlined project development processes/procedures
• Program charter with KYTC, FHWA
• Screened over 1,100 structures
• Began rehabilitation designs
Screening

Considerations for evaluation

- Structural Components
- Life Cycle Cost Evaluation
- Complexity Captures
  - ✓ ROW
  - ✓ Utilities
  - ✓ MOT
  - ✓ Environmental
Screening

Develop Screening Criteria

Evaluate Structures
BrM Data

Replacement

Other
Screening

Data-Driven Evaluation
Life Cycle Cost
vs
Replacement Cost

Field Evaluation

Replacement
Rehabilitation

Technical Discipline Evaluation
Screening to Prioritization

Prioritization

- Biennium bridges first
- Focus on three factors
  - Budget
  - Condition of structure
  - Project challenges
- Address closed bridges
Project Development Phase

Transitioning to Project Development

- Industry forums
- Project Development Activities
- Move projects to construction
Next steps

Construction Phase

• Several bridges under construction
• Starting rehab projects this year
• Large volume of rehabs/replacements in 2019
More Information

BridgingKentucky.com

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