

Safe & Sound

Bridge Improvement Program

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Missouri Department of Transportation

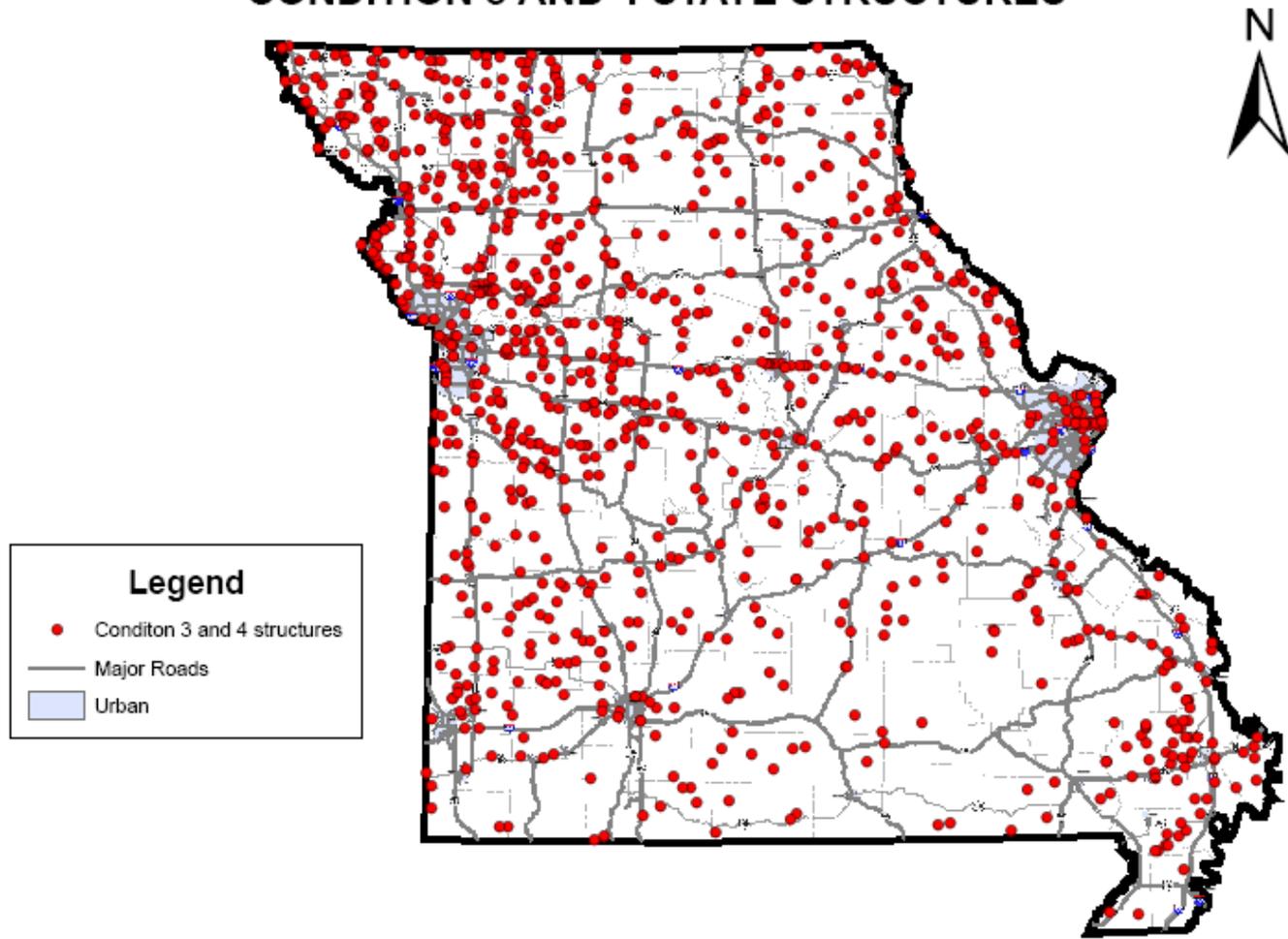
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A white arch graphic is positioned behind the AASHTO logo and extends across the bottom right of the slide.
The logo features a circular icon with four interlocking puzzle pieces in red, green, blue, and yellow, followed by the text "ONE TEAM" in a bold, black, sans-serif font.
Integrating Practical Solutions

Presentation Overview

- Why Safe & Sound
- Safe & Sound Program Overview
- Challenges
- Right of Way
- Utilities

CONDITION 3 AND 4 STATE STRUCTURES



- 10,240 bridges on MoDOT system
- 1,093 are Condition 3 (serious) or Condition 4 (poor)

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SAFE &
SOUND

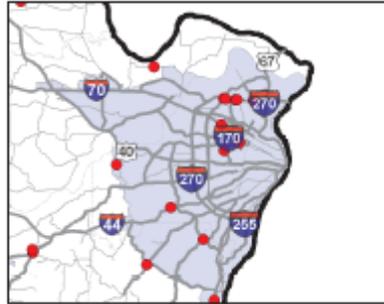
Safe & Sound Bridge Improvement Program

For details about the
Safe & Sound bridge
program please visit
www.modot.org or call
1-888-ASK MODOT.



Missouri Department of
Transportation

800 Better Bridges By 2012

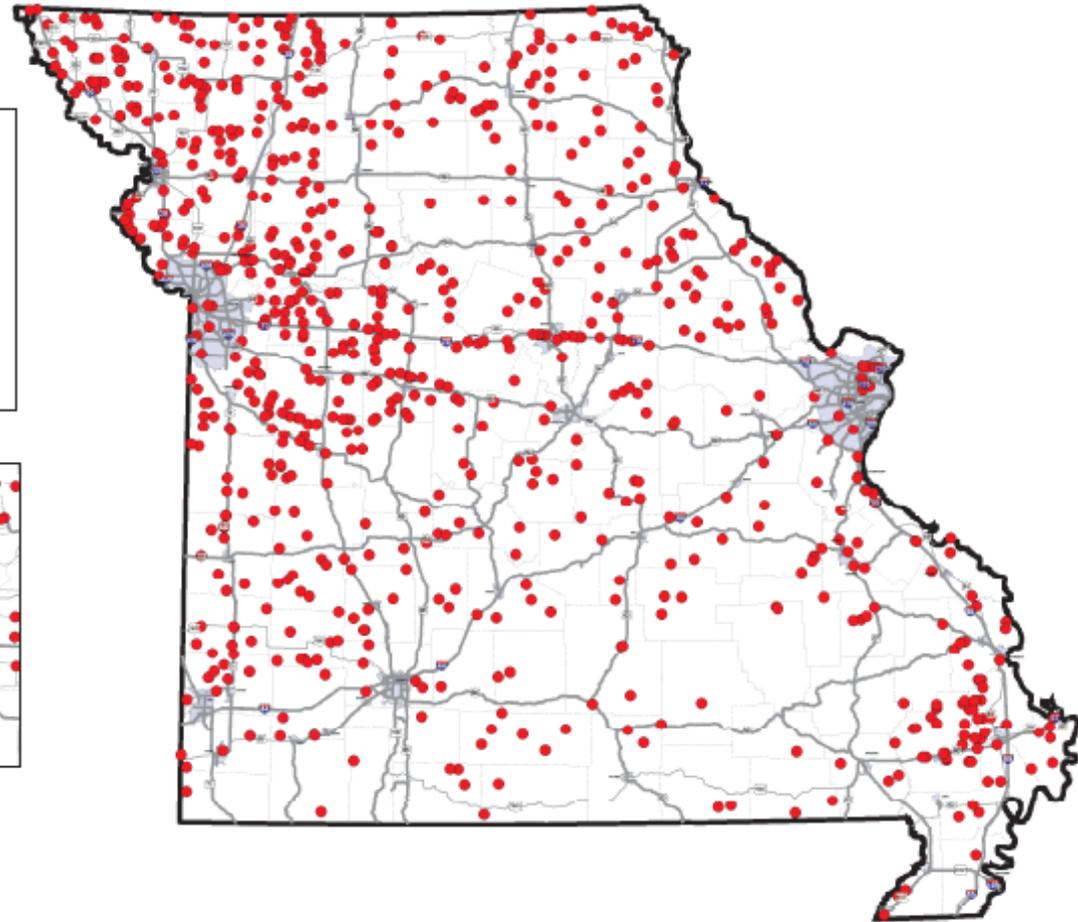


St. Louis



Kansas City

● Project Locations



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- 802 structures
- At least one in every county

Design-Build- Finance-Maintain

- Envisioned as a DBFM contract.
- Contractor was to finance construction (5 years), then maintain bridges over 25 years.
- MoDOT would repay contractor during maintenance period.
- Contractor determined rehabilitation approach

Guidelines for Selecting Bridges

1. Eliminate Condition 3 & 4 on Major highways.
2. Eliminate Condition 3 on Minor highways.
3. Eliminate as many Condition 4 on Minor highways as possible.
 - No Mississippi/Missouri River structures.
 - No structures >1000 feet long
 - Minimize right of way and roadway work.

The Typical Safe & Sound Bridge is ...

- 147 feet long, 24 feet wide
- 60 years old
 - Rehabs – 48 years old; Replacements – 66 years old
- In a rural location
- Avg. daily traffic of 1900 vehicles, but about 300 carry less than 400 vehicles per day.

Representative Bridges

A3015 02-28-06
Span 3, underdeck. Close
up of girder deterioration.



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Representative Bridges



S0298 12/19/06
Blocking at
north abutment

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Representative Bridges



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Road Blocks During Procurement

1. State Bonding Requirements

2. Risk Allocation

Capital

Utilities

ROW

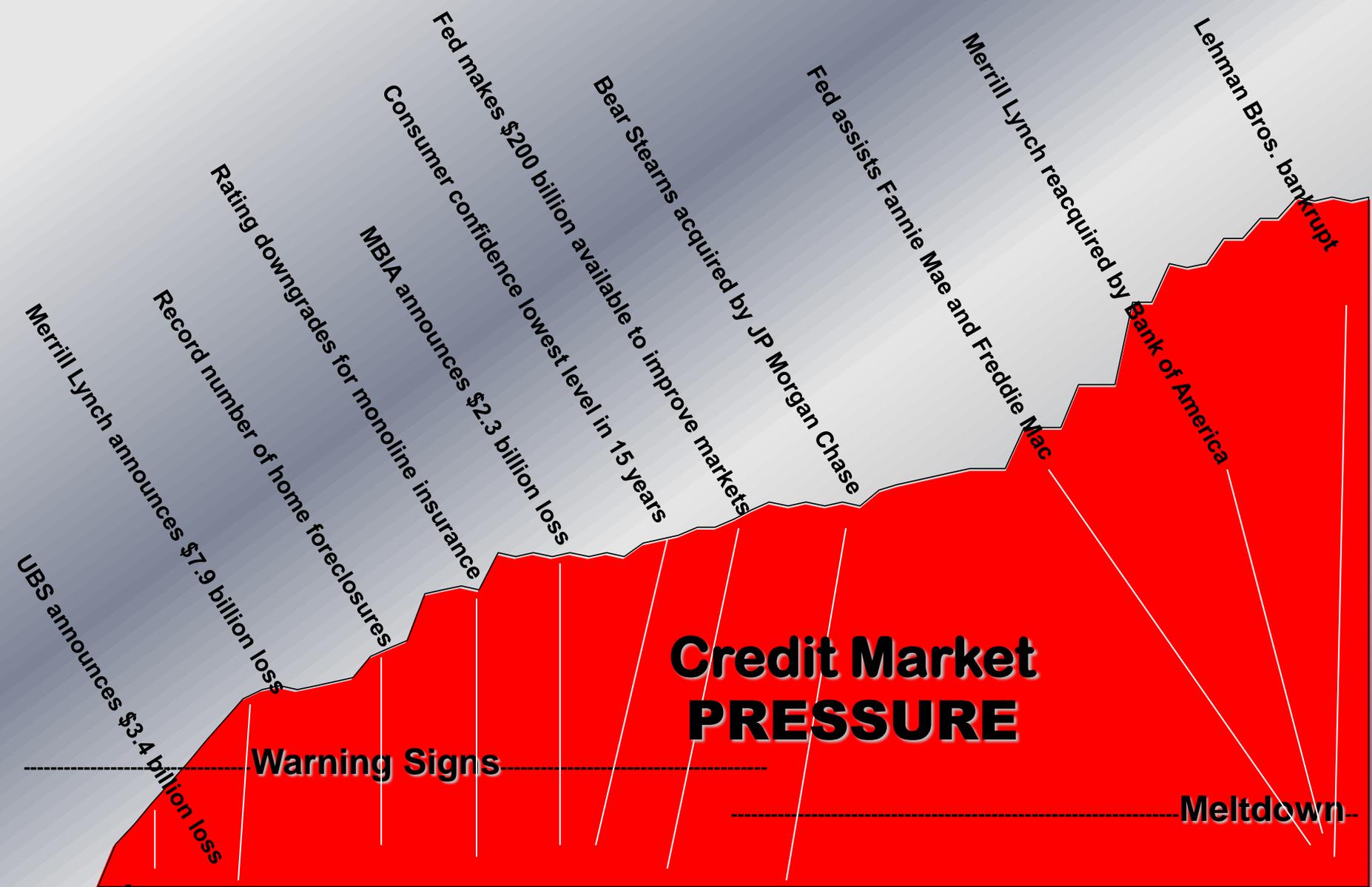
Geotechnical

3. Cost

Materials (Inflation)

Labor

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Oct-07 Nov-07 Dec-07 Jan-08 Feb-08 Mar-08 Apr-08 May-08 Jun-08 Jul-08 Aug-08 Sep-08

Proposals received Selection, BAFO Price Accepted Deal Point Memo LNTP Final Offer



..... MoDOT/MBP Negotiations Integrating Practical Solutions

DBFM Lessons Learned

- Use of Internal Staff during and after Procurement
 - Quality Control
 - ROW Acquisition
 - Traffic Control
 - Utility Relocation
- Can be done – Two Proposals
- Developer / Equity Roles
- Ideas to make statewide program more affordable

Largest Bridge Program in Missouri's History

- Statewide system improvement
 - 'Modified' Design-Bid-Build ... 248 bridges
 - Design-Build Package ... 554 replacements
- 802 bridges repaired or replaced
- Construction began in Spring 2009
- MoDOT will finance the project.

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Design-Build Project

- 554 bridges in 111 different counties statewide
- Avg. distance between bridges – 11 miles
- In concert with 248 other design- bid-build rehabilitations (detours)

Design-Build Project

1. Deliver good bridges at a great value.
2. Minimize public inconvenience through increased construction speed & flexible schedule.
3. Complete construction by Dec. 31, 2013.

DB Selection

Proposers pushed to meet goals by:

- Scoring process factoring various pass/fail elements along with 40 points technical proposal and 60 points A+B price structure
- 15 points for speed
- 10 points for schedule flex

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Approach to Right of Way

Contractor to provide legal description of all new ROW

MoDOT to negotiate with property owners

MoDOT to file all legal paperwork

MoDOT has 12 months to provide access to new ROW

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Right of Way Reserve Fund

Encourage Contractor to build within existing ROW

1. MoDOT pays for first \$3M in ROW cost
2. Next \$1M split 50-50
3. All ROW cost over \$4M on Contractor
4. Unused portion of first \$3M split 50-50

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Utilities

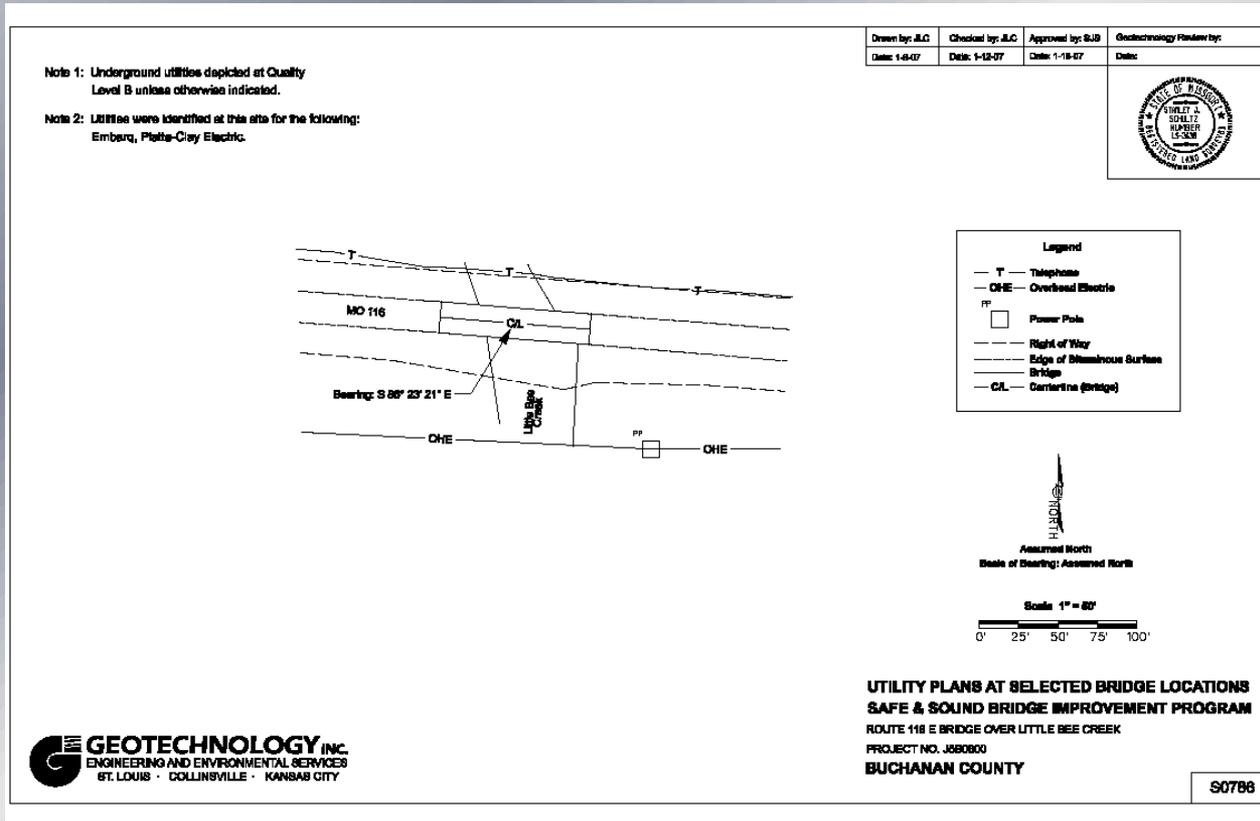
Utility relocation time constraints within existing state statutes and Master Utility Agreements

MoDOT provided Quality Level B Utility Locates for all bridges prior to bid (NTP)

MoDOT to coordinates and pays for all utility relocates

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Quality Level B Utility Locates



Results



- Eliminates Restriction on 450 Bridges
- Safety Improved with Guardrail or Delineation Enhancements

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Current Status

Design Build – 554

MDBBB – 248

2009 – 4

2009 – 118

2010 – 152

2010 – 56

2011 – 298 (projected)

2011 – 50 (projected)

2012 – 100 (projected)

2012 – 23 (projected)

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Web: www.modot.mo.gov/safeandsound
E-mail: safeandsound@modot.mo.gov

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