

# Bridge Rehabilitation/Replacement Needs

Redbud Trail Bridge  
Barton Springs Road Bridge

Presentation to Mobility Committee

April 2015



# PWD Bridge Program

- City of Austin has 447 “rated” bridges.
- Goal is to maintain all bridges in “good” or better condition using .
- Bridges rated as fair or poor are candidates for capital repair, rehabilitation, or replacement.
- Bridges rated below good are not in imminent danger, but may be inadequate for a variety of reasons. Bridges are inspected biannually.

Sufficiency Rating (Scale: 0-100)		Age (Years)	
Condition	No. of Bridges	Year Old	No. of Bridges
Excellent: 90-100	53	0-5	9
Very Good: 80-90	227	5-10	10
Good: 70-80	89	10-20	80
Fair: 60-70	67	20-35	125
Poor: 0-60	11*	35-50	105
Total:	447	50-75	67
		>75	51
		Total:	447

\*Includes River Plantation Drive bridge, which was repaired post TXDOT inspection using FEMA funds.



# Why are We Here?

- Bridges on Redbud Trail and Barton Springs Road were determined to be at long term risk due to condition and use.
- Design costs were included in the 2012 Transportation Bond to initiate replacement due to anticipated long project delivery schedules.
- The Requests for Qualifications (RFQ) were briefed to the CPTC (forerunner of the Mobility Committee) in 2014. The committee provided the following direction:
  - Rework the RFQs to ensure rehabilitation options are considered along with replacement and clearly call out cultural aspects.
  - Ensure RFQs are been reviewed by stakeholders with interests in the historic aspects of the bridges.
  - Ensure community outreach is required under the contracts.
  - Report back to the Committee upon completion of the Preliminary Engineering Reports.
- PWD incorporated the additional requirement to engage firms to provide peer review of designs to safeguard stakeholder interests.



# Redbud Trail Bridge

- Crosses Ladybird Lake near Tom Miller Dam.
- Built in 1948.
- Interim strengthening completed in 1998.
- 2012 inspection resulted in “fair” rating.
- Traffic volume/weight of vehicles exceeds initial design intent.
- Bridge is near end of its useful life.
- Approach on the west side has steep slope/curves.
- Need to initiate rehabilitation/replacement process before restrictions are necessary.

























# Barton Springs Road Bridge

- Crosses Barton Creek at Zilker Park
- Built in 1925, widened in 1945.
- Current condition assessment is “fair”, but will require substantial rehabilitation in near future.
- Bridge is functionally obsolete and is a traffic bottleneck.
- Sidewalks have non-compliant elements.
- Scope will include improved bicycle facilities.
- Intersection with Robert E. Lee Drive and retaining wall on PARD Umlauf property need to be addressed.













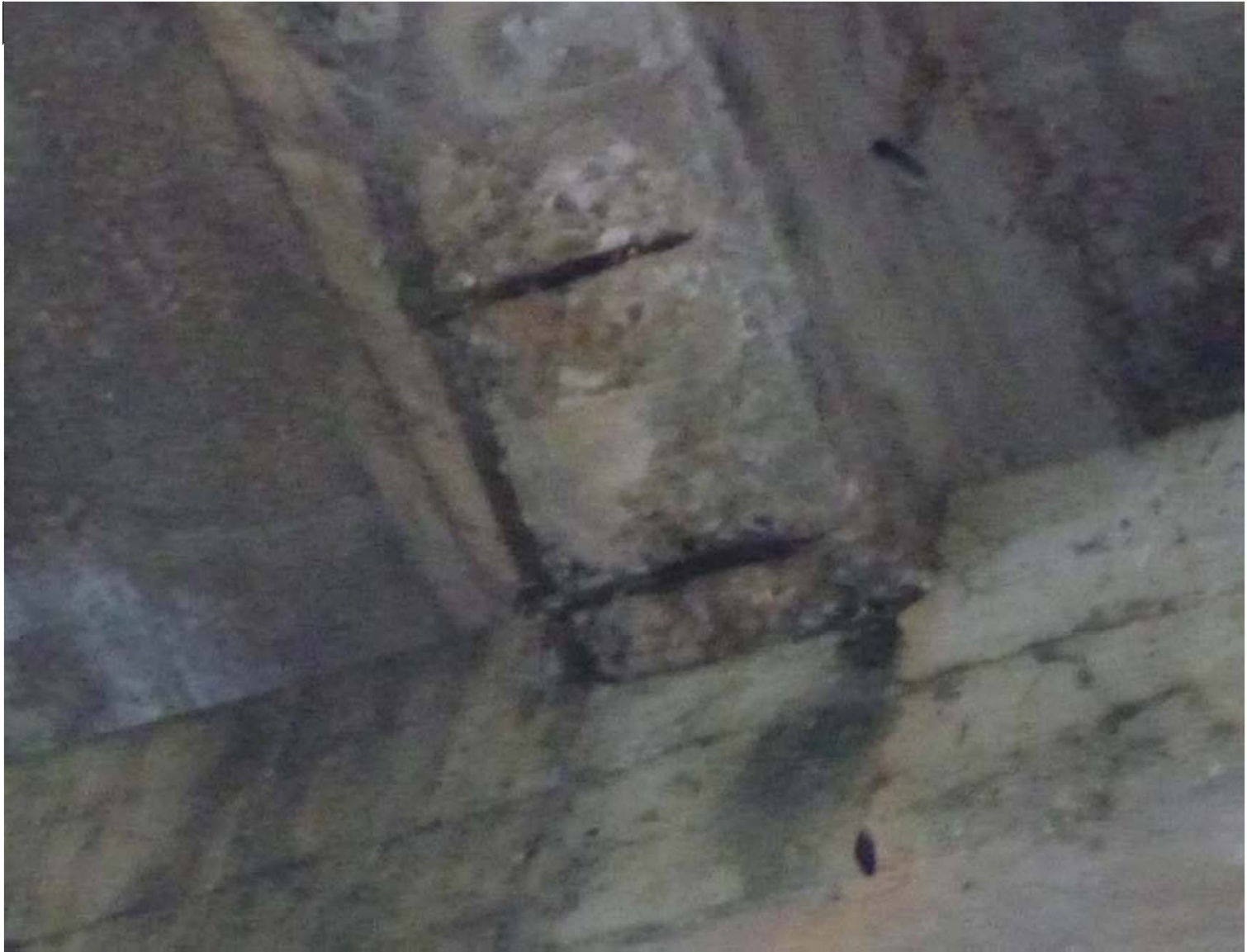


























# Funding Sources

- Funding from 2012 bond program:
  - \$3.0M for Barton Springs and Shelton Bridges
  - \$1.7M for Minor Bridges and Culverts
- Both bridges were on list of priorities provided to BEATF (see table on right).
- Neither bridge is funded for construction.

<b>Proposed Bridge Replacements &amp; Structural Improvements</b>	
Emmet Shelton Bridge on Redbud Trail	\$15,890,000
William Cannon Drive Misc. Wall Repairs (West End)	\$ 4,200,000
William Cannon Drive Msc. Wall Repairs East	\$ 3,000,000
Slaughter Lane MSE Wall Repair Both Ends	\$ 5,000,000
Barton Springs Road Bridge Over Barton Creek	\$ 4,800,000
Delwau Road Bridge Over South Boggy Creek	\$ 1,700,000
Riverside Drive Retaining Wall Improvements	\$ 1,000,000
Cesar Chavez at Red River Sidewalk Improvement and Retaining Walls	\$ 305,000
Citywide Improvements	
Minor Bridges and Culverts	\$ 5,000,000
<b>Total</b>	<b>\$40,895,000</b>



# Next Steps

- Bring RCAs for award of design and peer review contracts to the full Council with Committee endorsement.
- Initiate outreach community outreach process.
- Develop working estimates so that rehabilitation/replacement can be included in an upcoming bond election.

