

6th STREET VIADUCT SEISMIC SAFETY PROJECT

Briefing To:
CITY OF LOS ANGELES
BOARD OF PUBLIC WORK

Presented By:
BUREAU OF ENGINEERING

January 25, 2010



Federal Highway Administration



**CITY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING**



**California Department
of Transportation**

Project Setting



Alternatives Evolved from Stakeholders Involvement

- **Public Information Meetings**
 - January 23, 2007: Art share Los Angeles
 - January 25, 2007: Saint Isabel Church
- **Scoping Meetings**
 - August 14 & 16, 2007
- **Stakeholder Group & Agency Meetings**
 - February 13, 2007: Boyle Heights Neighborhood Council Land Use Committee
 - March 12, 2007: Boyle Heights Quadrant 4
 - March 13, 2007: Downtown LA Neighborhood Council
 - May 9, 2007: Boyle Heights Quadrant 3
 - May 19, 2007: Boyle Heights Resident Homeowners Assoc.
 - October 3, 2007: Arts District Business Improvement District
 - October 4, 2007: CRA/LA Eastside Region
 - October 29, 2007: LA Conservancy
 - February 4 & March 24, 2008: Caltrans Participating Agency Meetings
 - April 23, 2008: AIA Workshop
- **Community Advisory Committee (CAC) Meetings**
 - #1: March 29, 2007
 - #2: May 10, 2007
 - #3: June 28, 2007
 - #4: August 28, 2007
 - #5: November 8, 2007
 - #6: March 26, 2008
 - #7: October 28, 2008
 - #8: February 12, 2009
 - #9: April 8, 2009



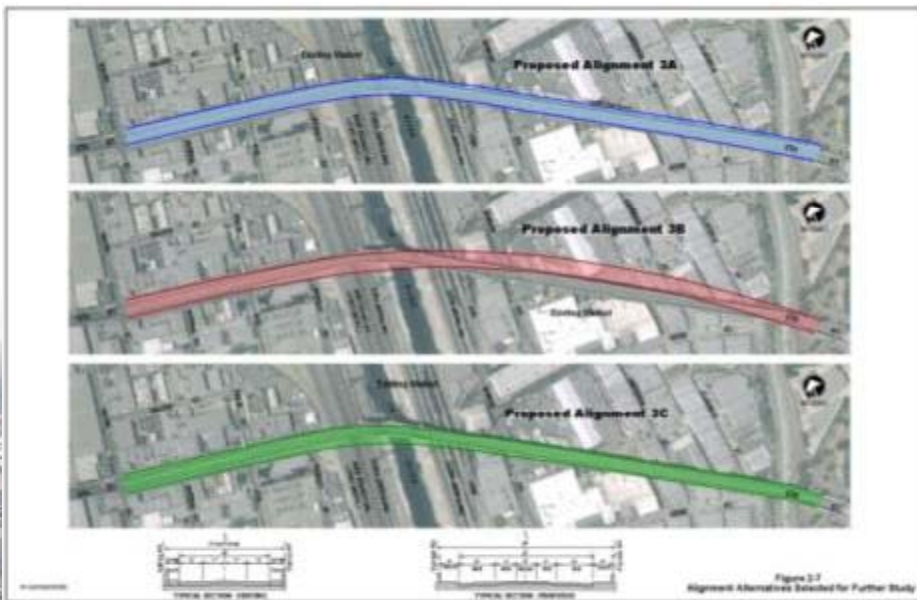
Process Examined Multiple Alternatives to Achieve Consensus

- **Alternative development history**
 - 5 retrofit schemes previously studied
 - 5 new retrofit schemes evaluated
 - 20 replacement alignments
 - 15 bridge types
- **Workshop with CAC**
- **Workshop of bridge experts**
- **Alternative evaluation and ranking**
- **Staff sensitivity analysis**



Project Alternatives for Environmental Assessment

- **Alternative 1 – No Action**
- **Alternative 2 – Retrofit**
 - Infill Walls & Heavy Steel Casing
 - Substructure Replacement
- **Alternative 3 – Replacement**
 - Alignments 3A, 3B, 3C
 - Bridge Concepts 1 – 5, 1A and 4A



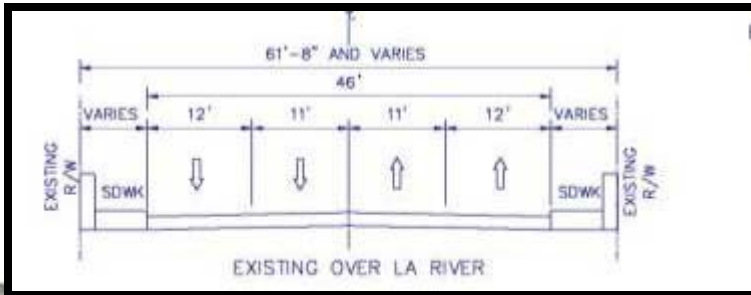
Estimated Cost of Alternatives

Alternative	TOTAL (\$ million)
Retrofit - Steel Casings (30 yr life)	\$237*
Retrofit - Substructure Replacement (75 yr life Substructure & 30 yr life for Superstructure)	\$393*
Replacement – Corridor A (75 yr life)	\$315 - \$375
Replacement – Corridor B (75 yr life)	\$340 - \$402
Replacement – Corridor C (75 yr life)	\$323 - \$374

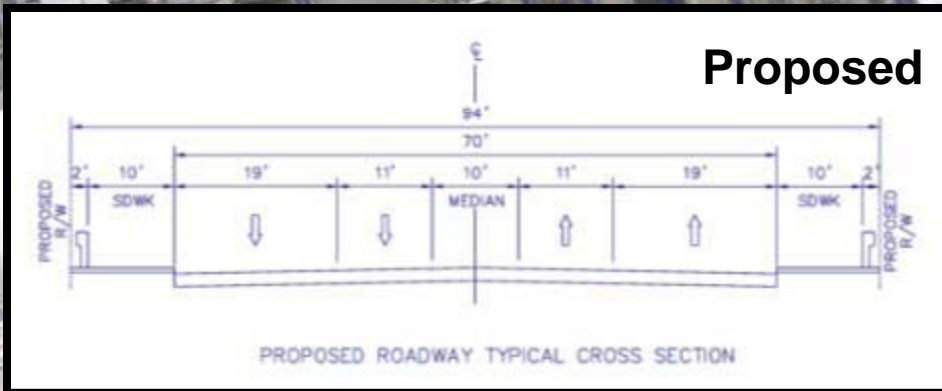
* Doesn't include future replacement cost



Replacement Alternative Provides a Safe Facility for all Users



Existing



Proposed

- Creates roadway shoulders
- Provides wider sidewalks
- Removes bend in bridge
- Provides median buffer

Replacement Bridge Concept 1

Main Span Replication



Concept 1A

Abutment to Abutment Replication



Replacement Bridge Concept 2

Steel Tied Arch Pedestrian Ways



Replacement Bridge Concept 3

Steel Half-through Arch



Replacement Bridge Concept 4

Cable-Supported with Dual Pylons



Concept 4A

Cable-Supported with 3 Dual Pylons



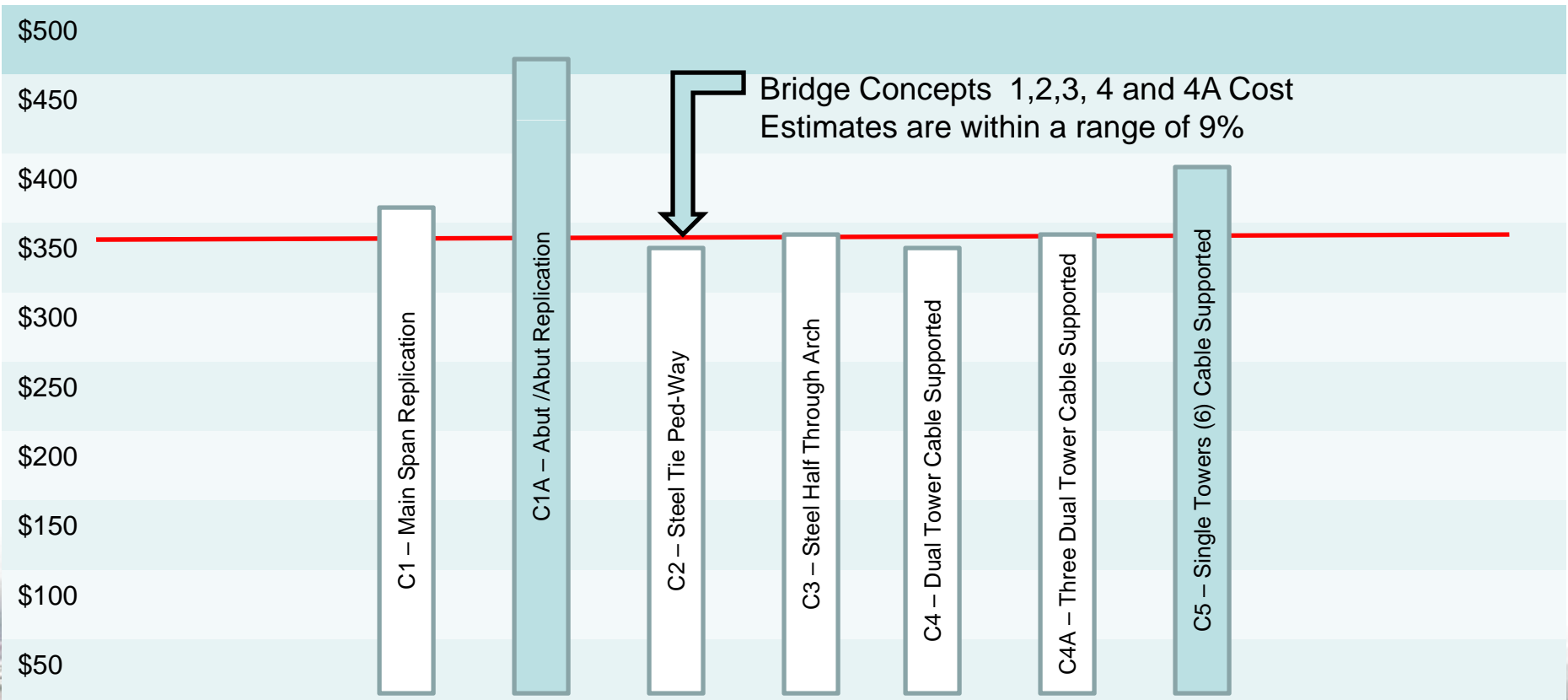
Option 4A

Replacement Bridge Concept 5

Cable-Supported with Single Pylon



Cost Comparison of Replacement Alternatives



Public Comment on the Draft EIR/EIS

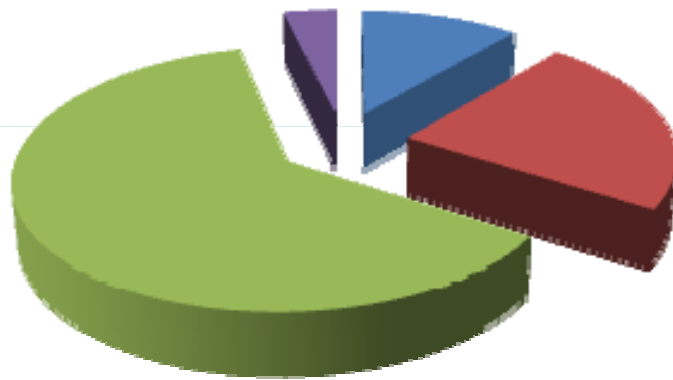
- **Preservation of Industrial Land Use**
- **Acquisition of Right-of-Way**
- **Business Relocation**
- **Creation of Open/Recreational Space**
- **Creation of Bike/Pedestrian Facilities on the Viaduct**
- **Incorporation of Original Design Elements of the Existing Viaduct**
- **Full Replication of the Existing Viaduct**
- **Demo and Construction Impacts to the Community**
- **Impacts to the LA River Master Plan**
- **Impacts to the future CA High Speed Rail**

Staff's Recommended Alternative Concept 4A – Corridor 3B



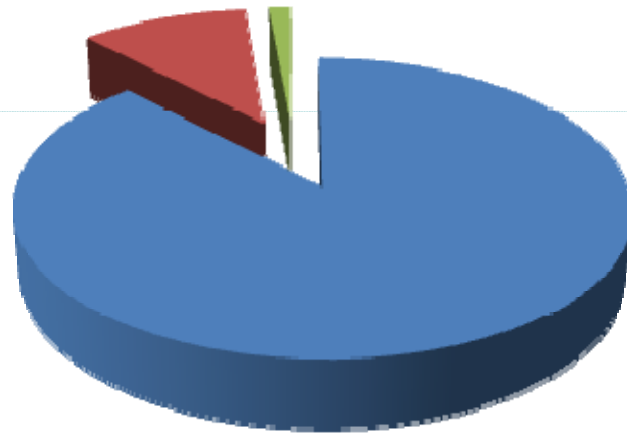
\$358.1M
(includes cost of financial bonds)

Project Cost Breakdown



- Support Service Cost \$40.1M
- Right-of-Way Cost \$81.8M
- Construction Cost \$223M
- Financing Cost \$13.2M

Funding Sources



■ Federal Highway Program
\$314.7M

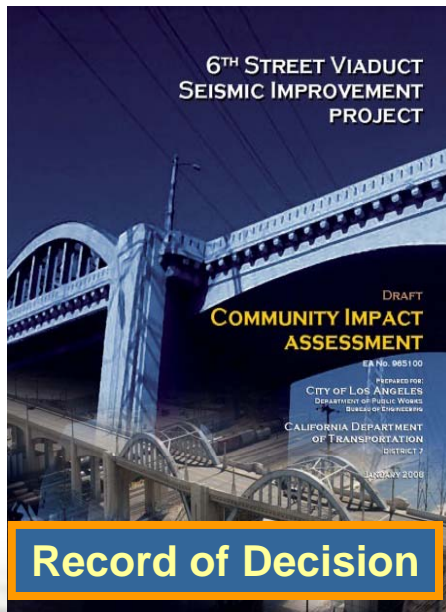
■ Prop. 1B Local Bridge Seismic
Retrofit Program \$38.4M

■ City Matching Funds \$5.0M



Next Steps for Project Approval

Final EIR/EIS Circulation and Approval



Board of Public Works –
Recommendation of PDT Preferred
Alternative to City Council

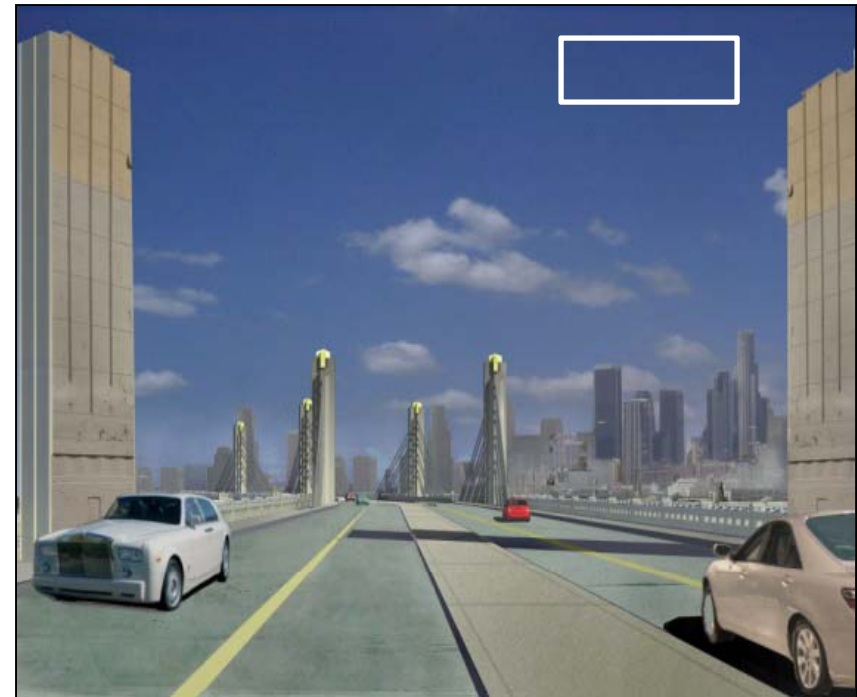
Council Committees – Transportation &
Finance (likely)

Full Council (EIR Certification)

Caltrans (EIS Record of Decision)

Future Project Milestones

Milestone	Target Date
Project Approval - ROD	Jun, 2010
Complete Design	Jan, 2013
Right of Way Certification	Mar, 2013
Advertise Project	Jun, 2013
Begin Construction	Nov, 2013
Complete Construction	Dec, 2016



QUESTIONS & COMMENTS

