



January 7, 2016

Executive Summary: Austin Avenue Bridges at North/South San Gabriel River – Forensic Investigation Condition Assessment/Evaluation

Wiss, Janney, Elstner Associates, Inc. (WJE) provided Aguirre & Fields LP (AF) with a Forensic Investigation Condition Assessment and Evaluation Report on December 23, 2015, documenting their independent structural review of the Austin Avenue Bridges and evaluation of bridge maintenance, repair and/or replacement options.

The report is currently in draft form and in review.

In summary, WJE report findings indicate:

Condition Assessment and Testing Results

1. The concrete deck and chamfered haunches have adequate structural integrity, but will experience ongoing deterioration and present a safety concern for falling debris. Deck service life will be limited by visible distress and falling debris hazards.
2. The steel girders and diaphragms have limited corrosion overall, but some corrosion will propagate at an increasing rate and present falling debris hazards.
3. The bearings do not present an immediate structural capacity hazard, but will continue to degrade and cause substructure distress (spalling) and potential falling debris hazards.
4. The concrete substructures exhibit minor corrosion distress.

TxDOT Inspection/Load Rating

5. Based on condition assessment and testing results, the TxDOT-assigned inspection rating and load rating warrant further consideration.

Maintenance, Repair, Replacement Recommendations/Considerations

6. Remove falling debris hazards, repair concrete at bearings, repair/reseat bearings, seal joints (with or without replace deck, depending on budget and construction impacts)
7. *If only considering structural condition of bridges, full replacement may not be necessary.*
8. *Consider falling debris hazards, load restriction and/or functionality limitations in significant repair or replacement determination.*

With respect to the AF June 2014 Assessment, these findings generally support the lifecycle cost analysis assumptions, options and recommendations.

Summarized by Dave Lubitz, PE and Oscar Aguirre, PE