Project Name: I-80; Mountain Dell to Lambs Canyon
Project #/PIN #: S-R299(54) / 6399
Year Constructed: 2008
ABC Element(s): Approach Slab Panels / Precast Sleeper Slabs / Precast superstructure
Placement Method: Self Propelled Modular Transport (SPMT’s)
Contracting Method: Design-Build

Project Description: What was scoped out as a deck replacement for four bridges on I-80, from Mountain Dell to Lambs Canyon, became four complete superstructure replacements on I-80 in August of 2008. The full closure of the heavily traveled I-80, with up to 2400 vehicles per hour during peak traffic periods, were limited to two successive weekend events on August 10 and 17. On the first weekend, the contractor replaced the superstructures for the westbound bridges at Mountain Dell and Lambs Canyon. Within 22 hours of the initial closure, the traveling public was driving on new bridges at those two locations. The work necessary to complete these replacements included the SPMT based removal of the existing steel bridge at Mountain Dell, conventional demolition and removal at Lambs Canyon, and moving the new bridges into position from their staging areas by means of SPMT’s. On the second weekend, the contractor (Wadsworth Brothers Construction) followed the same pattern, and restored traffic within 16 hours of the initial closure. Because of the unique method of supporting the structures in the staging area, the stress changes in the bridge during the move did not introduce any tension into the decks or the parapets, which resulted in zero move-related cracks in the concrete. Public involvement and information during the period of time leading up to the weekend closures facilitated the low impact replacement of the bridge superstructures at these two locations.