What is a Lateral Bridge Slide?

- Allows Simultaneous Construction of Substructure and Superstructure
- Superstructure is constructed adjacent to existing structure on temporary abutments while exiting remains in service
- Allows for Short Closures for Replacement
- Innovative Phasing Minimizes the Traffic Impact
Lateral Slide ABC Benefits

**Owner Benefits**
- Minimize Traffic Impacts
- Improve Safety of Public
- Could be more cost effective when considering detour and phasing costs

**Contractor Benefits**
- Safer Work Zone
- Schedule
- Operational Efficiencies
I-80 Over Echo Dam Road, Utah (2009)
I-80 Over Echo Dam Road, Utah (2009)

- Replacement of EB & WB I-80 over Echo Rd.
- Bridges replaced using horizontal skidding of the new bridge superstructures onto new abutments constructed under existing bridges
- Substructure constructed under existing bridge while it remained in service
- Final bridge placement in 7 hours
- Overnight detour on the ramps during slide
- Continuous Abutment with Pile Groups
I-80 Over Echo Dam Road, Utah (2009)

- Abutments and approach slabs on temporary supports
- Bridge slid on to new abutments and sleeper slabs
I-80 Over Echo Dam Road, Utah (2009)

- Daytime closures allowed on cross street
- Approach slabs construction with bridge
I-80 Over Echo Dam Road, Utah (2009)
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I-80 Over Echo Dam Road, Utah (2009)
I-80 Bridges at 2300 E
Salt Lake City, UT (2009)
I-80 Bridges at 2300 E  
Salt Lake City, UT (2009)

- Replacement of EB & WB I-80 over 2300
- Substructure constructed under existing bridge while it remained in service
- WB Bridge Raised for Vertical Clearance on On-Ramp
- Post Tensioned Abutments
- 6% Super Elevation Challenge
- Final bridge placement in 7 hours
I-80 Bridges at 2300 E
Salt Lake City, UT (2009)
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Salt Lake City, UT (2009)
I-80 Bridges at 2300 E
Salt Lake City, UT (2009)
I-80 at Summit Park, Utah (2011)
I-80 at Summit Park, Utah (2011)

- Replacement of EB & WB I-80 at Summit Park
- Steel Girders
- WB Bridge Raised for Vertical Clearance on On-Ramp – New Method
- Micro Piles and Spread Footings
- Full Retaining Abutment in Center
- More Time Allowed for Roadway Reconstruct
I-80 at Summit Park, Utah (2011)
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I-80 at Summit Park, Utah (2011)
I-80 at Summit Park, Utah (2011)
I-80 at Summit Park, Utah (2011)
I-80 at Wanship, Utah (2012)
I-80 at Wanship, Utah (2012)

- Replacement of EB & WB I-80 at Wanship
- All Thread Jacking/Sliding System
- Ramps used as Detour again
- Spread Footings
- Full Retaining Abutment in Center with Full Ht. Wingwalls
I-80 at Wanship, Utah (2012)
I-80 at Wanship, Utah (2012)
I-80 at Wanship, Utah (2012)
I-80 at Wanship, Utah (2012)
I-80 at Wanship, Utah (2012)
I-80 at Wanship, Utah (2012)
Lessons Learned

- Very Detailed and Tight Schedules

- Engineers and Contractors closely teamed with same project goals. Working through the smallest details

- Focus on Roadway Approaches as much as Structure move-in. Fill-in under moved in Approach Slabs

- Proactive detour planning with the DOT

- Phased first move if overnight full closure

- Be ready to be on TV!