ROAD CONSTRUCTION AHEAD
ABC – Accelerated Bridge Construction

• Standardized design concepts
• Small-to-medium sized bridges
• No special cranes or equipment needed
• Toolkit (R04) includes:
  – Standard design plans & details
  – Design examples
  – Design specifications
  – Construction specifications
  – Training materials

Superstructure replacement in Harlan Co., KY completed within 8 hours.
Harlan County
Harlan County
Harlan County
Indian Gap Road in Franklin County
Franklin County
Opportunities for Kentucky in Knox County

- Part of Bridge Replacement Program
- Two short-span bridges in Eastern Kentucky on KY 6, Knox County
- Conventional construction would require longer hindrance to local and thru traffic
- Rural areas have fewer options
Kentucky’s Approach

- Contract for bid in August, award in September; construction could begin in October
- Construction time to weigh heavily in the competitive bid
- Estimate time to construct roadway and bridge at three weeks

- Structure design:
  - Deck precast onto rolled steel girders in manageable sections to be placed onto precast pile end bents
  - Galvanized and shop painted steel girders to save time and prevent corrosion
Stewarts Creek Bridge 11-1076
Precast End Bent
SHRP2 Value to Kentucky

- **Time savings:** Reduce the construction time from 3 to 4 months down to 3 weeks.
- **Long Term Cost savings:** By galvanizing the beams, future maintenance coatings may be eliminated.
- **Minimize use of detours:** Deliver projects more rapidly and less intrusively to our traveling public.
- **Advance state of practice:** Add to existing knowledge and experience using accelerated bridge construction
- Opportunity to **share our experiences** with other states

“The more time we spend carefully planning for rapid construction techniques, then less time is spent impeding the flow of our transportation system.”
Questions