CONSTRUCTABILITY

Craig Hennings
Executive Director
ACPA Southwest

Added cost

- Width changes in pavement
  - Typically 2 day lost due to machine change
  - $7,000 to $10,000
  - ~ 160 to 230 SY concrete
- Add/remove dyke/ curb
  - Typically .75 day

Cost – Width changes

Cost, continued

Cost, continued

- Shoulders:
  - Concrete shoulders may be more economical than HMA shoulders
  - No need for extra paving operation with different subcontractor

Smoothness

- Allow at least 24” of track line, 30” would be better for the heavier pavers.
- On lane replacements and slab replacement projects… grind the existing pavement to a smoothness of IRI=60”/mi. Grind all the way to the edge, or cut edge off. Don’t leave a lip at edge of the pavement.

- Don’t allow or leave rocking slabs or cracked slabs in the adjacent lanes. These will move under the weight of the paver.
- Run the IRI profiler on the existing lanes before construction to see what the existing pavement is. It might only be possible to get to a IRI=80.
- Make sure the profiler is run and measured in the new construction lane, not crossing the longitudinal joint into old and new PCCP lanes, or across tapers. Some lanes are only 6 ft wide.

- Staking intervals. Was 20 meters, now is back to 50 ft. This is OK on tangents. On curves, the staking needs to be tighter. Is it possible to get to IRI=60 with current staking?
- Better concrete is produced with a central mixed plant. Allow room to set up a batch plant on site. Ready Mix concrete causes higher profiles.
- Short work windows lead to many construction joints. Allow longer work windows. Modify the Lane Closure Charts to allow an extra hour or two PCC paving.