Georgia

State DOT Representative Report Questions

National Concrete Consortium San Antonio, Texas April 2, 2009

Theme: Ride Quality for Bridges

Please provide your state DOT's perspective regarding the following theme questions. Each NCC state DOT representative will be asked to present their responses to the group during the State Report forum on Thursday morning April 2, 2009.

- 1. What features of a bridge deck and approach do you consider to have the most impact on ride quality? **Surface and the Joints**
- 2. How does your state measure ride quality for bridge decks?
 - a. IRI? Profile Index
 - b. Straight edge? 1/8" in 10' Transversely
 - c. Other? Lightweight Profiler

d. Specifications? 15 in. per mile w/ correcting individual bumps exceeding 2/10 inch and 1/8" in 10' Transversely with Straight Edge

- What smoothness thresholds does your DOT require for bridge decks?
 (See 2.d) Must meet the 15" per mile with profiler or corrective actions taken to bridge deck so specification can be met.
- 4. How are transitions near localized features (drainage basins, joints) treated in efforts to ensure acceptable ride quality? Joints are counted when calculating the ride. Most bridge decks are not designed with drainage structures in travel paths. Drainage structures are normally in the gutter line or attached to outer edge of approach slab and are outside the limits ran with the profiler.
- What corrective actions are required for substandard bridge deck/approach ride quality? Diamond grinding of surface until specifications are met.
- 6. Does your state initiate a penalty/incentive structure for bridge ride quality? No. The incentive is not to have grind surface. Penalty is the cost of the grinding.
- 7. Does your state consider ride quality as a scoping item for bridge rehabilitation? **Yes.**

- 8. Does your state require sequencing (casting positive moment regions prior to negative moment regions) of deck pours during placement of bridge deck concrete for continuously designed decks? Yes, only for continuous steel girder bridges.
- 9. What method and type of texture does your state apply to your bridge deck surface? Belt Drag Longitudally if Spans are less than 40' in length, or Wet Burlap both longitudinally and transversely, or Broom Finish. After Profiler has been ran and ride specification met, Final finish is to cut in grooves. Grooves are 0.125 in. wide, 0.125 in. deep, 0.5 in. apart center to center.
- 10. How does your state handle transitions/approaches from pavement on to the bridge deck (approach length, profile, joints)? Approach Slabs are normally 30' in length and are considered part of the bridge structure and must meet the same ride requirements as the bridge. Approaches to the bridge structure are 100' in length and must meet the ride specification of the roadway. If mainline concrete pavement 7 in. per mile, Asphalt pavement must meet 30 in. per mile.
- 11. Does your state maintain a database for bridge ride quality? No.
- 12. How does your state report its network ride quality for pavements and bridges to the Highway Performance Monitoring System (HPMS) database (network report excludes or includes bridges with pavements)? HPMS network, ride quality is reported in IRI on an annual basis – both directions for primary roadways. STRAHNET – one direction for secondary roadways.