

South Dakota

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?

Smooth approach slabs – transitions on and off

2. How does your state measure ride quality for bridge decks?
 - a. IRI?
 - b. Straight edge? **X**
 - c. Other?
 - d. Specifications?

3. What smoothness thresholds does your DOT require for bridge decks?

<1/8" deviation in 10 feet

4. How are transitions near localized features (drainage basins, joints) treated in efforts to ensure acceptable ride quality?

Any features in wheel paths are held to straightedge requirements

5. What corrective actions are required for substandard bridge deck/approach ride quality?

Grinding or price adjustment

6. Does your state initiate a penalty/incentive structure for bridge ride quality?

Price adjustments for left in place surface deviations

7. Does your state consider ride quality as a scoping item for bridge rehabilitation?

No, typically ride quality is not a scoping issue with existing bridge decks. However, it may be indirectly addressed by the amount of delamination area shown from deck surveys which is used for scoping purposes.

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

No, continuous designed decks are typically cast continuously from end to end if possible. However, if the deck geometry and pour rate make it not possible to maintain concrete plasticity over the negative regions during full placement, we will require sequencing.

9. What method and type of texture does your state apply to your bridge deck surface?

Carpet drag and random transverse tining

10. How does your state handle transitions/approaches from pavement on to the bridge deck (approach length, profile, joints)?

Compression seal and strip seal

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)?

The SDDOT reports average IRI for network routes including the bridges.