

Minnesota

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? Expansion joints/Transitions to pavements
2. How does your state measure ride quality for bridge decks? **B**
 - a. IRI?
 - b. Straight edge?**
 - c. Other?
 - d. Specifications?
3. What smoothness thresholds does your DOT require for bridge decks? The surface shall not vary by more than 1/8" from a 10' straightedge laid longitudinally
4. How are transitions near localized features (drainage basins, joints) treated in efforts to ensure acceptable ride quality? straightedge
5. What corrective actions are required for substandard bridge deck/approach ride quality? Remove and replace or grind high spots.
6. Does your state initiate a penalty/incentive structure for bridge ride quality? no
7. Does your state consider ride quality as a scoping item for bridge rehabilitation? Not specifically
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? Some larger pours.
9. What method and type of texture does your state apply to your bridge deck surface? Longitudinal carpet drag followed by transverse tining. Grind in the metro district for noise.

10. How does your state handle transitions/approaches from pavement on to the bridge deck (approach length, profile, joints)? 15-20 foot approach panel. 4" expansion joint with sleeper slab. Approach panel will have a square up panel if bridge is skewed.
11. Does your state maintain a database for bridge ride quality? Yes, for pavements.
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)? Includes bridges with pavements.