

North Carolina

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? **The tie-ins at the beginning and ending approach areas and joints.**
2. How does your state measure ride quality for bridge decks?
 - a. IRI?
 - b. Straight edge? 10' Straightedge on Bridges less than 1500'**
 - c. Other? - Rainhart Profilograph on Bridges 1500' or more**
 - d. Specifications?
3. What smoothness thresholds does your DOT require for bridge decks?
From Bridges less than 1500' – 1/8" using a 10' Straightedge
From Bridges more than 1500' – Rainhart Profilograph at 6"/mile
4. How are transitions near localized features (drainage basins, joints) treated in efforts to ensure acceptable ride quality? **10' Straightedge**
5. What corrective actions are required for substandard bridge deck/approach ride quality? **Grinding of the deck.**
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? **In some cases.**
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.**
9. What method and type of texture does your state apply to your bridge deck surface? **Transverse Grooving.**

10. How does your state handle transitions/approaches from pavement on to the bridge deck (approach length, profile, joints)? **Pavement contractor is not responsible for the 13' before and after the approaches the Bridge contractor is responsible for the 13' before and after the approaches, the approaches, and the bridge. Ride must be 1/8" in 10' using the straightedge and 6"/ mile using the Rainhart Profilograph.**
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)? **Through our Pavement Design Unit.**