

Wisconsin

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?

Deck: Alignment of rails for Bidwell to ride on, and evenness of charging and consolidating concrete ahead of the Bidwell.

Approaches: Setting stringlines well onto the deck to ensure that both elevation and longitudinal grade are in sync between pavement and deck. Consolidation of subgrade adjacent to abutment is also important for long-term ride quality.

2. How does your state measure ride quality for bridge decks?
 - a. IRI? **Yes**
 - b. Straight edge? **Yes**
 - c. Other?
 - d. Specifications?
3. What smoothness thresholds does your DOT require for bridge decks?

IRI: Same as for adjacent pavement, but deck spec defines only an incentive option, earned if contractor does well in this difficult location.

Straightedge: Correction required if exceeds deviation of 1/8" in 10 feet.

4. How are transitions near localized features (drainage basins, joints) treated in efforts to ensure acceptable ride quality?
5. What corrective actions are required for substandard bridge deck/approach ride quality?

Diamond grinding when justified

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

Incentive on IRI spec for good ride

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

Perhaps on an informal “seat of the pants” basis, but we do not systematically inventory ride quality on structures statewide.

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**
9. What method and type of texture does your state apply to your bridge deck surface? **Transverse tining – manually applied by finishers**
10. How does your state handle transitions/approaches from pavement on to the bridge deck (approach length, profile, joints)? **Contractor responsibility**
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)?

Network report includes bridges with pavements per current HPMS guidelines.