

# Michigan

## State DOT Representative Report

National Concrete Consortium  
Sacramento, CA  
September 14, 2010

### Theme: Pavement Smoothness

1. Briefly summarize your current pavement smoothness requirements.

Smoothness requirements are based on Mean Roughness Index (MRI), which is the average of IRI for both wheel paths. High speed specification requirements apply at or above a design speed of 50 mph, while low speed specification requirements apply below a design speed of 50 mph. New construction and major reconstruction must meet an MRI threshold of 75 inch/mile for every 1/10 mile segment, or 125 in/mi for low speed applications. Multiple course overlays and diamond grinding must provide at least a 40 percent improvement in the quality of ride relative to the pavement's initial condition (or down to a 75 in/mi threshold). Smoothness thresholds for surface treatments are based on the premise that they must not reduce the quality of the ride.

Corrective action is based on a mathematical model of the California profilograph, with the ProVal bump finding method optional.

2. Do the requirements apply to both PCC and HMA?

Yes

3. Are you considering changes in the future? (Next 2 to 3 years)

Yes. We are considering the following:

- a) Reinstate incentives for limited access roadway applications
- b) Include ride quality specifications for selected bridge deck applications
- c) Eliminate the use of the CalPro bump finding methods.

Also, we are working toward providing more guidance to our designers relative to the appropriate application of ride quality specifications for each fix-type on the project.

4. If yes, what indices are you considering using?

We currently plan to remain with Mean Roughness Index (MRI) for both HMA and PCC.