

State Discussion Topics – 2003
North Dakota Department of Transportation Materials and Research
Answers are in bold text.

1. What is the status of Superpave implementation for both binder and mixtures? **The Superpave binder and mix specifications have been 100% implemented, but not all projects with HMA in North Dakota are Superpave.**
2. What are the primary PG binder grades being used? **The primary grades of PG binder are PG 58-28 and PG 58-34.** Does your state use any SHRP plus tests and the reason for their use? **No.** Do you have any plans to implement AASHTO MP1a? **No, but this could change.**
3. There has been much recent discussion on the affects of acid modification of binders. Is your state concerned with the issue of chemical modification? **Yes.** Does your state have any specifications to address chemical modification of PG binders? **No.**
4. There has been a concern that Superpave mixtures may be over compacted, resulting in low binder contents and reduced durability and fatigue life. Is your state doing any testing, other than gyratory compaction, to determine if the mixture has adequate binder? **Plant produced HMA verification using Marshall plugs.** Has your state taken any action, or modified the Superpave procedures, to insure adequate binder in the mixture? **We implemented a minimum 2.5% moving average on air voids for field plugs from the gyratory.**
5. What procedures does your state use to specify aggregate durability for HMA (sodium sulfate, magnesium sulfate, freeze thaw, or other)? **L.A. abrasion.** Have you done any research with Micro Deval and do you have any plans to replace your present specifications with Micro Deval? **No.**
6. Does your state routinely specify Stone Mastic Asphalt (SMA) mixtures? **No.** Approximately how many tons of SMA is placed each year? **Zero.** Do you use AASHTO MP2 and PP41 for specifications and design or what significant modification to these have you made? **No.** Do you have any construction quality issues and how are SMA mixture performing? **No.**
7. Has the performance of longitudinal joints been as issue? **No.** What type of joint is required or generally constructed by contractors? **Butt joints.** Do you require any QC or QA procedures such as density or permeability at the joint? **No.**
8. Do you regularly see paver related segregation (linear streaks either at or just below the mat surface) and do you have a specification to address it? **No.** Do feel temperature segregation is a problem and do you have a specification to address it? **No.**

9. Are there any recent or pending rule changes by your state EPA that may impact specifications or changes to products? **No, but air quality is being looked at very closely in North Dakota.** Has there been any recent legislation that will impact the refining or HMA paving industries? **No.**

10. What is the single most concerning issue with the quality of HMA in your state?
Being able to find quality aggregate locally available.