Shoulder surface type will be based on the following policy. Projects currently programmed through current or past Biennial Transportation Improvement Programs (BTIPs) with gravel shoulders, will usually remain as programmed, as funds are not available to add shoulder paving. Therefore, with pavement preservation projects, this policy will fully become effective with the 2005-2005 BTIP.

A.) On the National Highway System - All shoulders shall be paved as part of new construction, highway improvement, or pavement preservation projects.

B.) Off the National Highway System -
   1.) Where shoulders are warranted, as determined by state standards on new construction or highway improvements, the shoulders will be paved. Composite shoulders may be used for context sensitive design reasons. When the proposed pavement width of a composite shoulder is less than four feet, the lead unit will notify the Bicycle Coordinator.
   2.) Pavement preservation projects
      a.) Existing paved shoulders will be resurfaced.
      b.) Pavement preservation projects will have gravel shoulders paved where the design year Summer Average Daily Traffic (SADT) is greater than 4000.
      c.) Pavement preservation projects where the design SADT is less than 4000, shoulders will be paved if the following applies; otherwise, shoulders will be gravel. If there is any uncertainty as to whether the criteria listed apply in any given situation, the lead unit will contact the Bicycle Coordinator.
         i.) A bicycle route that is designated in the Department’s bicycle plan.
         ii.) On recreational use highways. These highways are defined by individual traffic counters or included in group III - recreational highways.
         iii.) In villages, or adjacent to parks, schools, beaches, fairgrounds, recreation facilities, work centers, or other “built-up” areas to accommodate pedestrian and bicycle usage. This may include extending paved shoulders to a facility adjacent to the village.
iv.) Complete gaps on highway segments where the majority of shoulders are already paved.

v.) All guardrail locations.

vi.) Between short gaps of guardrail runs and closely spaced side roads.

vii.) Areas adjacent to side roads with many turning movements.

C.) Hot Maintenance Mulch - regardless of system
   1.) Existing gravel shoulders will remain gravel.

   2.) Existing paved shoulders will be resurfaced during Not Maintenance Mulch (HMM) paving when one of the following conditions apply. Otherwise, existing paved shoulders will not be resurfaced.

      a.) A lip, 16 mm or greater, exists at the edge of the traveled way as a result of previous resurfacing of the traveled way and not resurfacing the shoulder.

      b.) The existing paved shoulder is in such poor condition that it has an adverse impact on shoulder maintenance and use by pedestrians and bicyclists.

   3.) Shoulders being resurfaced under HMM contracts should not require extensive “hand work” which is outside the scope of work for HMM. An example of extensive “hand work” includes paved “spoon ditches”.

   4.) If a municipality desires resurfaced shoulders, which in the opinion of the Department do not meet the above criteria, the shoulder resurfacing can be completed with the municipality responsible for the cost.

   5.) When shoulders are resurfaced, painting of pavement markings (edge line, etc.) is the responsibility of the entity who normally maintains the pavement markings.

D.) Glossary

   Composite Shoulder - Multiple surface types across the width of a shoulder.
   Highway Improvement - Major rehabilitation or reconstruction of a roadway.
Hot Maintenance Mulch - A pavement treatment used as a holding action until another level of treatment can be affected.

National Highway System (NHS) - A highway system, consisting primarily of existing Interstate routes and a portion of the federally designated principal arterial highways. These roads are considered most important to Interstate travel and national defense, they connect with other modes of transportation, and are essential for international commerce.

Pavement Preservation Program - A program that resurfaces or rehabilitates the pavement structure on highways that are built to modern standards to extend the life of the pavement. Included are PPM, Level 2 and 3 highway resurfacing projects, each level describing the intensity of work effort.

Spoon Ditches - Swale type shoulders that are formed to transport highway runoff away from the travel way.

Summer Average Daily Traffic (SADT) - The average traffic on a weekday during the months of July and August.

Approved by:

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John E. Dority
Chief Engineer