

# THE NEW HOT-MIX ASPHALT ABSOLUTELY!

## Long-Life Pavement

America's highways have come a long way since roads were first paved in the early 1900's. As technology progressed, the 94% of America's roads paved with Hot-Mix Asphalt (HMA) have proven that HMA is the right choice. Designs have evolved to fit the environment and carry the traffic loads, including Full-Depth<sup>®</sup> and Deep-Strength<sup>®</sup> HMA pavements, which have the advantage of providing a thinner overall section with less right-of-way width required than those employing thick granular base courses. As a result, traditional fatigue cracking is reduced, and pavement distress is confined to the upper layer or surface of the structure. Thus, when a surface distress reaches a critical level, an economical solution is to remove the surface layer and replace it.

### ❖ Full-Depth<sup>®</sup> HMA Pavement

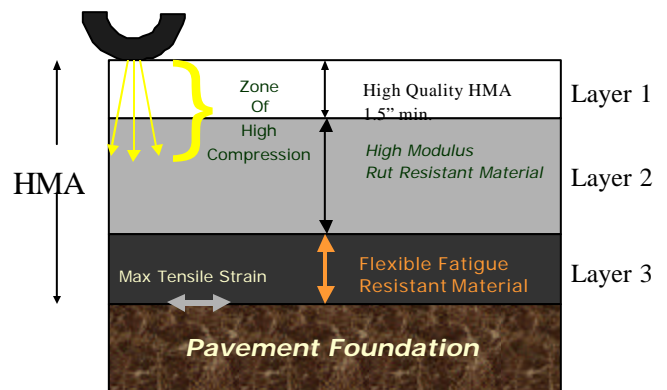
Full-Depth<sup>®</sup> HMA Pavement is one in which asphalt mixtures are employed for all courses above the subgrade or improved subgrade. A Full-Depth<sup>®</sup> asphalt pavement is placed directly on the prepared subgrade or improved subgrade.

### ❖ Deep-Strength<sup>®</sup> HMA Pavement

Deep-Strength<sup>®</sup> HMA Pavement is placed on relatively thin granular base courses and contains at least four inches of HMA over non-stabilized base course.

### ❖ Perpetual (Long-Life) HMA Pavement

A Perpetual Hot Mix Asphalt Pavement structure is designed and constructed from the bottom-up. It combines the well-documented smoothness and safety advantages of HMA with an advanced, multi-layer paving design process that, with routine maintenance, extends the life-cycled cost of a roadway. Perpetual Pavements use multiple layers of durable asphalt to produce a safe, smooth, long-lasting road. The HMA design begins with a strong, yet flexible bottom layer (Layer 3) that resists tensile strain caused by traffic, thus preventing fatigue cracks from forming in the bottom of the pavement. The intermediate layer (Layer 2) is designed with stone-on-stone contact to resist rutting. Distresses are concentrated to the sacrificial, rut-resistant surface layer (Layer 1).



Each of these designs shares the advantages of HMA as a paving material. Recent efforts in materials selection, mix design, performance testing and pavement design offer a method of obtaining long-lasting performance from HMA pavement structures. When scheduled restoration is performed, they can be maintained easily and cost-effectively without removing the road structure for reconstruction, saving time and money while keeping motorists happy. Asphalt is 100% recyclable, providing further cost savings and environmental benefits. Asphalt has a proven safety record as a smooth driving surface, offering stronger visual contrast with center stripes than other markings. Other advantages include reduced noise and greater skid resistance. HMA technology is constantly improving and *the new asphalt is the right choice, absolutely!*