Although the restricted zone was initially intended as a guide, it became more of a forbidden zone when adopted by the various state agencies. By avoiding the restricted zone, mix designers are often more successful in achieving adequate VMA. While it is possible to achieve that mixes with gradations going above the restricted zone tend to be sandier than those with gradations below the zone.

Current Issues

Although the Superpave system has gained widespread support, there continues to be discussion and research of a few issues. There is a desire among some user agencies for more stringent guidelines on flat, elongated particles. Specifically, some specifying agencies want to change the requirement from a 5.1 to 3.1 length to width ratio. Accompanying this change would be a change in the maximum criterion from 10 to 20 percent. Thus, the specification would require a maximum of 20 percent, 3.1 ratio for coarse aggregate larger than 4.75 mm. Many in the aggregate industry are opposed to the change, claiming that it is unnecessary and would greatly increase the cost of production. There is currently little data to support the change, but the industry continues to gather information.

Changes?

Without a doubt, the Superpave aggregate specifications have caused changes within the aggregate industry. Those changes are varied, and they depend on location of the aggregate source. In addressing the issue of Superpave aggregate specifications, the question we must ask is: “Have Superpave aggregate specifications improved HMA mixtures?” The answer the asphalt industry gives to that question is: “We believe they have.” More time is needed, however, before the question will be answered in a definitive manner.

It is possible to say that the Superpave system is working and that aggregates are a critical component of that system. We need more research to define and measure important aggregate characteristics. We need more research to define and measure important aggregate characteristics.