



ASPHALT PAVEMENT IS AMERICA'S MOST RECYCLED PRODUCT

Americans who recycle their aluminum cans, newspapers, plastics and glass are helping to preserve our nation's resources. But daily and quietly, the Hot Mix Asphalt industry is recycling asphalt pavement to a substantially larger extent.

Asphalt pavement is unquestionably the nation's most widely recycled product.

The Federal Highway Administration reports that 73 million metric tons of the 91 million metric tons (or 80.3 million of the 100.1 million tons) of asphalt pavement that is removed each year during resurfacing and widening projects is reused as part of new roads, roadbeds, shoulders and embankments. That's a recycling rate of 80 percent.

In terms of tonnage, only scrap metal comes close at 70 million tons, which represents a recycling rate of 64 percent for steel.

On a percentage basis, the rate for asphalt pavement is second only to the 93 percent rate that the U.S. Environmental Protection Agency estimates for the relatively few auto batteries (less than one ton) recycled annually. The EPA has not estimated a recycling rate for batteries overall.

A possible misconception is the extent to which the recycling of consumer goods occurs. The EPA says Americans recycle only 28 percent of the materials in the municipal solid waste stream. The EPA says that of the 217 million tons of solid waste generated in 1997, the latest year for which figures are available, we recycled 60.7 million tons of paper and paperboard, yard trimmings, glass, metal, plastic and other materials.

Thus, the 80.3-million-ton volume of recycled asphalt pavement is approximately one-third higher than the total volume of 60.7 million tons of post-consumer recycling. And it's double the volume of paper, glass, plastic and aluminum combined.

The Hot Mix Asphalt industry has been reclaiming and reusing asphalt pavement for many years. Says Mike Acott, president of the National Asphalt Pavement Association, "The recycling of asphalt pavement is an everyday business practice."

When a road is widened or resurfaced, the top layer of asphalt pavement is removed and later re-mixed with fresh materials. Dr. Jon A. Epps, civil engineering professor emeritus at the University of Nevada in Reno, notes the quality remains high when making new roads with recycled asphalt pavement. He reports that mixtures containing 10 percent to 25 percent of reclaimed asphalt pavement performed well in numerous states. He reviewed data primarily from Federal Highway Administration studies of projects in states including Connecticut, Florida, Georgia, Louisiana, Massachusetts and Washington.

While the extent of asphalt pavement recycling is impressive, there is a second environmental benefit as well: The making of Hot Mix Asphalt provides a way not only to reuse old asphalt pavement but also to put other waste products to good use. Specifications for asphalt pavement now include such ingredients as rubber from old tires, slag from the steel-making process, sand from metal-casting foundries, and waste from the production of roofing shingles.

Adds Earl Arp, director of health, safety and the environment for the Asphalt Institute, "From both the environmental and engineering standpoint, the recycling practices of the Hot Mix Asphalt industry are second to none."