



NATIONAL ASPHALT
PAVEMENT ASSOCIATION

The Asphalt Pavement Industry Fast Facts

The Association

- The National Asphalt Pavement Association (NAPA) exclusively represents the interests of the asphalt pavement industry, including producers and contractors, on the national level with Congress, government agencies, and other national trade and business organizations.
- The Association, which counts more than 1,200 companies as its members, was founded 65 years ago in 1955.
- NAPA works to advocate, advance, and support the asphalt pavement industry.
- NAPA maintains an active research program designed to address environmental issues and to improve the performance and quality of asphalt pavements and paving techniques used in the construction of roads, streets, highways, parking lots, airports, and environmental and recreational facilities.

Asphalt Pavement

- Asphalt pavement material is a combination of approximately 95 percent aggregate (stone, sand, or gravel) bound together by approximately 5 percent asphalt binder.
- Asphalt pavement material is produced at a manufacturing facility known as an asphalt plant, where the aggregates and asphalt binder are heated, mixed according to precise engineering formulas, and loaded into trucks for transport to the paving site.
- The asphalt pavement industry has a record of using sustainable and environmentally friendly practices in the manufacture and paving of asphalt pavements.

Scope and Scale of the Asphalt Pavement Industry

- The asphalt pavement industry workforce, estimated to be almost 150,000 men and women strong, is part of a larger transportation construction industry that employs 410,000 people including asphalt plant managers, administrators, road crews, researchers, engineers, and support personnel, all of whom play critical roles in building and maintaining the roads Americans rely upon every day.
- The U.S. has about 3,600 asphalt production sites¹ and produced about 420 million tons of asphalt mixture in 2019.
- Of the 2.8 million miles of paved roads in the U.S., about 94 percent are surfaced with asphalt.²
- Approximately 80 percent of the nearly 3,330 runways in the FAA's national airport system are surfaced with asphalt pavement.³

¹ Chapter 11: Mineral Products Industry, AP 42, Fifth Edition, Volume I. (2004). Retrieved September 22, 2020, from <https://www3.epa.gov/ttn/chief/ap42/ch11/index.html>

² U.S. Department of Transportation, Federal Highway Administration. (2018, August 23). *Table HM-12 - Highway Statistics 2017*. <https://www.fhwa.dot.gov/policyinformation/statistics/2017/hm12.cfm>

³ *Federal Aviation Administration (FAA) Airport Master Records (5010) Module in Airport Data and Information Portal*. Retrieved by FAA representative September 15, 2020. <https://adip.faa.gov/agis/public#/airportSearch/advanced>.

The Asphalt Pavement Market

- Publicly funded highway programs make up about 65 percent of the asphalt pavement market, with residential and non-residential construction making up the remaining 35 percent.
- Over five years ago, in 2014, total spending on highway improvements such as new construction, reconstruction, resurfacing, and rehabilitation by all levels of government was \$105 billion. The federal share was 43 percent.⁴
- Approximately \$4 billion per year from Airport Improvement Program grants and passenger facility charges is spent on airfield runways, taxiways, and aprons.⁵
- The U.S. Council of Economic Advisers has calculated that \$1 billion of transportation-infrastructure investment supports 13,000 jobs for a year.⁶
- Beyond the numbers, infrastructure is critical to the health and well-being of the country. The United States' economy could not function without an interconnected and well-maintained infrastructure network of roads, bridges, and airports.

Environmentally Friendly & Sustainable⁷

- The use of recycled materials, primarily reclaimed asphalt pavement (RAP) and reclaimed asphalt shingles (RAS), in asphalt pavements reduces the amount of raw materials required to produce asphalt mixes and materials going to landfills. In fact, asphalt pavements are recycled into new roadway surfaces at the highest rate, over 90%, of any material.
- In 2019, 97 million tons of RAP and 1 million tons of RAS were collected for re-use, saving nearly 60 million cubic yards of landfill space.
- In 2019, 90 million tons of recycled materials were used in asphalt pavement, saving more than \$3.3 billion compared to the use of virgin materials.
- An additional 5.5 million tons of RAP and RAS were used as aggregate in cold-mix asphalt and other road-building activities.
- The use of warm-mix asphalt allows the producers of asphalt mixtures to lower temperatures at which the material is mixed and placed on the road.
- Overall, warm-mix asphalt provides substantial sustainability benefits similar to or, in some cases, better than conventional hot-mix asphalt. Sustainability benefits include lower energy use, reduced emissions, and potential for increased reclaimed asphalt pavement usage.
- In 2019, total warm-mix asphalt tonnage increased to over 164 million tons, or 38 percent of all asphalt pavement produced in the United States.

⁴ U.S. Department of Transportation, Federal Highway Administration. (2019). *Status of the nation's highways, bridges, and transit – conditions and performance: Report to Congress*. <https://www.fhwa.dot.gov/policy/23cpr/pdfs/23cpr.pdf>

⁵ Congressional Research Service (CRS). (2019). *Financing airport improvements: CRS report prepared for members and committees of Congress*. <https://fas.org/sgp/crs/misc/R43327.pdf>

⁶ U.S. Department of Transportation, Federal Highway Administration. (2020, September 21). *Employment impacts of highway infrastructure investment*. <https://www.fhwa.dot.gov/policy/otps/pubs/impacts/>

⁷ Citation for entire section: Williams, B.A., J.R. Willis, & Shacat, J. (2019). *Annual Asphalt Pavement Industry Survey on Recycled Materials and Warm-Mix Asphalt Usage: 2018, 9th Annual Survey* (IS 138). National Asphalt Pavement Association, Greenbelt, Maryland. DOI: 10.13140/RG.2.2.21946.82888