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 was founded in 1955 and counts more than 1,100 companies as its members.
- NAPA works to advance the asphalt pavement industry through leadership, stewardship, and member engagement.
- 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% aggregate (stone, sand, or gravel) bound together by approximately 5% asphalt binder.
- Asphalt pavement material is produced at a manufacturing facility known as an asphalt mix 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 manufacturing and paving of asphalt pavements.

Scope and Scale of the Asphalt Pavement Industry

- The asphalt pavement industry workforce, estimated at approximately 150,000 men and women strong, is part of a larger highway construction and maintenance industry that employs 350,000 people including asphalt mix 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 United States has about 3,600 asphalt production sites¹ including at least one in every Congressional district and produced about 432 million tons of asphalt mixture in 2021.
- Of the 2.8 million miles of paved roads in the United States, about 94% are surfaced with asphalt.²
- Approximately 80% 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% of the asphalt pavement market, with residential and non-residential construction making up the remaining 35%.
- 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%.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 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 U.S.
 economy could not function without an interconnected and well-maintained infrastructure network
 of roads, bridges, and airports.

Environmentally Friendly and 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 prevents those materials going to landfills. In fact, asphalt pavements are recycled into new roadway surfaces at a rate greater than 95%, making asphalt pavement the most recycled material in the country.
- 101 million tons of RAP and 385,000 tons of RAS were collected in 2021 for reuse, saving nearly 62 million cubic yards of landfill space.
- 99 million tons of recycled materials were used in new asphalt pavements and other road-building activities, saving more than \$3.56 billion compared to the use of virgin materials.
- 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, thereby saving energy. Overall, warm-mix asphalt
 provides substantial sustainability benefits similar to or better than conventional hot-mix asphalt.
 Sustainability benefits include lower energy use, reduced emissions, and potential for increased RAP
 usage.
- In 2021, warm-mix asphalt accounted for 41% 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., Willis, J.R., & Shacat, J. (2022). *Annual Asphalt Pavement Industry Survey on Recycled Materials and Warm-Mix Asphalt Usage: 2021, 12th Annual Survey* (IS 138). National Asphalt Pavement Association, Greenbelt, MD. DOI:10.13140/RG.2.2.23149.26081.