IMPROVING PAVEMENT SUSTAINABILITY THROUGH

GREEN THINK **REDUCE, REUSE, RECYCLE**

As quality resources are depleted, it is

REDUCE

REUSE

the use of virgin resources

important to:

existing pavement structures to the extent possible

+ RECYCLE

pavement materials even more aggressively in new and rehabilitated pavement structures

Over 100 million tons of reclaimed asphalt pavement produced in 2018 source: National Asphalt

ENVIRONMENTAL: reduced energy consumption & emissions



CASE STUDIES

In-Place & Central-Plant Recycling of Asphalt Pavements in Virginia

Virginia DOT demonstrated the use of in-place recycling and central-plant recycling methods for two major rehabilitation projects: I-81 near Staunton, VA and I-64 near Williamsburg, VA.

Up to 70% energy reduction ٨% when compared to conventional asphalt pavement

Costs savings of up to \$15 million (6 to 7 percent of contract value)

Use of Recycled Concrete Aggregate (RCA) in Concrete **Pavements in Texas**

To better understand RCA usage in continuously reinforced concrete pavements, Texas DOT used it in the reconstruction of a 5.8-mile segment of I-10 near Houston, TX.



200,000 tons of virgin aggregate

material saved on the project

Costs savings of roughly \$1.4 million through the use of RCA in lieu of virgin aggregate

Learn more about the Texas RCA project





Learn more about the Virginia asphalt pavement recycling projects

U.S. Department of Transportation **Federal Highway Administration** www.fhwa.dot.gov/pavement/sustainability