

Smooth Asphalt Roads:

RECYCLED ASPHALT PROVIDES A LOW-COST SOLUTION TO PROTECT ROADS IN LOUISIANA

Fixing a disaster-ravaged road is a challenge that requires anticipation, preparation, and a rapid response. Louisiana inadvertently discovered a process that saved its roads from needing repairs after flooding events from major storms. In the late 1990s, two parishes worked with Prairie Contractors LLC to develop a low-cost solution to reduce serious and fatal accidents on rural roads.

Drivers who edged off these roads often found themselves sliding into a ditch, resulting in significant accidents. Cameron Parish and Calcasieu Parish decided to use a reclaimed asphalt pavement (RAP) mix to expand roadway shoulders and support vehicles from slipping off the shoulder, enabling vehicles to regain traction and safely return to the road.

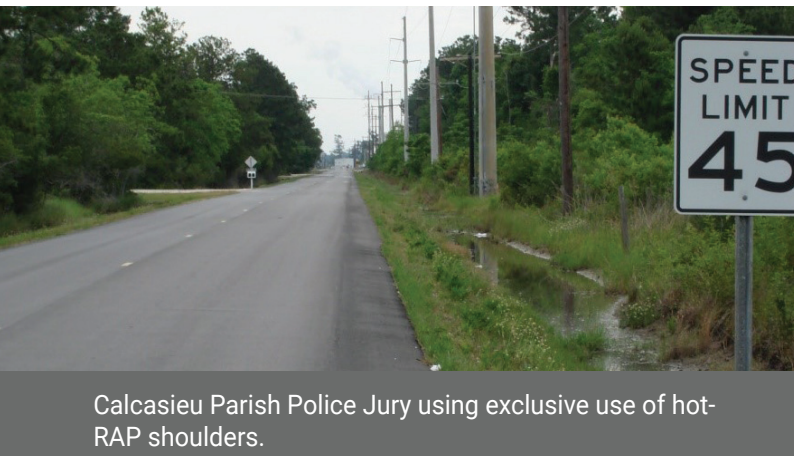


Portable RAP fractionation unit.

just enough asphalt binder to hold it together. The state used 6-10 inches of the mixture to develop the shoulder. "The parishes adopted the mix as standard use for rural roads," said Winford.

The mix did the job but also delivered unexpected benefits. "In 2020, Louisiana was hit by two hurricanes in a single year," said Winford. "Parish engineers found that the inexpensive RAP shoulder mixture kept the floods from undermining the roads. This saved the state millions of dollars in road repairs."

Asphalt continues to be an excellent choice for maintaining or repairing roads in the wake of natural disasters like flooding and hurricanes. A community's ability to bounce back from a natural disaster is greatly enhanced with asphalt mixtures that adapt to our changing climate and are constructed to withstand these events.



Calcasieu Parish Police Jury using exclusive use of hot-RAP shoulders.

James Winford, Jr., Ph.D., P.E., president of Prairie Contractors, described the mix design as stone with