

National Park Service is able to maintain 5x the road miles on the Blue Ridge Parkway with chip and fog seals.



Average chip and fog seal combo costs about one fifth those of HMA mill and overlay



All roads in the project brought from poor/fair condition to good/excellent.

### BACKSTORY:

The Blue Ridge Parkway is comprised of 530 winding mountain road miles that saw more than 15 million visitors in 2016. Common hazards such as fog and adverse weather conditions, traffic, wildlife, blind curves and drop-offs make it essential to keep the Parkway in tip-top shape to help ensure a safe and enjoyable experience.

### PROBLEM:

The National Park Service is tasked with maintaining more than 5,500 miles of paved roads. The agency faces budget shortfalls annually which have compounded to the \$5.668 *billion* in deferred maintenance projects for Paved Roads and Structures. With so much to do across the nation and not enough to do it with, the Park Service needed a way to tackle more maintenance on more miles of roads. Nearly 90 miles of the Blue Ridge Parkway in Virginia were identified as needing immediate maintenance with transverse cracking, potholes, and alligatoring dotting the roadway. The low-cost solution of patching and crack-filling alone would address the problem, but would lessen ride quality and visually deter from the experience visitors expect. The cost of a traditional hot mix overlay to address these problems made the option unfeasible.

### SOLUTION:

With the ability to provide a smooth ride and pleasing appearance, improve the friction rating of the road above that of hot mix, and do so at a fraction of the latter's cost, the Park Service chose to employ a chip and fog seal to improve and preserve the road. What's more, the project ran so smoothly that an additional 10.3 miles were added bringing the total miles rehabbed and preserved to nearly one fifth of the entire length of the Parkway. Considering costs and the mileage that will be completed on this project, the Park service could effectively chip and fog the entire Parkway for the same cost to overlay this project's section alone.

### PHOTOS:

