Commonly known as “oil and chip,” this maintenance activity is used as a way to extend the life of low-traffic-volume roads for another three to five years.

This activity is performed only during hot weather, which varies from region to region. Surface treatment requires a sweeper, oil distributor, a stone chipper, rollers, numerous dump trucks and about 18 crew members on the road.

First, the roadway is swept and the hot liquid asphalt is sprayed on the road. Then, fine stones are spread on top of the asphalt. Finally, the area is rolled and swept again to remove loose stones.

Generally, it takes about two days for the stones to fully bond in the hardened asphalt. Motorists should reduce their speed on these roads until the stone and the asphalt fully adhere.

This maintenance treatment seals the road surface to keep water out and restores the friction of the surface to enhance traction.
Although Pennsylvanians see PennDOT crews on the roads year round, they may not always realize the scope or importance of all of the work we do.

More common maintenance activities such as Surface Treatment don't receive as much public attention as building new bridges or highways, but they are integral to the maintenance of the state’s 40,000 roadway miles and 25,000 bridges.

For more information, or for additional copies of the Maintenance First cards, please contact PennDOT’s Press Office at 717-783-8800 or your local PennDOT District Press Office.

The Maintenance First Series was developed to help educate our customers about our more common maintenance operations.