Reducing Chip Seal Damage to Vehicles

INDOT prefers to close roads during chip seal projects, but this is not possible on all projects. On open roads, motorists may encounter work crews, equipment, fresh oil, loose aggregate, dust, or traffic delays during chip seal operations.

INDOT makes every effort to reduce vehicle damage during and immediately after chip seal projects. Although these efforts may not prevent all vehicle damage during the chip seal process, they substantially reduce the likelihood of damage.

Motorists can protect their vehicles when driving through chip seal project areas:

- Use alternate routes and respect road closures – chip seal projects last only a few days.
- Slow down. Higher speeds can cause loose stones to scatter and damage vehicle paint and windshields.
- Increase distance between vehicles. Leave space between you and other vehicles to reduce damage caused by loose stones.
- Stay far behind construction vehicles.
- Consider worker safety when traveling through a work zone.
- Obey construction signs and flaggers.
- Expect the unexpected. Use caution.

Chip sealing will typically extend the life of a roadway surface by four to six years.

INDOT works hard to preserve Indiana's transportation assets – even beyond their typical life cycle.

Indiana Department of Transportation
100 North Senate Avenue, Room N755
Indianapolis, IN 46204
www.in.gov/indot

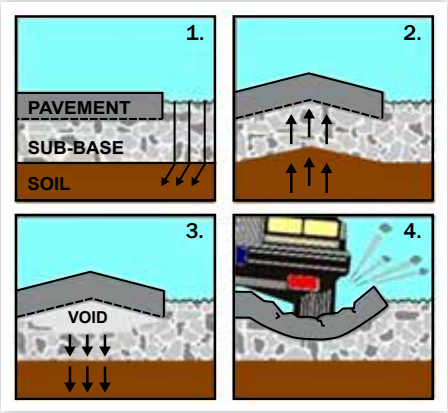
INDOT Chip Sealing

Chip seal is one of INDOT's most common pavement preservation techniques, with about 1,500 miles of roadway treated each year.

Chip seal or seal coat projects treat the pavement surface with liquid asphalt and crushed stone to provide a new roadway surface and prevent future road deterioration.

How Chip Sealing Works

After years of traffic and winter freeze-thaw cycles, small cracks develop in roadway pavement. If these cracks are untreated, moisture seeps in and forms potholes when the water freezes and expands. As the name implies, a chip seal treatment seals cracks, provides waterproofing, improves traction and helps prevent potholes from developing.



Chip sealing helps INDOT meet its goal of "Taking Care of What We Have." It provides a new roadway surface, prevents future deterioration, and typically will extend the life of a roadway surface many years, which reduces future maintenance and saves money.

INDOT chooses roads for chip seal pavement preservation based on their surface type, condition, age, and traffic volume. INDOT pavement engineers review roads suitable for chip seal projects and prioritize them according to need, safety and funding.

Prior to chip sealing, the pavement should show no major deficiencies, and isolated deficiencies should be repaired. A road surface may be chip sealed multiple times, as long as the road is structurally sound.

Chip sealing is an important component of INDOT's pavement preservation program.

The Chip Sealing Process

Chip sealing involves a multi-step process:

1. Spraying the roadway with liquid asphalt.
2. Distributing crushed stone chips over the liquid asphalt. The mixture must then set or cure for at least one hour before traffic can be returned to the roadway.
3. Sweeping loose stone chips off the roadway. Maintenance crews will take measures to minimize the dust throughout this area during the process.
4. A fog seal is applied to the finished chip seal. Fog sealing is a light layer of liquid asphalt overcoat that helps settle the stone chips and reduce dust.
5. Once all applications of chip seal and fog seal have been completed, traffic crews will install permanent pavement markings onto the roadway.