

# DIAMOND GRINDING PAVEMENT TREATMENT

ADOT will diamond grind the Loop 101 (Pima Freeway) from Interstate 17 to Pima Road in conjunction with the widening and improvement project.



Pictured to the right: ADOT has used diamond grinding to replace the worn-down rubberized asphalt on sections of the Loop 202 (Santan Freeway) in Chandler.



## Less Maintenance

Rubberized asphalt lasts about **10 to 15 YEARS**



Rubberized asphalt wears out over time because of traffic and the elements. Diamond grinding is a longer-lasting solution. Diamond grinding can occur any time of year, day or night, and requires fewer lane closures. Rubberized asphalt is temperature sensitive, so paving in the Valley can occur only during spring and fall. Rubberized asphalt paving also may require freeway closures, while diamond grinding can be done with fewer impacts to drivers.

## A smooth, quiet ride

On a highway treated with diamond grinding, drivers will enjoy a smooth ride.

Lower noise levels have remained consistent over time on a highway treated with diamond grinding.



# Cost Savings \$\$\$

**Between  
2020 and 2024**

rubberized asphalt replacement and pavement maintenance costs for highways in Maricopa County are estimated at nearly

**\$200  
MILLION**

That number is projected to  
**INCREASE BY  
300%**  
**between  
2025 and 2029**  
to nearly

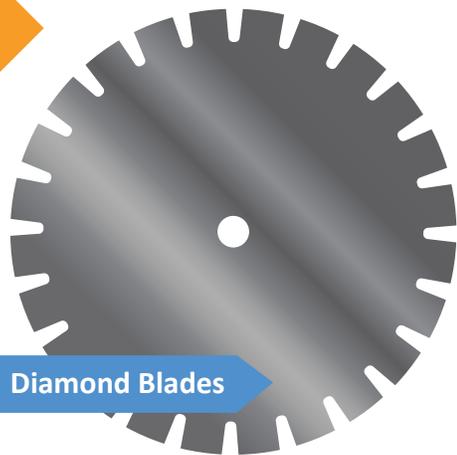
**\$800  
MILLION**

to replace rubberized asphalt on highways across Maricopa County.



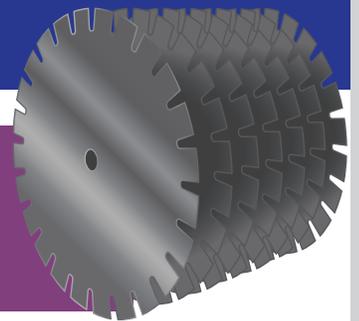
Diamond grinding could save millions of dollars in pavement-rehabilitation costs in the years to come and free up funding for future freeway improvements. It could also eliminate the need to continually replace rubberized asphalt.

## How Diamond Grinding Works



Diamond Blades

Closely spaced diamond blades remove a thin layer of roadway surface – about 1/4 of an inch.



The road surface has a consistent, smooth texture. Up close, the diamond-ground road surface looks similar to corduroy fabric. The small grooves run in the same direction as the driving surface.

Rubberized Asphalt

Grooves

