

**2014
Rocky Mountain West
Pavement Preservation Partnership
Arizona Report (ADOT)**



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AZ Basic Demographics



- State Highway System Description
 - 8,072 Total Centerline Miles
 - 21,213 Total Paved Miles (Asphalt and Concrete)
- Number of State Highway Employees: 4,100±
- Total State Highway Budget: \$1,272,952,000
- Total Pavement Preservation Budget: \$14,000,000
- Major Pavement Preservation Treatments
 - Chip Seal, Micro Surface, Slurry Seal and Crack Seal

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Strengths

- Dedicated Yearly Funds for Surface Treatment Projects (112 Sub-Program)
 - FY15 \$14 Million
 - FY16 \$14 Million
 - FY17 \$16 Million
 - FY18 \$16 Million
- Pavement Surface Treatments applied on a Network Level including Interstate, US Routes and State Routes
- SHRP2 (R26)
 - Four High Volume Roadway Projects
 - Two Interstate Crack Seal Projects
 - One Interstate Micro Surfacing Project
 - One State Route Micro Surfacing Project

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ADOT - FHWA SHRP-2 (R-26) PROJECT TESTING

DATE:
October 9, 2014

HIGH VOLUME ROADWAYS	Route & Mile Posts	Type of Work	SHRP-2 Testing		Testing Frequency
	I-8 MP 141.10 to 147.60 AADT 5351	Crack Seal Full Width 41.20 Lane Miles	Before Constuction	Condition Survey Profiler (IRI)	High Speed Friction Test
After Constuction			Condition Survey Rideability Profile (IRI)	High Speed Friction Test	
I-10 MP 80.00 to 112.30 AADT 35959	Crack Seal Full Width 204.60 Lane Miles	Before Constuction	Condition Survey Profiler (IRI)	High Speed Friction Test	Yearly
		After Constuction	Condition Survey Rideability Profile (IRI)	High Speed Friction Test	
I-10 MP 209.87 to 212.95 AADT 41854	Micro-Surfacing Travel Lanes 19.50 Lane Miles	Before Constuction	Condition Survey Profiler (IRI)	High Speed Friction Test	Yearly
		After Constuction	Condition Survey Rideability Profile (IRI)	High Speed Friction Test	
SR 68 MP 21.70 to 25.80 AADT 13102	Micro-Surfacing Travel Lanes & Median 20.50 Lane Miles	Before Constuction	Condition Survey Profiler (IRI)	High Speed Friction Test	Yearly
		After Constuction	Condition Survey Rideability Profile (IRI)	High Speed Friction Test	

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- Approximately 14 Surface Treatment Projects Constructed Yearly
- Current Surface Treatment Applications in use:
 - Emulsion Chip Seal (Standard & Polymer Modified)
 - Hot Applied Asphalt Rubber Chip Seal
 - Precoated Chip Seal with terminal blend polymerized asphalt rubber (PG 64-28TR+)
 - Crumb Rubber Asphalt (CRA) Chip Seal
 - Micro Surfacing
 - Slurry Seal
 - Crack Seal
 - Crack Fill
 - 2 ½" AC Mill & Replace Surface Repair/Spot Repair
 - AR-ACFC
 - ACFC
 - Asphalt Rubber Stress Absorbing Membrane (AR SAME)

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Challenges

- High Volume Road Surface Treatments
 - Low Friction After Micro Surface Applications
 - Limited Applications
- Wide variety of climate conditions
 - Roadway elevations ranging from 90 feet to 9000+ feet above sea level
 - Temperatures from -20° to $122^{\circ}+$
 - Frequent high elevation winter freeze/thaw cycles
 - Snow removal damage to the surface
 - Summer monsoon season with heavy rainfalls
 - High pavement surface temperatures ($150^{\circ}+$)
- Micro Surfacing and ADA Requirements

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Looking Ahead

- Increased use of Rubberized Chip Seals
- Developing a Fog Seal test project
 - SR195 in Yuma
 - 17 surface applied products
 - 86 Lane Miles
 - Determine the environmental effects of temperature extremes with significant amounts of truck traffic from the San Luis Port of Entry
 - Working toward federally funded fog seal pavement preservation projects