ADOT Maintenance and Rehabilitation

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ADOT Materials Group
Surface Treatments

- Fog Seals
- Chip Seals
- Slurry Seals
- Micro seals
Maintenance Activities

- Cleaning Ditches
- Cleaning Culverts
- Repairing Potholes
- Repairing/Replacing Pavement Damaged in Traffic Incidents, etc.
Rehabilitation

- Overlays
- Mill and Replace
- Full Depth Reconstruction
Budget

• ADOT currently budgets about 50% of need for Pavement Preservation

• Some States only fund maintenance and still not enough

• Some States selectively choosing not to maintain some roads
Profilometer
Federal Standards

• Below 95 in/mi – good ride; good condition
• 95-119 in/mi – acceptable ride; fair condition
• 120-170 in/mi - acceptable ride; mediocre condition
• Greater than 170 in/mi – unacceptable ride; poor condition
ADOT Standards

- PSR no worse than 3.2
- PSR of 3.2 = IRI of 117 in/mi
- Currently about 25% of the State system exceeds 117 in/mi
AASHTO 2008 - Pavement Smoothness

2nd in the nation
AASHTO 2009 – Rough Roads Ahead

• Top 5 in country

• AZ vehicle operating costs $380 less than CA
Life Cycle of Road

- **Design**
  - 20 year new flexible
  - 10 year rehab flexible

- **Construction**
  - Incentive/disincentive $7-9K per lane mile
  - Strict adherence to specifications
Life Cycle of Road cont.

- Initial Deterioration
- Visible Deterioration
- Failure
Pavement Option Curve

- Excellent
- Good
- Fair
- Poor
- Very Poor
- Failed

40% Drop in Quality

75% of Life

12% of Life

Spending $1 on Preservation here...

...eliminates or delays spending $6 to $10 on rehabilitation or reconstruction here.

0 5 10 15 20
QUESTIONS?