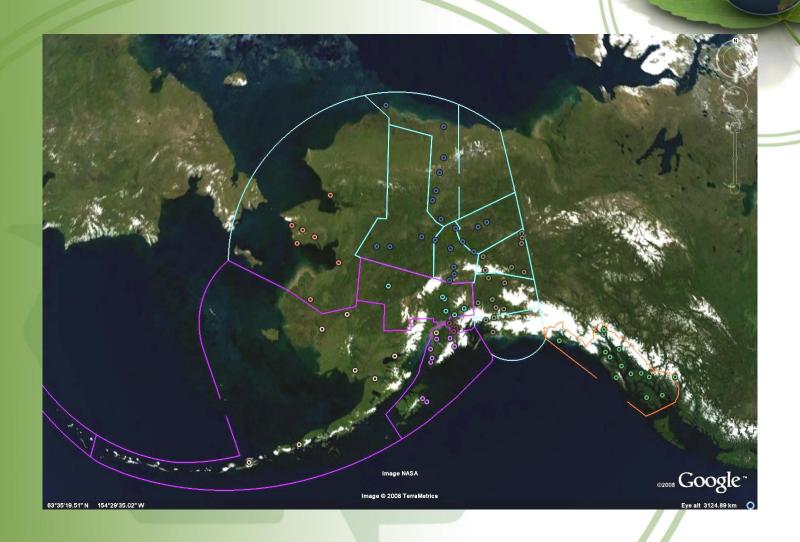


Jim Horn PE State Pavement Management & Preservation Engr. jim.horn@alaska.gov

Alaska Demographics

- State Highway System Description
 - 15,680 Total Centerline Miles
 - 5085 Total Paved Miles
 - 252 Airports, 250 State Buildings, Ferry System
- Number of State Highway Employees: 3420
- Total State Highway Budget: \$1.2B
- Total Pavement Preservation Budget: \$50 m
- Major Pavement Preservation Treatments
 - Chip Seals, High Float, Thin Overlays

Alaska's Challenges



Alaska's Challenges

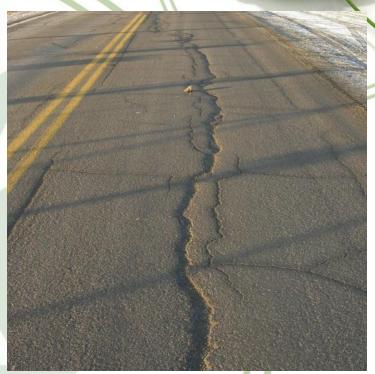


- Melting Permafrost Embankment
- Frost penetration up to 12 feet
- Temperature Extremes
- -Rainfall up to 12 feet / year
- Disconnected Road System = High Costs
- Studded tire usage 6-7 months / year

Permafrost & Frost Distress







Alaska - Looking Ahead



- Strength- Staff Versatility & Training
- New technologies
 - Asset Management / Pavement Management
 Integration (IRI, Rut, Photo, Lidar, GPS)
 - Repair of Pavement Joints
 - Banding, Fiber HMA, SAMI, Infrared Joint Heating
 - Sand Seal with Hard Aggregate
 - Resilient PMA @ 0°C For Thin Overlays

Alaska Sand Seal w/ "Hard" Aggregate





Sand Seal

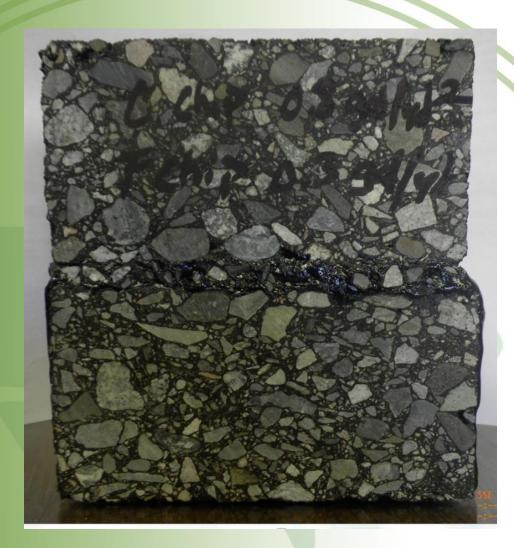






SAMI-RAP w/ PMA





Working Together





