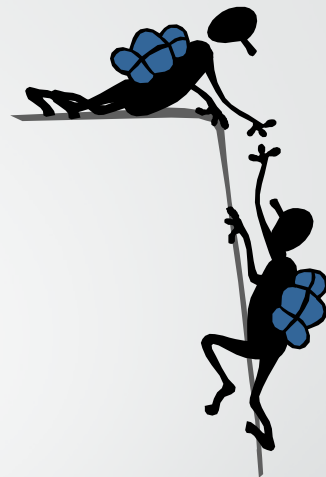




Selecting the Right Pavement Preservation: Roads in



David P. Orr, P.E.

We will be getting answers @
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When poll is active, respond at pollev.com/davidorrpe

Text **DAVIDORRPE** to **22333** once to join

I work for:

Local Government

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FHWA

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The Weekend

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Pavement Preservation

- ✓ Right Treatment
- ✓ Right Place
- ✓ Right Time



🚫 Do nothing

💧 Drainage maintenance

⚡ Crack repairs

🔴 Patching

✂ Area repairs

🚚 Wearing courses

🚧 Overlays

♻ Recycling

🏗 Reclamation

🔧 Reconstruction



The Right Treatment

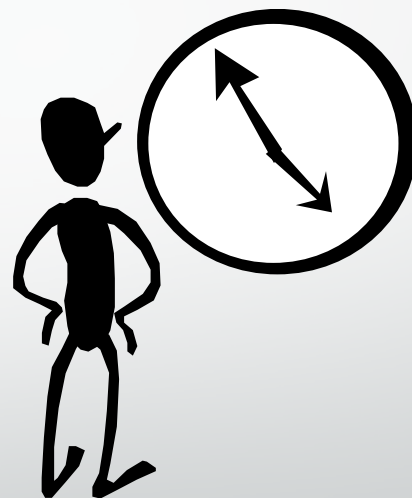
- Let the road tell you what needs to be done
 - Fix the disease,
NOT the symptoms





Why Roads Fail Prematurely

- Design
- Construction
- Materials
- Preservation







Recycling fixes the base?

- True
- False



Recycling fixes the base?

True

False

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Recycling fixes the base?

✓ False



↻ Recycling

- ↻ Cold in-place
- ↻ Hot in-place
- ↻ Cold stockpiled
- ↻ Heater-Scarifier





Calcium chloride stabilization:

- Reduces the fines %
- Reduces the frost susceptibility
- Reduces the fines %
& the frost susceptibility



Calcium chloride stabilization:

Reduces the fines %

Reduces the frost
susceptibility

Reduces the fines % & the
frost susceptibility

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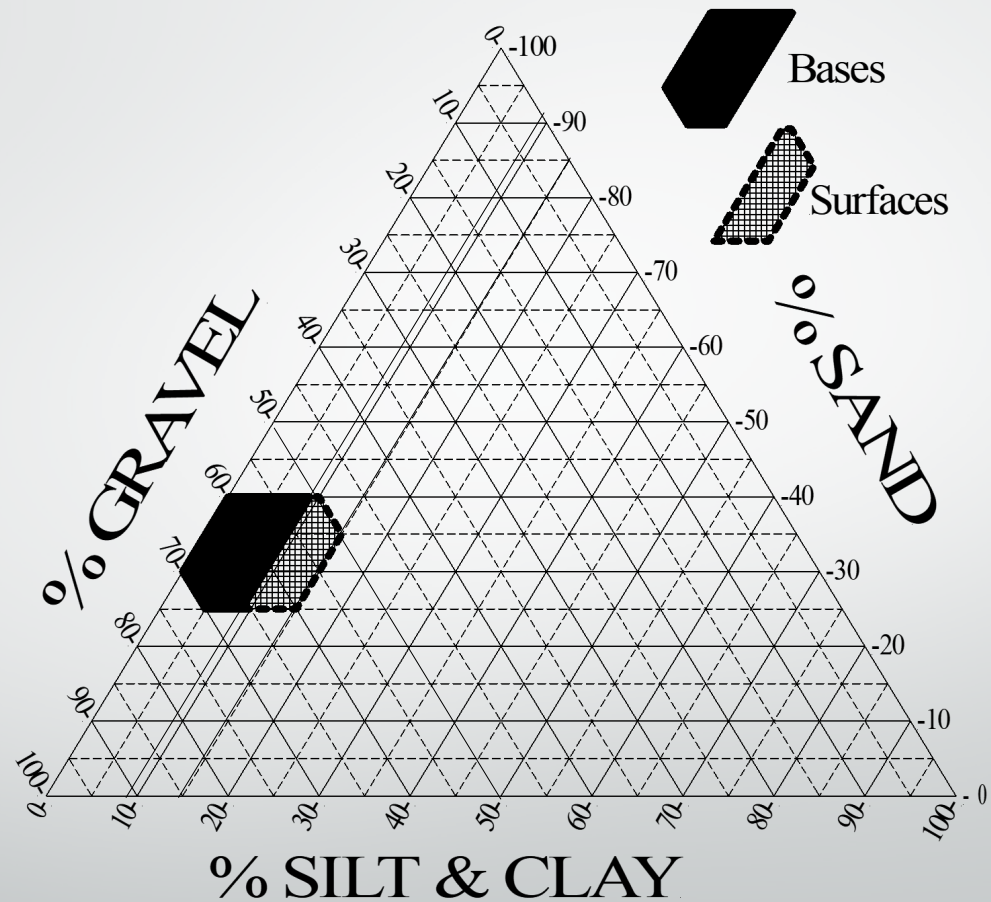
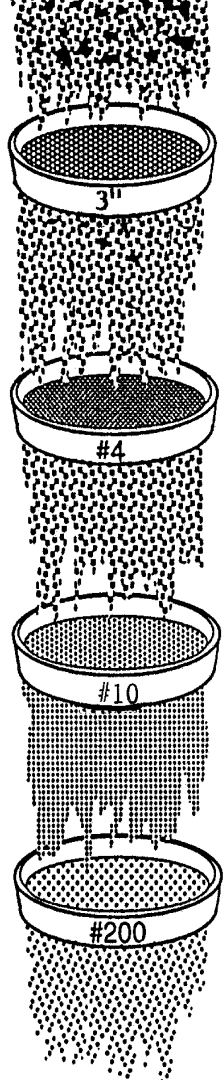




Calcium chloride stabilization:

- ✓ Reduces the frost susceptibility







GENESEE COUNTY.—Town Road in Town of Pavilion.

- Pulverization
- Mechanical stabilization
- Chemical stabilization
 - Calcium chloride
 - Cement
 - Lime
- Bituminous stabilization
 - Emulsion
 - Foamed asphalt
- Combination

Stabilization









Doing nothing is a good maintenance technique?

- True
- False



Doing nothing is a good maintenance technique

True

False

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Doing nothing is a good maintenance technique?

✓ True



⊘ Doing Nothing

- ⊘ Easy
- ⊘ Cheap
- ⊘ Good roads
- ⊘ Bad roads







The worker in the hole is?

- Obviously not a supervisor
- An OSHA inspector
- Not following good safety practices



The worker in the hole is:

Obviously not a
supervisor

An OSHA inspector

Not following good
safety practices

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Pavement Preservation Quiz

The worker in the hole is?

✓ Not following good safety practices



Total reconstruction

 Very expensive

 May be only option

 Brand new road when done





811 must be called before?

- Before any work
- Before using powered equipment that will dig
- After hitting a utility line
- To report a non-emergency

811

811 must be called before:

Before any work

Before using powered equipment
that will dig into the ground

After hitting a utility line

To report a non-emergency

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811 must be called before?

✓ Before using powered equipment that will dig

811







The 3 most important things to remember
when maintaining a road are?

The 3 most important things to remember when maintaining a road are?

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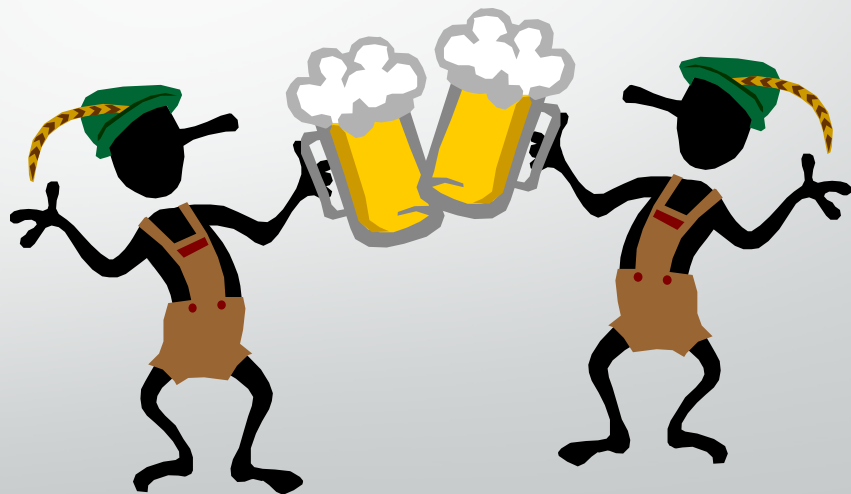




Pavement Preservation Quiz

The 3 most important things to remember when maintaining a road are?

- 🟢 Drainage
- 🟢 Drainage
- 🟢 Drainage







Sealing is used for cracks that are non-working?

- True
- False



Sealing is used for cracks that are non-working

True

False

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Sealing is used for
cracks that are
non-working?



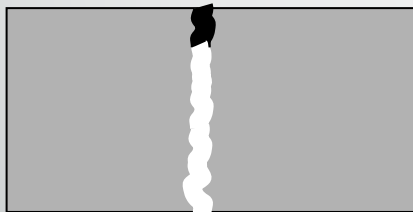
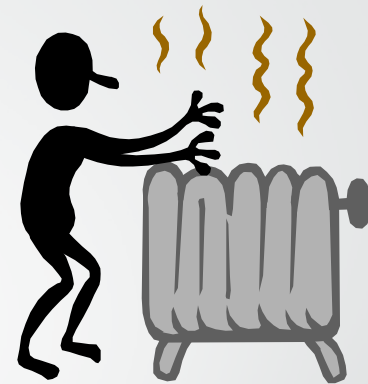
False



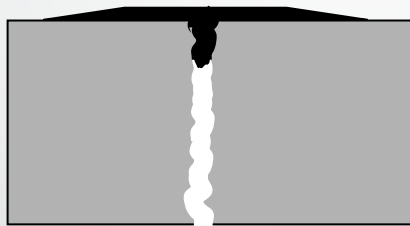
⚡ Crack repairs

⚡ Sealing

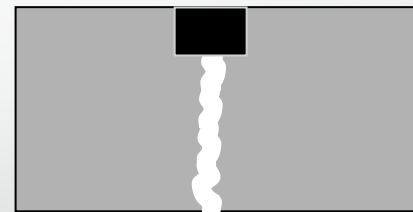
⚡ Filling



Flush-Fill



Overband



Reservoir

⚡ Crack repairs









The most cost-effective patching technique is?

- Throw & go
- Throw & roll
- Semi-permanent
- Spray patch



The most cost-effective patching technique is:

Throw & go

Throw & roll

Semi-permanent

Spray patch

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Pavement Preservation Quiz

The most cost-effective patching technique is?

- ✓ Throw & roll
- ✓ Semi-permanent
- ✓ Spray patch



Potholes



- Throw & go



● Patching



- Throw and Roll
- Semi-permanent
- Spray patch

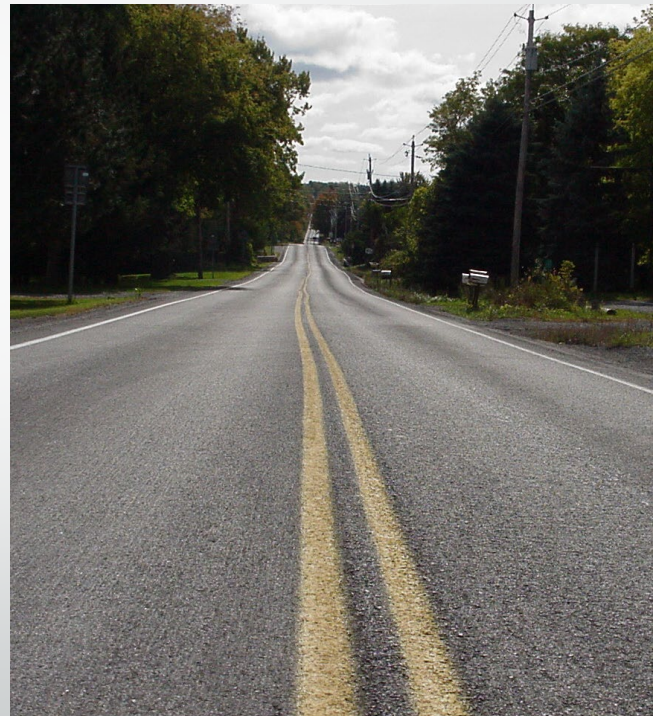






All wearing courses (surface treatments)?

- Waterproof the pavement
- Restore skid resistance
- Restore oxidized surface
- True & level minor ruts



All wearing courses (surface treatments): (allow multiple replies)

Waterproof the pavement

Restore skid resistance

Restore oxidized surface

True & level minor ruts

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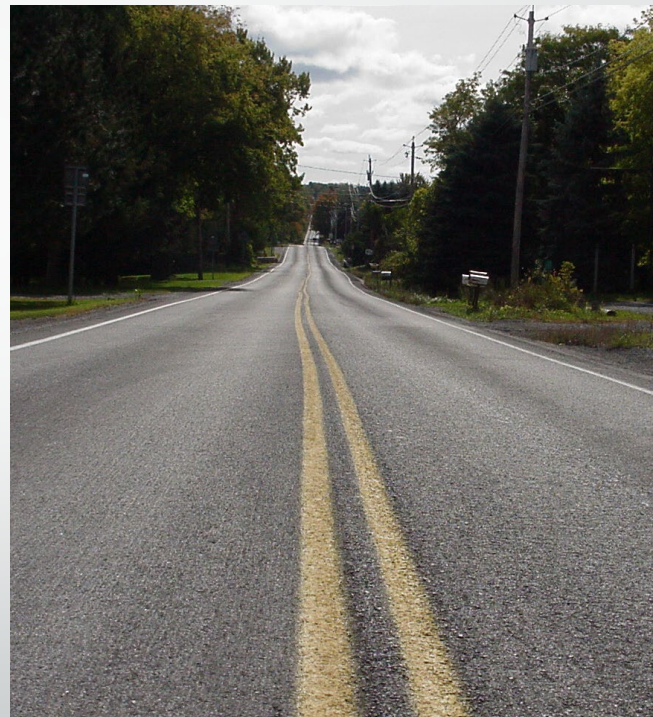
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All wearing courses
(surface treatments)?

- ✓ Waterproof the pavement
- ✓ Restore skid resistance
- ✓ Restore oxidized surface
- ~~— True & level minor ruts~~



Wearing Courses



Chip seal



Slurry seal



Micropave



NovaChip



Thin overlay

Waterproof
Skid resistance
Oxidized surface
True & level

✓	✓	✓	
✓	✓	✓	
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	







SOUTH
41A

NO
PARKING
ANY
TIME



The emulsion is brown?

- Before it breaks
- Because it is a bad photo
- Because the stone is brown



The emulsion is brown:

Before it breaks

Because it is a
bad photo

Because the
stone is brown

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Pavement Preservation Quiz

The emulsion is brown?

✓ Before it breaks



Pavement Preservation Quiz







Which is not a cause of pavement distress:

- Traffic
- Temperature
- Excess Moisture
- Age
- Possums



Which is not a cause of pavement distress:

Traffic

Temperature

Excess Moisture

Age

Possums

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Pavement Preservation Quiz

Which is not a cause of pavement distress:

- Traffic
- Temperature
- Moisture
- Age
- ✓ **Possums**



Pavement Distress

- Fatigue cracking
- Longitudinal cracking
- Transverse cracking
- Block cracking
- Slippage cracking
- Reflective cracking
- Edge cracking
- Rutting
- Corrugations
- Shoving
- Swells
- Depressions
- Potholes / Patching
- Raveling
- Polishing
- Bleeding
- Drainage

Fix the cause of the distress,
not the effect.



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What is the best
pavement
preservation
technique?



What is the best pavement preservation technique?

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What is the best
pavement
preservation
technique?



FRANK AND ERNEST BOB THAVES





Thank You

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