

MENDOCINO COUNTY

"Twenty-Year Corrective Maintenance Plan"

<https://www.mendocinocounty.gov/departments/transportation/current-projects>

MENDOCINO ROTARY CLUB PRESENTATION
OCTOBER 10th or 24th, 2024

Year 8 & 17 of "Twenty-Year Corrective Maintenance Plan"

Year 8 (2026-27): 26+/- miles chip seal as a pavement preservation strategy. Deep dig outs of all base failures. (Total 25.6 miles program \$5.57 million)

County Road Name	Beginning MP	Ending MP	Total Length	PCI	ADT
Casper Road, CR 569	0.00	0.94	0.94	68	2,562
Casper Street, CR 410E	0.00	0.27	0.27	18	
Fern Creek Road, CR 411A	0.00	4.00	4.00	48	1,198
Caspar Little Lake Road, CR 409	0.00	4.00	4.00	70	
Caspar Orchard Road, CR 410	0.00	0.95	0.95	39	
Point Cabrillo Drive, CR 564	0.00	2.92	2.92	81	762
Comptche Ukiah Road, CR 223	10.00	22.52	12.52		1,152

Year 17 (2035-36): Chip seal treatments of 25 +/- miles of salvageable road segments in a pavement preservation strategy. CIP treatment with chip seal of 10 +/- miles of roads segments with delimited layers of oxidized asphalts and chip seals where emulsion and grinding is effective. Deep dig outs of all base failures. (Total 34.71 miles program \$7 million)

County Road Name	Beginning MP	Ending MP	Total Length	PCI	ADT
Lansing Street, CR 500	0.00	0.94	0.94	68	2,562
Point Cabrillo Drive, CR 564	0.00	2.92	2.92	81	762
Clark Street, CR 407Q	0.00	0.27	0.27	18	
Little Lake Road, CR 408	0.00	4.00	4.00	48	1,198
Gualala Road, CR 501	0.00	1.77	1.77	60	244
Old Stage Road, CR 502	0.00	5.72	5.72	56	1,210
Old State Highway, CR 501A	0.00	0.67	0.67	87	1,468
Eureka Hill Road, CR 505	0.00	9.34	9.34	44	221
Ten Mile Road, CR 506	0.00	5.99	5.99	64	500
Pacific Woods Road, 524	0.00	1.44	1.44		
Stoneboro Road, CR 570	0.00	1.65	1.65	29	92

RMRA Project Implementation

(Road Maintenance & Rehabilitation Account)



- Preventative Maintenance
work done sooner saves good roads.
- More Corrective Maintenance on
main roads with higher traffic or urban setting.
- Transportation needs in order of
importance:
 - Traffic Safety
 - System Maintenance and Preservation RMRA - Road
Maintenance and Rehabilitation Account
 - System Completion (providing improvements on major
roadways) 3Rs - Rehabilitate, Restore, and Resurface
 - Congestion Relief
 - System Expansion

What to do with Added Gas Tax?

New Pavement



New AC:

- improves rideability
- has a 20 year plus life
- with pavement preservation treatments along the way, we can likely get 40 years of life before complete AC replacement is needed
- Hot – cools fast; less than an hour to drive.

Asphalt Concrete (AC) overlay @ 0.3' - \$0.5 million per mile is the most common before 2000

New Additional Gas Tax for a New Approach – Recycle in Place



1. Spread some cement to grind into old road surface & aggregate base rock (AB)
2. Grind down 4 to 6 inches, adding water
3. Grade, level, and compact

Grind down 4 to 6 inches

Add H₂O or emulsion



Add H₂O or emulsion and/or liquid cement mix



Chip Seal emulsion

Compacted recycled AB w/ emulsion cement mix

Chip Seal chips

1st 5 years of Mendocino County Preventative Maintenance



Aggregate hopper



Emulsion tank

Micro Seal - Cape Seal

- A single to multi-layer application(s) of emulsion mixed with aggregate
- First layer - a slurry seal of emulsion and sand to fill large cracks
- Middle layer(s) - rubberized chip (crushed rock coated in oil and melted rubber) or "seal layer" (wearing surface)
- Last layer - fog seal of thick black emulsion
- This treatment is hoped to last approximately 15 years
- Slower to dry (break)... one lane closed
- \$100k per mile depending on number of layers

1st 5 years of Mendocino County Preventative Maintenance

Chip Seal has been the standard on Mendocino County surfaced roads 90% through history – before 1990s MCDOT averaged 100 miles per year – today, Chip Seal: \$50k/mile



Emulsion (cold) dries slower



Compact pneumatic roller



New wearing surface – ride is the same

Mendocino County Chip Seals

Corrective/Preventative Maintenance

Preserve a fair to good road with Preventative Maintenance “Chip Seal” only OR
Perform Corrective Maintenance with recycle grind topped off with “Chip Seal”

Chip Seals are a “poor” county’s surfacing, but inspection must keep us in the *Goldilocks* range



Too much chips

Too little chips

Just right Goldilocks !

Adding a cape seal over the top adds 10% cost and makes it black but does not correct ride.

Additional Information- Questions?

- Save California Streets - www.savecaliforniastreet.org
- MCDOT Web Page:
<https://www.mendocinocounty.gov/departments/transportation>

Or did I put
you to sleep?

