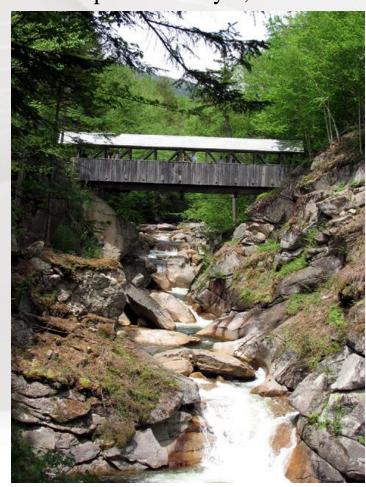
NEW HAMPSHIRE STATE REPORT

Northeast Pavement Preservation Partnership Meeting

Annapolis, Maryland April 29 – May 1, 2013







Kevin Prince – Pavement Management Engineer

PRESENTATION OVERVIEW

- 1. 2013 Resurfacing Program Overview
- 2. NHDOT Advancing Awareness of Pavement Preservation





2013 RESURFACING PROGRAM

Turnpike Resurfacing: \$6.6M 19.0Mi

Interstate Preservation Program: \$7.1M 31.3Mi

Interstate 4R Program: \$11.5M 30.3Mi

Federal Resurfacing Program: \$18.8M 105.1Mi

Secondary System Reclamation: \$3.8M 8.9Mi

Forest Highway: \$1.0M 10.3Mi

District Program:

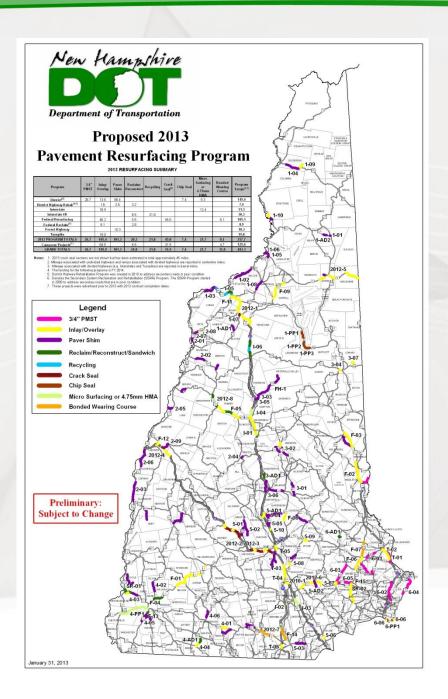
- Resurfacing \$11.7M 145.4Mi

Secondary Rehabilitation \$2.4M 7.4Mi

- Leveling \$2.4M ????

TOTAL: \$65.3M 357.7Mi





- 358 Total Miles
- Target: 500 miles



2013 - Preservation/PM Treatments

2012 2013

Crack Seal: 57.0 miles 50.0 miles

AR Chip Seal: 13.9 miles 7.4 miles

Micro Surfacing: 17.0 miles 0 miles

4.75mm Superpave: 0 miles 9.2 miles

1-1/2" AR HMA: 3.0 miles 15.8 miles

CIP Recycle: 0 miles 5.4 miles

TOTAL: 90.9 miles 87.8 miles



Advancing Awareness of Pavement Preservation

- Front Office Support
- News Articles
- Tracking Pavement Preservation Sections



New Hampshire Department of Transportation

MEDIA ADVISORY

"Why are you paving a perfectly good road???"

The importance of utilizing pavement surface treatments to preserve New Hampshire's roads will be highlighted at a ceremonial "ribbon-cutting" on NH Route 12 in Marlborough on Friday, October 5, at 11:00 AM.

Highlighted will be the recent "micro-surfacing" pavement application on 4.5 miles of Route 12 in Swanzey, Troy and Marlborough at a cost far less than a full reconstruction of the roadway.

To be addressed - Why "keeping good roads good" makes more sense than "fixing worst roads first"

When: Friday, October 5, 2012 at 11:00 AM

Location: Marlborough, NH Route 12 southbound turnout approximately 1.7 mile south of Flat

Roof Mill Road

Contact: Bill Boynton

NHDOT Public Information Officer

(603) 271-6495 (603) 630-2986 (cell) <u>wboynton@dot.state.nh.us</u>







News Articles

'Micro-resurfacing' touted by DOT officials in Marlborough



Chris Clement, commissioner of the state Department of Transportation, speaks at a ribbon outting on Route 12 in Marlborough Friday about the importance of preventative road maintenance. MEGHAN PIERCE PHOTO

State Department of Transportation officials celebrated the completion of a ¿micro-resurfacing ¿ of a stretch of Route 12 Friday morning and took the opportunity to talk up the repaying technique that should save the department millions in road reconstruction costs.

By MEGHAN PIERCE
Union Leader Correspondent
MARLBOROUGH — State Department of
Transportation officials celebrated the completion of a
"micro-resurfacing" of a stretch of Route 12 Friday
morning and took the opportunity to talk up the
repaving technique that should save the department
millions in road reconstruction costs.

The "micro-surfacing" pavement on 4½ miles of Route 12 in Swanzey, Troy and Marlborough costs far less

than a full reconstruction of the roadway and has a smaller environmental impact, said Eric Thibodeau, DOT pavement management chief.

The same stretch of road was rebuilt in 2002 for \$3.9 million, Thibodeau said.

Historically, the department would reconstruct a road every 25 years. Instead of waiting for the quarter century mark, the department returned to the stretch of Route 12 this summer to repave it with a mixture of asphalt, water and cement for \$298,000.

The plan is to keep this "good" road in good condition and avoid any future reconstruction.

"As our dollars are stretched and our budgets are taxed we really have to look at pavement preservation as a way of keeping good roads good. So it frees up money to work on the fair to poor roads... Keeping good roads good is cost effective. It's analogous to doing preventative maintenance to your car," Thibodeau said. "These preservation projects emit less greenhouse gas and use less nature materials so we really have to look at it from that perspective as well."

DOT Commissioner Chris Clement said once the Interstate 93 Concord/Bow reconstruction project is completed in 2016 or 2017, the department plans to focus on preventative maintenance and keeping track of current assets.

The state has \$3.7 billion in road infrastructure, but is only reinvesting 1.5 percent of that each year, he said.

Using the micro-surfacing technique on good roads frees up resources for reconstruction needed on the 16,000 miles of poor roads in the state, he said.

DOT has used the technique on 10 projects since 2006. Micro-surfacing was invented in Germany in the 1960s, but has only been used in the United States since 1980.

Bill Boynton, DOT spokesman, said of the technique, "It's much cheaper. And yet ... people see what they think is a fairly good road" being repaved, "and what you are doing is trying to preserve the life of the road

Alan Rawson, the department's head of materials and resource bureau, said "The big question is, 'Why are you out there resurfacing a good road?' It's that preservation aspect that people don't understand. ... Our goal is perpetual repayement."

Thibodeau added that if the department only focused on poor roads it would fall behind. "It's just a losing battle trying to fix worst roads first."

Boynton said, "This is an important new direction that the New Hampshire DOT has been heading in as well as the DOTs across the country in order to better effectively use constrained budgets and to preserve the life of pavements."

"Once the roads fail, now you have a very expensive project. So the key in our road management program is to try to keep our higher-volume roads in as good condition as possible so that they don't slip to that point of failure."

mpierce@newstote.com



New Hampshire Union Leader October 9, 2012

News Articles

Officials: New paving system fills in the cracks

By Jacqueline Palochko Sentinel Staff | Posted: Sunday, October 7, 2012

Two area roads recently repaired saved the N.H. Department of Transportation money and time — thanks to a system known as "micro-surfacing."

When cracks needed to be filled on Route 9 in Chesterfield and Route 12 in Marlborough this year, the department of transportation used micro-surfacing, which drops a thin layer of asphalt containing water and mineral fillers into the cracks.

On Route 12, 41/2 miles needed to be repaired, said N.H. Department of Transportation spokesman William Boynton.

In 2002, the same section was rehabilitated with 4 inches of new pavement and cost \$3.9 million, Boynton said.

But when micro-surfacing was done in early September, it cost \$290,000 for the same section to be done.

And within a half-hour, Boynton said, drivers were back on the road.

In Chesterfield, eight miles of Route 9 also received micro-surfacing this year.

This system, which was was invented in Germany in the 1960s, is a way to preserve roads at a low expense, Boynton said. The N.H. Department of Transportation has been using this method since 2006.

Route 12 was the 10th project in the state to use this system.

Micro-surfacing also frees up money, Boynton said, for the department to focus more on roads that need more treatment.

Jacqueline Palochko can be reached at 352-1234, extension 1409, or jpalochko@keenesentinel.com.

New Hampshive
Department of Transportation

New Hampshire Department of Transportation

MEDIA ADVISORY

"Why are you paving a perfectly good road???"

The importance of utilizing pavement surface treatments to preserve New Hampshire's roads will be highlighted at a ceremonial "ribbon-cutting" on NH Route 112 in Lincoln on Thursday, October 18, at 9:00 AM.

Highlighted will be the recent "Asphalt Rubber Chip Seal" pavement application on 6.8 miles of Route 112 in Lincoln at a cost far less than a full reconstruction of the roadway. NHDOT Commissioner Chris Clement will be joined by District 1 Executive Councilor Ray Burton.

To be addressed - Why "keeping good roads good" makes more sense than "fixing worst roads first".

When: Thursday, October 18, 2012 at 9:00 AM

Location: Lincoln, NH Route 112 - Otter Rock pull-off site, 7.7 miles east of I-93 Exit 32 and 5.5 miles east of the entrance to Loon Mt Ski Area.

Contact: Bill Boynton

NHDOT Public Information Officer
(603) 271-6495 (603) 630-2986 (cell) wboynton@dot.state.nh.us





Ribbon Cutting – AR Chip Seal – 10/18/12



News Articles

Asphalt rubber chip seal adds life to Kancamagus

Preservation: About 62,500 recycled scrap tires were used to create the highway coating. 101917

By SARA YOUNG-KNOX Union Leader Correspondent

LINCOLN - A section of Route 112 in Lincoln could now be described as "where the rubber hits the rubber" thanks to the composition of the material used to "repave" the road.

The surface of the pavement recently received an application of asphalt rubber chip seal, a preservation treatment that, for this length of the Kancamagus Highway just east of Loon Mountain, used an estimated 62,500 recycled scrap N.H. Department of Transporto 10 years. tires. The work was done by All States Asphalt Inc. of Sunderland, Mass.

The surface treatment has hot-applied crumb rubber modified asphalt, and is designed to be more durable and flexible than conventional chip seals.

On Thursday, state officials,



From left, Commissioner Christopher Clement of N.H. DOT, state Rep. Gene Chandler of Bartlett, Gus Larandeau of All States Asphalt, District 1 Executive Councilor Ray Burton and Alan Chicoine of All States Asphalt stand by the asphalt rubber chip sealed section of the Kancamagus Highway. SARA YOUNG-KNOX

tation staff, and representatives from All States Asphalt celproject with a ribbon-cutting. pre-coated crushed stone over It's the eighth asphalt rubber chip project for DOT, and the goal is to preserve the existing pavement before it shows signs of deterioration, using the chip of the pavement another eight makes economic sense."

Waiting until a road is in poor condition and then reebrated the completion of the constructing it is not a good use of the state's money, officials said, Instead, NHDOT is working "to keep good roads good," DOT spokesman Bill Boynton said. By the time you can actually see the stress, he seal treatment to extend the life said, it's too late. "It actually

In 2002 and 2003, the 8.1 mile section of road from the Seasons Road to the bridge over the Hancock Brook was rehabilitated for a cost of \$3.8 million. This year, that section was part of the 6.8 miles of AR chip seal application, along with 1.3 miles of a hot mix overlay, and completed for about \$875,000.

Commissioner Chris Clement said that after the widening of Interstate 93 and other large projects are done, there will be more funds for maintenance and the hopes are that are regular scheduling of chip sealing will save enough money to free funds to address the condition of the worst state roads.

Rod Birdsall of All States said, "This is really a green initiative." He said the asphalt rubber chip seal will resist thermal cracking, and be good in high temperatures, too.

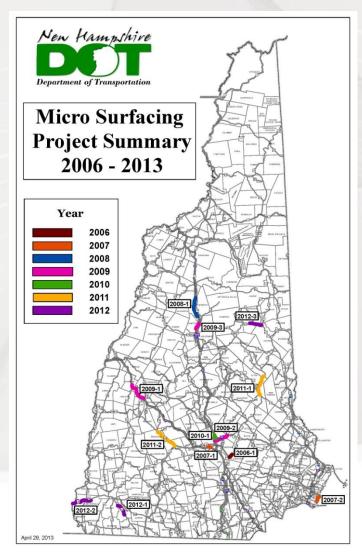


Gives a chance to explain Pavement Preservation to the local Representatives.





Tracking Pavement Preservation Sections

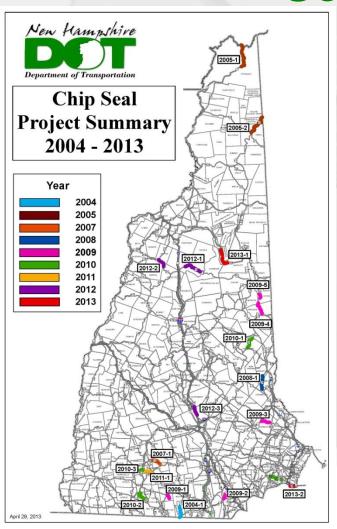


MICRO-SURFACING

2006	1.4 Miles	
2007	4.5 Miles	
2008	13.7 Miles	
2009	31.4 Miles	
2010	3.4 Miles	
2011	16.5 Miles	
2012	11.8 Miles	
2013	0.0 Miles	
TOTAL: 82.7 Miles		



Tracking Pavement Preservation Sections



CHIP SEAL

- 1		
	2004	3.0 Miles
	2005	18.7 Miles
	2006	0.0 Miles
	2007	3.5 Miles (Double)
	2008	5.0 Miles
	2009	16.0 Miles
	2010	16.0 Miles
	2011	2.0 Miles
	2012	17.0 Miles (AR)
	2013	7.4 Miles (AR)
	TOTA	AI. 00 7 N/1.
	1017	AL: 82.7 Miles

New Hampshire

Department of Transportation

Tracking Pavement Preservation Sections

Additional Mapping Needed

- 1-1/2" AR HMA
- 1" Kraton HiMA
- Polymer Modified Overlay (3/4" Thick)
- Hot-in-Place
- Cold-in-Place





