



STATE OF MAINE

PAVEMENT PRESERVATION REPORT



MaineDOT

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Topics for Discussion

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- Preservation Tools
- 2015 Outlook
- Work Plan
- Funding Outlook
- Ultra-Thin Bonded Wearing Course
- HMA Durability Initiative

Maine 2015 Preservation Tools

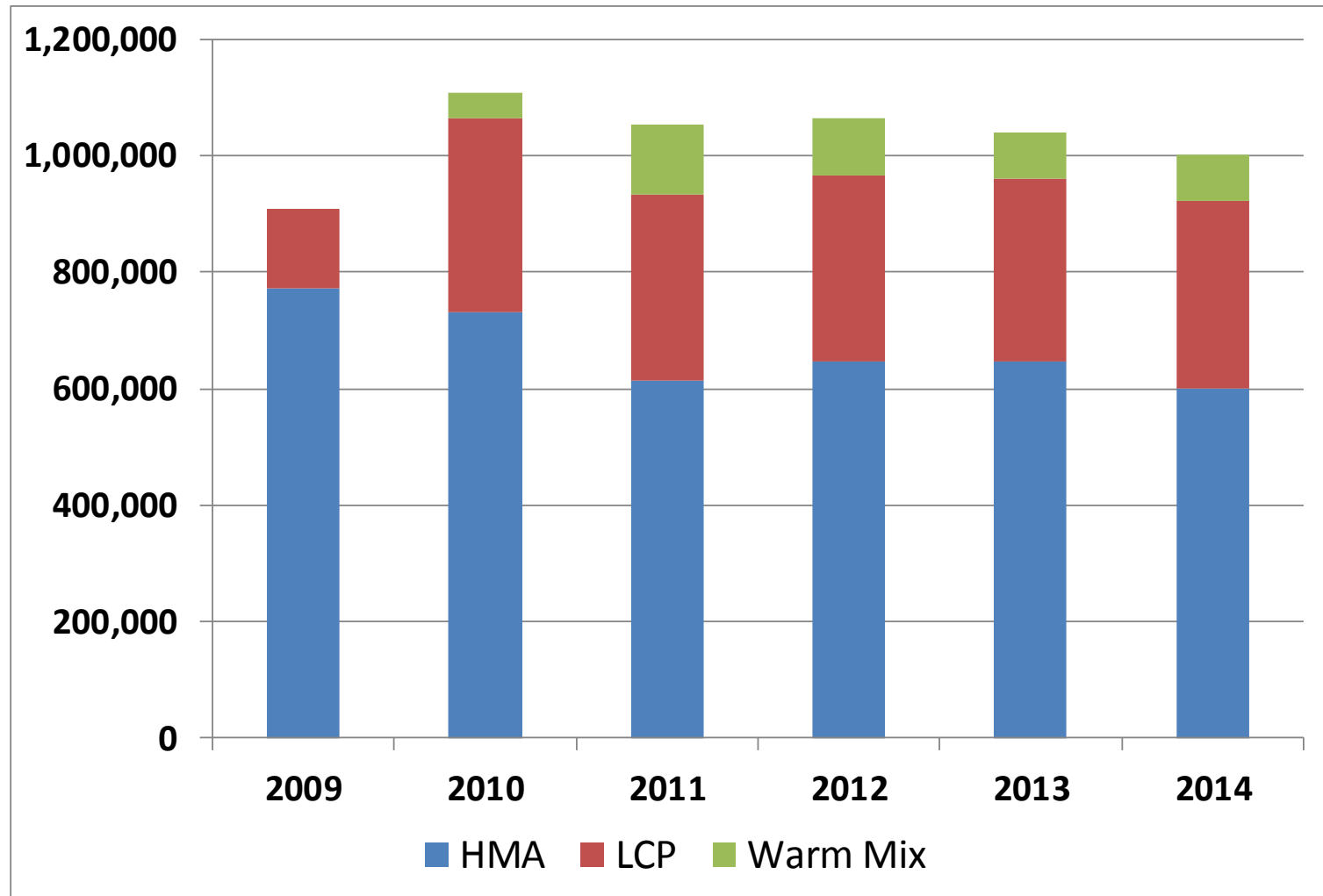
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- HMA Mill & Fills
- HMA Shim & Overlays
 - ▣ 1 1/4" Surface
 - ▣ 3/4" Surface
- Ultra-Thin Bonded Wearing Course
 - ▣ 800,000 s.y. in 2015
- Fog Seals – (Mainline and shoulder)
- Crack Seal

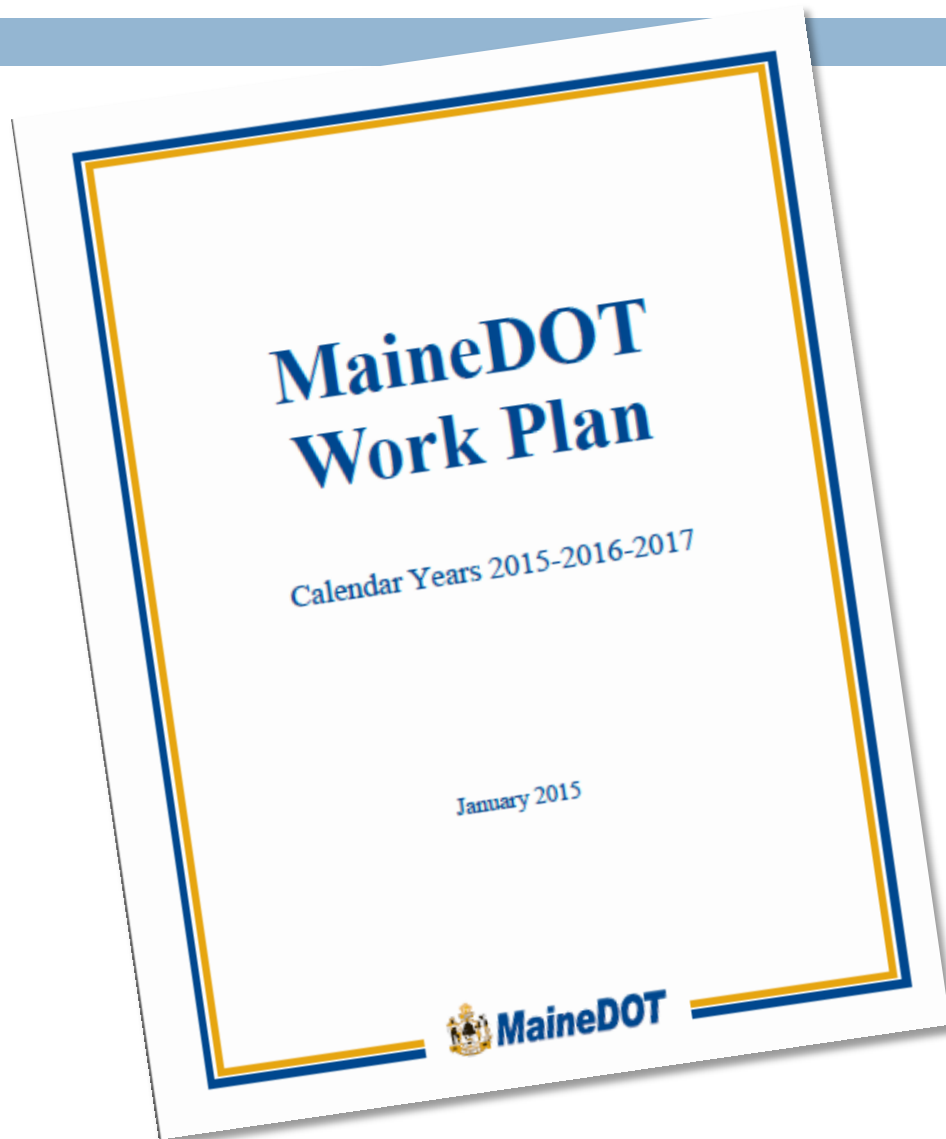


Annual HMA Production

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Work Plan



2013

2014

2015

2016

2017

2018

2019

Work Plan Example

018578.00		Highway Paving			
2015	Bangor		Route 2	Beginning at Union Street and extending easterly 0.12 of a mile. - BACTS sponsored	\$256,796
HCP 3		Mill And Fill			
018579.00		Highway Safety and Spot Improvements			
2016/17	Bangor		Route 15	Located at the intersection of Broadway with Griffin Road and Burleigh Road. - BACTS sponsored	\$34,450
HCP 3		Traffic Signals			
018639.00		Highway Paving			
2016/17	Bangor		Route 15	Beginning at Center Street and extending northerly 0.65 of a mile. - BACTS sponsored	\$872,612
HCP 2		Mill And Fill			
018640.00		Highway Paving			
2016/17	Bangor		Route 222	Beginning at Griffin Road and extending easterly 0.82 of a mile. - BACTS sponsored	\$830,503
HCP 3, 2		Mill And Fill			

Work Plan

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- Planning work 3-4 years in advance presents issues
 - ▣ Hard to get the right road at the right time
- Will shift in 2017 to allocating funds but not identify locations
 - ▣ Allows for flexibility and identify proper roads

Light Treatments

Region	Miles	\$ (M)
1	17	4.3
2	14	4.0
3	16	4.0
4	22	4.7
<u>5</u>	<u>16</u>	<u>3.3</u>
Total	85	20.3

Actual Funding vs. Needs

Core Highway and Bridge Programs **CY 2015-2016-2017 *Work Plan* vs. Need** (\$ Millions)

Work Group	Average Annual \$ from 2015-2016-2017 <i>Work Plan</i>	Annual \$ Needed to Meet Basic Statutory Goals	Average Annual \$ Shortfall	Dollar % Shortfall*
Bridge Capital & Preservation	\$70	\$140	(\$70)	(50%)
Highway Reconstruction/Rehab	\$93	\$100	(\$7)	(7%)
Pavement Preservation	\$78	\$120	(\$42)	(35%)
Light Capital Paving	\$28	\$28	\$0	0%
Total - Core Programs	\$269	\$388	(\$119)	(31%)

Ultra-Thin Bonded Wearing Course

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- ❑ Project on I-95 in Bangor area completed in 2014
- ❑ Three projects being completed in 2015
- ❑ Potential alternative to $\frac{3}{4}$ " overlay
- ❑ Must be applied to pavement in fair condition



Ultra-Thin Bonded Wearing Course

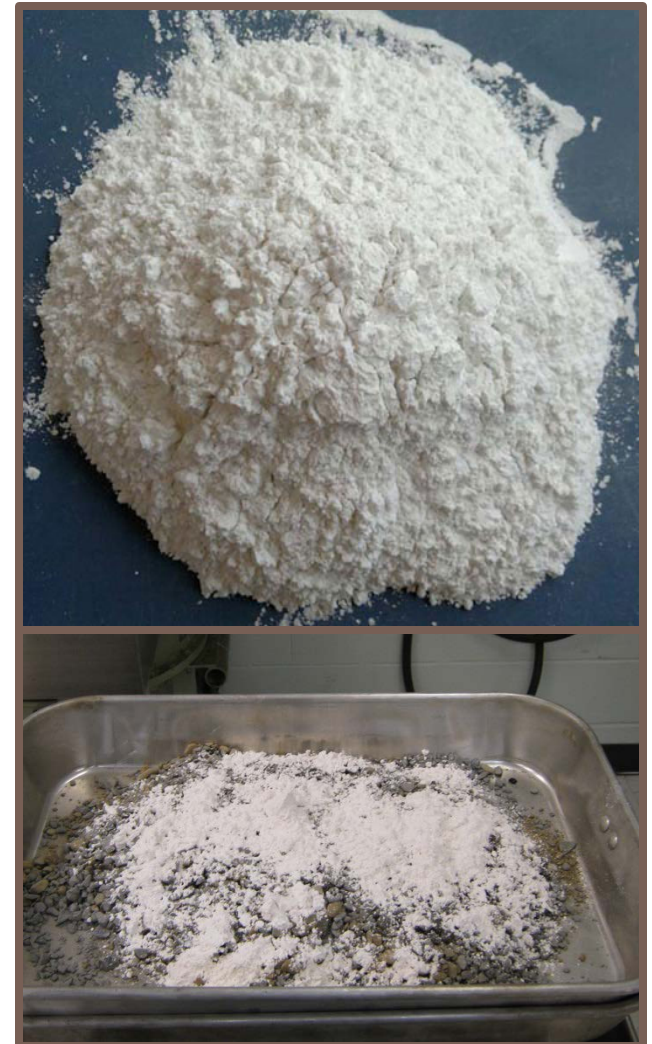
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Hydrated Lime Pilot Projects

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- Three projects this year require Contractor to use Hydrated Lime
 - ▣ New Gloucester Rte. 202 1 1/4" Overlay – Lane Const.
 - ▣ Newport-Palmyra I-95 SB Mill & Fill – Pike Ind.
 - ▣ Houlton-Oakfield I-95 SB Mill & Fill – Lane Const.
- Hydrated lime is a well researched and noted anti-strip required or utilized in a number of states
 - ▣ Chemically reacts with aggregate surface to improve adhesion between asphalt binder and aggregate



HMA Durability Study Initiative

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- Continued joint effort by Industry and MaineDOT to improve durability of HMA materials
- Effort to reduce premature failures seen in recent years and extend service lives of treatments
 - ▣ Data suggests mill & fills currently lasting 7-10 years



HMA Durability Study Initiative

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- HMA Durability Committee has been formed to look at changes for 2016
 - ▣ Hydrated Lime
 - ▣ Performance Testing specification
 - ▣ Others
- Extensive testing ongoing in 2015 to generate baseline data for analysis
 - ▣ Will require extra material on acceptance samples



Hamburg Wheel Tracker

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- Been used by MaineDOT in the last 1 ½ years to evaluate HMA mixes
- Passing sample expected to last 20,000 passes with rutting less than ½" and no stripping
 - ▣ Test results give indication of rutting and stripping potential of the mix
- Numerous states use as a JMF approval tool (including Texas and Massachusetts)



JMF “C” – No Lime

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JMF “C” – No Lime

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Thank you for the opportunity.

Any Questions?