



VTrans

Vermont Agency of Transportation

Vermont Agency of Transportation (VTrans)



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**PROGRAM DEVELOPMENT DIVISION
HIGHWAY SAFETY AND DESIGN SECTION**

PAVEMENT MANAGEMENT UNIT



Network of approximately 3800 Centerline Miles

2011 Preventive Maintenance Program

- Crack Seal, 111 Centerline Miles
 - ~\$500,000 in total expenditures
- Surface Seal Treatments, 56 Centerline Miles
 - ~330,000 SY (14 miles) Microsurfacing (Micro)
 - ~720,000 SY (40 miles) Paver Placed Surface Treatment (PPST)
 - ~2600 Tons (~52,000 SY) Highly Polymer Modified A.C. (HiMA)
 - ~\$7,500,000 in total expenditures

2010 versus 2011

- **2010 – ~\$11,000,000** in total expenditures
 - Crack Seal, 82 Centerline Miles (~\$300,000)
 - Surface Seals, 71 Centerline Miles (~\$10,700,000)
 - Combination of HIR w/Micro, PPST, Micro Overlay, 1.5” A.C. Overlay
- **2011 – ~\$8,000,000** in total expenditures
 - Crack Seal, 111 Centerline Miles (~\$500,000)
 - Surface Seals, 56 Centerline Miles (~\$7,500,000)
 - Combination of PPST, Micro Overlay, and 1” HiMA Demo
- Negative Trend?!
 - **\$3,000,000 reduction** in total expenditures
 - **15** Centerline Miles **less** in Surface Seal treatments
 - From a Remaining Service Life perspective effect of fewer miles was fortunately somewhat offset by more Crack Seal in 2011 than 2010
- Major Reason for Trend
 - Expiration of ARRA funding



Proposed 2012 Preventive Maintenance Program

- ~150 Centerline Miles Crack Seal (~\$700,000)
- ~122 Centerline Miles Surface Seal (~\$20,000,000)
 - Alternate Treatment Bids
 - 3/4" nominal thickness PPST
 - **~2,500,000 SY or 113,000 tons**
 - 1" nominal thickness 6.3 mm Polymer Modified A.C.overlay
 - **~141,000 tons**
 - Combination of Interstate and State route candidate projects
 - 1 PPST project awarded to date for 37+/- Centerline Miles (Interstate Typ.)
 - \$3.9 million low bid
 - **\$105,000/centerline mile or \$52,000/lane-mile**
 - 5 more projects currently under development for bids by 4/12



New Products

- TPS2/Kraton Sponsored HiMA Demonstration Project
 - 44 foot wide engineered roadway with a 1997 surface in fair condition
 - 1 mile 9.5 mm, 0% RAP with 7.5% SBS Kraton Polymer
 - 1 mile 9.5 mm, 25%RAP with 7,5% SBS Kraton Polymer
 - No noticeable difference between conventional mixes and HiMA reported by producer, contractor, or inspection staff.
 - Realized a \$7/ton premium for the 0% RAP mix over the 25% Rap mix

Exceptional Products?

- Only mid to long term (5+ years)experience with PPST
 - Definitely living up to expectations
 - Also performing well on “aggressive” candidates



Questions?

Contact Information

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