

HIGH FRICTION SURFACE TREATMENT

LOCAL SAFETY PEER EXCHANGE

October 11, 2018



Craig Atwood, Allegan County Road Commission

High Friction Surface Treatments

Frequently Asked Questions



Frequently Asked Questions about High Friction Surface Treatments (HFST)

- SAFETY
- MAINTENANCE AND OPERATIONS
- COST
- ENVIRONMENTAL IMPACTS
- SITE CONDITIONS
- MATERIAL SPECIFICATIONS / DURABILITY
- LESSONS LEARNED
- INSTALLATION

- Crash Reduction
 - Pennsylvania: 100%
 - Kentucky: 90%
 - South Carolina: 57%
- MDOT CRFs
 - Wet Crashes: 35%
 - Other Applicable: 20%

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- Approximately ¼" thickness
- Very resistant to snow plowing

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- MDOT AUP: \$20.09 / Syd
- ACRC (2017): \$21.50 / Syd

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• Materials:

- Two part epoxy
- Bauxite aggregate
- Superior to chip seals

• Life Expectancy:

- Internationally 7-12 years
- Bridge decks 12-15 years
- HMA pavement ???

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- LESSONS LEARNED
- **INSTALLATION**

- Preparation & Installation:
 - 30 day old pavement
 - Clean surface
 - Proper mixing and application
 - Temperature

State DOT HFST Status

★ Active implementation as of 12/1/2017

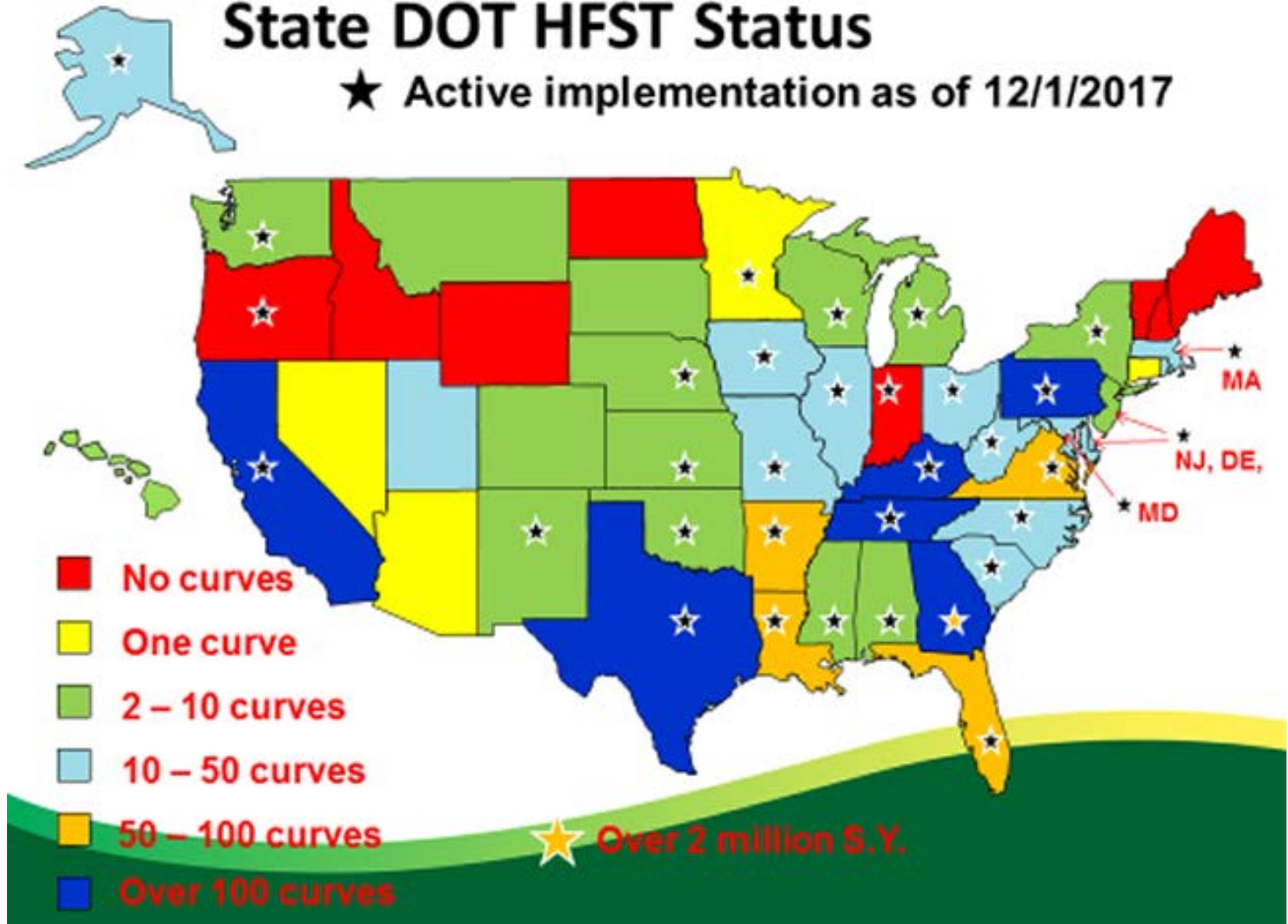


Exhibit 2 – Financial Goals

Project Type¹	Total Program
Projects with scopes that directly correct areas with a concentration of Types "A" and "K" crashes	\$5,000,000
Project locations corresponding to High Priority locations in the area's Regional (Local) Traffic Safety Plan (RTSP) ²	\$3,000,000
Safety Edge	\$500,000
Non-motorized facility/Pedestrian improvements	\$500,000
High Friction Surface	\$500,000
Road Safety Audits (RSA)	\$50,000
Guardrail Upgrades and Clear Zone Improvements ³	\$750,000
Safety Funds per MDOT Region	\$350,000

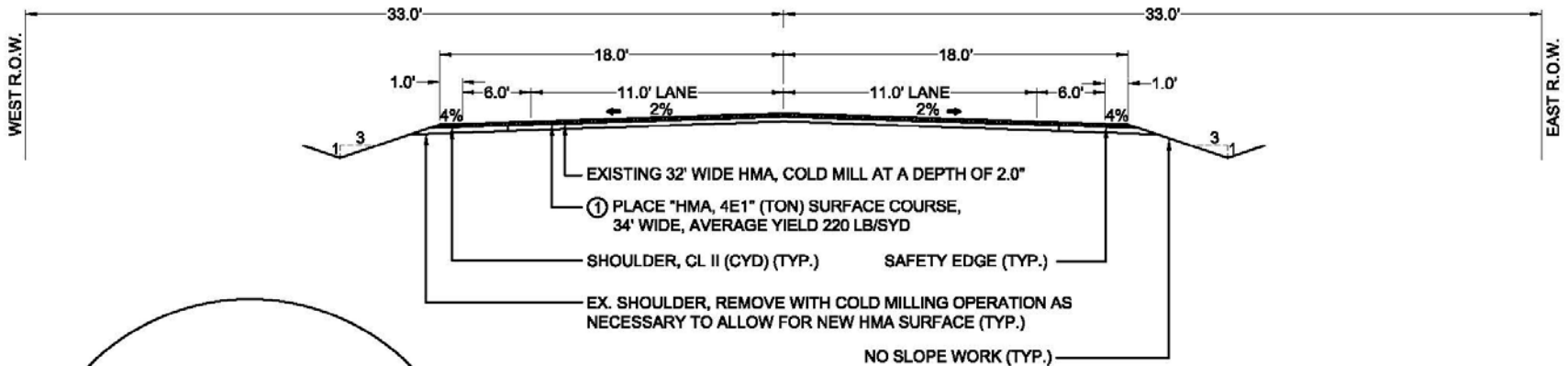
1. **A selected project may count towards multiple financial goals.**
2. Copies of the Regional (Local) Traffic Safety Plan for your area may be obtained by contacting your Regional Planning Agency or by contacting MDOT at blazop@michigan.gov or 517-335-2224.
3. The intent of the Guardrail financial goal is for projects installing guardrail when none currently exists, upgrading terminal endings, or removing existing guardrail by flattening slopes. It is not intended to be used for replacing existing damaged guardrail as this is considered a maintenance item.



PROJECT INFO & SCOPE

- Total project length of 5 miles
- ADT of 4,300
- Log project
- Mill and resurface
- Widen paved shoulders
- Safety Edge
- High Friction Surface
- Fixed object removal (separate project)

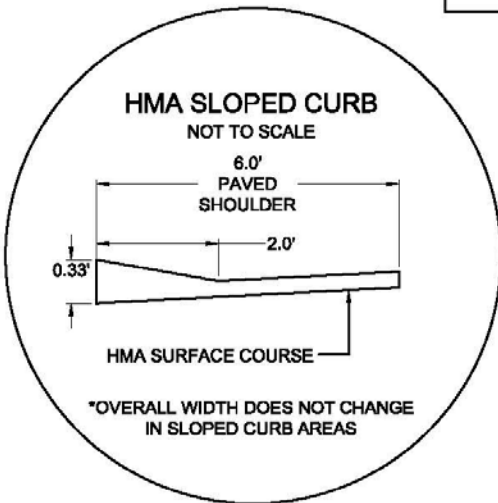
30TH STREET - 118TH AVENUE TO 128TH AVENUE



TYPICAL CROSS SECTION

5+00 (POB) TO 273+00 (POE)
SCALE : NONE

NOTE: IN EXISTING SUPERELEVATED AREAS, MILL TO MATCH EXISTING SLOPE



HMA APPLICATION TABLE

	ITEM	YIELD	PERF. GRADE	AWI
①	HMA, 4E1	220#/SYD	64-28	260 MIN.
EX. CONCRETE DRIVES	HMA, 4E1	330#/SYD	64-28	
EX. HMA DRIVES	HMA, 4E1	165#/SYD	64-28	
NOTE: BOND COAT SHALL BE SS1H APPLIED AT A RATE OF 0.05 - 0.15 GAL/SYD				

12SP-800A-03

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
HIGH FRICTION SURFACE TREATMENT

OFS:CER

1 of 4

APPR:SJS:TEH:07-13-16
FHWA:APPR:07-29-16



ALLEGAN COUNTY ROAD
COMMISSION

SPECIAL PROVISION
FOR
**HIGH FRICTION SURFACE TREATMENT,
MODIFIED**

ACRC/CSA

1 of 4

03-20-17

