EVERY DAY COUNTS - 2

HIGH FRICTION SURFACE TREATMENT (HFST)

SH-20, Salina, OK (Division 8)

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Safety Engineer

October 23, 2014
OTEA – 2014 Fall Meeting
What is EDC

http://www.fhwa.dot.gov/everydaycounts/
What is EDC

- **EDC-1 (2011 – 2012)**
  - Safety Edge
  - Slide-In Bridge (SH-51/Cottonwood Crk.)
  - [Link](http://garverusa.com/iq/201351/96/bridge-slide/)

  - LTAP – IIIGs, November 12-13, 2014
  - [Link](https://clgtweb.okstate.edu/CourseStatus.awp?&course=14EDCII1112)

- **EDC-3 (2015 – 2016)**
  - Road Diets
  - Data Driven Safety Analysis
Late 2012
- Horizontal Curve Program
- Chat Aggregates
- Focus State (Roadway Departure)

Six sites reviewed:
- 2 Mayes Co (Salina)
- Rogers Co. (Kentonville Hill)
- Cherokee Co. (Eldon Hill)
- LeFlore Co. (Talimena Drive)
- Oklahoma Co. (Urban Interstate)
Field Problems

- Multiple Curves
- Pavement conditions
- Wrong demographics (motorcycle on SH-1)
- Mislead information ie. Water shed Speeding Under report
Two Specific Locations
Site 1:

- 1300 ADT
- MP 2.9 to 3.4
- Asphalt, fair
- 2L rural, 11’
- Downhill
  - “wobble” superelevation
- 2-3 years life span
- 28 crashes (2006-2012)
  - 4 dry (14%)
  - 24 wet (86%)
Site 2:

- 520 ADT
- MP 11.3 to 11.8
- Asphalt, good
- 2L rural, 11’
- Downhill
  - “hook” sharp RH turn
  - compound radii
- 20 crashes (2006-2012)
  - 17 dry (85%)
  - 3 wet (15%)
Demo Project:

- $60,000
- Transtec and Kwik Bond
- 3-yr evaluation

Site 1 (12/17/2013):
- SB: 450’ (550 sy)
- NB: 200’ (244 sy)

Site 2 (03/24/2014):
- NB: 1000’ (1,222 sy)
- SB: 250’ (306 sy) – Done by hand

- Approximate $37 / sy
Site 1:
Site 2:
SH-20 Skid Test Information for both Site 1 and Site 2

<table>
<thead>
<tr>
<th></th>
<th>Site 1</th>
<th>Site 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12/17/2013</td>
<td>5/23/2014</td>
</tr>
<tr>
<td>Left</td>
<td>NB 49.3</td>
<td>NB 28.9</td>
</tr>
<tr>
<td></td>
<td>SB 44.0</td>
<td>SB 25.0</td>
</tr>
<tr>
<td></td>
<td>NB 75.9</td>
<td>NB 75.0</td>
</tr>
<tr>
<td></td>
<td>SB 78.9</td>
<td>SB 33.0</td>
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<tr>
<td>Right</td>
<td>NB 45.3</td>
<td>NB 33.0</td>
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<tr>
<td></td>
<td>SB 45.2</td>
<td>SB 37.0</td>
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<tr>
<td></td>
<td>SBL 81.4</td>
<td>SBL 72.4</td>
</tr>
</tbody>
</table>

The graph illustrates the skid test information for both sites, with the left and right values for each site represented in different colors. The values for Site 1 are shown in blue, while those for Site 2 are in green.
ODOT Youtube HFST

https://www.youtube.com/watch?v=gWajb4Vz38Q&list=UUh0LvHtuzB5-BVNdb9El1pQ

What Now:

AID (Accelerated Innovation Demonstration)
http://www.fhwa.dot.gov/accelerating/grants/

STIC (State Transportation Innovation Council)
Specifications (SP 404-1(a-e)09)
Questions?