

Managing Florida's Pavement Assets

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Southeastern Pavement Preservation Partnership (SEPPP)

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Charelston, SC

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Topics

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- FDOT Synopsis
- Pavement Overview
- Opportunities
- Research Projects



FDOT Synopsis

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- 43,402 lane miles
- 97.6% flexible, 2.4% rigid
- Almost exclusive use of milling and thin hot-mix overlays
- Primary roads only, no secondary roads
- Required by law to maintain 80% of roadways meeting minimum standards
 - Distress criteria: cracking, rutting, ride quality



Pavement Overview

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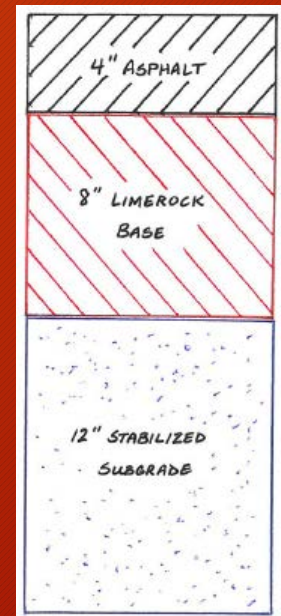
- Consistently ranked near the top of national polls rating pavement condition
 - Well-drained, A-3 type soils
 - Limerock base
 - Annual Pavement Condition Survey
 - Dedicated funding source (maintain existing before building new)
 - Performance based specs



Pavement Overview

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- Typical Florida pavement section
 - Thin HMA layer (3 - 5")
 - Limerock base (LBR 100, 8 - 10")
 - Stabilized subgrade (LBR 40, 12")
- Typical distress is top-down cracking
- Mill depth is set to remove cracks



Pavement Overview

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- Life-span
 - Open graded: 14 years
 - Dense graded: 20 years
- No other pavement rehab is generally required between resurfacing projects

Opportunities

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- Lots of room for new techniques
- Need to do more with less
- Upper Management is open to “bold and innovative” ideas
 - Pavement preservation test section
 - Crack seal research project
 - Micro surfacing 319 in Leon County
- Inclusive of asphalt contractors
 - Warm mix, HiMA, Ultra-thin wearing courses



Opportunities

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- Florida Pavement Preservation Council
- Expand local agency awareness and use
- Research
- Education and training



Pavement Preservation Test Section

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- Mexico Beach, Florida
- Constructed in 2012
- Contains 10 Test Sections with 2 control sections.
- Test Sections contain various asphalt mixes along with Microsurfacing and Reworked Asphalt.

Pavement Preservation Test Section

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Crack Seal

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- FDOT does not use crack sealing on state highways
- In 2011, FDOT began a research project to re-examine the potential benefit of crack sealing



Crack Seal Research

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- Roadway characteristics:
 - Two-lane, rural roads
 - AADT ranges from 1,500 vpd to 16,800 vpd
 - % Trucks ranges from 3.6% to 38.2%
- Each location is 1.25 miles long, divided into (5) ¼-mile sections
- Crack sealing/filling in NB/EB lane only, from centerline to edge of travel lane
 - Section 1: Rout and seal w/ asphalt rubber binder
 - Section 2: Crack fill w/ asphalt rubber binder
 - Section 3: Control (no treatment)
 - Section 4: Rout and seal w/ polymer modified binder
 - Section 5: Crack fill w/ polymer modified binder

Crack Seal Research

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- Cost \$75,000 to construct(each site, 5 Total)
- Constructed in March 2013
- Will analyze for 3 - 5 years
- Annual condition surveys
- Life-cycle cost analysis to determine if process is of any benefit

CRACK SEAL TEST LOCATIONS

- SR 61, Leon County
- SR 121, Baker County
- SR 471, Sumter County
- SR 72, Desoto County
- SR 997, Miami-Dade County

Krome Ave. Miami-Dade County

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Microsurfacing - Hwy 319

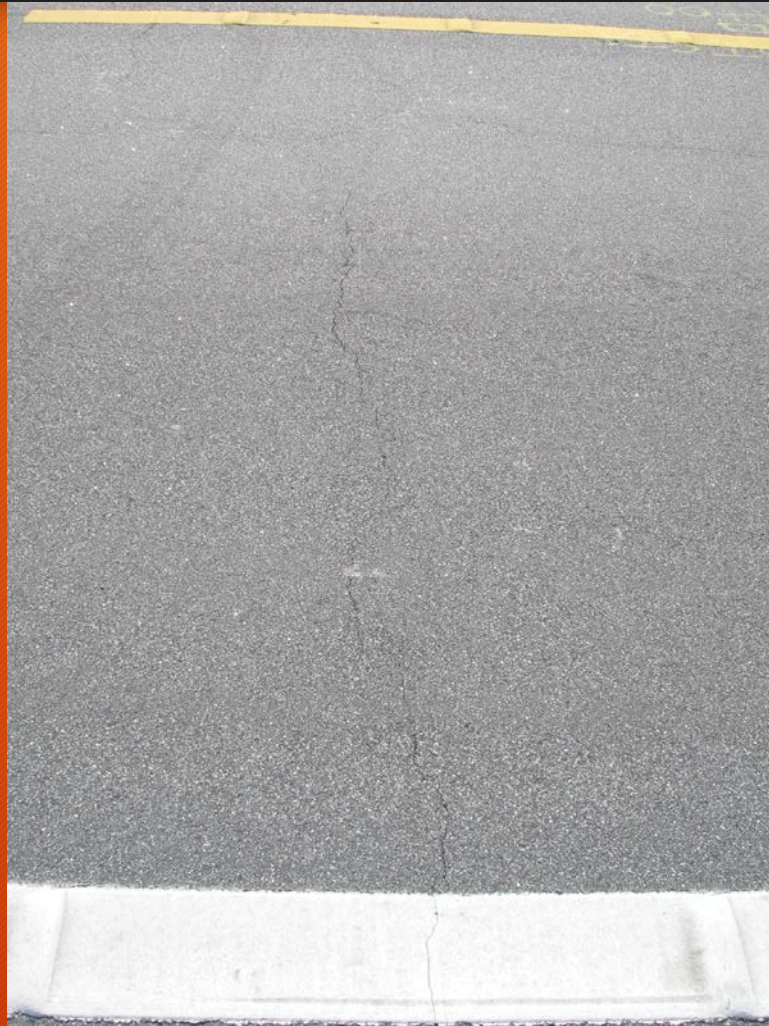
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- Constructed in May, 2013



Microsurfacing

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Florida Pavement Preservation Council (FPPC)

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- FDOT hosts a web page for the FPPC
- The website contains a variety of Pavement Preservation Specifications
- The hosting of the FPPC site allows one place for counties and cities to go to ensure they are getting the most up to date specification



The Florida Pavement Preservation Council is a partnership of agency, industry and academia professionals in Florida focused on the promotion of Pavement Preservation Principles through Education.

These specifications were not developed by and are not owned by the Florida Department of Transportation.

NOTE: These files MAY NOT BE USED on any FDOT projects.

Note: The links on this page are Word Documents and will require Microsoft Word 2003 or higher to view or Word Viewer 2003 (Opens in new Window)

Specifications Title	Specification Number
Bituminous Chip Seal (REV 1-29-2014)	FPPC335-Bituminous Chip Seal (59kb)
Bituminous Fog Seal (REV 1-29-2014)	FPPC335-Bituminous Fog Seal (35kb)
Micro Surfacing (REV 7-30-2013)	FPPC335-Micro Surfacing (59kb)
Polymer Modified Chip Seal (REV 5-16-2014)	FPPC335-Polymer Modified Chip Seal (67kb)
Slurry Seal Surfacing (REV 9-15-2014)	FPPC335-Slurry Seal Surfacing (125kb)

- The site is continually updated with new specifications.

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- <http://www.dot.state.fl.us/specificationsoffice/Implemented/LAP/FPPC/Default.shtm>

Thank You!

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