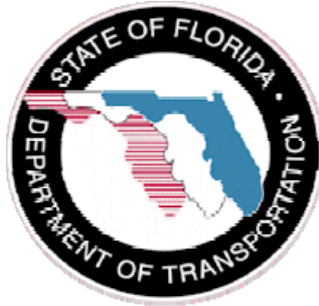


State of Florida  
**Department of Transportation**



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**Asphalt Rubber Membrane Interlayer (ARMI)**  
**Experimental Project Interim Report**

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**County:**  
Baker

**Section/Subsection:**  
27020-3509

**FIN:**  
20791915201

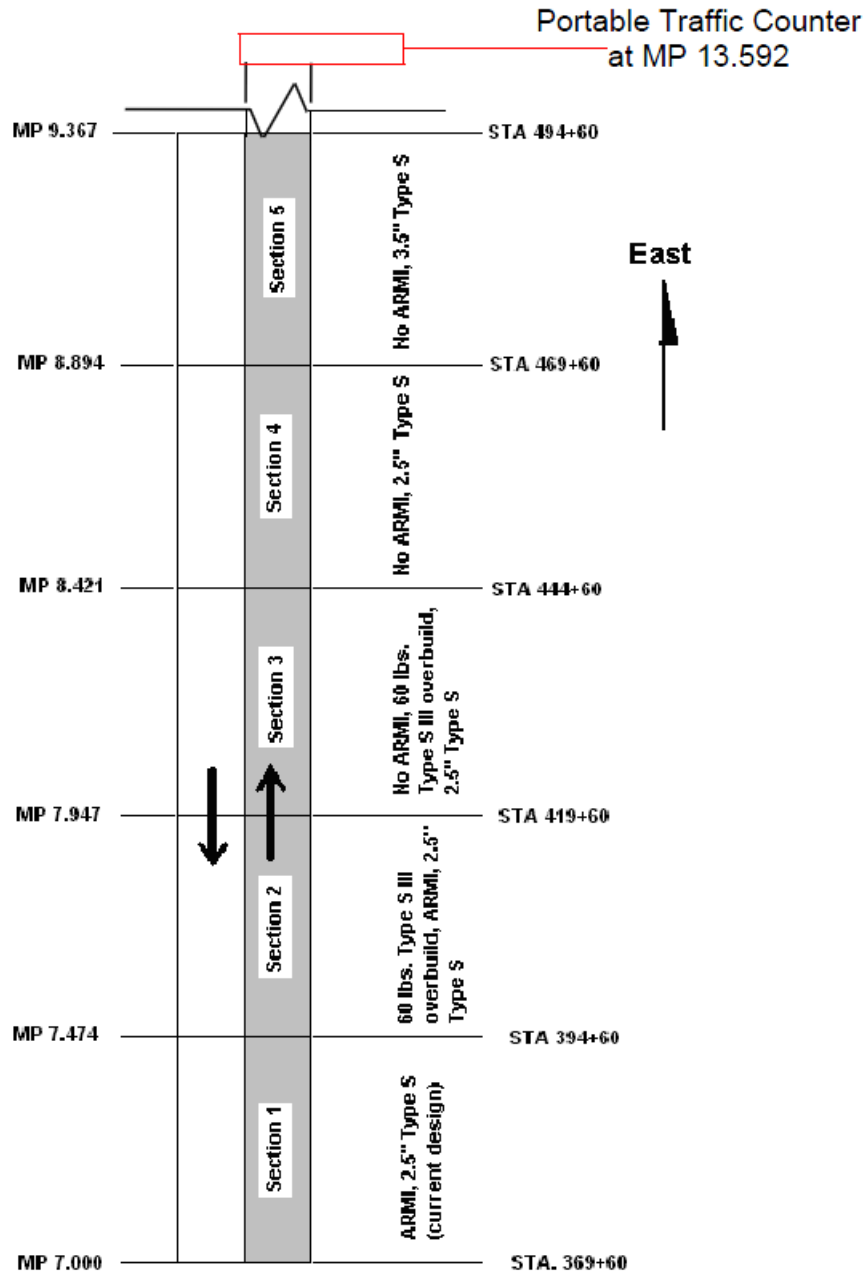
**State Road:**  
2

**Last Updated:**  
February 2011

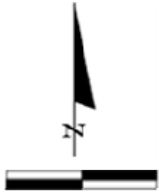
# Project Description

**County:** Baker  
**Section/Subsection:** 27020-3509  
**FIN:** 20791915201  
**State Road:** 2

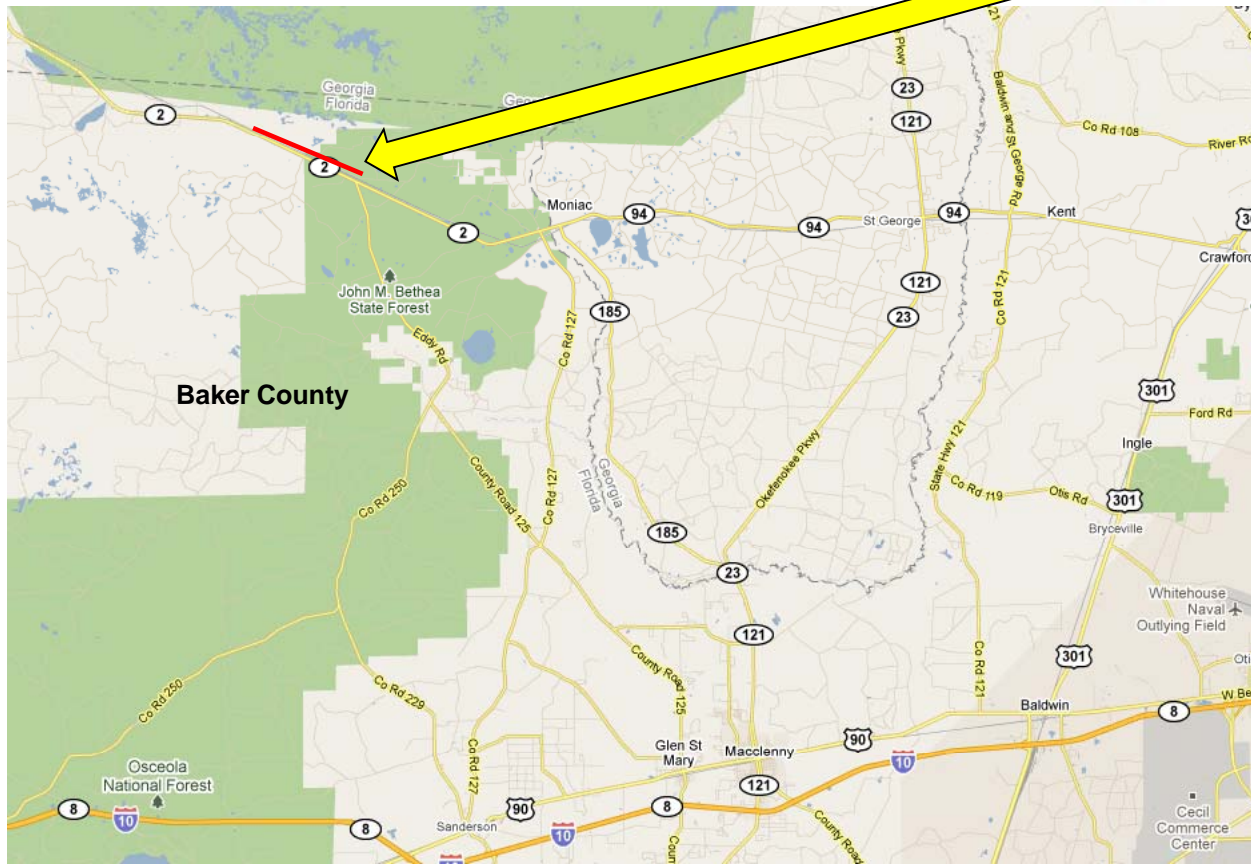
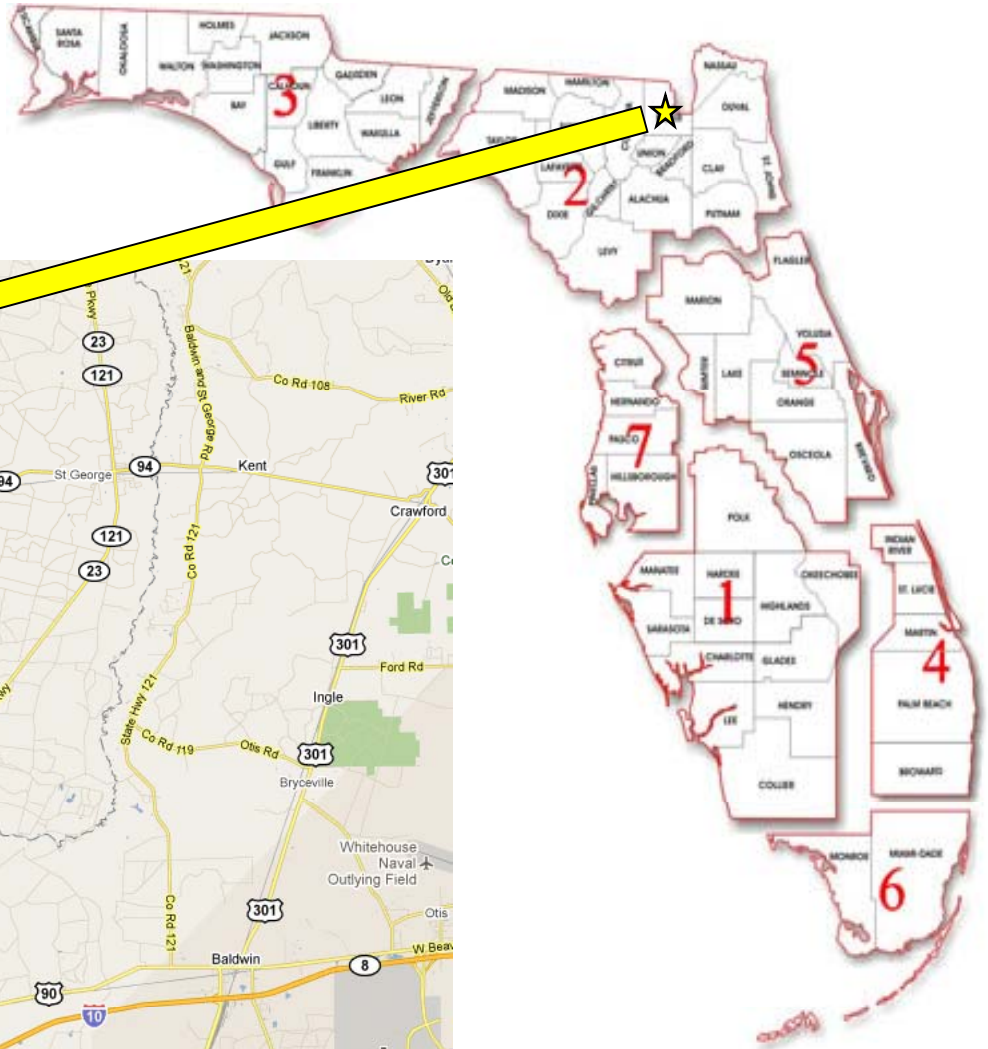
**Objective:** The objective of this study is to evaluate the relative long-term field performance of an Asphalt Rubber Membrane Interlayer (ARMI). The project was constructed in January 1998, and consists of five test sections in the eastbound lane of SR 2 in Baker County. Performance is evaluated in terms of deflection, ride quality rutting and cracking.



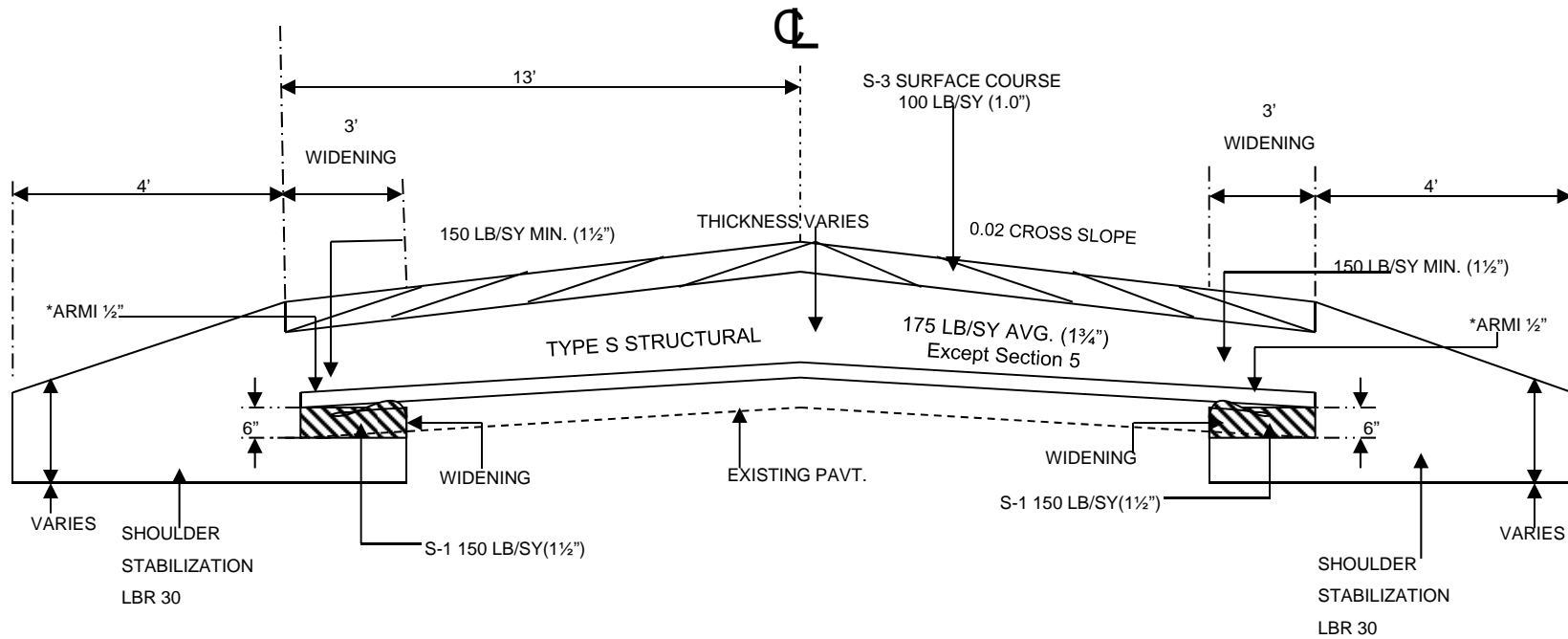
# Project Location



Not to Scale



# TYPICAL SECTION



Section 1

Section 2

Section 3

Section 4

Section 5

2.5 inch Type S
A R M I
Existing Pavement

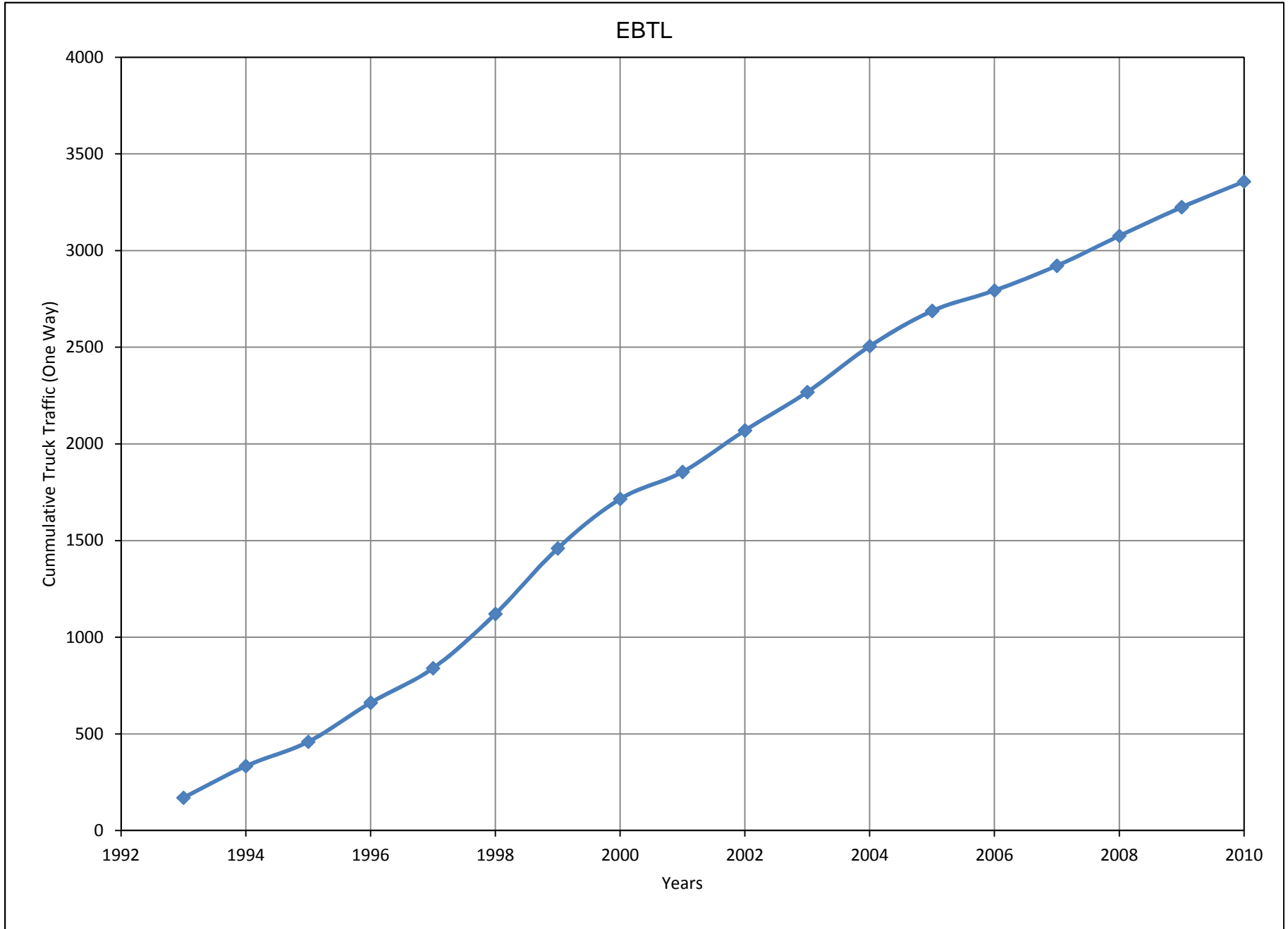
2.5 inch Type S
A R M I
Type S Overbuild
Existing Pavement

2.5 inch Type S
Type S Overbuild
Existing Pavement

2.5 inch Type S
Existing Pavement

3.5 inch Type S
Existing Pavement

Traffic Count  
Site # 0053



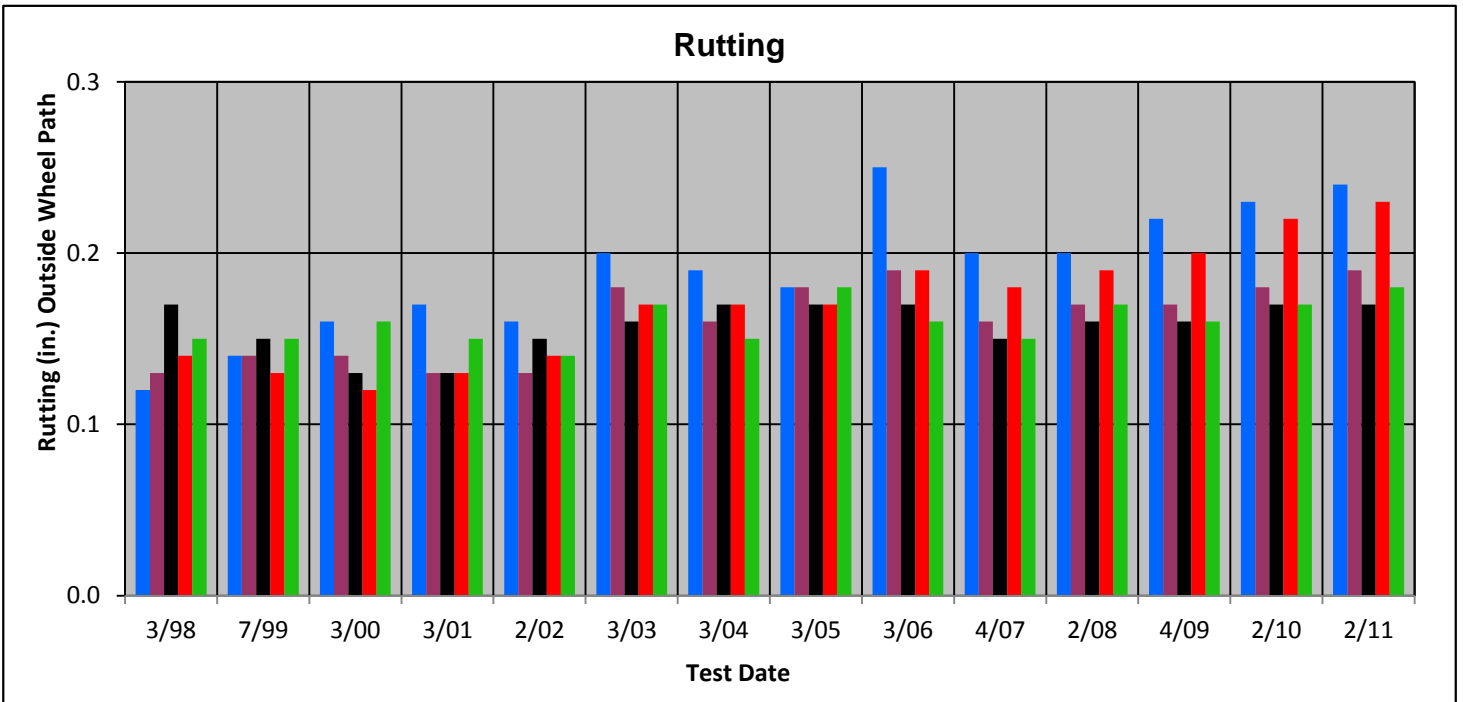
## Pavement Distress Summary

2011 Test Results

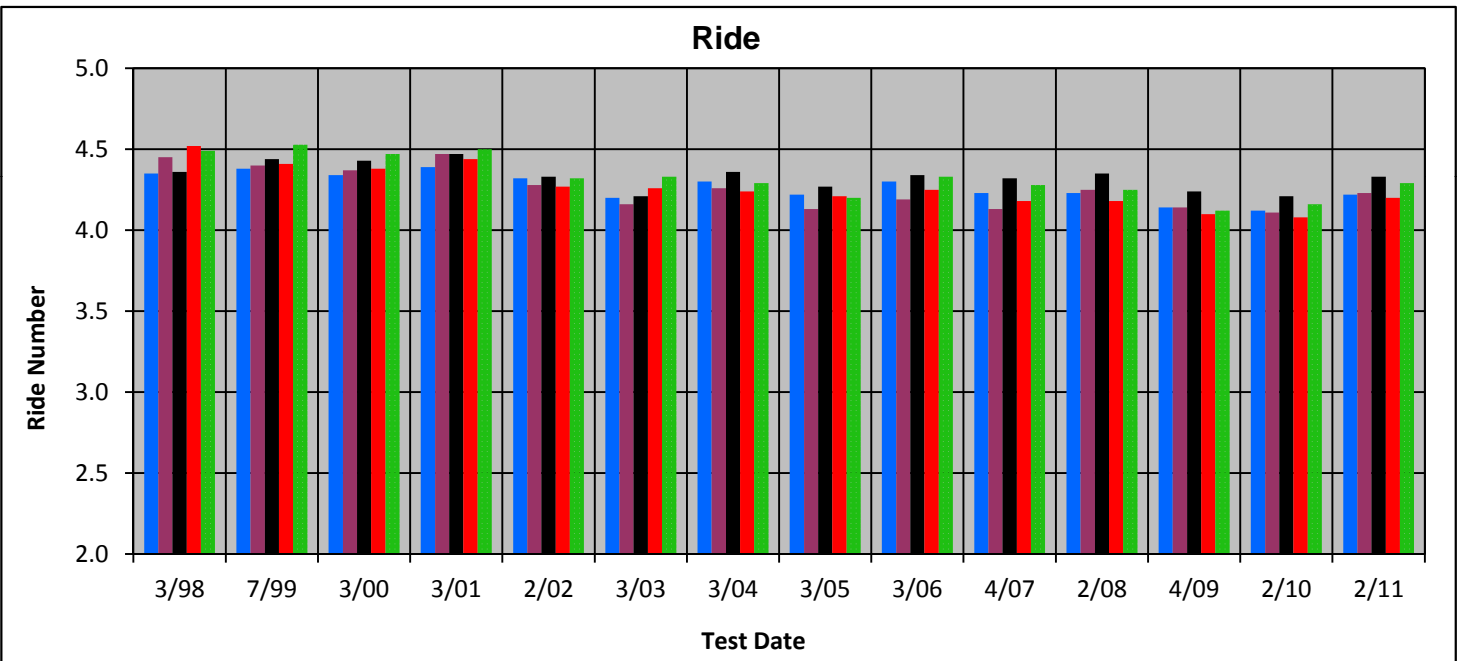
Test Section	Design	Transverse Cracking (SF/1000SF)	Total Cracking (SF/1000SF)	Rutting (in.)	Ride Quality		FWD. Deflection (mils.) (Under Load Plate D <sub>0</sub> ) Temp. corrected 70 °F	Embankment Modulus (M <sub>r</sub> )	
					RN	IRI		Psi	Mpa
1	ARMI, 2.5" Type S (current design)	27	223	0.23	4.22	66	12.5	14,500	100
2	60 lbs. Type S III overbuild, ARMI, 2.5" Type S	3	166	0.18	4.23	61	10.8	14,200	100
3	No ARMI, 60 lbs. Type S III overbuild, 2.5" Type S	4	151	0.17	4.29	55	10.3	13,500	90
4	No ARMI, 2.5" Type S	3	207	0.22	4.25	61	11.0	13,900	100
5	No ARMI, 3.5" Type S	1	182	0.17	4.32	55	9.7	11,800	80

# Pavement Distress

## Rutting

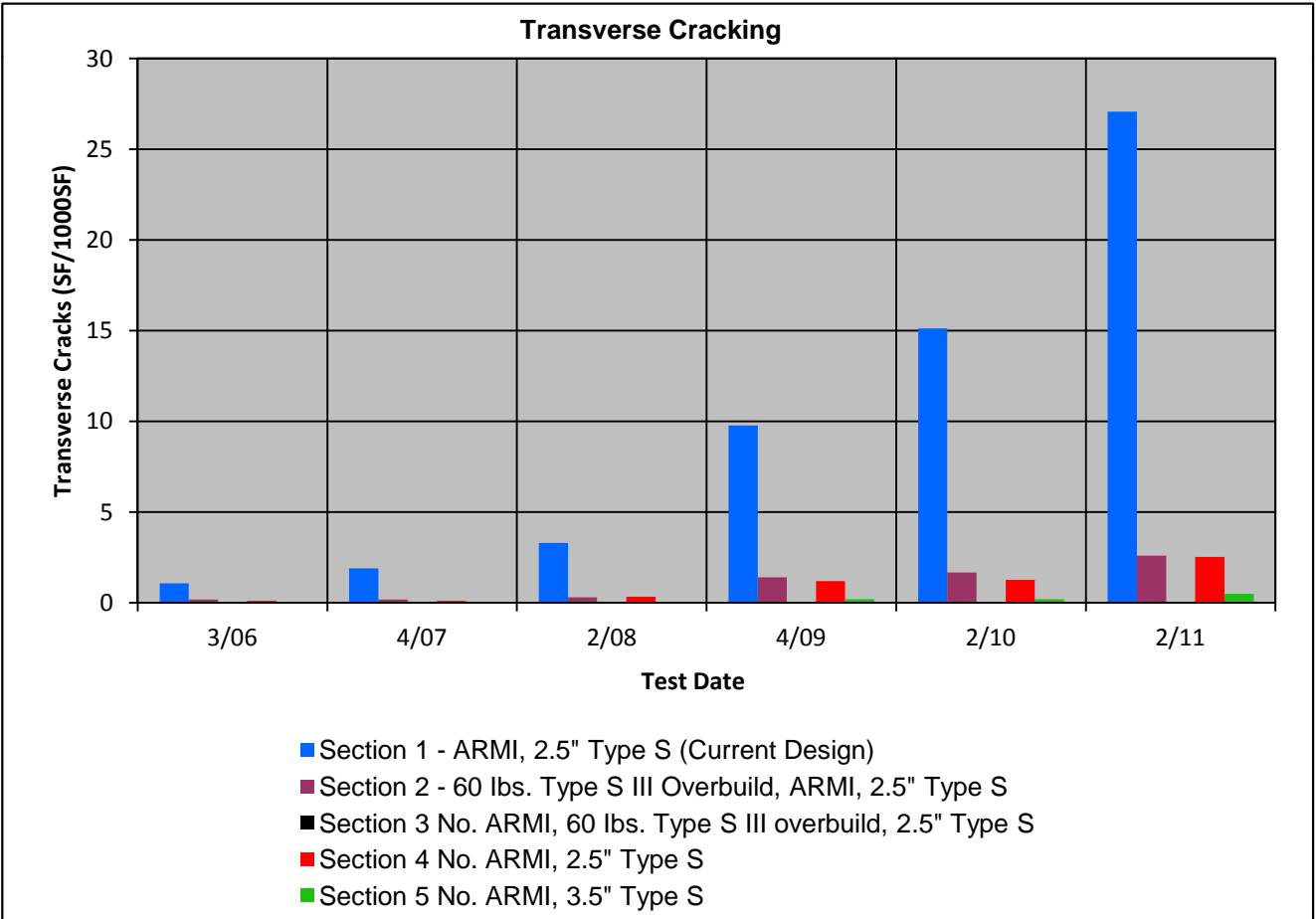
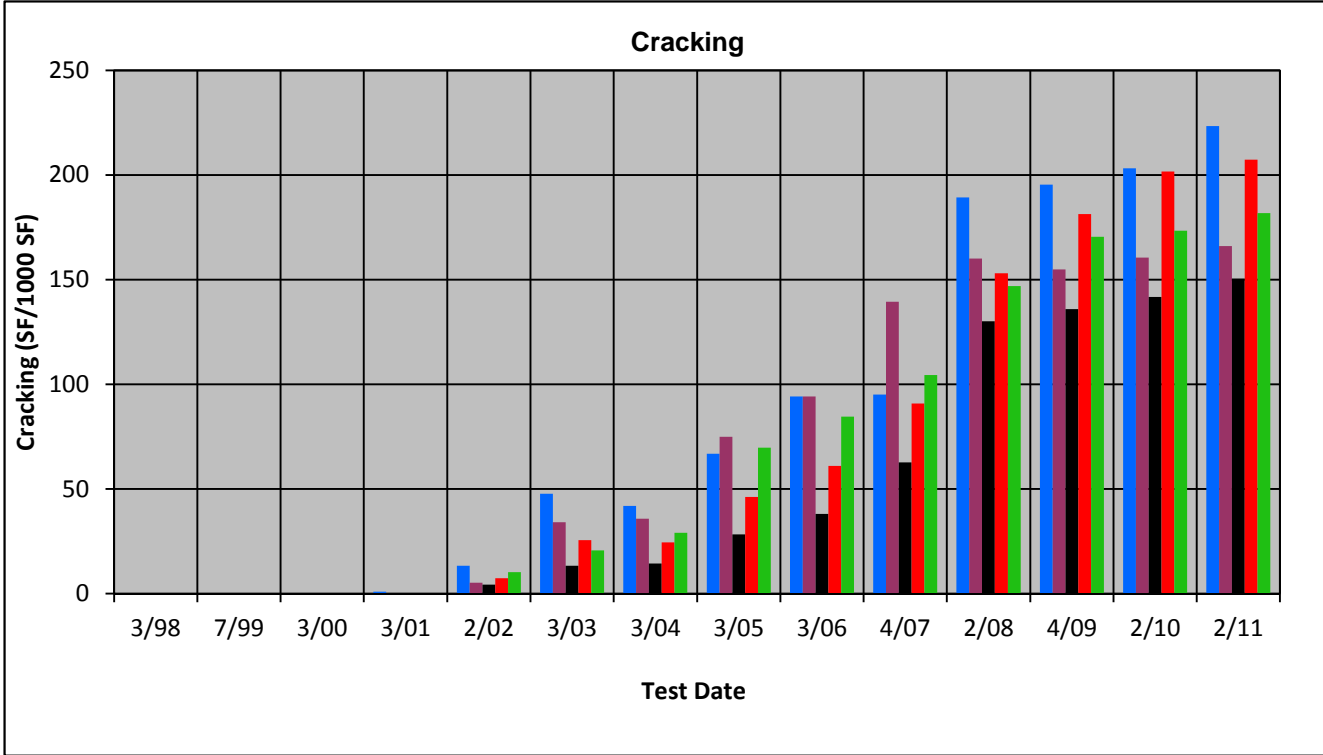


## Ride



- Section 1 - ARMI, 2.5" Type S (current design)
- Section 2 - 60 lbs. Type S III overbuild, ARMI, 2.5" Type S
- Section 3 - No ARMI, 60 lbs. Type S III overbuild, 2.5" Type S
- Section 4 - No ARMI, 2.5" Type S
- Section 5 - No ARMI, 3.5" Type S

# Pavement Distress





# Pavement Deflection

