

# 2014 Rigid Pavement Condition Survey Facts and Figures

FDOT Office

State Materials Office

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# **Executive Summary**

The Pavement Condition Unit is one of three functional units of the Pavement Materials System Section, which represents one of four areas of expertise within the State Materials Office (SMO).

Since 1985, this unit has been collecting, processing, and analyzing the information on the condition and performance of the State Roadway System on an annual basis. The information provided by the Pavement Condition Survey (PCS) Program has been critical to the Department's effort to support informed highway planning, policy, and decision making at the State and local levels. This includes the apportionment and allocation of funding needs to the Districts, as well as the determination of appropriate cost-effective strategies to rehabilitate and preserve existing highway transportation infrastructure.

The PCS traditionally evaluates the pavement lane that is in the worst condition in each roadway direction. The beginning and ending of pavement sections to be rated are determined by construction limits and/or uniformity of conditions. All sections are rated based on the varying levels and extent of specific distresses, namely, 1) ride quality, 2) surface deterioration, 3) spalling, 4) patching, 5) transverse cracking, 6) longitudinal cracking, 7) corner cracking, 8) shattered slabs, 9) faulting, 10) pumping, and 11) joint condition. The ratings for distresses 2 through 11 are combined to generate an overall Defect Rating.

The Central Pavement Management Office is responsible for the data processing and analysis, and for making the data available for use by the Department, consultants, and others. The Central Program Development Office is responsible for reporting the condition of the State Highway System for Pavement Management purposes.

The present report provides essential information on the current condition of the rigid pavement sections of the Florida State Highway System as part of the PCS program. It also includes a summary of the historical condition rating data.

To obtain an electronic copy of this and other reports, and to learn more about our program, please visit the Pavement Materials Division at SMO's website:

Intranet <a href="http://materials.dot.state.fl.us/">http://materials.dot.state.fl.us/</a>

Internet http://www.dot.state.fl.us/statematerialsoffice/

### **Section I**

### Introduction

The Pavement Condition Unit is responsible for the Department's Annual Pavement Condition Survey. The survey is conducted on the entire State-maintained Highway System, on an annual basis.

The survey is conducted by a highly-trained and experienced staff, and requires four area staff specialists about 25 weeks of travel each year to complete.

The annual PCS is used to accomplish the following main objectives:

- Determine the present condition of the State Roadway System
- Compare the present to past conditions
- Predict deterioration rates
- Predict rehabilitation funding needs
- Provide justification for project rehabilitation
- Provide justification for annual rehabilitation budget
- Provide justification for distribution of the funds to Districts

The PCS rating of rigid pavements is based on two main criteria, namely, 1) Defect Rating, and (2) Ride Rating. A pavement section is rated on a scale of 0 to 10, where a rating of 10 indicates a section in excellent condition. Currently, any section with a rating of 6 or less is eligible for rehabilitation.

The Defect Rating is obtained by evaluating ten different individual distress types, namely, 1) surface deterioration, 2) spalling, 3) patching, 4) transverse cracking, 5) longitudinal cracking, 6) corner cracking, 7) shattered slab, 8) faulting, 9) pumping, and 10) joint condition.

Ride quality is measured using an automated vehicle-mounted instrument called a Profiler that measures the longitudinal profile of the roadway. The ride quality is quantified in terms of Ride Number (RN). RN is a mathematical processing of longitudinal profile measurements to produce an estimate of ride quality or user perception in accordance with ASTM Standard E1489.

In order to ensure maximum accuracy and repeatability of the data collected, the testing equipment is well maintained and routinely calibrated. In addition, over 150 edit checks are used to test both the data accuracy and compliance with other known parameters. Comparisons of annual PCS data with earlier years are also performed to review trends and identify potential errors. When necessary, survey equipment is upgraded to improve the data analysis software to increase efficiency and effectiveness of data collection and processing. These types of improvements now allow in-depth analysis of any segment of the highway system and on-time completion of the PCS while maintaining a high level of accuracy.

For more detailed information about the Pavement Condition Surveys, please refer to the latest edition of the Rigid and Flexible Pavement Condition Survey Handbooks, which can be accessed online at: <a href="http://materials.dot.state.fl.us/smo/pavement/performance/pcs/pavementconditionsurvey.htm">http://materials.dot.state.fl.us/smo/pavement/performance/pcs/pavementconditionsurvey.htm</a>

The facts and figures contained in this report are for rigid pavements only, which represent approximately 2.4% of the entire State Highway System.

### **Observations**

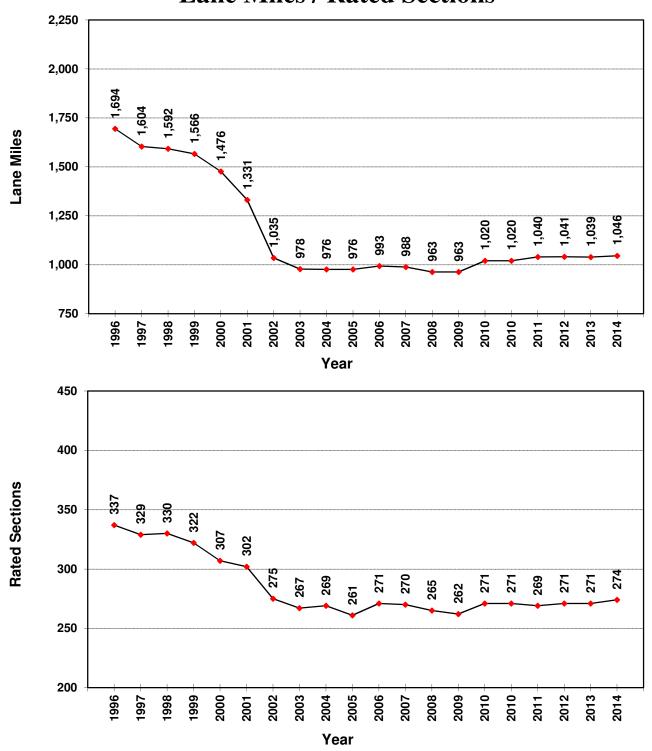
The review and analysis of PCS historical Distress Ratings for rigid pavements have resulted in the following statewide observations:

- 1. Since 1996 the number of miles of Rigid Pavements on the state-maintained highway system had declined from 1694 lane miles to only 1046 lane miles in 2014. Because of this, the conclusions drawn below may be largely due to the drop in number of miles.
- 2. The average Defect Ratings have steadily improved from 7.47 in 1997 to 7.87 in 2014.
- 3. The average Ride Ratings remained constant for the 7 years prior to the 2004 PCS with a mean rating of 7.36 in 2003 and an overall average of 7.29. In 2004 the Ride Rating declined to a statewide average of 6.79. This decline was mainly due to a change in sampling interval used when collecting the data. Prior to the 2004, all surveys were conducted using a 12 inch sampling interval. Beginning with the 2004 survey, a 6 inch sampling interval was used. Since 2004, the Ride Rating has steadily improved from 6.79 to 7.18 in 2014.
- 4. 100% of the pavement sections rated in 2014 for Defect were within one deduct point compared to the 2013 ratings. (1)
- 5. 99.9% of the pavement sections rated in 2014 for Ride were within one deduct point compared to the 2013 ratings. (1)
- \* Note (1): Sections that had undergone notable changes such as new construction or total rehabilitation were excluded from the analysis.

### **General Notes**

- 1. For multi-lane roadways: The worst lane in each direction is rated (normally the outermost traffic lane).
- 2. For two-lane roadways: The worst lane is rated (normally the same lane tested the previous year).
- 3. Rated sections are determined by construction limits and/or significant changes in visual condition of the pavement.
- 4. Ride Rating data is collected using four identical roadway profiler units.
- 5. Defect Rating is based on manual and visual distress measurements collected by the rater from the shoulder of the roadway.
- 6. Rigid Pavement Condition Survey Production History (p. 4) and PCS Production History (p. 5) is based on total lane miles, including pavement types of No ride, Under construction, and Structures. All other graphs and tables are based on lane miles where given rating index (defect or ride) was measured.
- 7. Historical Distress Ratings by District (Section IV) and by System (Section V) are based on Lane Miles for Defect Rating.

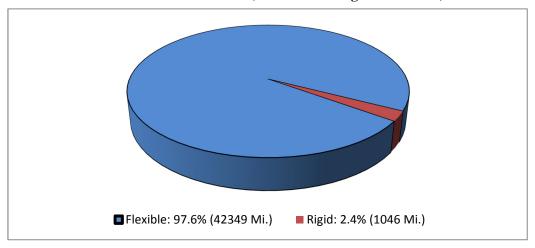
# Rigid Pavement Condition Survey Production History Lane Miles / Rated Sections



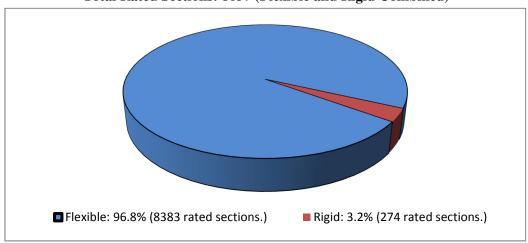
# **Rigid Pavement Condition Survey 2014 PCS Production Summary**

### **Statewide**

**Total Lane Miles: 43395 (Flexible and Rigid Combined)** 



**Total Rated Sections: 8657 (Flexible and Rigid Combined)** 



# Section II Defect Rating By System and District



### **Section II**

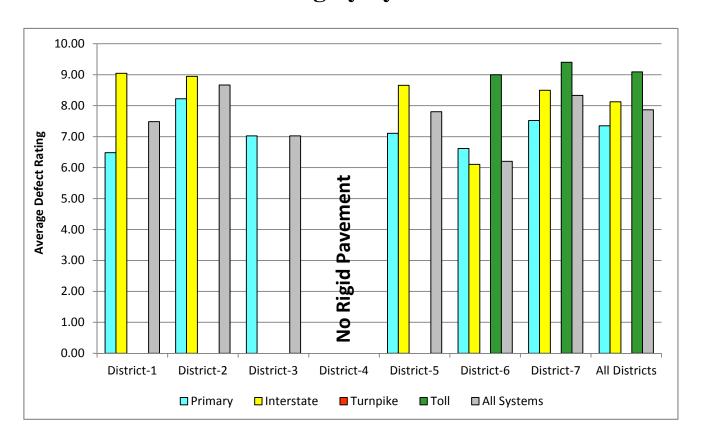
### **Defect Rating by System and District**

### **Defect Rating Criteria**

- 1. Ten different distresses are counted and/or estimated then classified by severity levels.
- 2. Each distress has a numeric deduct value based on the severity level assigned by the rater.
- 3. The Defect Rating is obtained by subtracting the individual deduct values associated with each various form of distress from 100, and then dividing by 10. A Defect Rating of 10 indicates a pavement without observable distress.

For more information on how Defect Rating is calculated see the 2012 Rigid PCS Handbook.

# **2014 Defect Rating by System and District**



### **Lane Miles**

System	District-1	District-2	District-3	District-4	District-5	District-6	District-7	Statewide
Primary	33	72	15	0	126	10	49	306
Interstate	21	115	0	0	103	127	233	600
Turnpike	0	0	0	0	0	0	0	0
Toll	0	0	0	0	0	3	1	4
Statewide	55	188	15	0	229	140	283	910

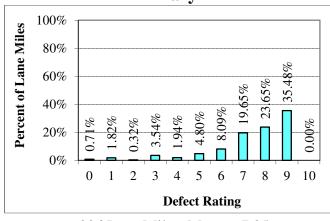
**Defect Rating** 

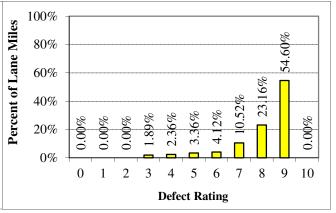
System	District-1	District-2	District-3	District-4	District-5	District-6	District-7	Statewide
Primary	6.48	8.23	7.03		7.11	6.61	7.52	7.35
Interstate	9.05	8.95			8.66	6.10	8.50	8.12
Turnpike								
Toll						9.00	9.40	9.09
Statewide	7.48	8.67	7.03		7.80	6.20	8.33	7.87

# 2014 Defect Distribution by System - Statewide



### Interstate



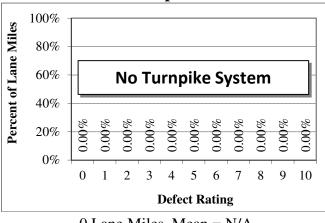


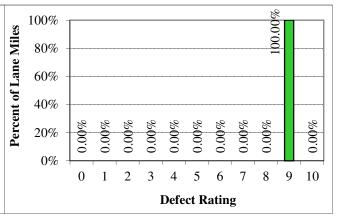
306 Lane Miles, Mean = 7.35

600 Lane Miles, Mean = 8.12

### **Turnpike**

Toll

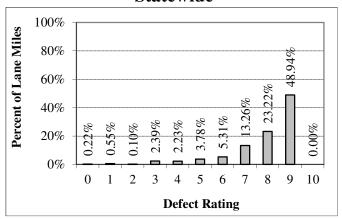




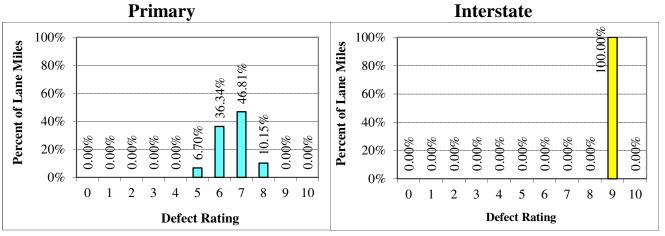
0 Lane Miles, Mean = N/A

4 Lane Miles, Mean = 9.09

### Statewide

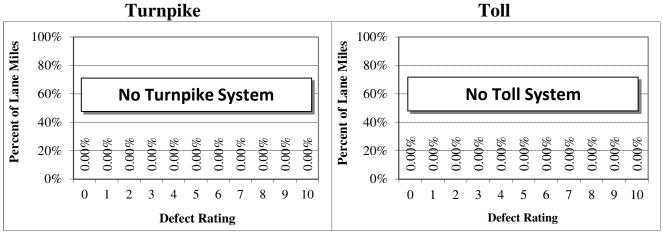


910 Lane Miles, Mean = 7.87



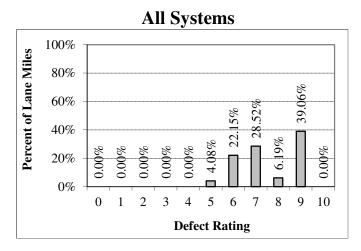
33 Lane Miles, Mean = 6.48

21 Lane Miles, Mean = 9.05

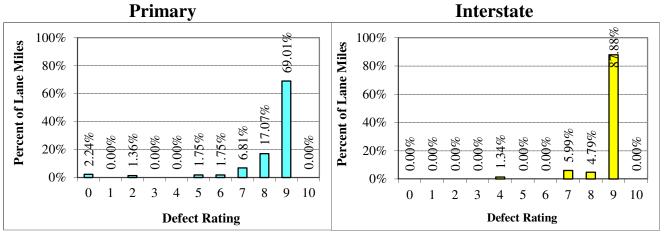


0 Lane Miles, Mean = N/A

0 Lane Miles, Mean = N/A

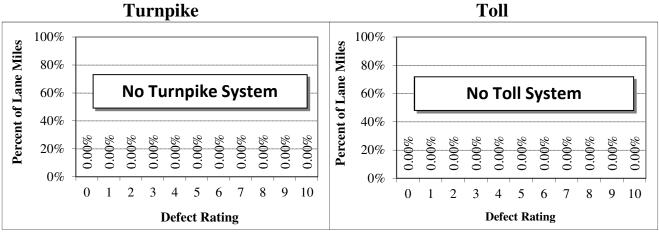


55 Lane Miles, Mean = 7.48



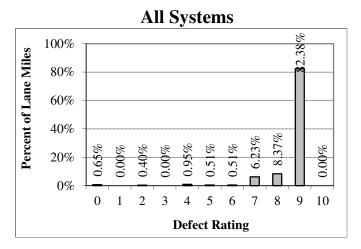
72 Lane Miles, Mean = 8.23

115 Lane Miles, Mean = 8.95

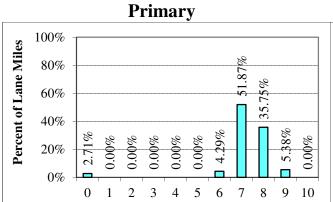


0 Lane Miles, Mean = N/A

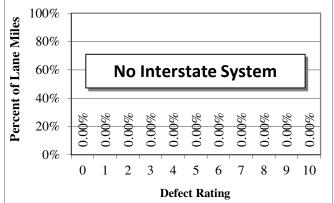
0 Lane Miles, Mean = N/A



188 Lane Miles, Mean = 8.67



### Interstate

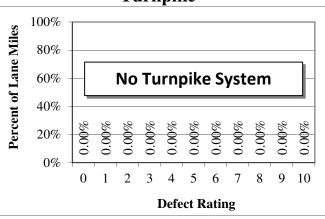


15 Lane Miles, Mean = 7.03

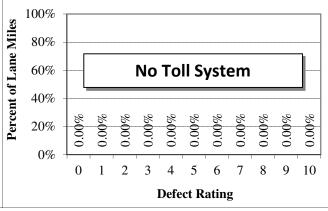
**Defect Rating** 

0 Lane Miles, Mean = N/A





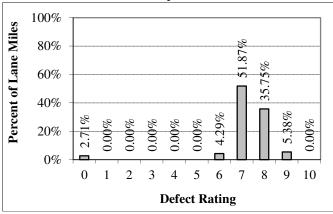
### Toll



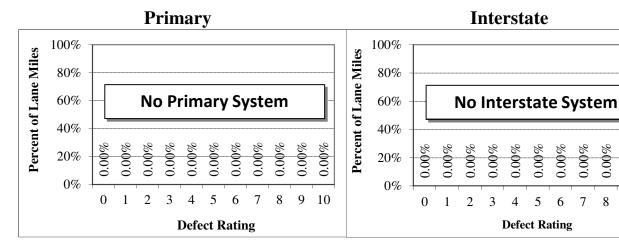
0 Lane Miles, Mean = N/A

0 Lane Miles, Mean = N/A

### All Systems

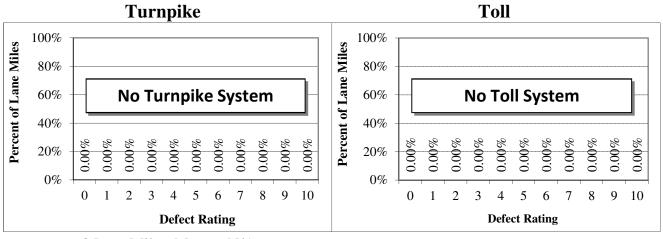


15 Lane Miles, Mean = 7.03



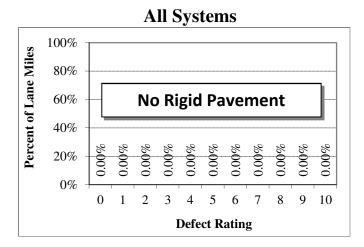
Lane Miles, Mean = N/A

Lane Miles, Mean = N/A

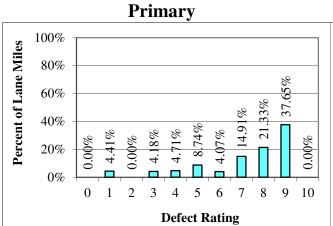


Lane Miles, Mean = N/A

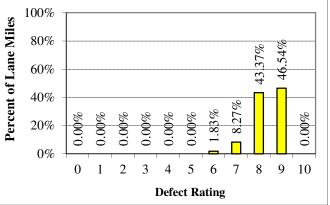
0 Lane Miles, Mean = N/A



Lane Miles, Mean = N/A



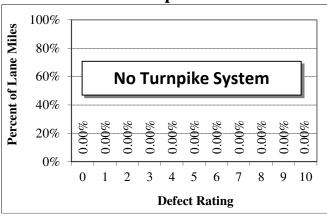
Interstate



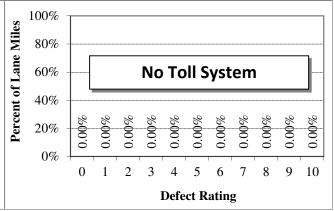
126 Lane Miles, Mean = 7.11

103 Lane Miles, Mean = 8.66





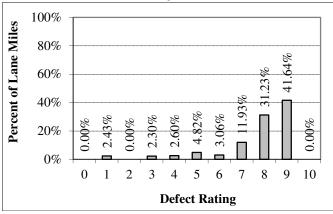
### Toll



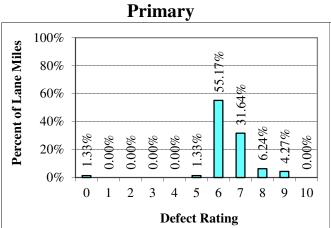
0 Lane Miles, Mean = N/A

0 Lane Miles, Mean = N/A

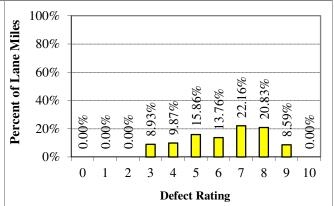




229 Lane Miles, Mean = 7.81



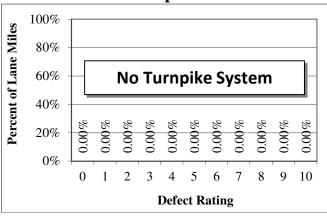
### Interstate



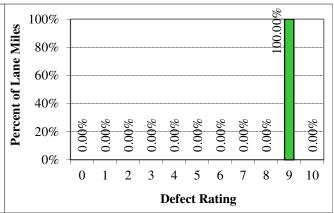
10 Lane Miles, Mean = 6.61

127 Lane Miles, Mean = 6.1





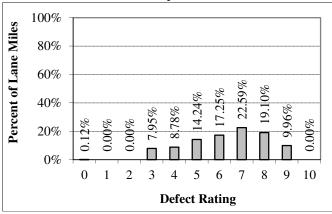
### Toll



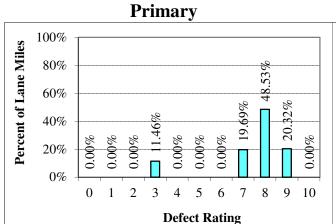
0 Lane Miles, Mean = N/A

3 Lane Miles, Mean = 9

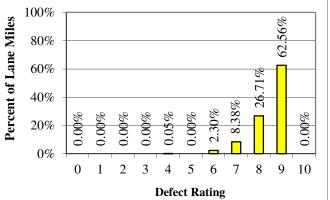




140 Lane Miles, Mean = 6.2



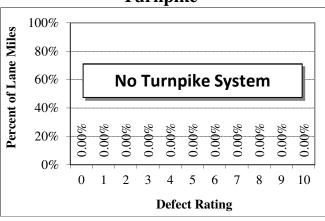
### Interstate



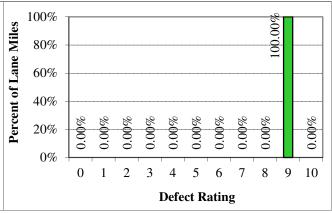
49 Lane Miles, Mean = 7.52

233 Lane Miles, Mean = 8.5





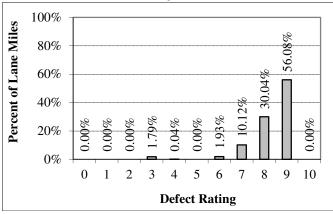
### Toll



0 Lane Miles, Mean = N/A

1 Lane Miles, Mean = 9.4

### **All Systems**



283 Lane Miles, Mean = 8.33

# Section III Ride Rating By System and District



# **Section III**

### **Ride Rating by System and District**

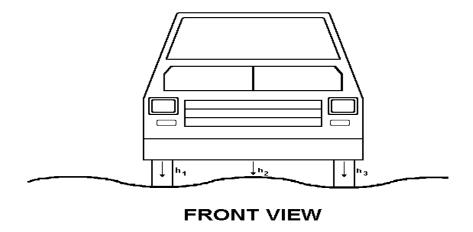
### **Ride Rating Criteria**

- 1. A Ride Rating represents the ride quality of a pavement section. It is an indication of the degree of smoothness or roughness of the wearing surface.
- 2. A Ride Rating is calculated from Ride Number (RN). Ride Rating = RN \* 2

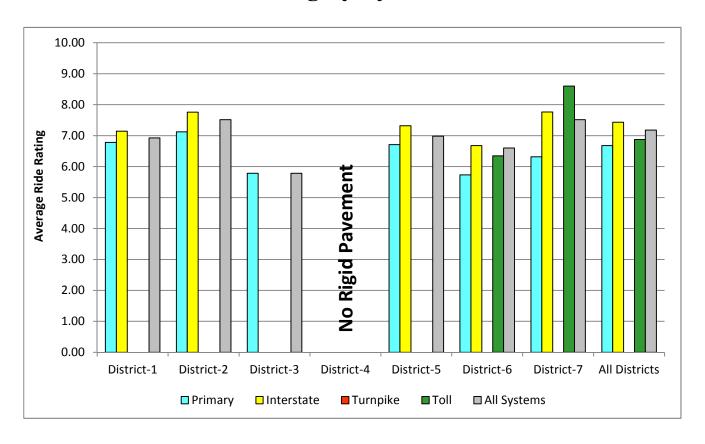
RN is a mathematical processing of longitudinal profile measurements to produce an estimate of a driver's subjective perception of the ride quality of a roadway. The RN is based on an algorithm published in National Cooperative Highway Research Project (NCHRP) 1-23. RN is defined in ASTM Standard E-1489.

- 3. The ride quality of a roadway is greatly affected by, but not limited to, factors that include the following:
  - Original pavement profile
  - Profiles of intersecting roads
  - Utility patches and manhole covers
  - Surface and structural deterioration and deformation
- 4. Ride Rating is based on a 0 to 10 scale, where 10 represents a pavement with no roughness while ratings of 6 or less represent a pavement with an undesirable ride quality.

Note that with the start of the 2004 PCS, the profile data was collected using a sampling rate of 6 in. compared to a 12 in. sample interval used in previous years.



# 2014 Ride Rating by System and District



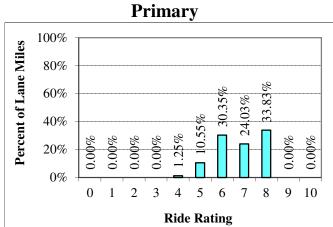
### **Lane Miles**

System	District-1	District-2	District-3	District-4	District-5	District-6	District-7	Statewide
Primary	33	72	15	0	126	10	49	304
Interstate	21	115	0	0	103	127	233	600
Turnpike	0	0	0	0	0	0	0	0
Toll	0	0	0	0	0	3	1	4
Statewide	54	187	15	0	229	139	283	908

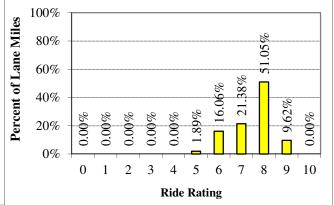
**Ride Rating** 

System	District-1	District-2	District-3	District-4	District-5	District-6	District-7	Statewide
Primary	6.78	7.12	5.78		6.71	5.73	6.32	6.68
Interstate	7.15	7.76			7.32	6.68	7.76	7.43
Turnpike								
Toll						6.35	8.60	6.87
Statewide	6.93	7.51	5.78		6.98	6.60	7.52	7.18

# 2014 Ride Distribution by System - Statewide



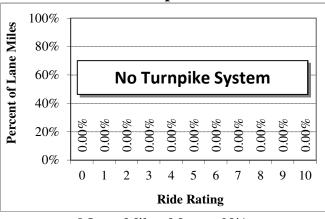
### Interstate



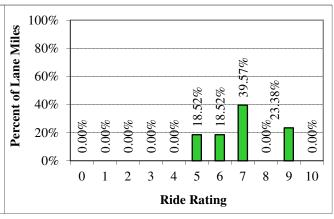
304 Lane Miles, Mean = 6.68

600 Lane Miles, Mean = 7.43





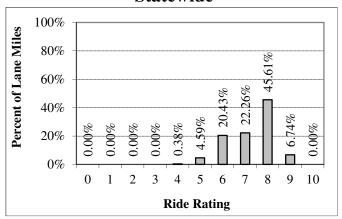
### Toll



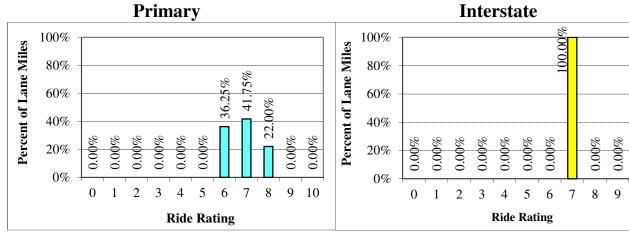
0 Lane Miles, Mean = N/A

4 Lane Miles, Mean = 6.87

### Statewide

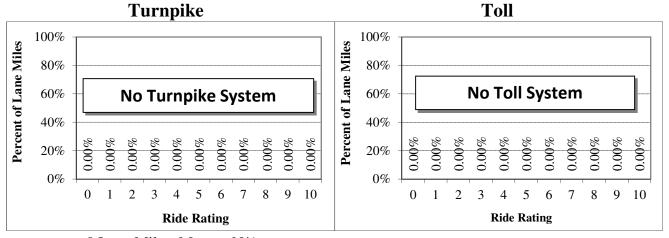


908 Lane Miles, Mean = 7.18



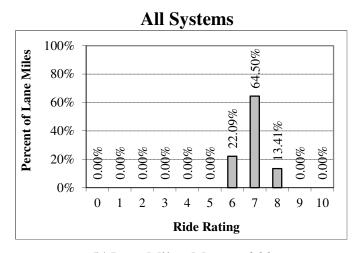
33 Lane Miles, Mean = 6.78

21 Lane Miles, Mean = 7.15

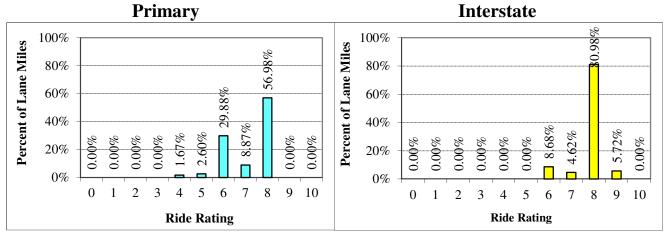


0 Lane Miles, Mean = N/A

0 Lane Miles, Mean = N/A

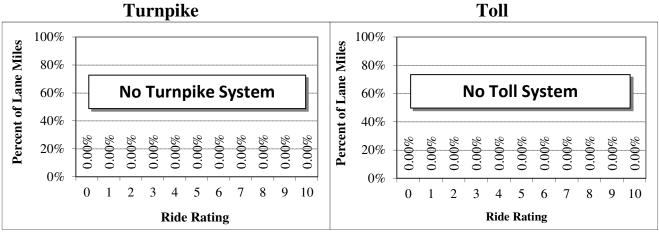


54 Lane Miles, Mean = 6.93



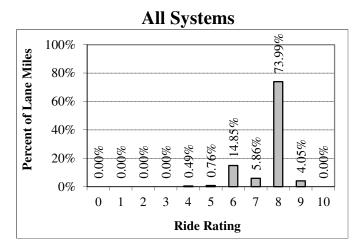
72 Lane Miles, Mean = 7.12

115 Lane Miles, Mean = 7.76

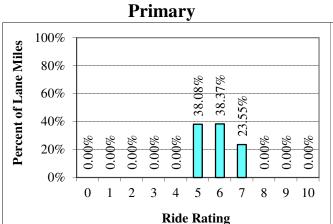


0 Lane Miles, Mean = N/A

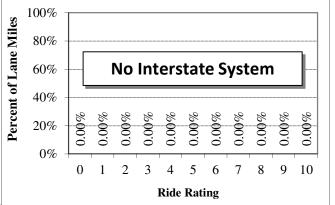
0 Lane Miles, Mean = N/A



187 Lane Miles, Mean = 7.52



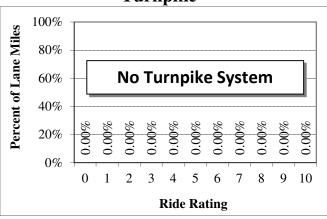
### Interstate



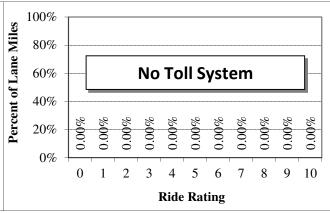
15 Lane Miles, Mean = 5.78

0 Lane Miles, Mean = N/A





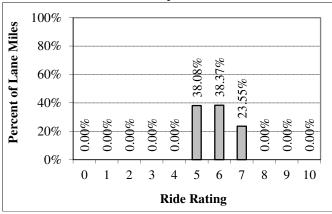
### Toll



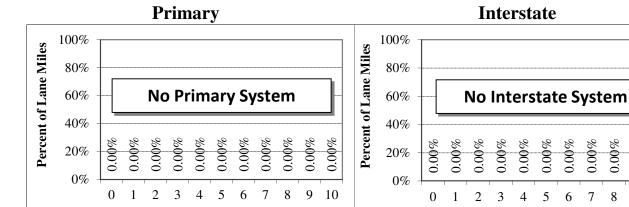
0 Lane Miles, Mean = N/A

0 Lane Miles, Mean = N/A





15 Lane Miles, Mean = 5.78

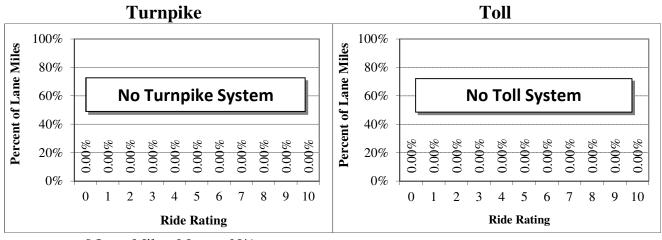


Lane Miles, Mean = N/A

**Ride Rating** 

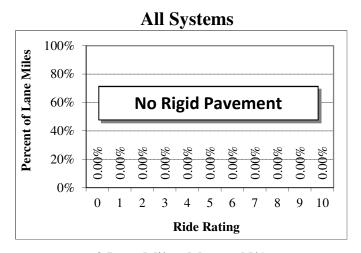
Lane Miles, Mean = N/A

**Ride Rating** 

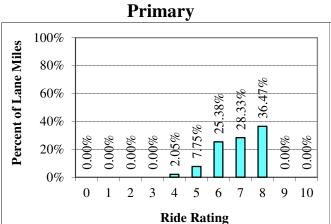


Lane Miles, Mean = N/A

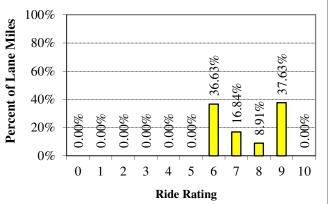
Lane Miles, Mean = N/A



Lane Miles, Mean = N/A



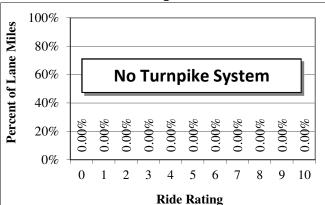
### Interstate



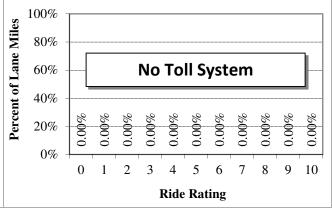
126 Lane Miles, Mean = 6.71

103 Lane Miles, Mean = 7.32



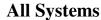


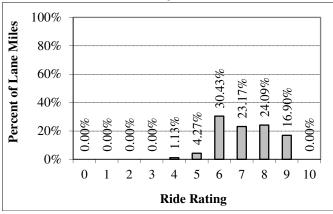
**Toll** 



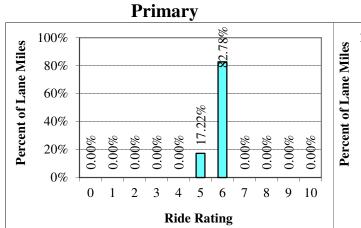
0 Lane Miles, Mean = N/A

0 Lane Miles, Mean = N/A

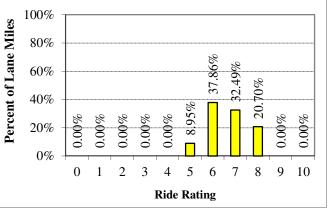




229 Lane Miles, Mean = 6.98



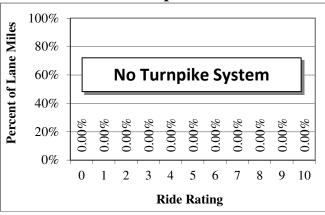
Interstate



10 Lane Miles, Mean = 5.73

127 Lane Miles, Mean = 6.68



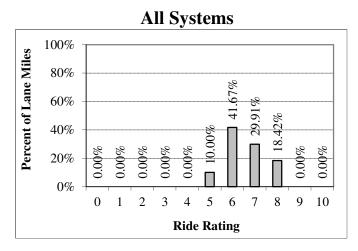


### Toll



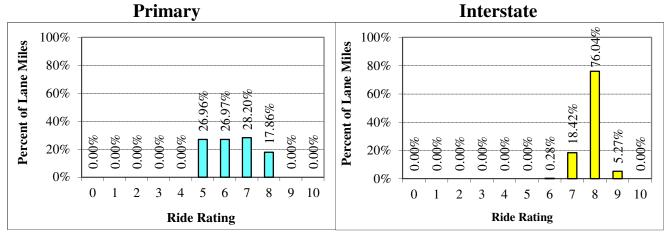
0 Lane Miles, Mean = N/A

3 Lane Miles, Mean = 6.35



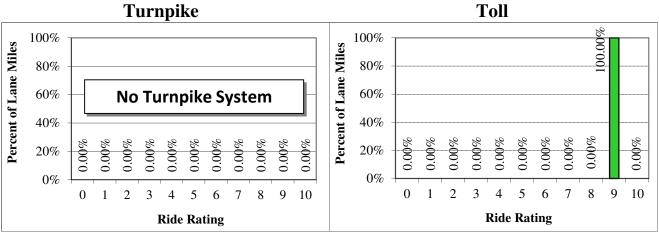
139 Lane Miles, Mean = 6.6

#### 2014 Ride Distribution by System - District 7



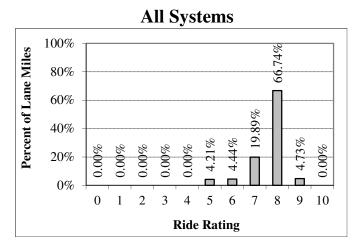
49 Lane Miles, Mean = 6.32

233 Lane Miles, Mean = 7.76



0 Lane Miles, Mean = N/A

1 Lane Miles, Mean = 8.6



283 Lane Miles, Mean = 7.52

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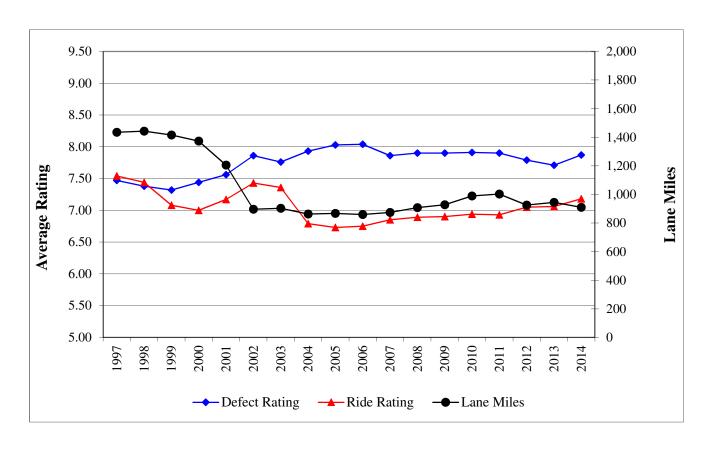
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# Section IV Historical Distress Ratings By District 1997 - 2014



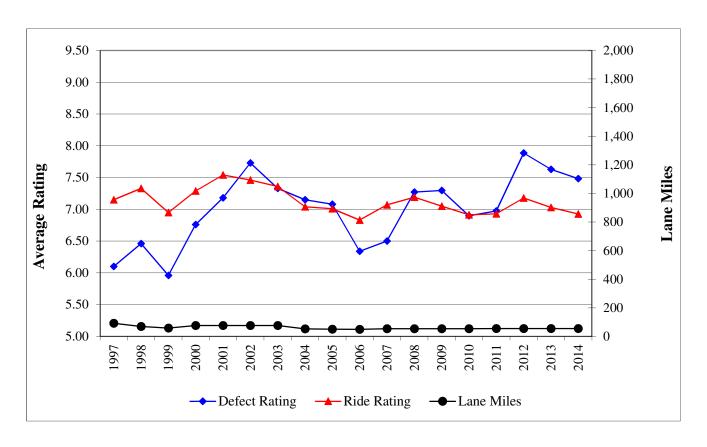
## **Historical Distress Ratings - Statewide**

#### **All Systems - All Districts**



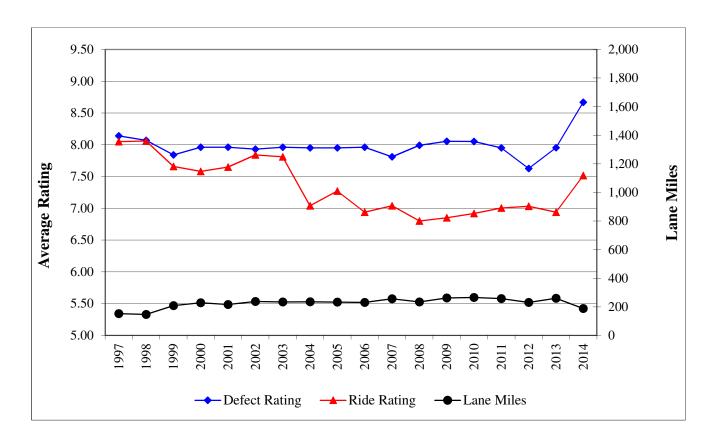
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	7.47	7.38	7.32	7.44	7.56	7.86	7.76	7.93	8.03
<b>Ride Rating</b>	7.54	7.44	7.08	7.00	7.17	7.43	7.36	6.79	6.73
Lane Miles	1434	1442	1416	1373	1205	896	903	863	867
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>	8.04	7.86	7.90	7.90	7.91	7.90	7.79	7.71	7.87
<b>Ride Rating</b>	6.75	6.85	6.89	6.90	6.94	6.93	7.05	7.06	7.18
Lane Miles	859	874	908	928	989	1003	926	944	910

#### **All Systems**



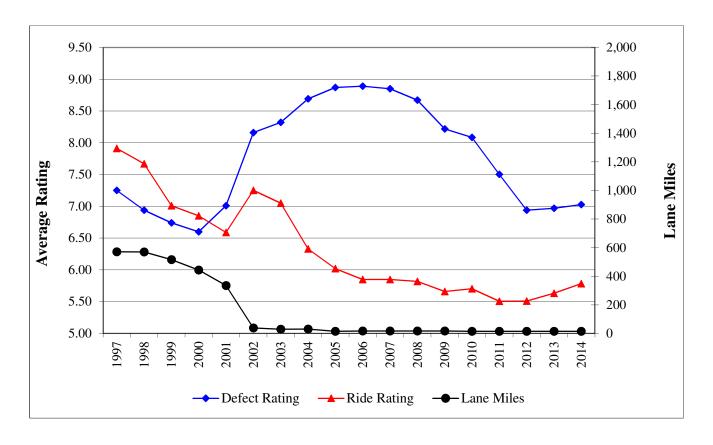
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	6.10	6.46	5.96	6.76	7.18	7.73	7.33	7.15	7.08
<b>Ride Rating</b>	7.15	7.33	6.95	7.29	7.54	7.46	7.36	7.04	7.01
Lane Miles	92	70	59	76	76	76	76	53	51
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>	6.34	6.50	7.27	7.30	6.90	6.97	7.89	7.63	7.48
<b>Ride Rating</b>	6.83	7.07	7.19	7.05	6.91	6.93	7.18	7.03	6.93
Lane Miles	50	54	54	54	54	55	55	55	55

#### **All Systems**



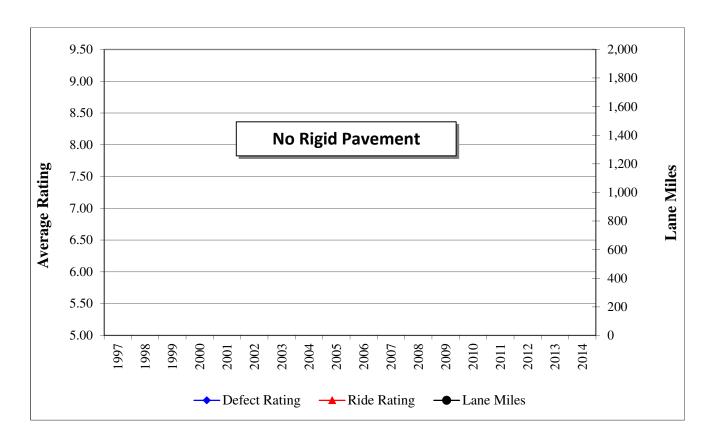
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	8.14	8.07	7.84	7.96	7.96	7.93	7.96	7.95	7.95
<b>Ride Rating</b>	8.05	8.06	7.66	7.58	7.65	7.84	7.81	7.04	7.27
Lane Miles	152	147	208	228	216	237	234	235	233
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>	7.96	7.81	7.99	8.05	8.05	7.95	7.63	7.95	8.67
<b>Ride Rating</b>	6.94	7.04	6.80	6.85	6.92	7.01	7.03	6.94	7.51
Lane Miles	231	256	234	262	265	258	231	260	188

#### **All Systems**



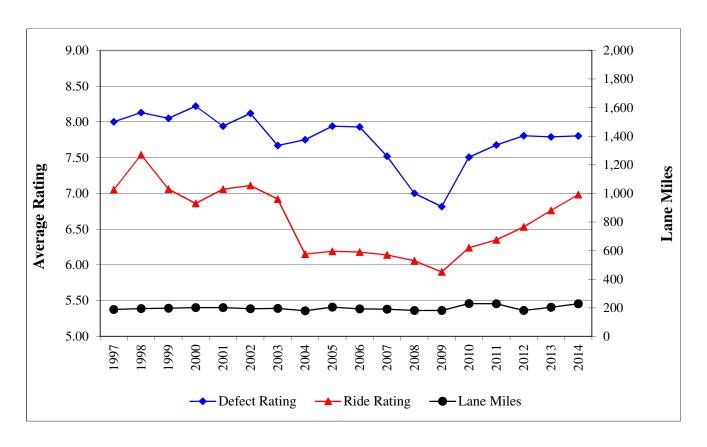
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	7.25	6.94	6.74	6.60	7.01	8.16	8.32	8.69	8.87
<b>Ride Rating</b>	7.91	7.67	7.01	6.85	6.59	7.25	7.05	6.33	6.02
Lane Miles	571	570	516	443	335	38	29	31	15
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>	8.89	8.85	8.67	8.22	8.09	7.50	6.94	6.97	7.03
<b>Ride Rating</b>	5.85	5.85	5.82	5.66	5.70	5.51	5.51	5.63	5.78
Lane Miles	17	17	17	17	15	15	15	15	15

#### **All Systems**



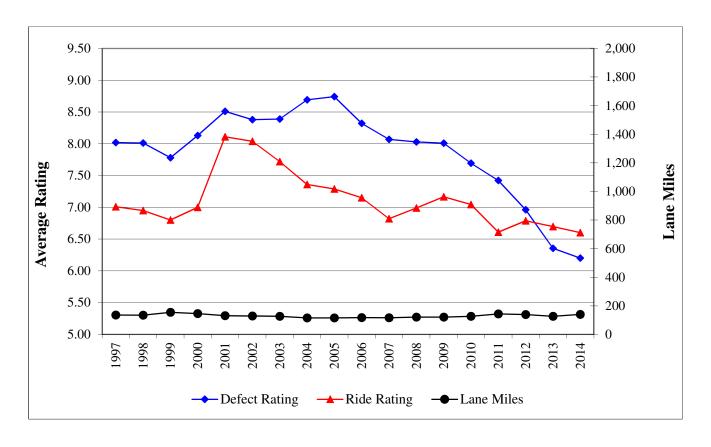
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>									
Ride Rating									
Lane Miles									
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>									
Ride Rating									
Lane Miles							-		

#### **All Systems**



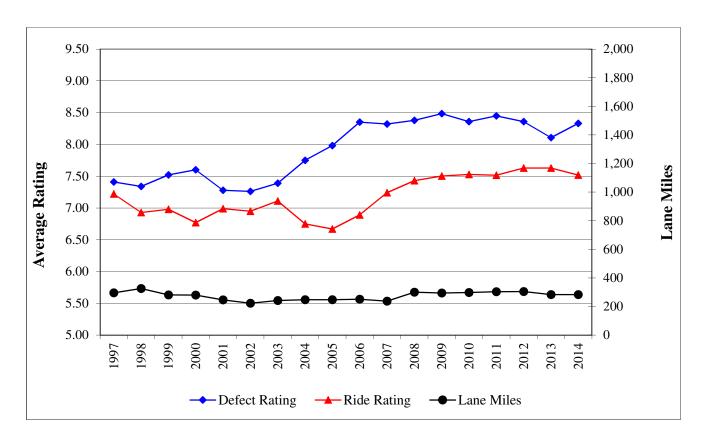
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	8.00	8.13	8.05	8.22	7.94	8.12	7.67	7.75	7.94
<b>Ride Rating</b>	7.05	7.54	7.06	6.86	7.06	7.11	6.92	6.15	6.19
Lane Miles	188	195	197	202	202	194	196	179	205
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>	7.93	7.52	7.00	6.82	7.51	7.68	7.81	7.79	7.80
<b>Ride Rating</b>	6.18	6.14	6.06	5.90	6.24	6.35	6.53	6.76	6.98
Lane Miles	193	191	182	181	230	229	181	204	229

#### **All Systems**



Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	8.02	8.01	7.78	8.13	8.51	8.38	8.39	8.69	8.74
<b>Ride Rating</b>	7.01	6.95	6.80	7.00	8.11	8.04	7.72	7.36	7.29
Lane Miles	136	135	155	146	131	129	127	116	116
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>	8.32	8.07	8.03	8.01	7.69	7.42	6.96	6.36	6.20
<b>Ride Rating</b>	7.15	6.82	6.99	7.17	7.05	6.61	6.79	6.70	6.60
Lane Miles	118	117	121	121	127	143	139	127	140

#### **All Systems**



Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	7.41	7.34	7.52	7.60	7.28	7.26	7.39	7.75	7.98
<b>Ride Rating</b>	7.22	6.93	6.98	6.77	6.99	6.95	7.11	6.75	6.67
Lane Miles	296	326	281	280	246	223	242	248	247
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>	8.35	8.32	8.38	8.49	8.36	8.45	8.36	8.11	8.33
<b>Ride Rating</b>	6.89	7.24	7.43	7.50	7.53	7.51	7.63	7.63	7.52
Lane Miles	251	238	300	294	298	304	305	283	283

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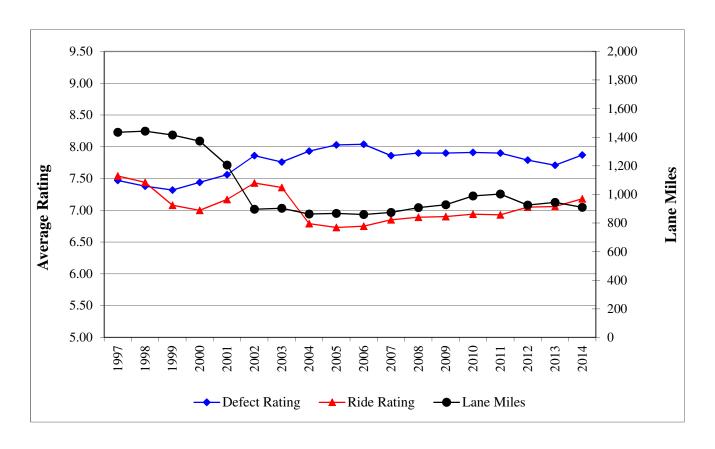
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# Section V Historical Distress Ratings By System 1997 - 2014



## **Historical Distress Ratings - Statewide**

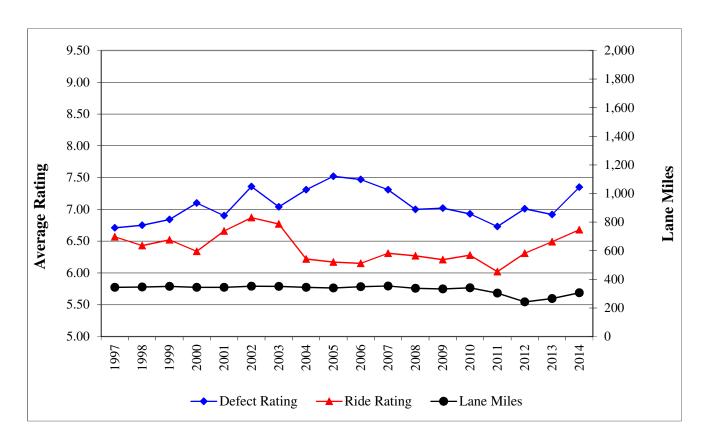
#### **All Systems - All Districts**



Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	7.47	7.38	7.32	7.44	7.56	7.86	7.76	7.93	8.03
<b>Ride Rating</b>	7.54	7.44	7.08	7.00	7.17	7.43	7.36	6.79	6.73
Lane Miles	1434	1442	1416	1373	1205	896	903	863	867
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>	8.04	7.86	7.90	7.90	7.91	7.90	7.79	7.71	7.87
<b>Ride Rating</b>	6.75	6.85	6.89	6.90	6.94	6.93	7.05	7.06	7.18
Lane Miles	859	874	908	928	989	1003	926	944	910

## **Historical Distress Ratings - Primary System**

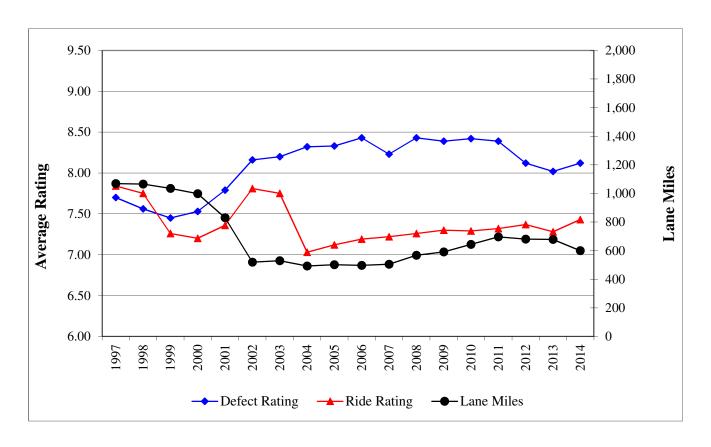
#### **All Districts**



Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	6.71	6.75	6.84	7.10	6.90	7.36	7.04	7.31	7.52
<b>Ride Rating</b>	6.57	6.43	6.52	6.34	6.66	6.87	6.77	6.22	6.17
Lane Miles	344	346	350	344	344	352	350	344	339
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>	7.47	7.31	7.00	7.02	6.93	6.73	7.01	6.92	7.35
<b>Ride Rating</b>	6.15	6.31	6.27	6.21	6.28	6.02	6.31	6.49	6.68
Lane Miles	348	353	337	333	340	303	242	265	306

## **Historical Distress Ratings - Interstate System**

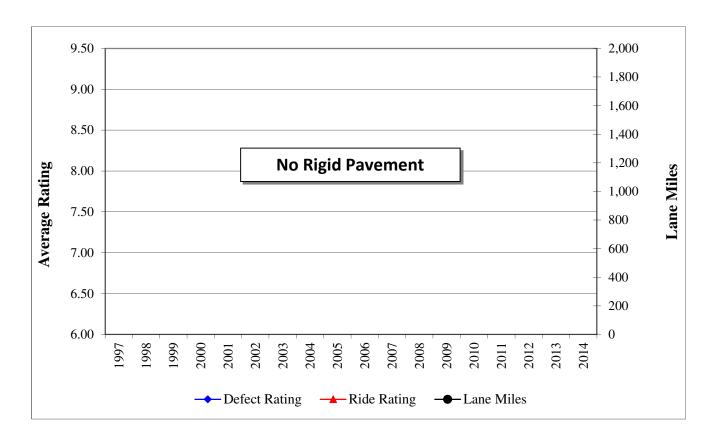
#### **All Districts**



Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	7.70	7.56	7.45	7.53	7.79	8.16	8.20	8.32	8.33
<b>Ride Rating</b>	7.84	7.75	7.26	7.20	7.36	7.81	7.75	7.03	7.12
Lane Miles	1069	1065	1035	998	830	519	529	492	501
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>	8.43	8.23	8.43	8.39	8.42	8.39	8.12	8.02	8.12
<b>Ride Rating</b>	7.19	7.22	7.26	7.30	7.29	7.32	7.37	7.28	7.43
Lane Miles	497	505	567	591	644	696	680	678	600

# **Historical Distress Ratings - Turnpike System**

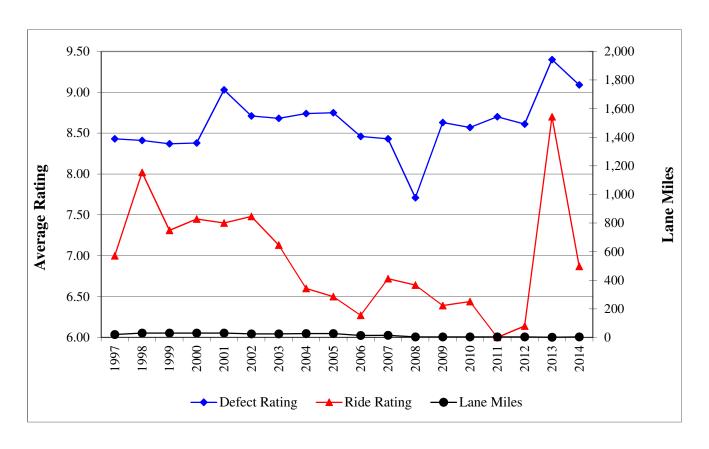
#### **All Districts**



Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>									
Ride Rating									
Lane Miles									
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Defect Rating</b>									
Ride Rating									
Lane Miles		·	·						

# **Historical Distress Ratings - Toll System**

#### **All Districts**

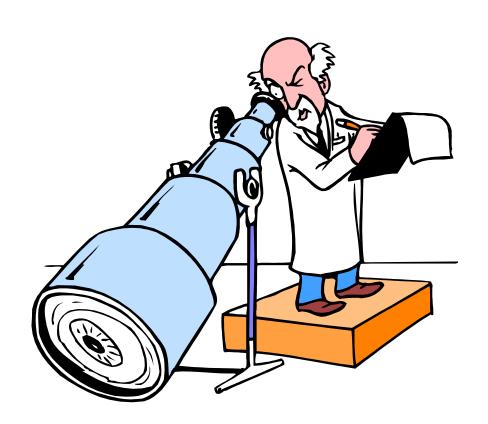


Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Defect Rating</b>	8.43	8.41	8.37	8.38	9.03	8.71	8.68	8.74	8.75
<b>Ride Rating</b>	7.00	8.02	7.31	7.45	7.40	7.48	7.13	6.60	6.50
Lane Miles	21	31	31	31	31	25	25	27	27

Year				
<b>Defect Rating</b>				
<b>Ride Rating</b>				
Lane Miles				

2006	2007	2008	2009	2010	2011	2012	2013	2014
8.46	8.43	7.71	8.63	8.57	8.70	8.61	9.40	9.09
6.27	6.72	6.64	6.39	6.44	6.00	6.14	8.70	6.87
14	15	4	4	4	4	4	1	4

Section VI
Distress Ratings
Comparison
2013 vs. 2014



#### **Section VI**

#### **Defect and Ride Ratings Comparison**

#### **Rating Comparison Criteria**

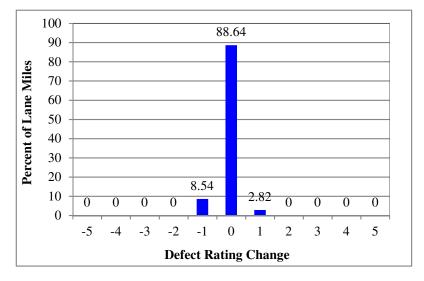
Only Type 4 Rigid Pavements are included in the comparison. The following pavement types have been omitted from this comparison since they exhibit notable changes to the pavement surface as indicated below:

- Type 0 Pavement sections not State-maintained, duplicated under another county section number, or added under the Rigid PCS.
- Type 1 Flexible Pavement
- Type 2 Surface Treatment or pavement improvement without new construction, such as intersection improvements, wheel path leveling, bridge approach or area resurfacing.
- Type 3 Skin Patch
- Type 5 New Construction
- Type 6 No Ride taken for this section (normally because of length constraint)
- Type 7 Rehabilitated Pavement
- Type 8 Under Construction
- Type 9 Structures or exceptions that are State-maintained

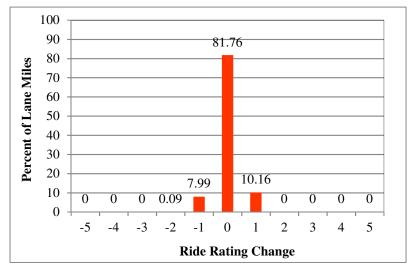
#### **Defect and Ride Rating Changes**

#### **2013** compared to **2014**

100% of the 2014 lane miles were within +/-1 point compared to 2013 survey



99.9% of the 2014 lane miles were within +/-1 point compared to 2013 survey



Negative values are indicative of the deterioration in the pavement and/or the variability in the data collection process. Positive values are indicative of the variability in the data collection process.

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# Section VII Customer Service Survey



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#### **2014 Rigid Pavement Condition Survey**

#### **Facts and Figures**

#### **Customer Service Form**

In an effort to continuously improve customer service, the Pavement Materials Section asks for your input by filling out and returning this survey form.

(Optional)						
Name:	Title:					
Company/Office:						
Address:Phone:						
Please rate each of the following on the scale provided by circling the appropriate number. <b>One</b> corresponds to <b>Very Poor</b> , and <b>Five</b> corresponds to <b>Excellent</b> .						
Usefulness of Content	1 2 3 4 5					
Organization of Information	1 2 3 4 5					
Clarity of Graphical Illustrations	1 2 3 4 5					
Format of Tables	1 2 3 4 5					
Overall Value of this Report	1 2 3 4 5					
Please provide an answer to the following questions. Attach an additional sheet(s) if needed.						
What was the most useful/informative part of this report	rt? 					
What was the least useful/informative part of this report	rt?					
What changes do you recommend to improve this report	rt?					

#### Detach and mail to:

State Materials Office, Attention: Stacy Scott, 5007 NE 39th Ave., Gainesville, FL 32609 or send via email to: stacy.scott@dot.state.fl.us