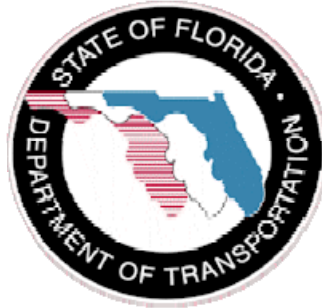


State of Florida
Department of Transportation



2013 Rigid Pavement Condition Survey
Facts and Figures

FDOT Office

State Materials Office

Research Report Number

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This team's hard work in collecting and processing the data, and organizing this report is greatly appreciated.

To access the electronic copy of this and other reports, please follow the steps below:

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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 <http://materials.dot.state.fl.us/>

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 each of these four area staff specialists about 25 weeks of travel each year to complete. Since 1986, the PCS program has seen close to a 20 percent increase in surveyed lane miles (refer to chart on page 5). This report pertains to rigid pavements

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 for any of the two criteria indicates a section in excellent condition. Currently, any section with a rating of 6 or less becomes 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. Raters collect this distress data by evaluating pavements from the roadway shoulder.

Each distress type for the lane being rated is assigned a score from 0 to 10, and a "deduct value" depending on the distress type and severity level (light, moderate, or severe). The Defect Rating is obtained by subtracting the sum of the deduct values from 100 and then dividing by 10. Thus, a pavement section with a Defect Rating of 10 indicates a pavement without any observable distress.

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 currently implemented to test both the data accuracy and compliance with other parameters of the Pavement Management System (PMS). Comparisons of annual PCS data with earlier years to review trends and identify potential errors are also performed. When necessary, efforts are made to upgrade the survey equipment and 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:
<http://materials.dot.state.fl.us/smo/pavement/performance/pcs/pavementconditionsurvey.htm>

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

PAGE

Observations

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

1. Since 1995 the number of miles of Rigid Pavements on the state-maintained highway system had declined from 1739 lane miles to only 1039 lane miles in 2013. 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 7.36 in 1996 to 7.71 in 2013.
3. The average Ride Ratings have remained constant for the 8 years prior to the 2004 PCS with a mean rating of 7.36 in 2003 and an overall average of 7.32. 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. The 2013 Ride Rating dropped to 7.06, slightly lower compared to the average Ride Rating from the 2003 survey.
4. 96% of the pavement sections rated in 2013 for Defect were within one deduct point compared to the 2012 ratings. (1)
5. 100% of the pavement sections rated in 2013 for Ride were within one deduct point compared to the 2012 ratings. (1)

* Note (1): Sections that had undergone notable changes such as new construction or total rehabilitation were excluded from the analysis.

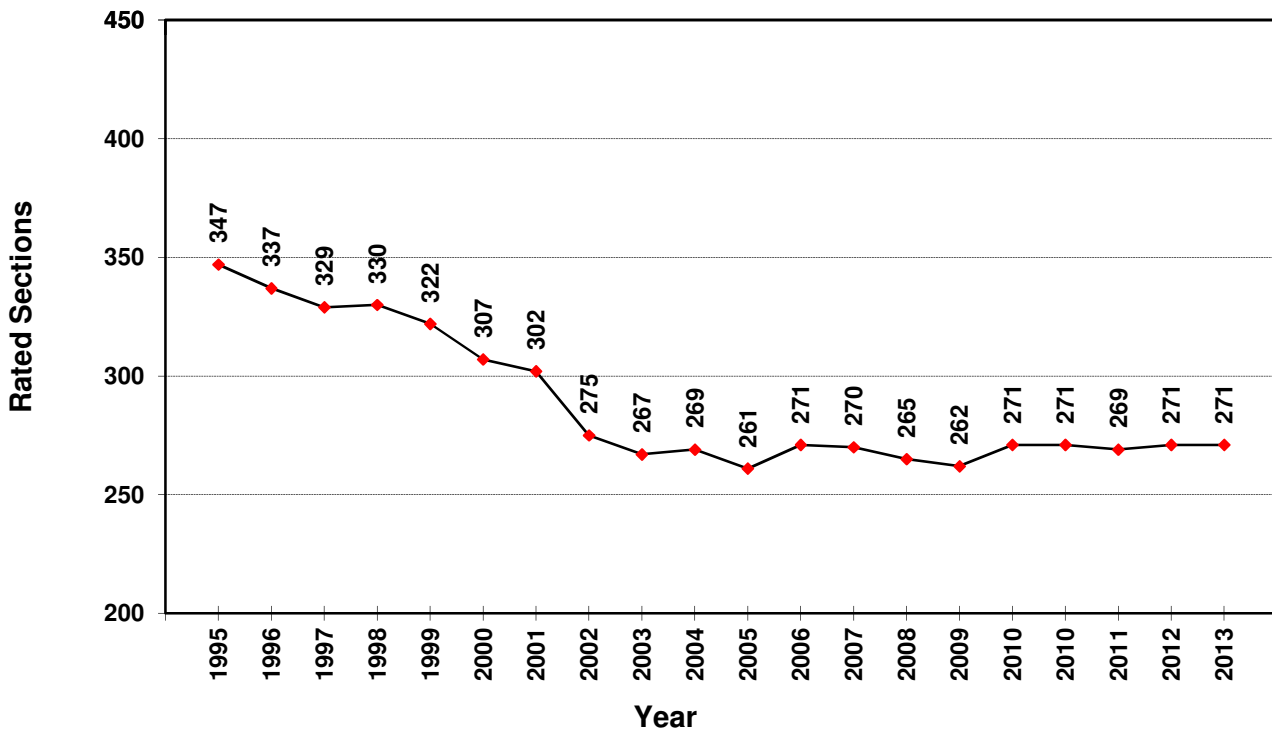
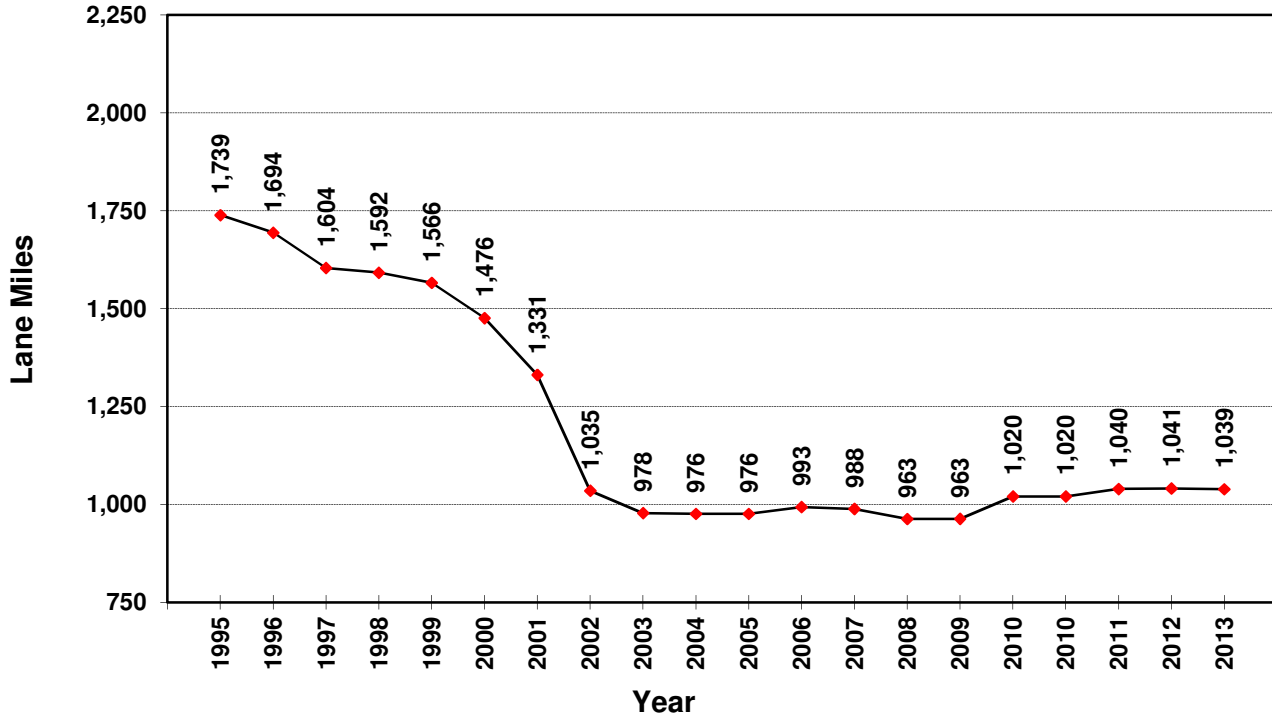
General Notes

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 V) and by System (Section VI) are based on Lane Miles for Defect Rating.

Rigid Pavement Condition Survey

Production History

Lane Miles / Rated Sections

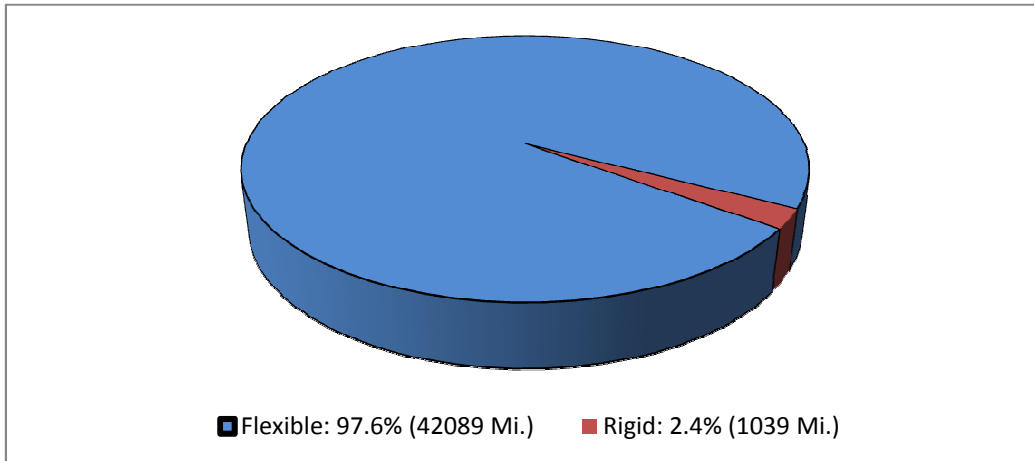


Rigid Pavement Condition Survey

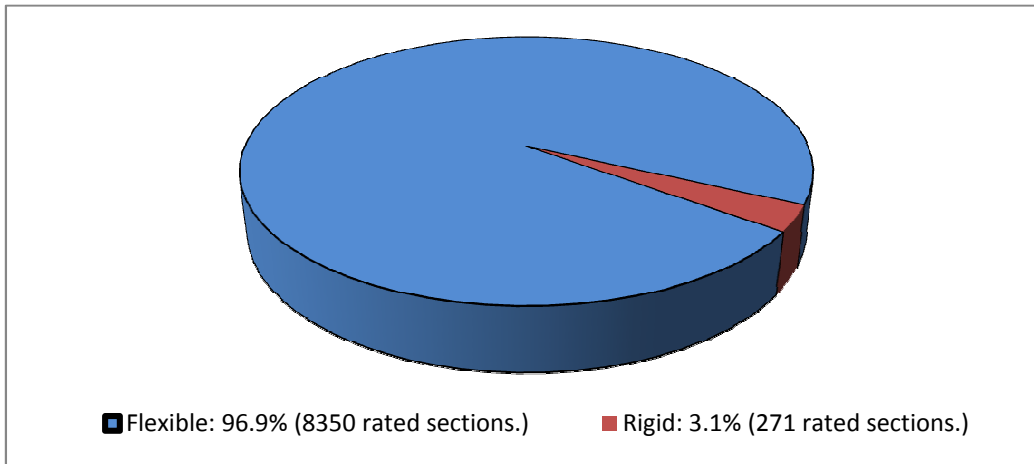
2013 PCS Production Summary

Statewide

Total Lane Miles: 43128 (Flexible and Rigid Combined)



Total Rated Sections: 8621 (Flexible and Rigid Combined)



Section II
Defect Rating
By
System and District



Section II

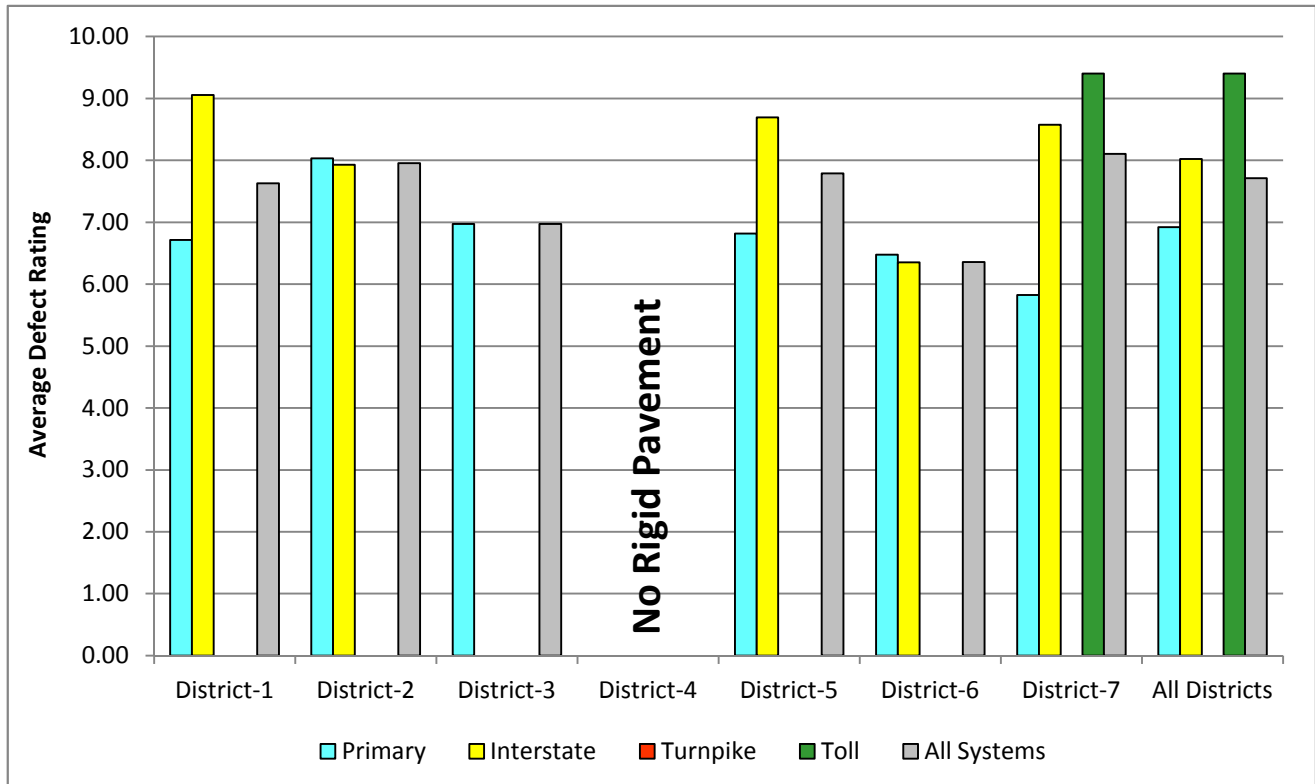
Defect Rating by System and District

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.

2013 Defect Rating by System and District



Lane Miles

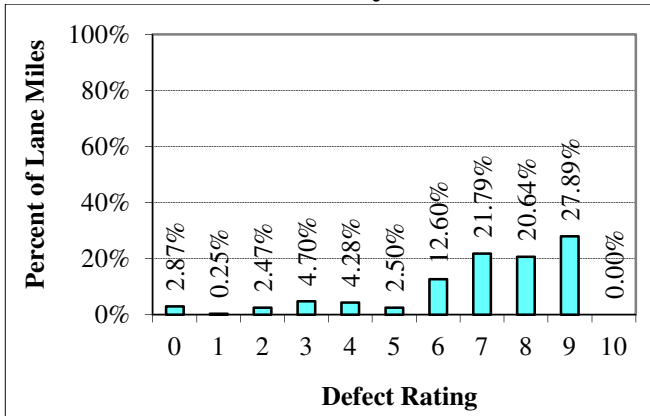
System	District-1	District-2	District-3	District-4	District-5	District-6	District-7	Statewide
Primary	33	65	15	0	98	5	49	265
Interstate	21	195	0	0	106	122	233	678
Turnpike	0	0	0	0	0	0	0	0
Toll	0	0	0	0	0	0	1	1
Statewide	55	260	15	0	204	127	283	944

Defect Rating

System	District-1	District-2	District-3	District-4	District-5	District-6	District-7	Statewide
Primary	6.72	8.03	6.97		6.82	6.48	5.83	6.92
Interstate	9.05	7.93			8.69	6.35	8.58	8.02
Turnpike								
Toll							9.40	9.40
Statewide	7.63	7.95	6.97		7.79	6.36	8.11	7.71

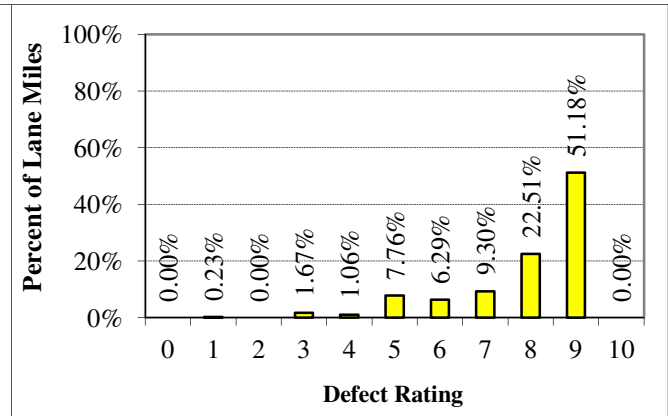
2013 Defect Distribution by System - Statewide

Primary



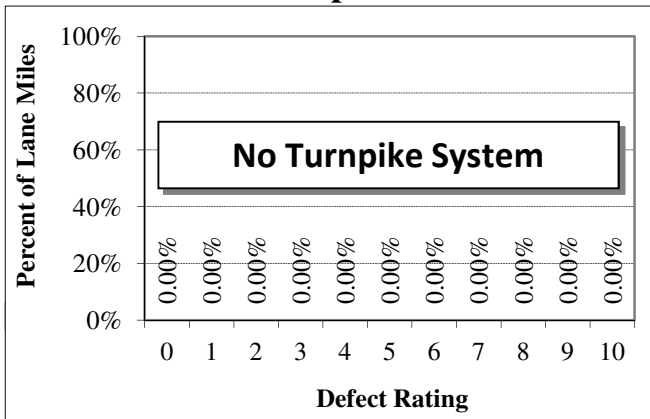
265 Lane Miles, Mean = 6.92

Interstate



678 Lane Miles, Mean = 8.02

Turnpike



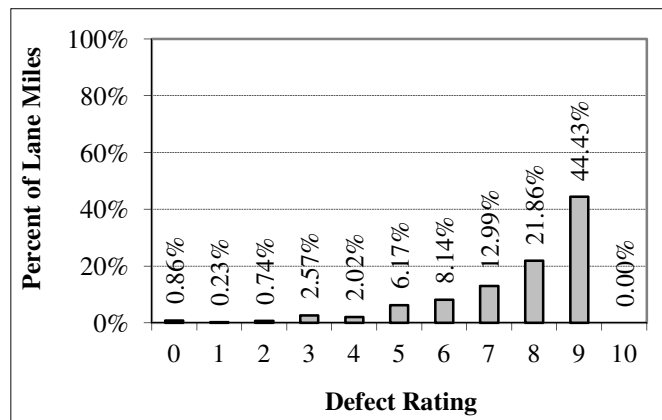
0 Lane Miles, Mean = N/A

Toll



1 Lane Miles, Mean = 9.4

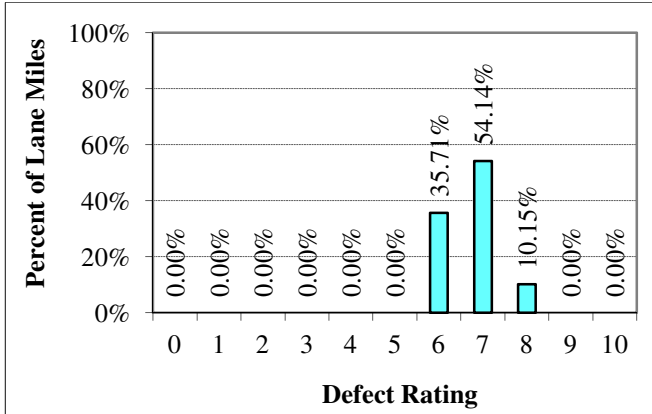
Statewide



944 Lane Miles, Mean = 7.71

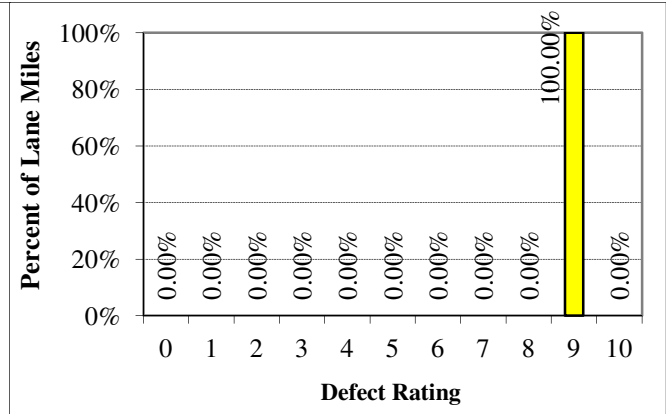
2013 Defect Distribution by System - District 1

Primary



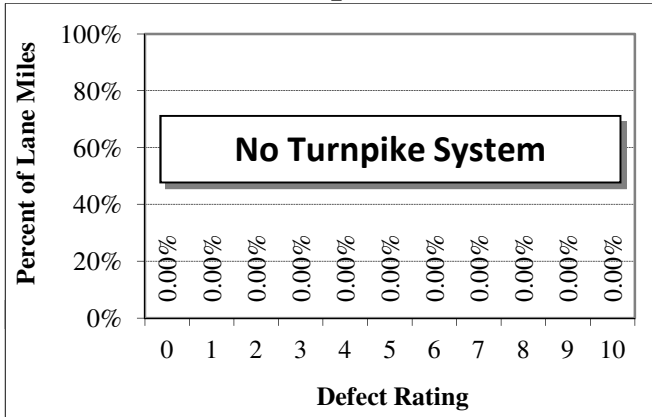
33 Lane Miles, Mean = 6.72

Interstate



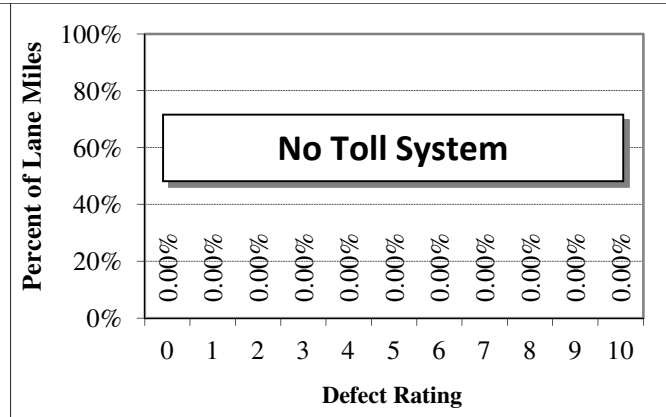
21 Lane Miles, Mean = 9.05

Turnpike



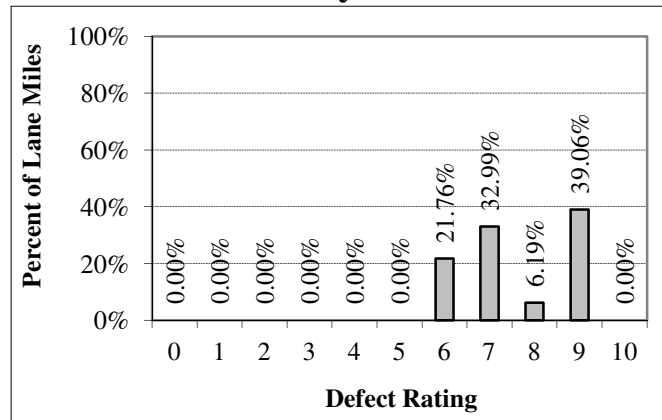
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

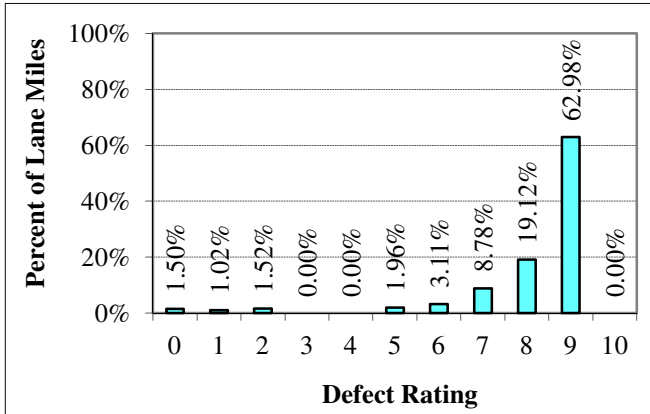
All Systems



55 Lane Miles, Mean = 7.63

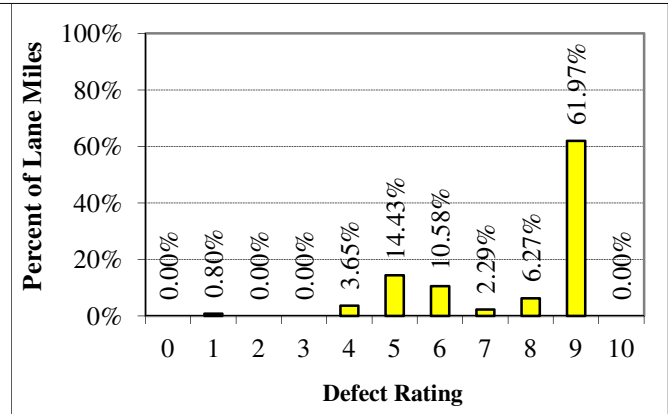
2013 Defect Distribution by System - District 2

Primary



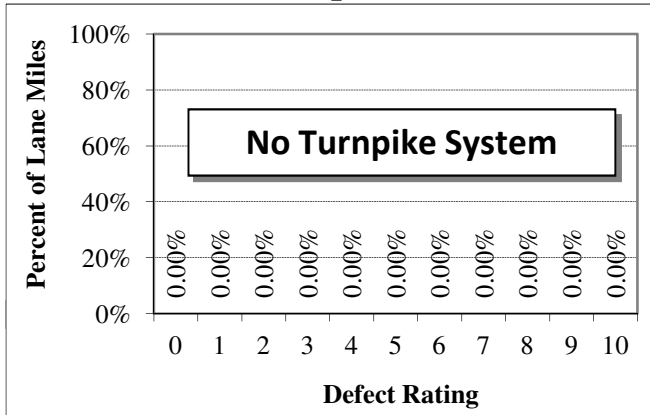
65 Lane Miles, Mean = 8.03

Interstate



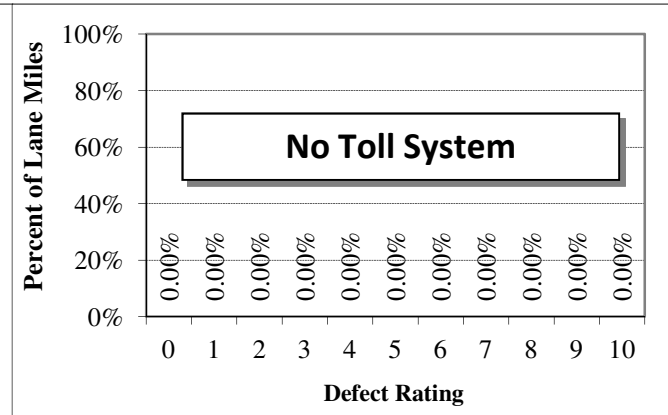
195 Lane Miles, Mean = 7.93

Turnpike



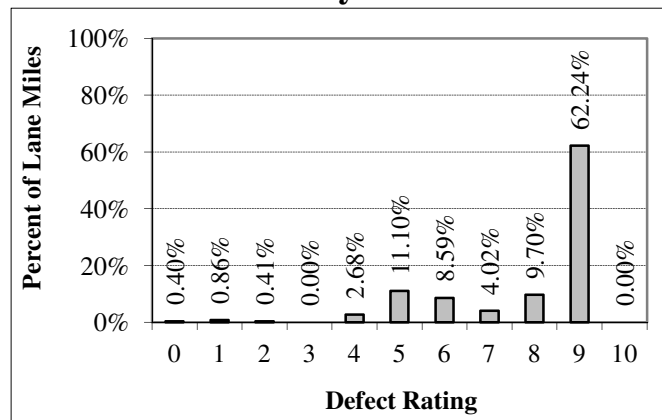
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

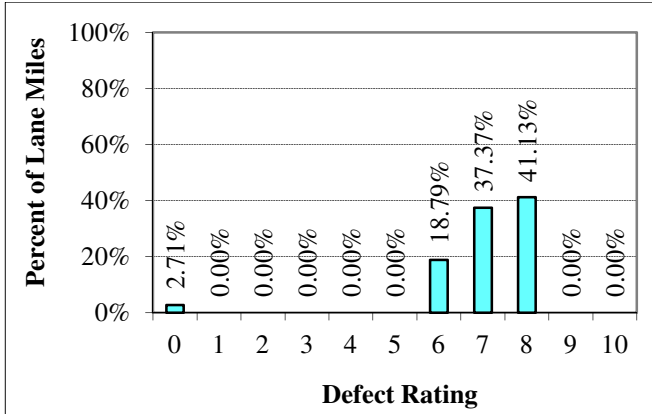
All Systems



260 Lane Miles, Mean = 7.95

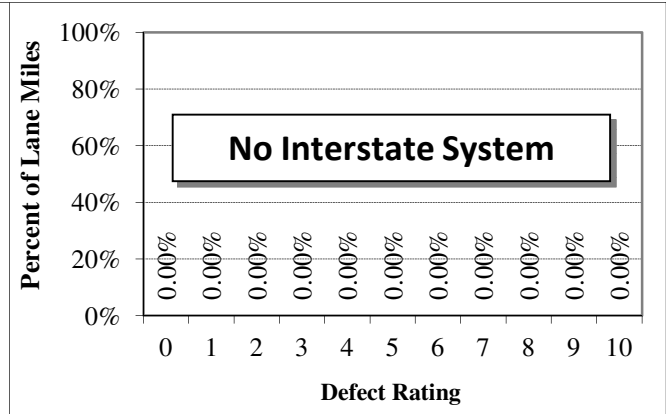
2013 Defect Distribution by System - District 3

Primary



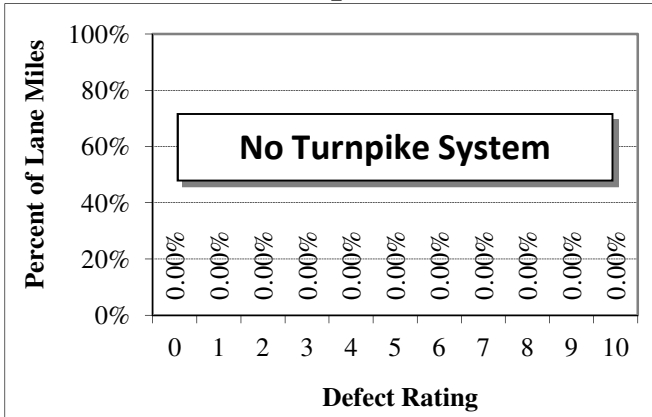
15 Lane Miles, Mean = 6.97

Interstate



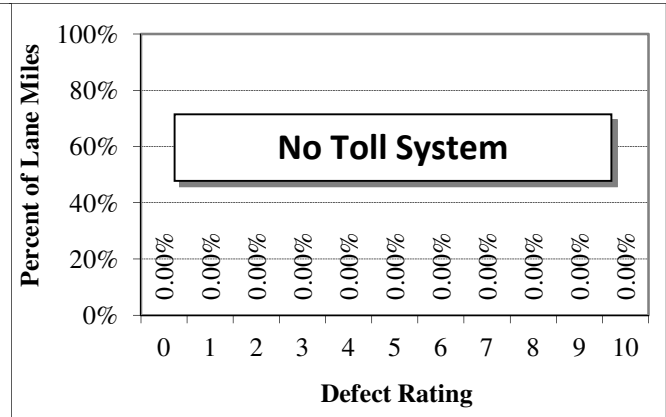
0 Lane Miles, Mean = N/A

Turnpike



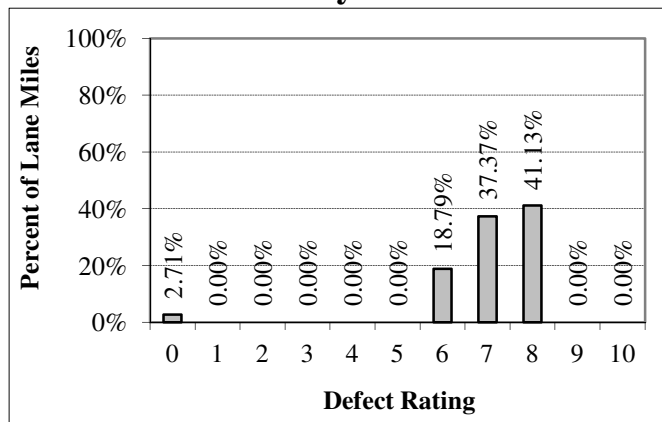
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

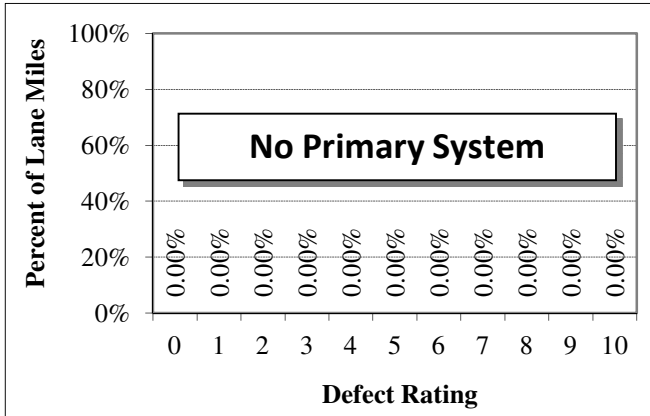
All Systems



15 Lane Miles, Mean = 6.97

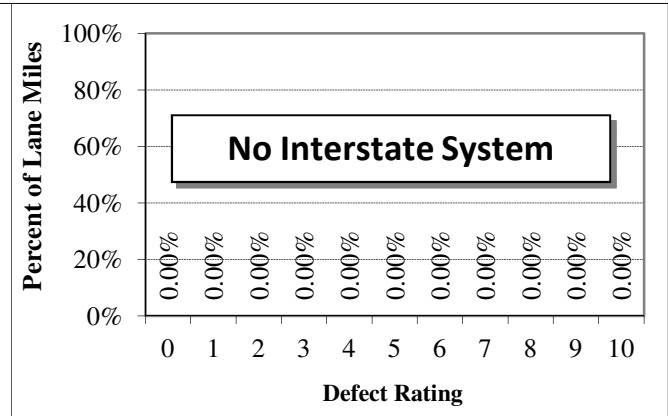
2013 Defect Distribution by System - District 4

Primary



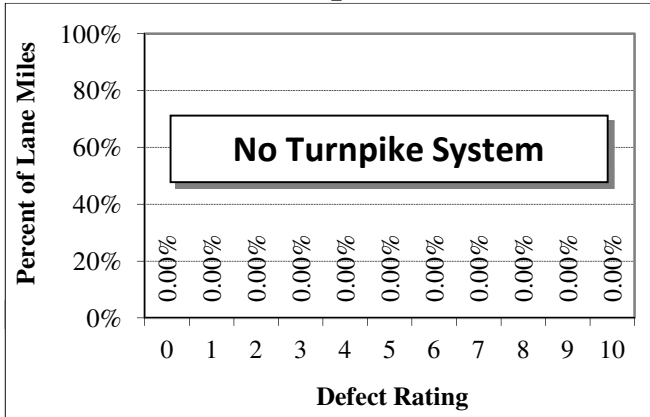
0 Lane Miles, Mean = N/A

Interstate



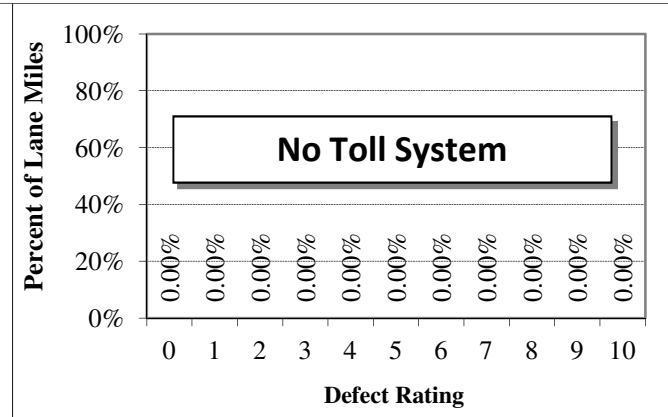
0 Lane Miles, Mean = N/A

Turnpike



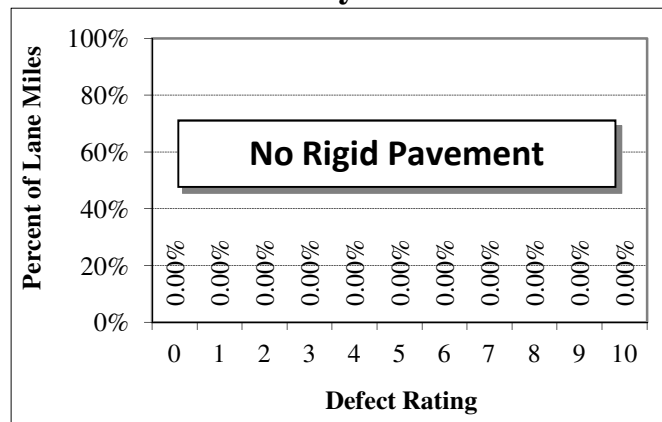
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

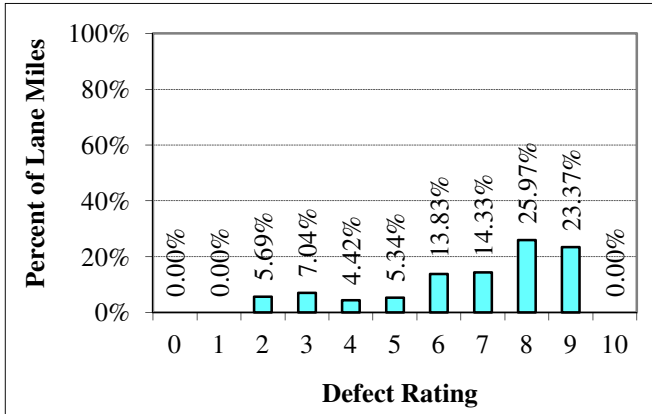
All Systems



0 Lane Miles, Mean = N/A

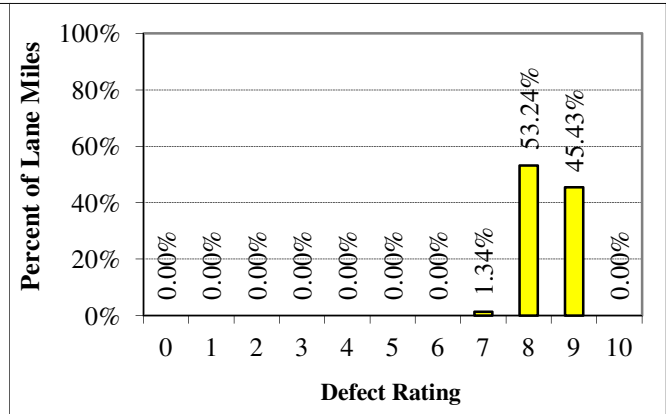
2013 Defect Distribution by System - District 5

Primary



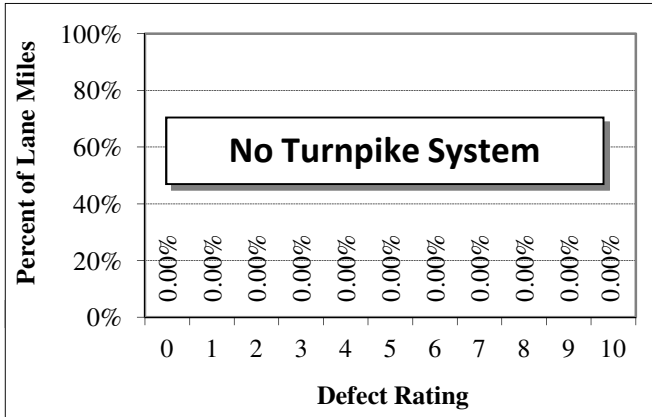
98 Lane Miles, Mean = 6.82

Interstate



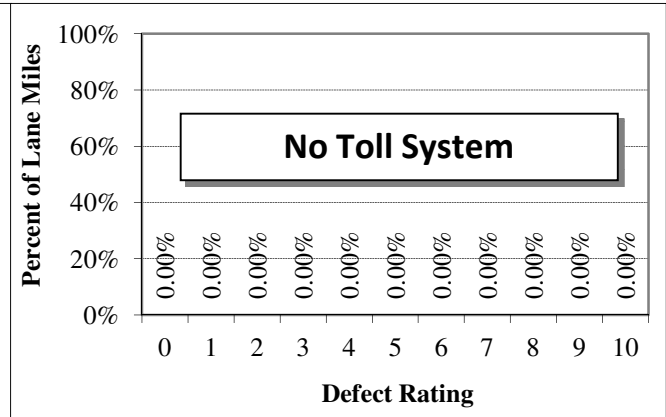
106 Lane Miles, Mean = 8.69

Turnpike



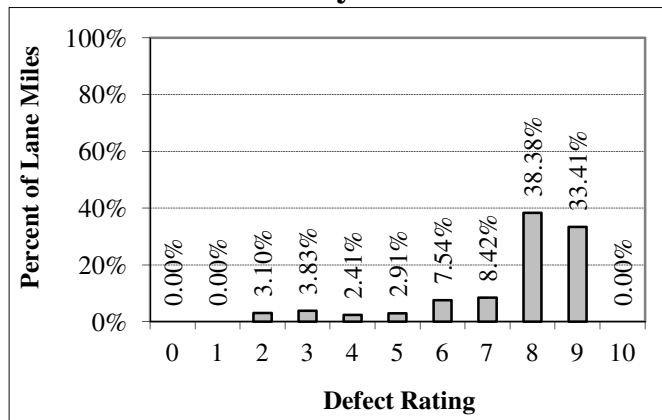
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

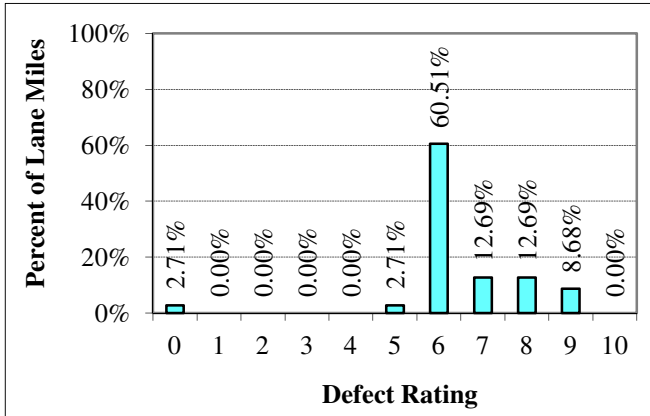
All Systems



204 Lane Miles, Mean = 7.79

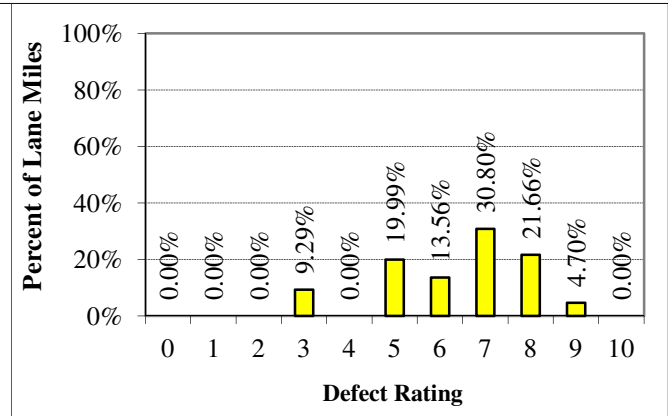
2013 Defect Distribution by System - District 6

Primary



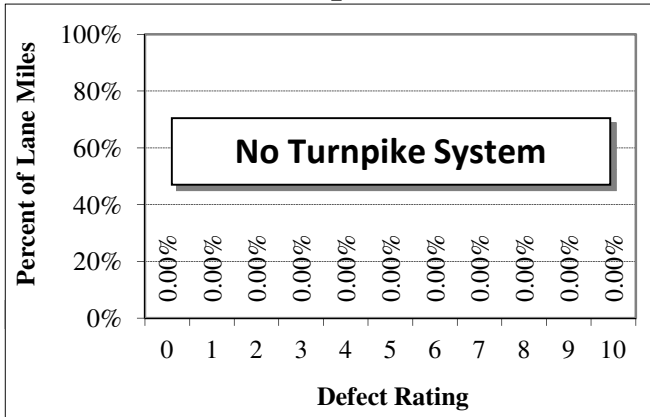
5 Lane Miles, Mean = 6.48

Interstate



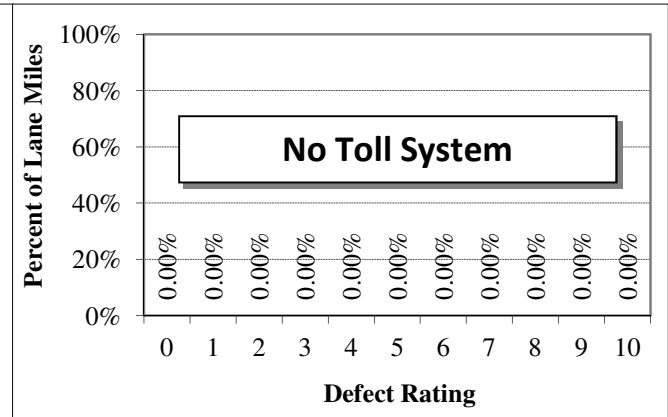
122 Lane Miles, Mean = 6.35

Turnpike



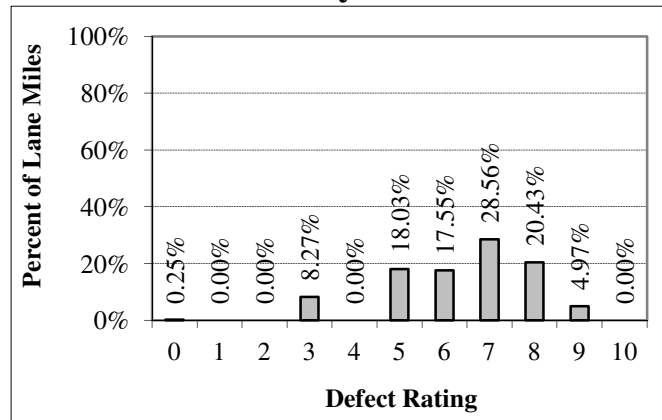
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

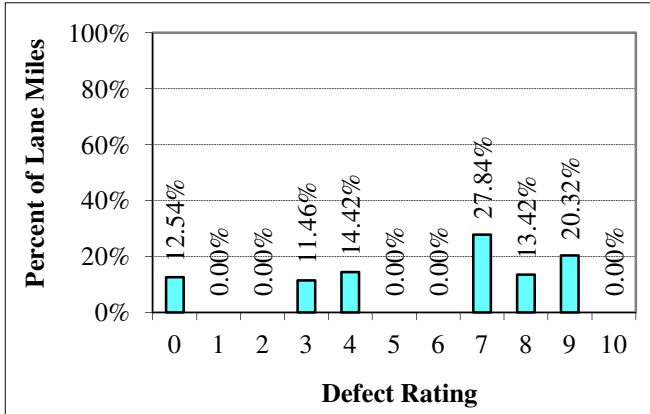
All Systems



127 Lane Miles, Mean = 6.36

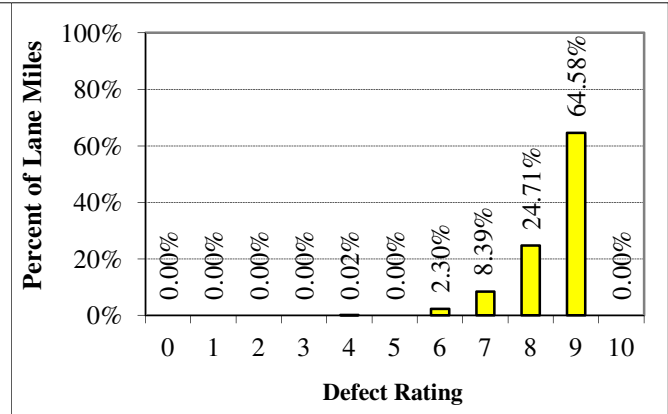
2013 Defect Distribution by System - District 7

Primary



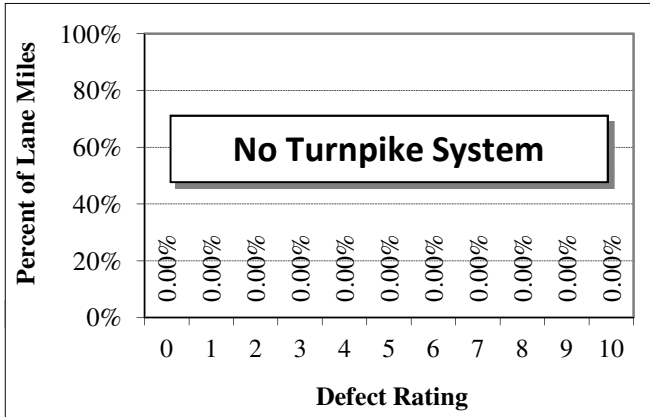
49 Lane Miles, Mean = 5.83

Interstate



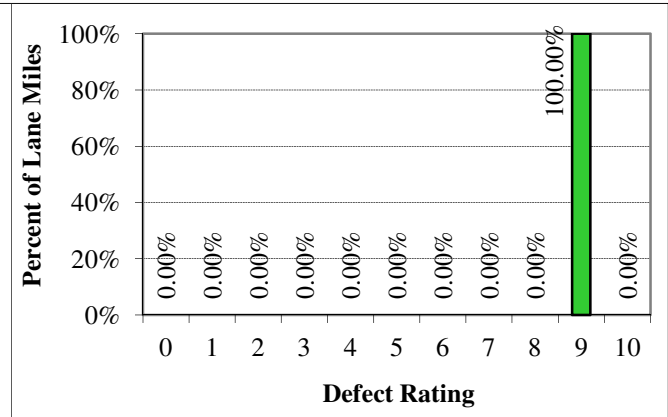
233 Lane Miles, Mean = 8.58

Turnpike



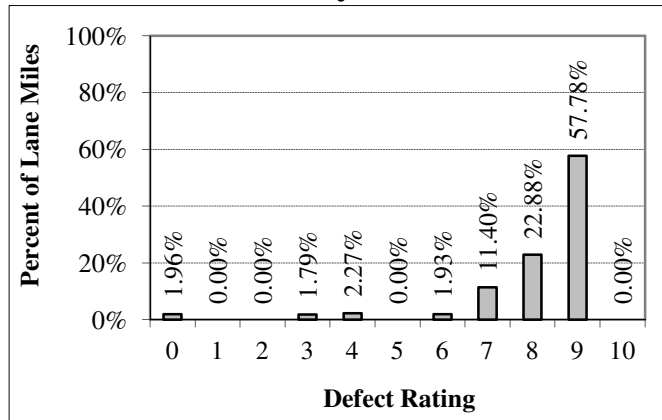
0 Lane Miles, Mean = N/A

Toll



1 Lane Miles, Mean = 9.4

All Systems



283 Lane Miles, Mean = 8.11

Section III
Ride Rating
By
System and District

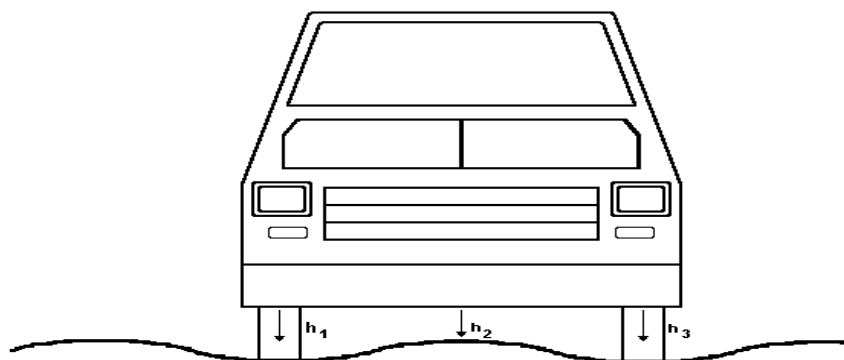


Section IV

Ride Rating by System and District

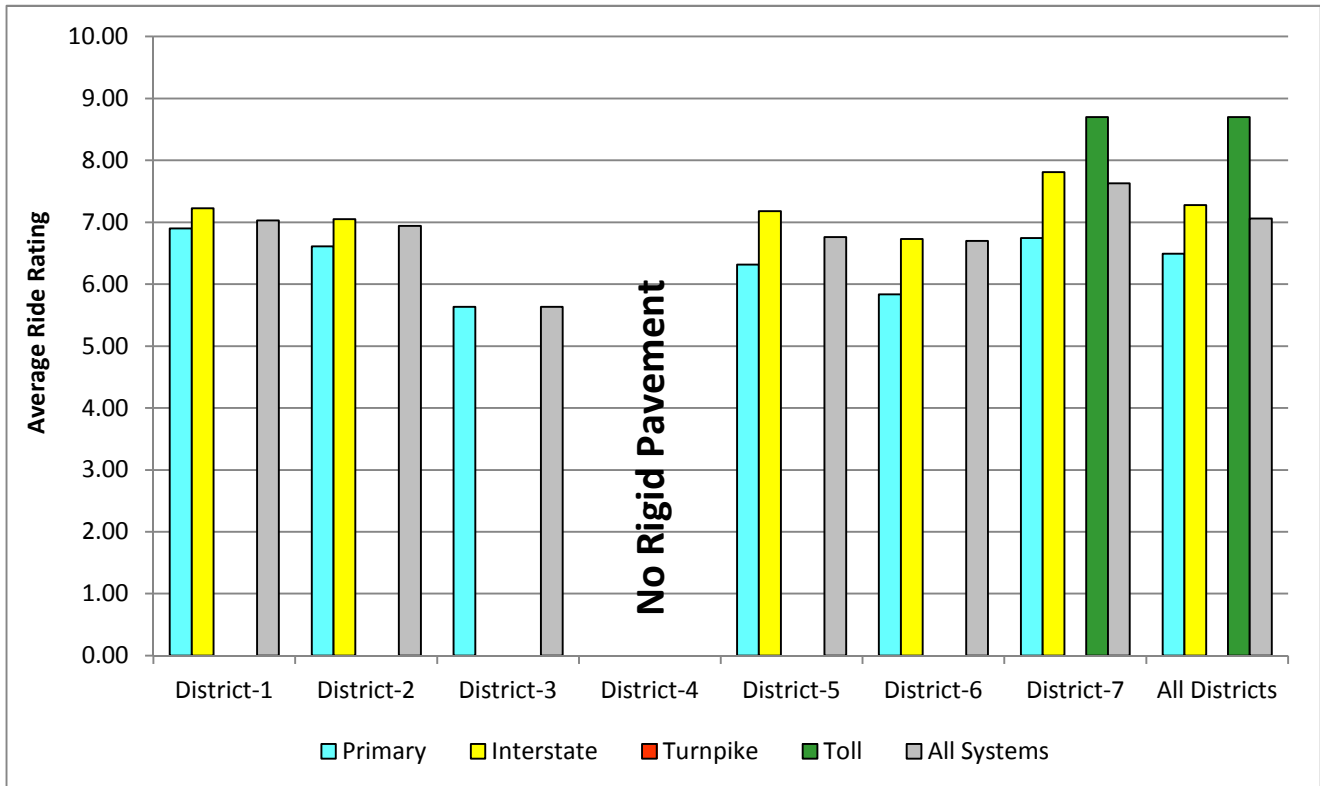
Ride Rating Criteria

- 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 rated on a 0 to 10 scale, where 10 represents a pavement that is perfectly smooth, while a rating of 6 or less represents a relatively rough pavement.
- 5 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..
- 5 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.



FRONT VIEW

2013 Ride Rating by System and District



Lane Miles

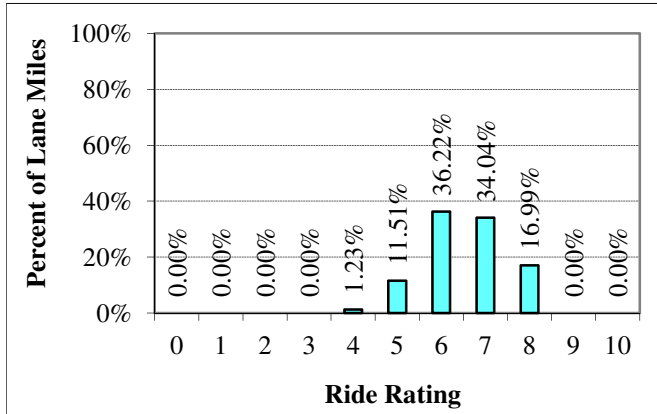
System	District-1	District-2	District-3	District-4	District-5	District-6	District-7	Statewide
Primary	33	64	15	0	98	5	49	263
Interstate	21	195	0	0	106	121	233	677
Turnpike	0	0	0	0	0	0	0	0
Toll	0	0	0	0	0	0	1	1
Statewide	54	259	15	0	204	126	283	941

Ride Rating

System	District-1	District-2	District-3	District-4	District-5	District-6	District-7	Statewide
Primary	6.90	6.61	5.63		6.32	5.83	6.75	6.49
Interstate	7.23	7.05			7.18	6.73	7.81	7.28
Turnpike								
Toll							8.70	8.70
Statewide	7.03	6.94	5.63		6.76	6.70	7.63	7.06

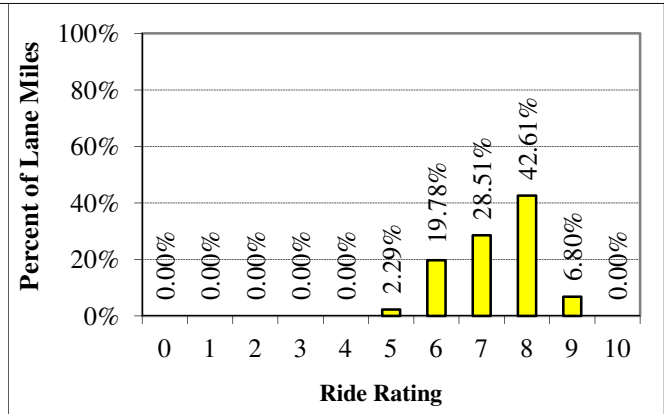
2013 Ride Distribution by System - Statewide

Primary



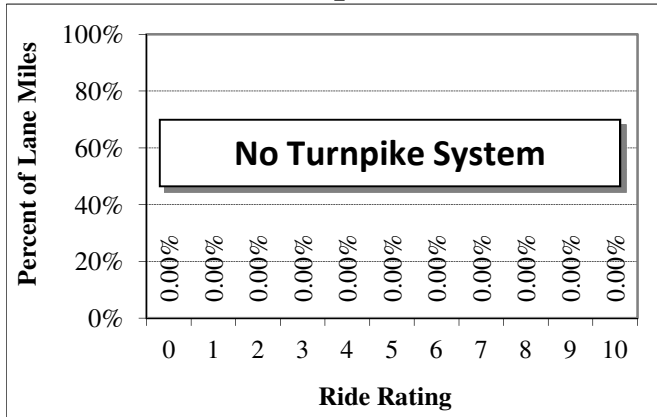
263 Lane Miles, Mean = 6.49

Interstate



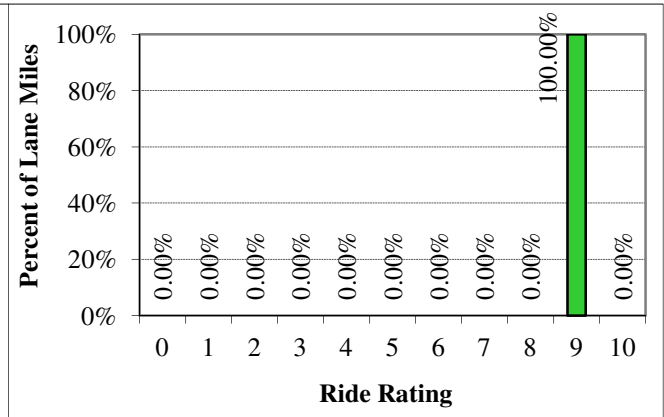
677 Lane Miles, Mean = 7.28

Turnpike



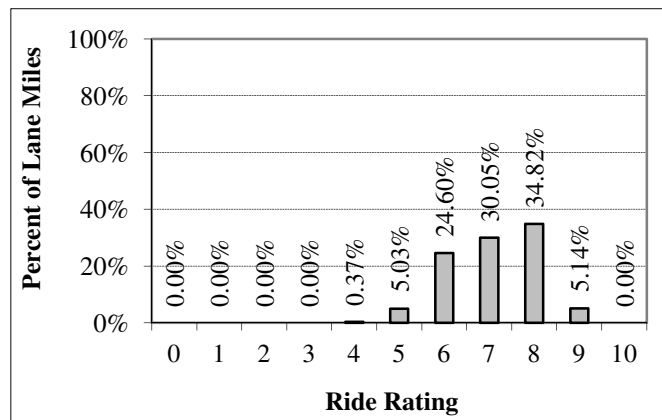
0 Lane Miles, Mean = N/A

Toll



1 Lane Miles, Mean = 8.7

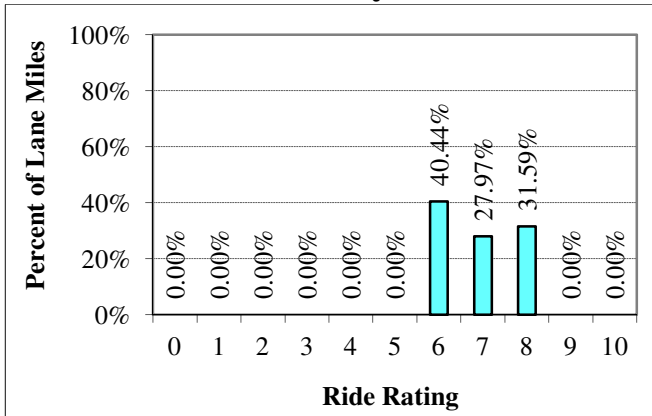
Statewide



941 Lane Miles, Mean = 7.06

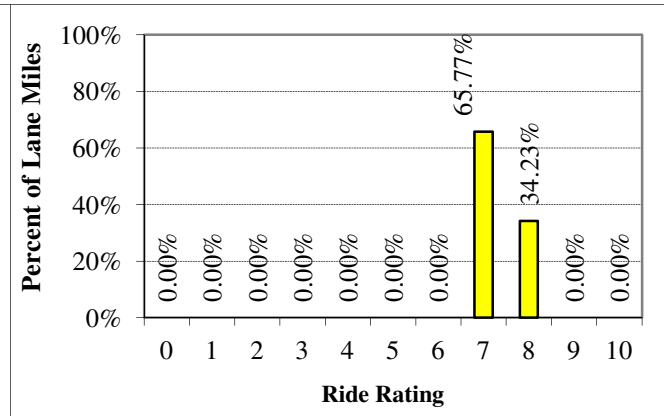
2013 Ride Distribution by System - District 1

Primary



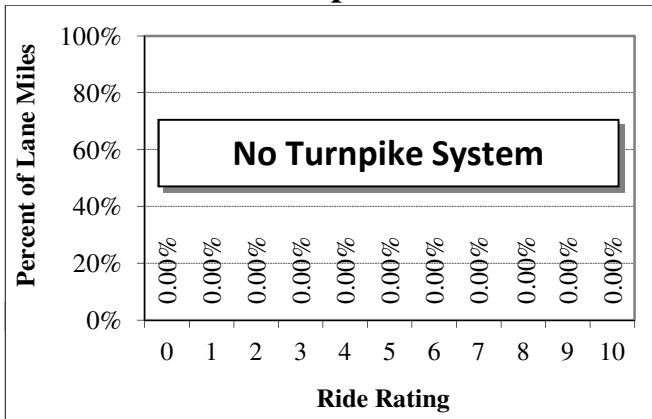
33 Lane Miles, Mean = 6.9

Interstate



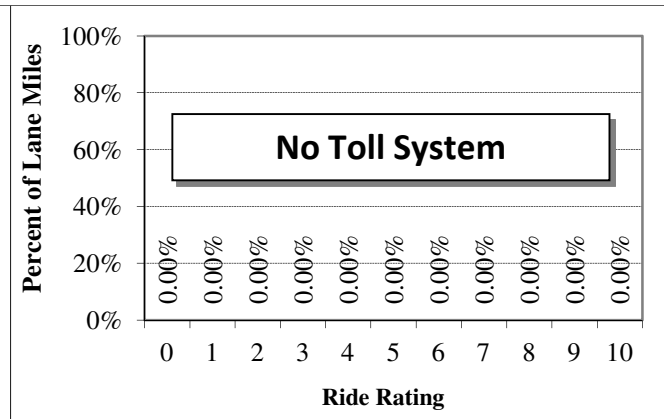
21 Lane Miles, Mean = 7.23

Turnpike



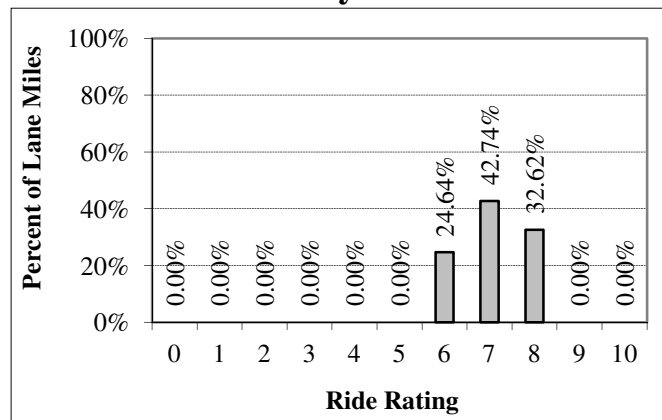
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

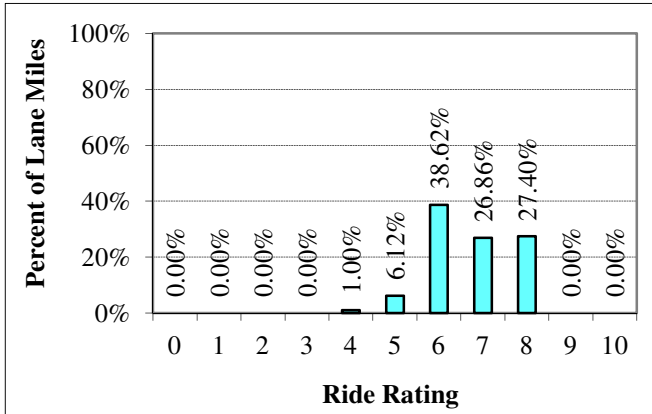
All Systems



54 Lane Miles, Mean = 7.03

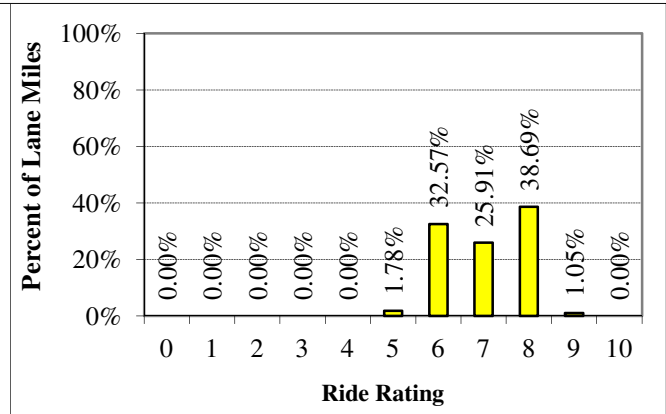
2013 Ride Distribution by System - District 2

Primary



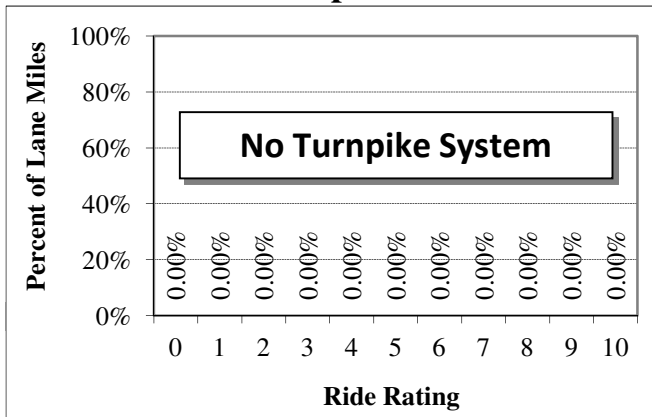
64 Lane Miles, Mean = 6.61

Interstate



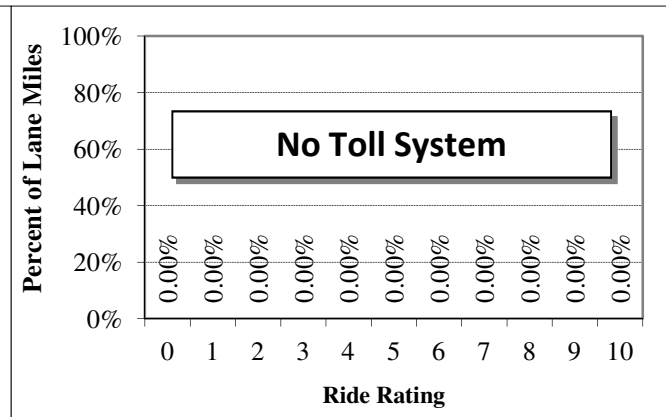
195 Lane Miles, Mean = 7.05

Turnpike



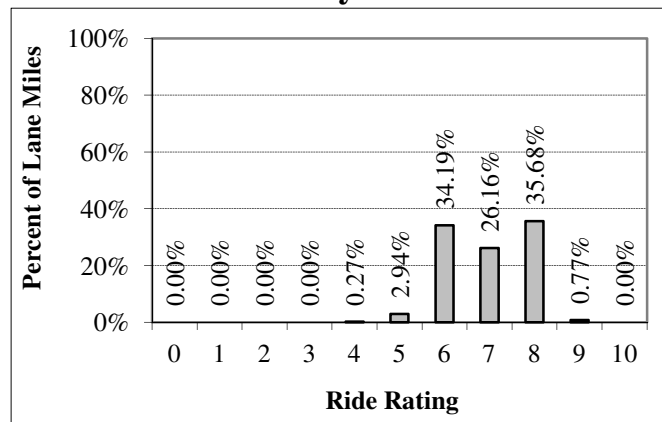
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

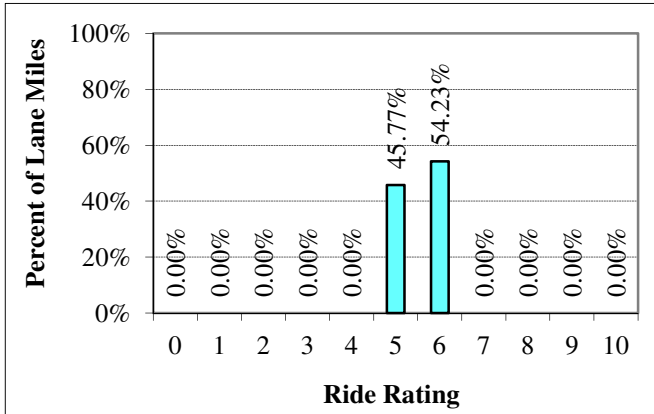
All Systems



259 Lane Miles, Mean = 6.94

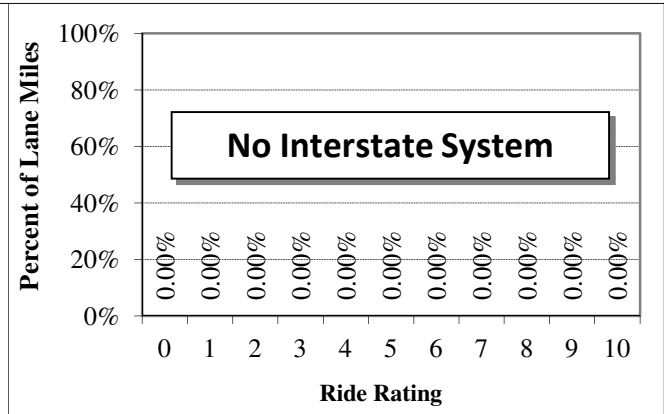
2013 Ride Distribution by System - District 3

Primary



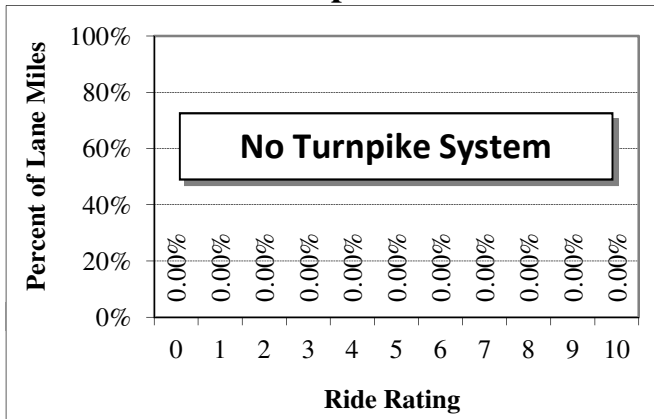
15 Lane Miles, Mean = 5.63

Interstate



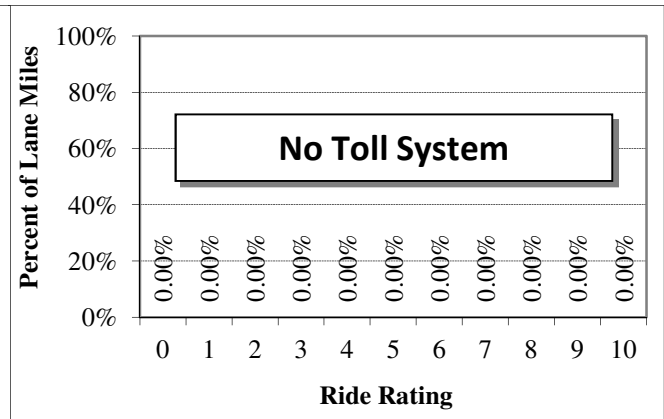
0 Lane Miles, Mean = N/A

Turnpike



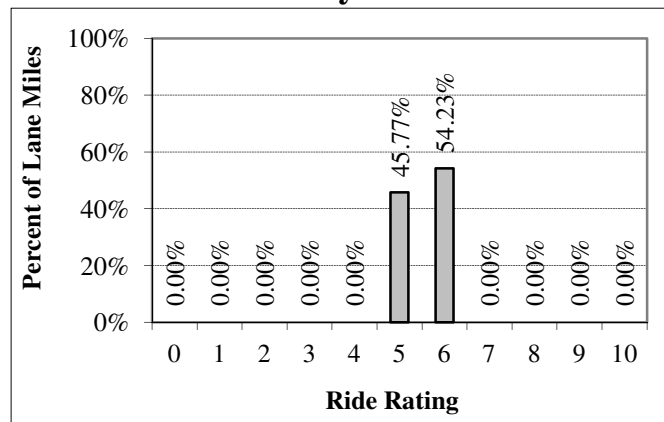
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

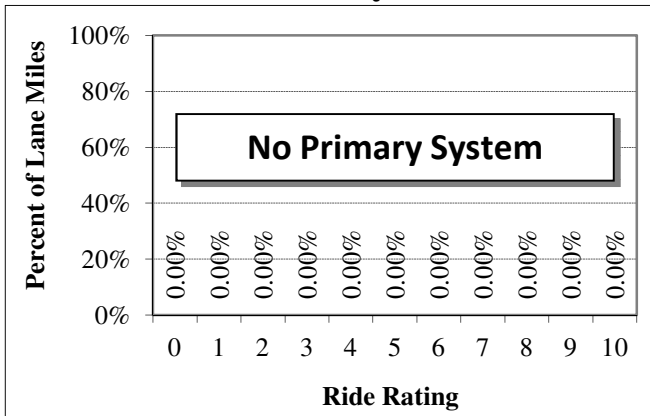
All Systems



15 Lane Miles, Mean = 5.63

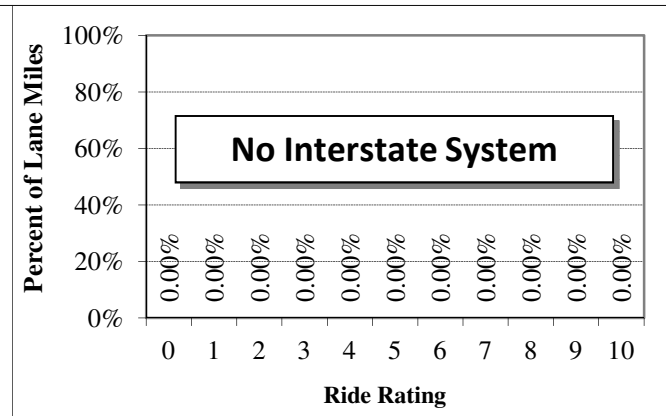
2013 Ride Distribution by System - District 4

Primary



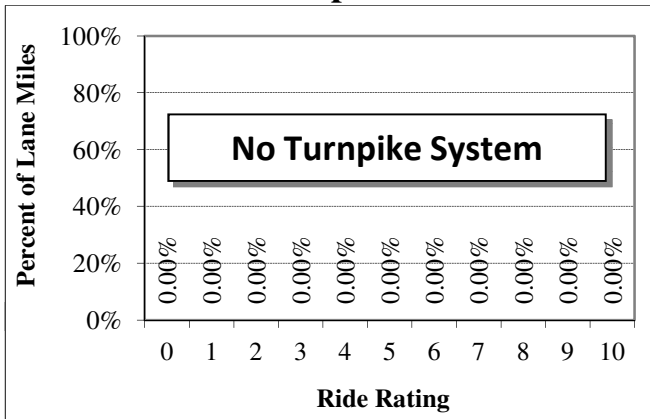
0 Lane Miles, Mean = N/A

Interstate



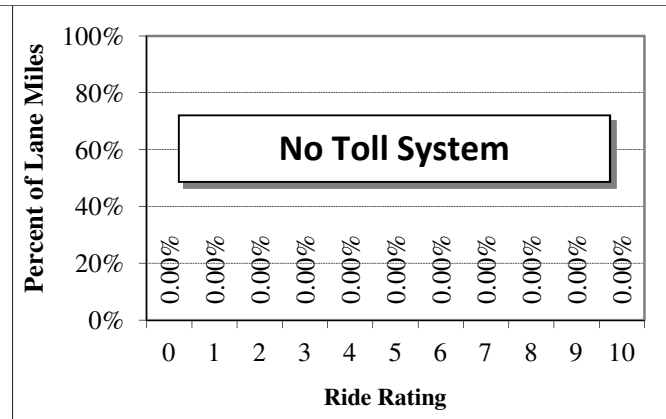
0 Lane Miles, Mean = N/A

Turnpike



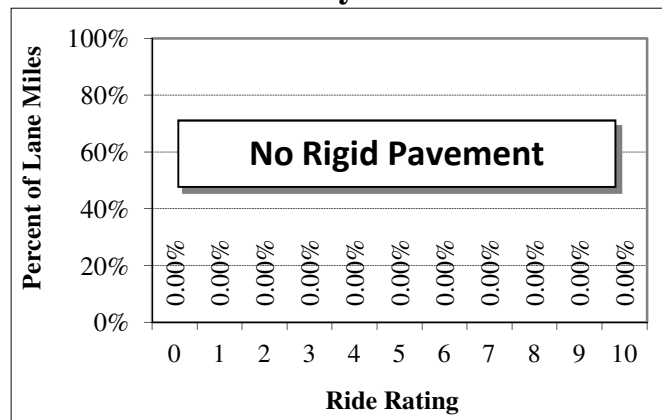
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

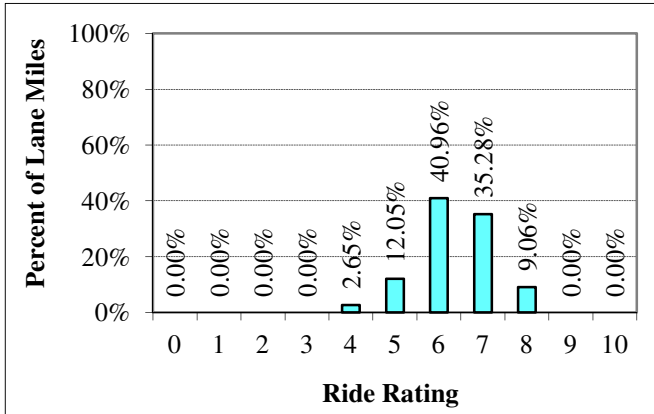
All Systems



0 Lane Miles, Mean = N/A

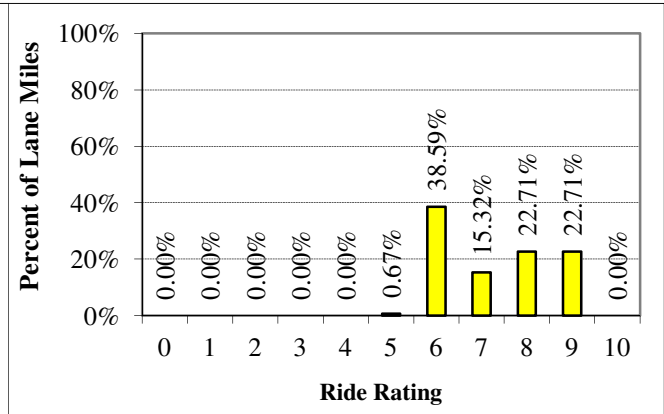
2013 Ride Distribution by System - District 5

Primary



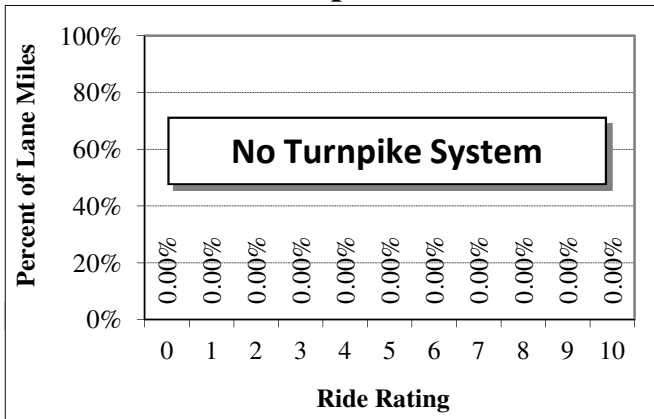
98 Lane Miles, Mean = 6.32

Interstate



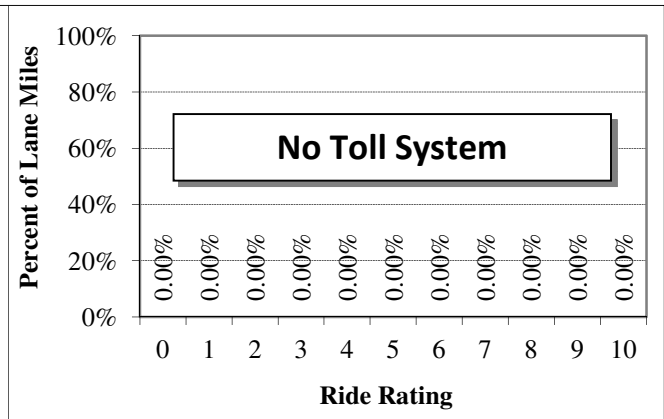
106 Lane Miles, Mean = 7.18

Turnpike



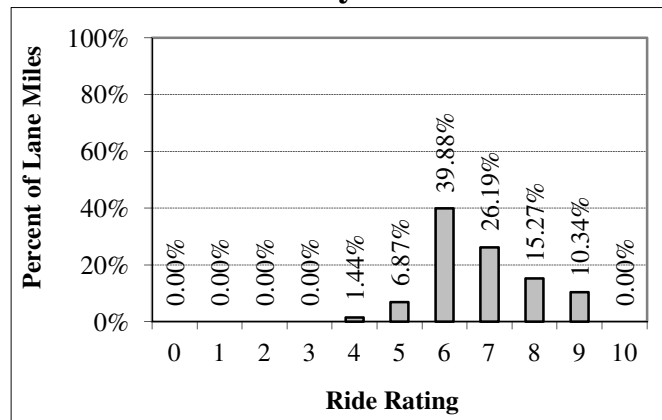
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

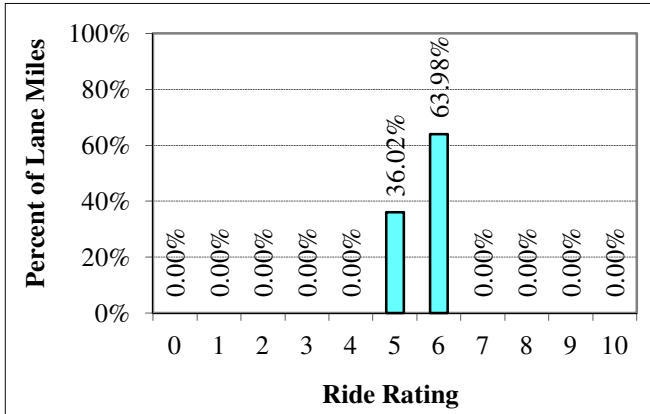
All Systems



204 Lane Miles, Mean = 6.76

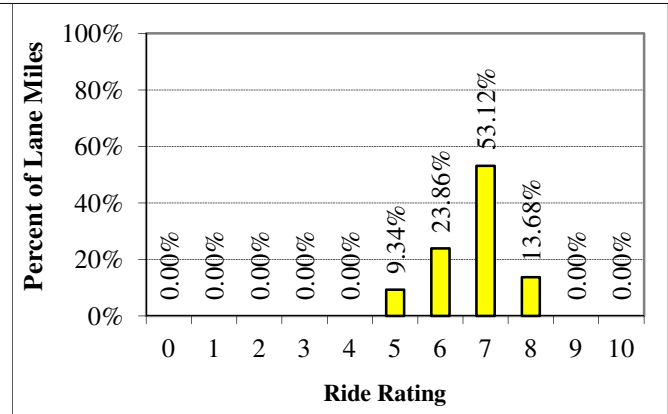
2013 Ride Distribution by System - District 6

Primary



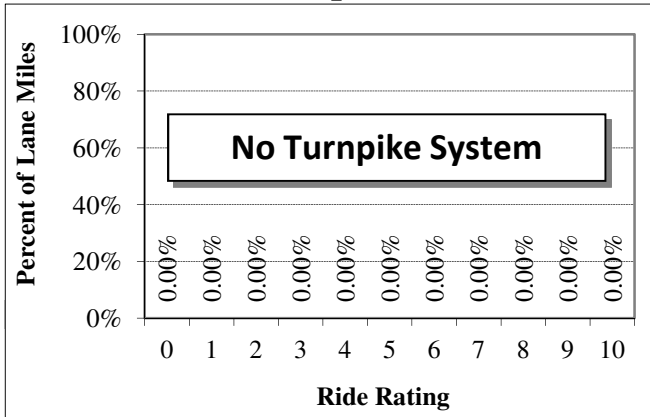
5 Lane Miles, Mean = 5.83

Interstate



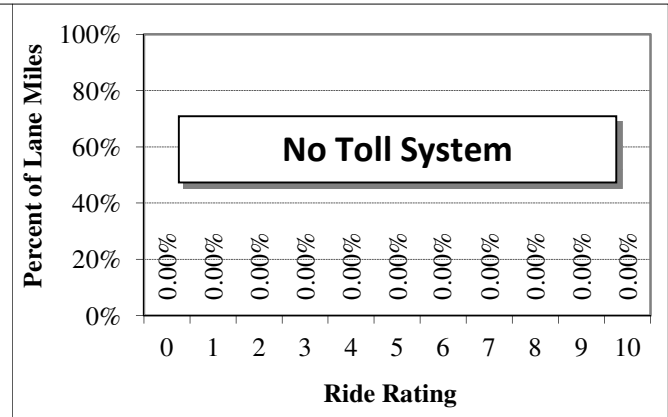
121 Lane Miles, Mean = 6.73

Turnpike



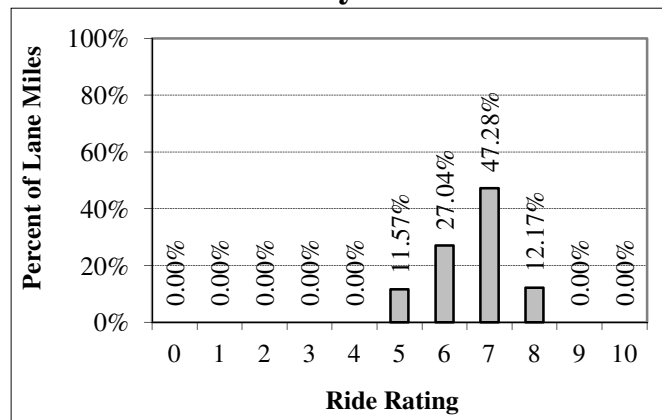
0 Lane Miles, Mean = N/A

Toll



0 Lane Miles, Mean = N/A

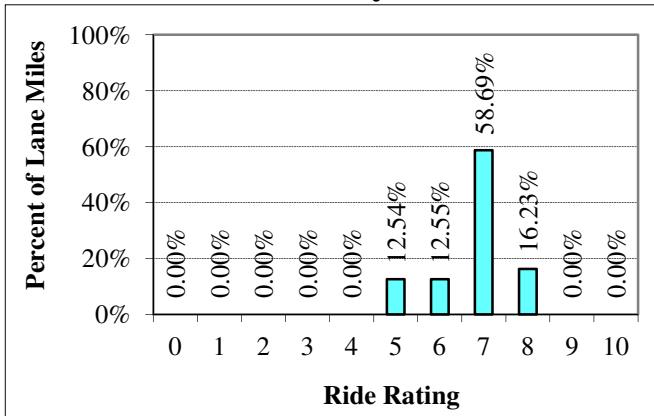
All Systems



126 Lane Miles, Mean = 6.7

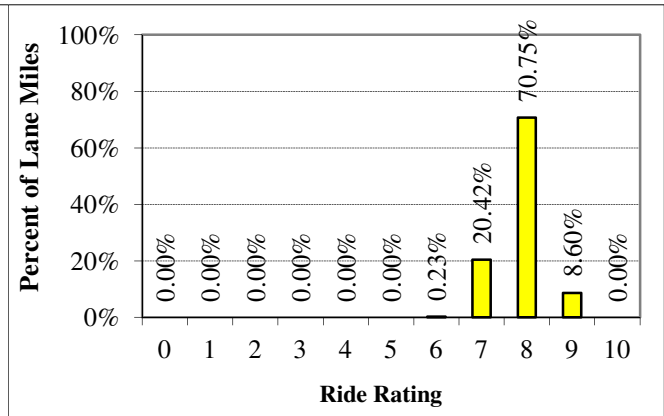
2013 Ride Distribution by System - District 7

Primary



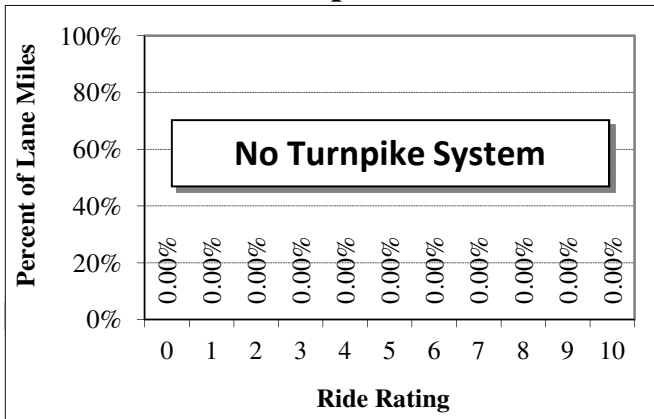
49 Lane Miles, Mean = 6.75

Interstate



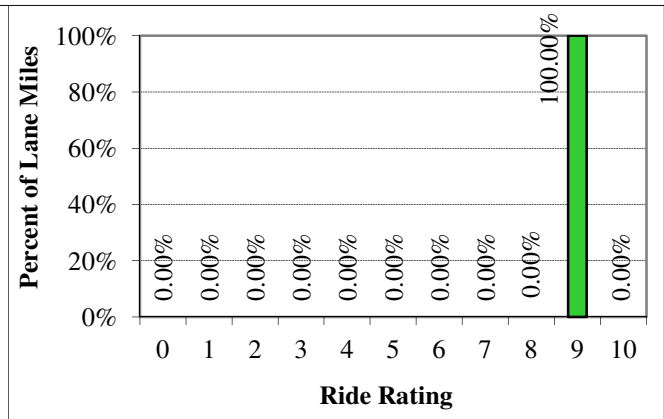
233 Lane Miles, Mean = 7.81

Turnpike



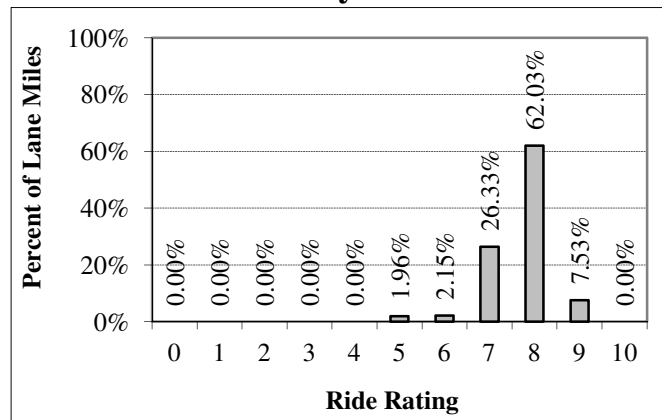
0 Lane Miles, Mean = N/A

Toll



1 Lane Miles, Mean = 8.7

All Systems

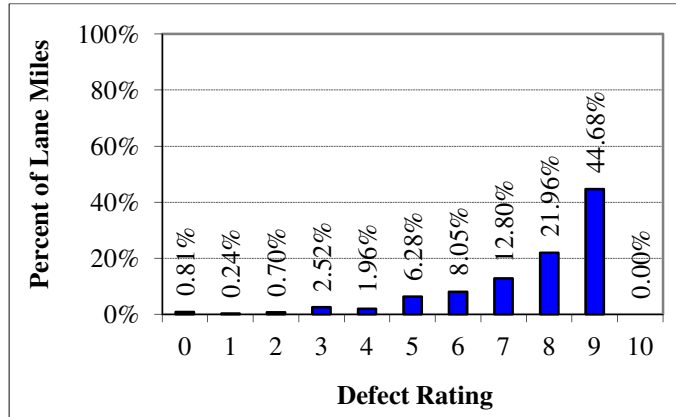


283 Lane Miles, Mean = 7.63

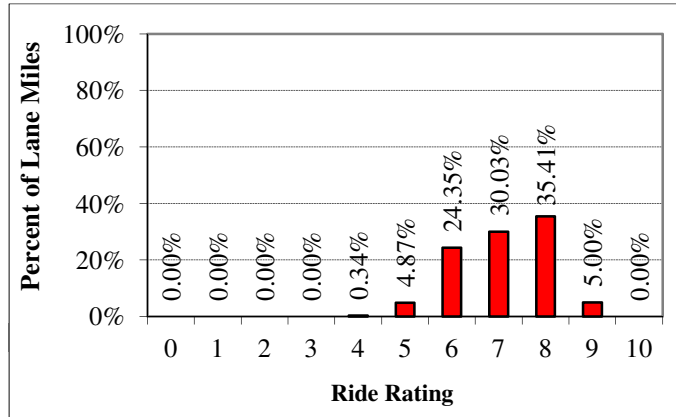
Section IV
Defect and Ride
by
District



2013 Defect and Ride Distribution - Statewide

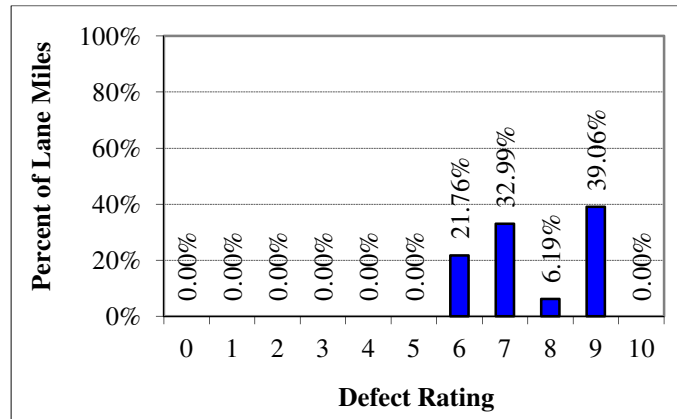


944 Lane Miles

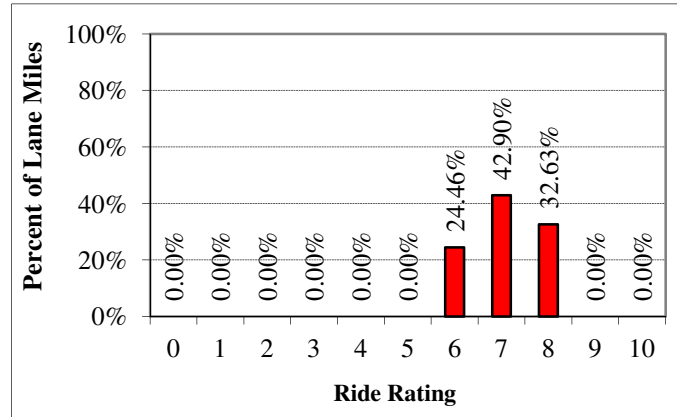


941 Lane Miles

2013 Defect and Ride Distribution - District 1

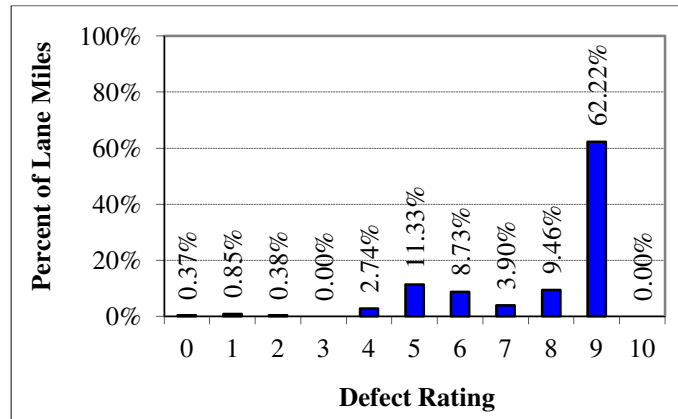


55 Lane Miles

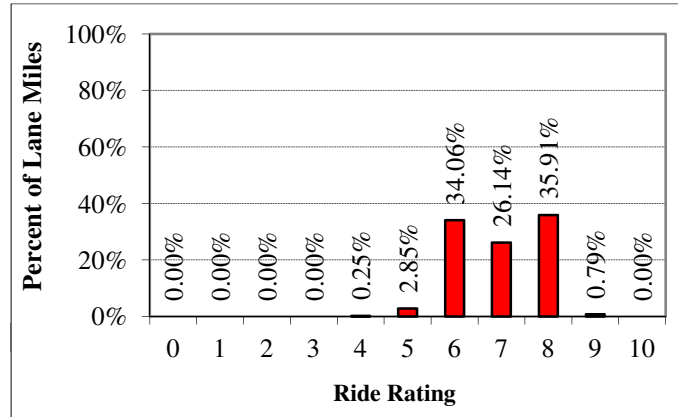


54 Lane Miles

2013 Defect and Ride Distribution - District 2

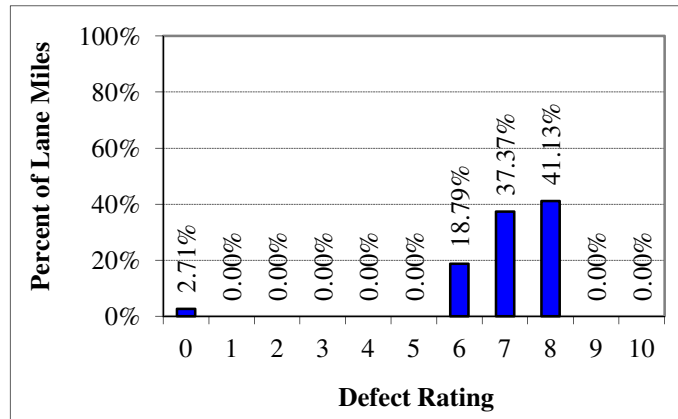


260 Lane Miles

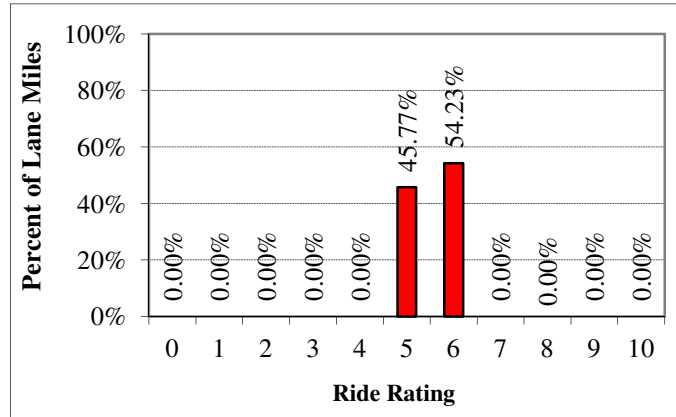


259 Lane Miles

2013 Defect and Ride Distribution - District 3

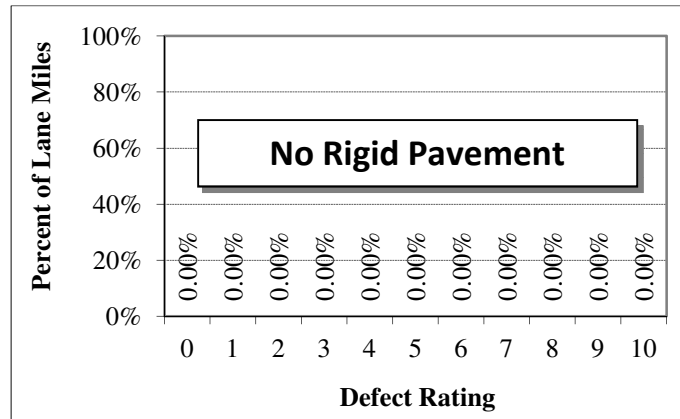


15 Lane Miles

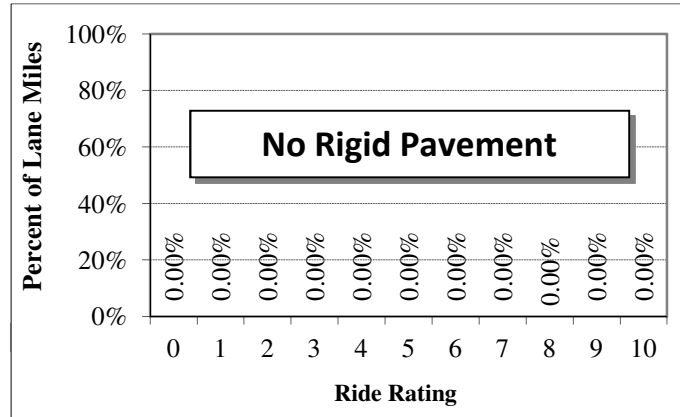


15 Lane Miles

2013 Defect and Ride Distribution - District 4

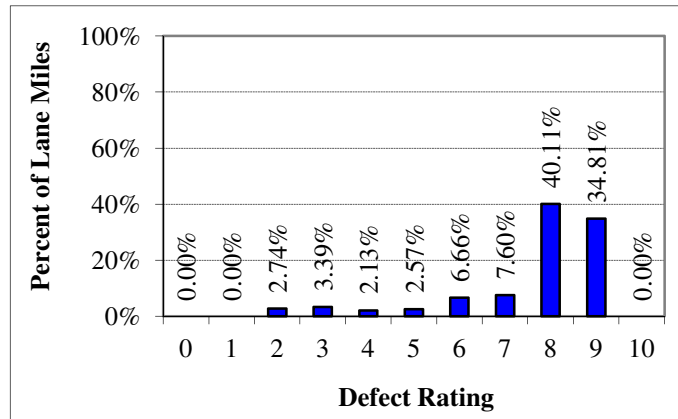


0 Lane Miles

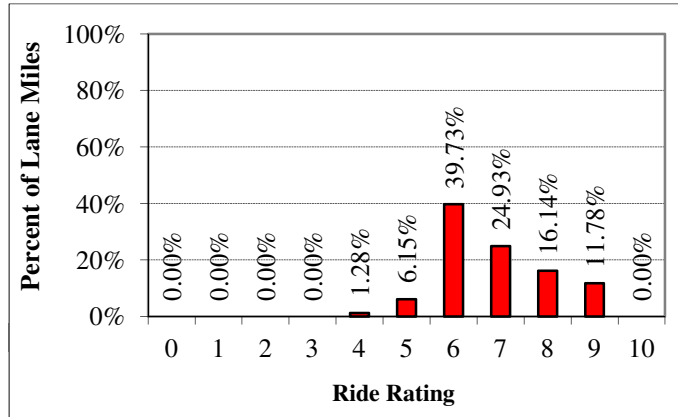


0 Lane Miles

2013 Defect and Ride Distribution - District 5

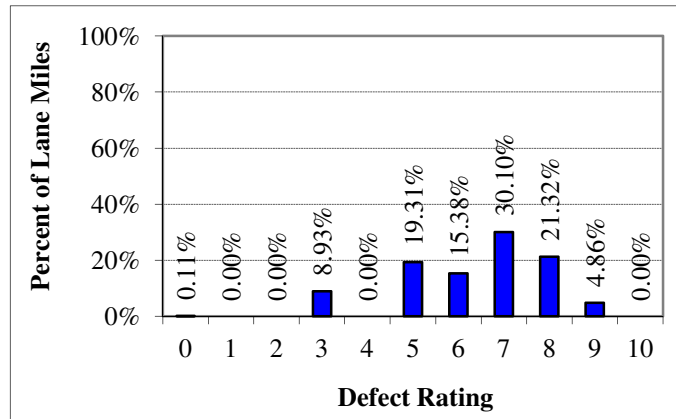


204 Lane Miles

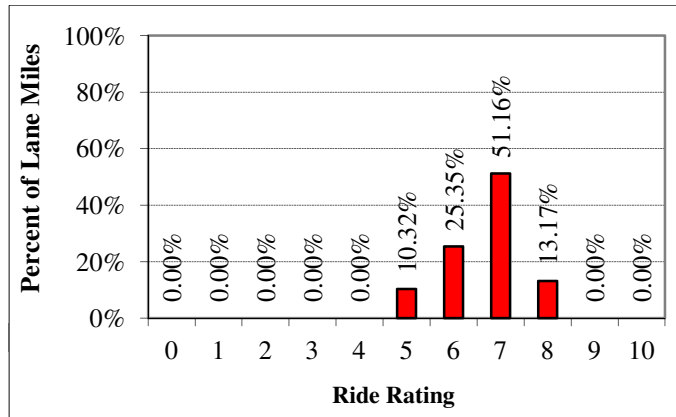


204 Lane Miles

2013 Defect and Ride Distribution - District 6

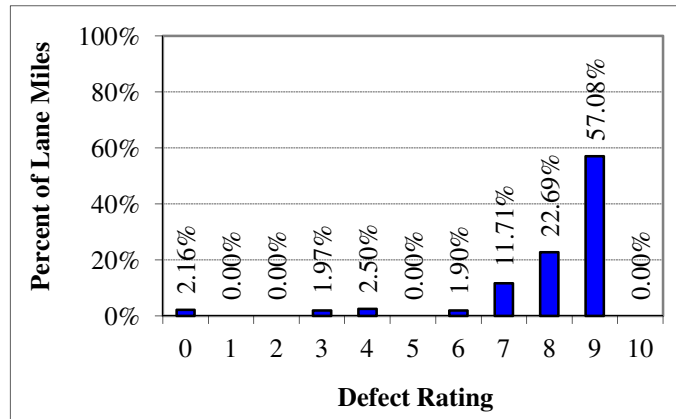


127 Lane Miles

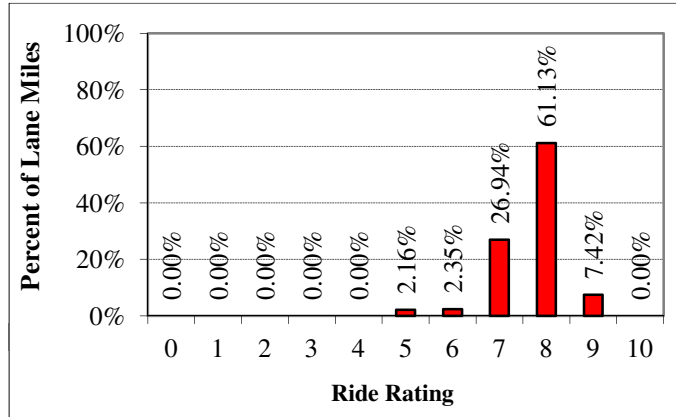


126 Lane Miles

2013 Defect and Ride Distribution - District 7



283 Lane Miles



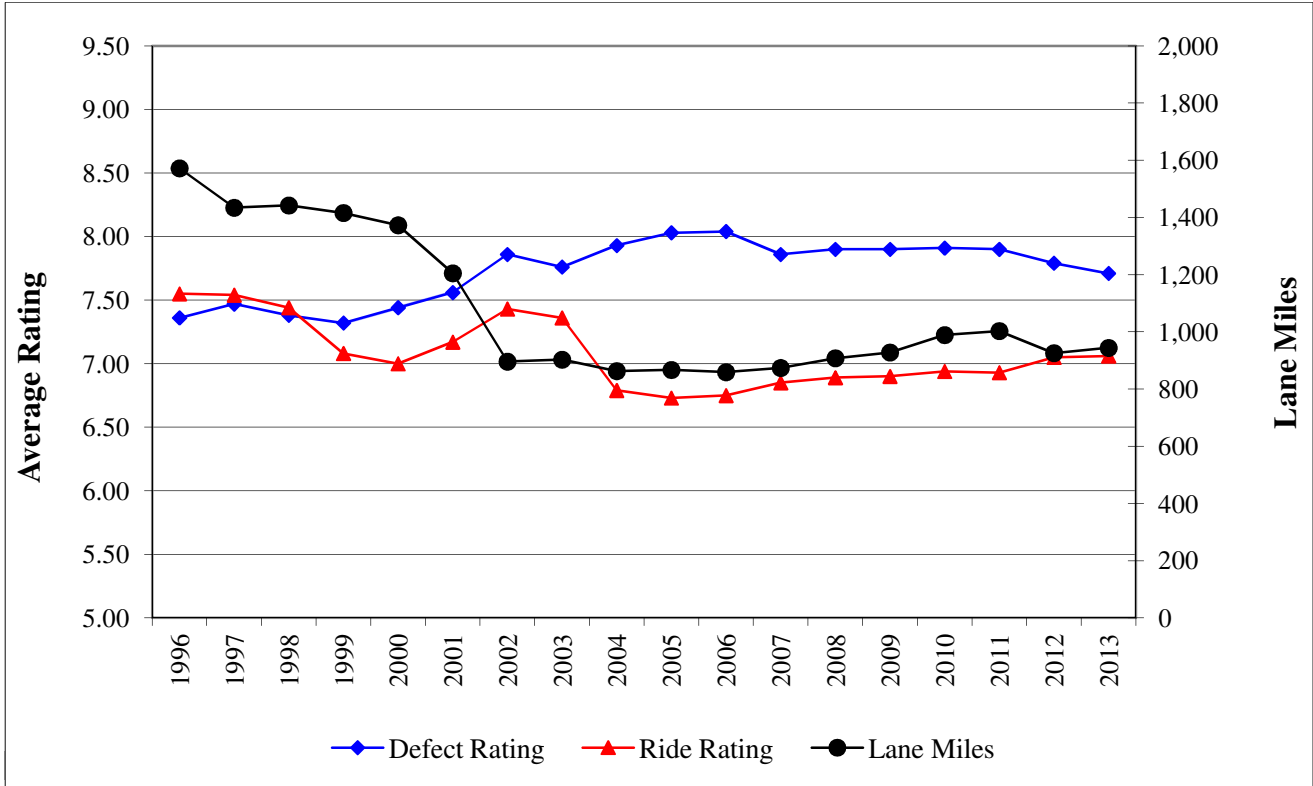
283 Lane Miles

Section V
Historical Distress Ratings
By District
1996 - 2013



Historical Distress Ratings - Statewide

All Systems - All Districts



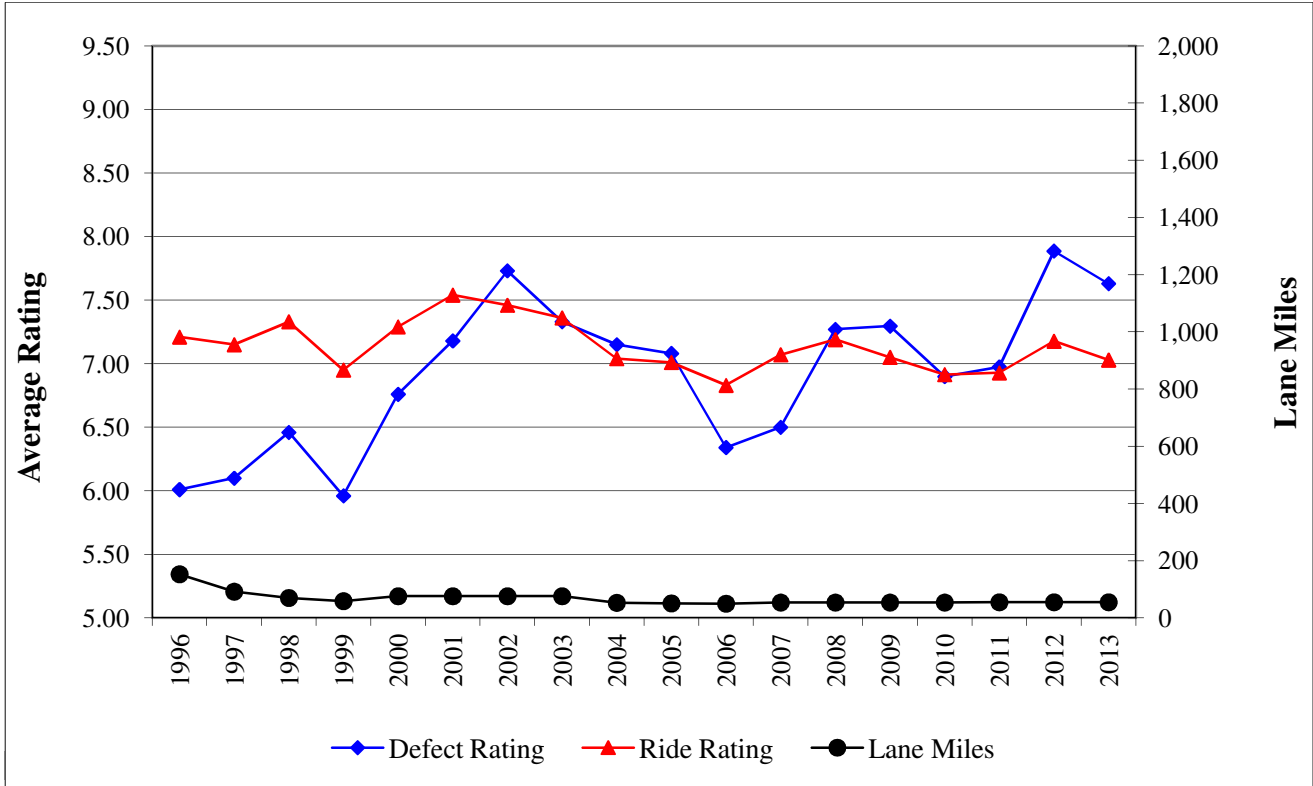
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	7.36	7.47	7.38	7.32	7.44	7.56	7.86	7.76	7.93
Ride Rating	7.55	7.54	7.44	7.08	7.00	7.17	7.43	7.36	6.79
Lane Miles	1572	1434	1442	1416	1373	1205	896	903	863

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	8.03	8.04	7.86	7.90	7.90	7.91	7.90	7.79	7.71
Ride Rating	6.73	6.75	6.85	6.89	6.90	6.94	6.93	7.05	7.06
Lane Miles	867	859	874	908	928	989	1003	926	944

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.

Historical Distress Ratings - District 1

All Systems



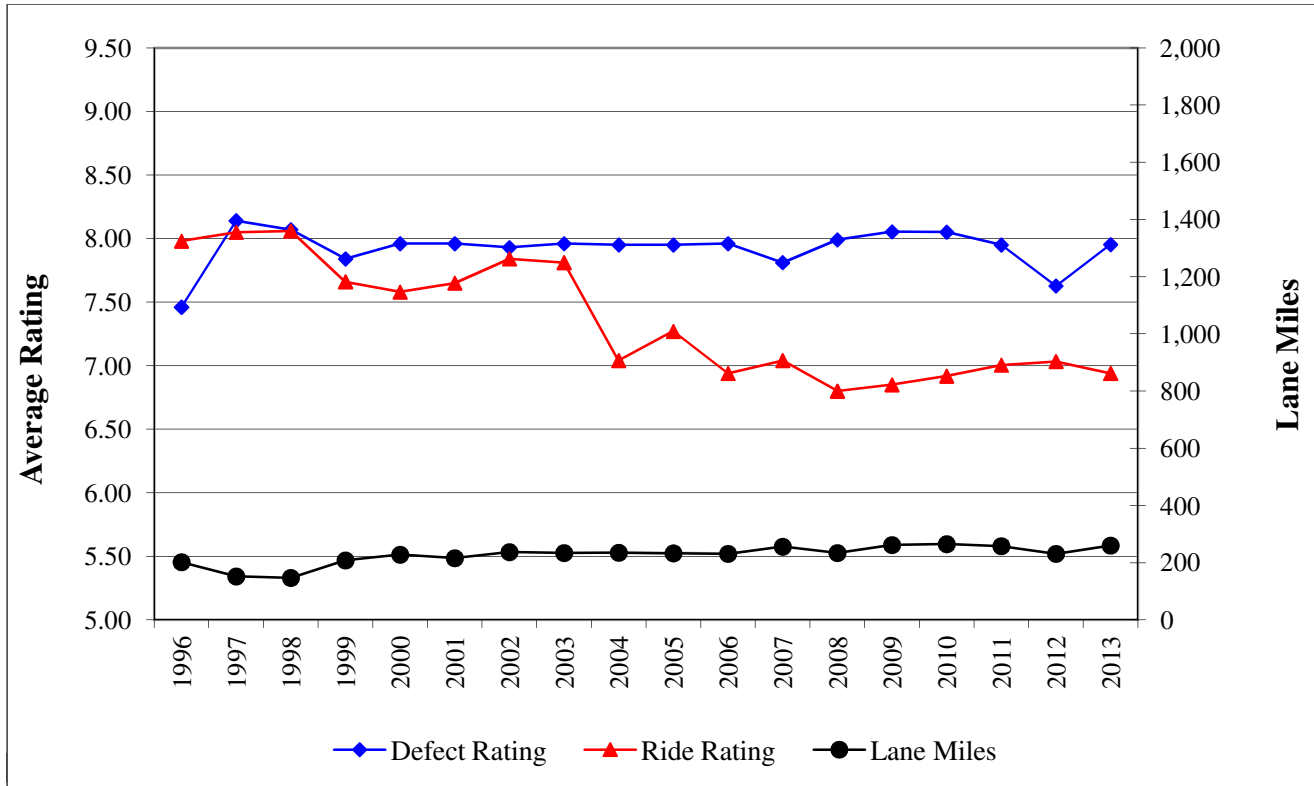
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	6.01	6.10	6.46	5.96	6.76	7.18	7.73	7.33	7.15
Ride Rating	7.21	7.15	7.33	6.95	7.29	7.54	7.46	7.36	7.04
Lane Miles	153	92	70	59	76	76	76	76	53

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	7.08	6.34	6.50	7.27	7.30	6.90	6.97	7.89	7.63
Ride Rating	7.01	6.83	7.07	7.19	7.05	6.91	6.93	7.18	7.03
Lane Miles	51	50	54	54	54	54	55	55	55

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.

Historical Distress Ratings - District 2

All Systems



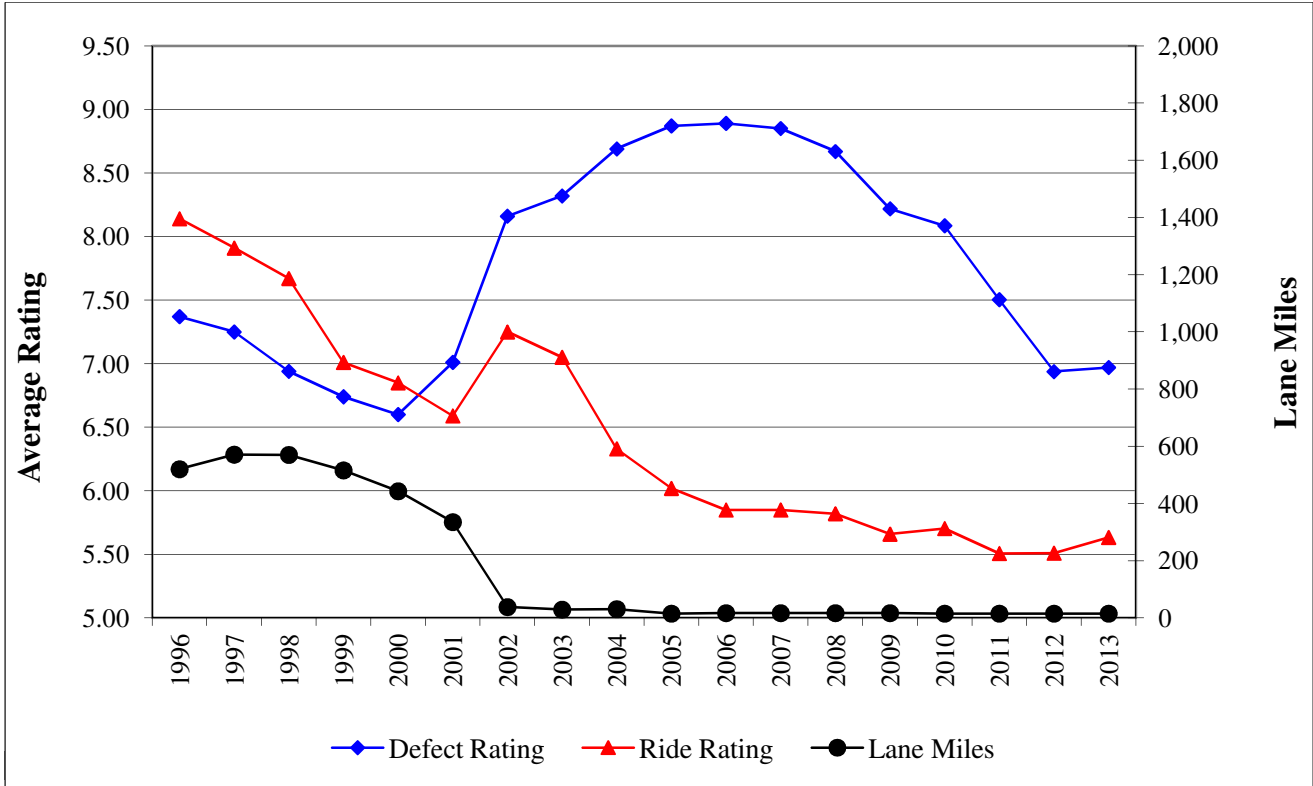
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	7.46	8.14	8.07	7.84	7.96	7.96	7.93	7.96	7.95
Ride Rating	7.98	8.05	8.06	7.66	7.58	7.65	7.84	7.81	7.04
Lane Miles	202	152	147	208	228	216	237	234	235

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	7.95	7.96	7.81	7.99	8.05	8.05	7.95	7.63	7.95
Ride Rating	7.27	6.94	7.04	6.80	6.85	6.92	7.01	7.03	6.94
Lane Miles	233	231	256	234	262	265	258	231	260

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.

Historical Distress Ratings - District 3

All Systems



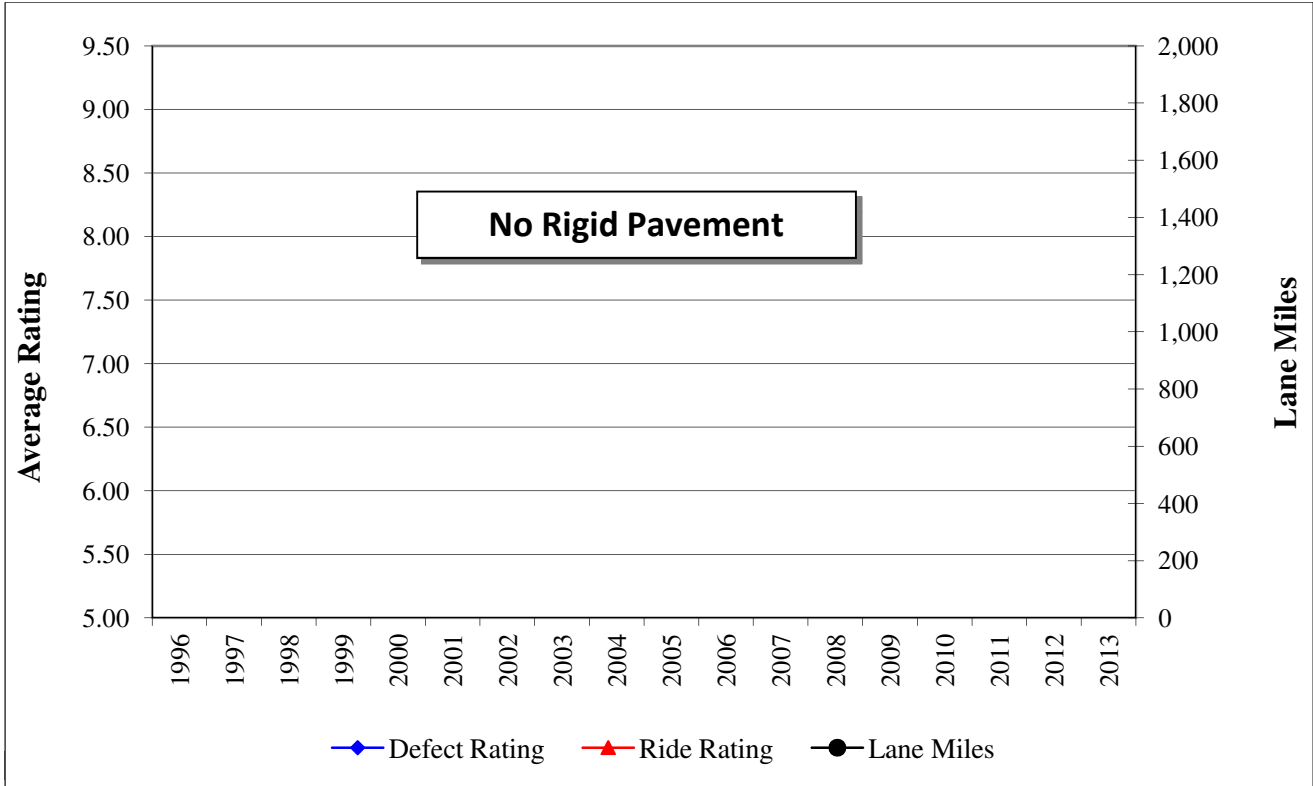
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	7.37	7.25	6.94	6.74	6.60	7.01	8.16	8.32	8.69
Ride Rating	8.14	7.91	7.67	7.01	6.85	6.59	7.25	7.05	6.33
Lane Miles	520	571	570	516	443	335	38	29	31

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	8.87	8.89	8.85	8.67	8.22	8.09	7.50	6.94	6.97
Ride Rating	6.02	5.85	5.85	5.82	5.66	5.70	5.51	5.51	5.63
Lane Miles	15	17	17	17	17	15	15	15	15

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.

Historical Distress Ratings - District 4

All Systems



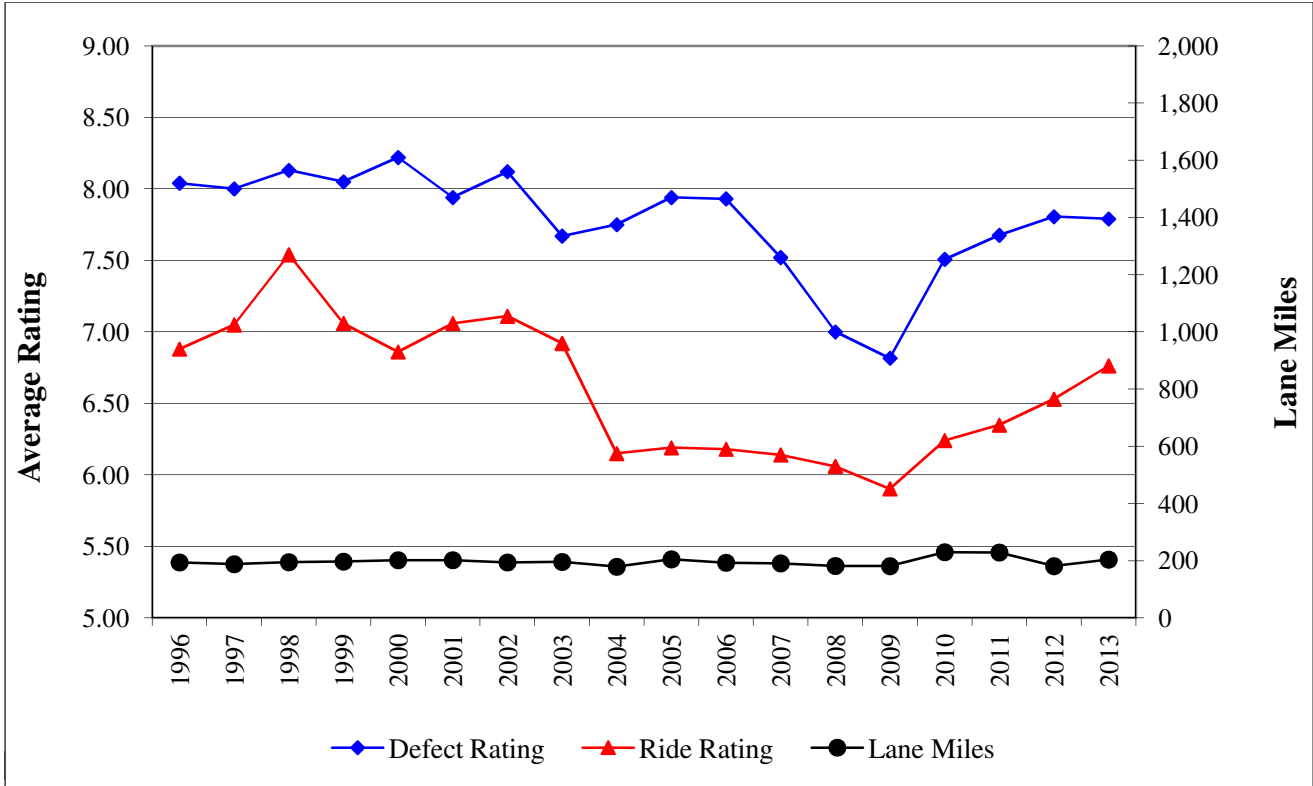
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating									
Ride Rating									
Lane Miles									

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating									
Ride Rating									
Lane Miles									

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.

Historical Distress Ratings - District 5

All Systems



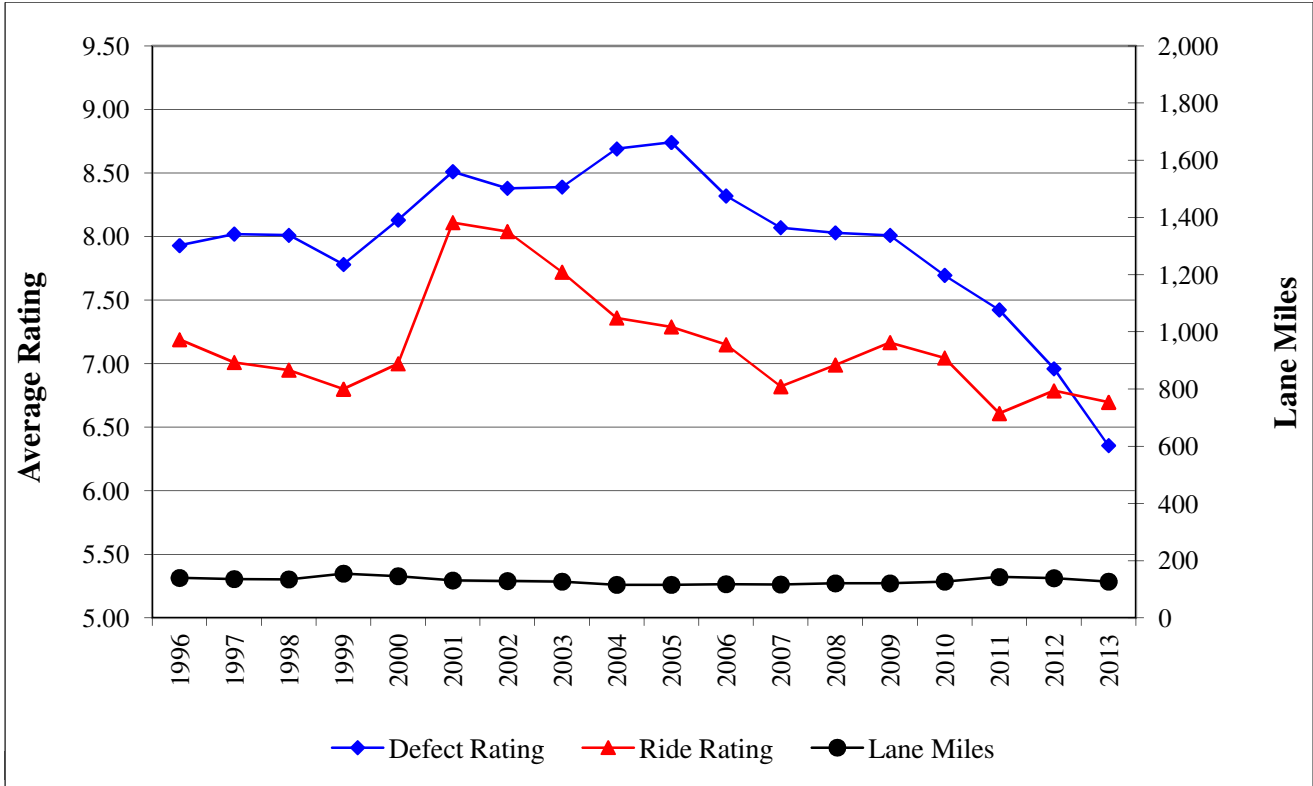
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	8.04	8.00	8.13	8.05	8.22	7.94	8.12	7.67	7.75
Ride Rating	6.88	7.05	7.54	7.06	6.86	7.06	7.11	6.92	6.15
Lane Miles	194	188	195	197	202	202	194	196	179

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	7.94	7.93	7.52	7.00	6.82	7.51	7.68	7.81	7.79
Ride Rating	6.19	6.18	6.14	6.06	5.90	6.24	6.35	6.53	6.76
Lane Miles	205	193	191	182	181	230	229	181	204

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.

Historical Distress Ratings - District 6

All Systems



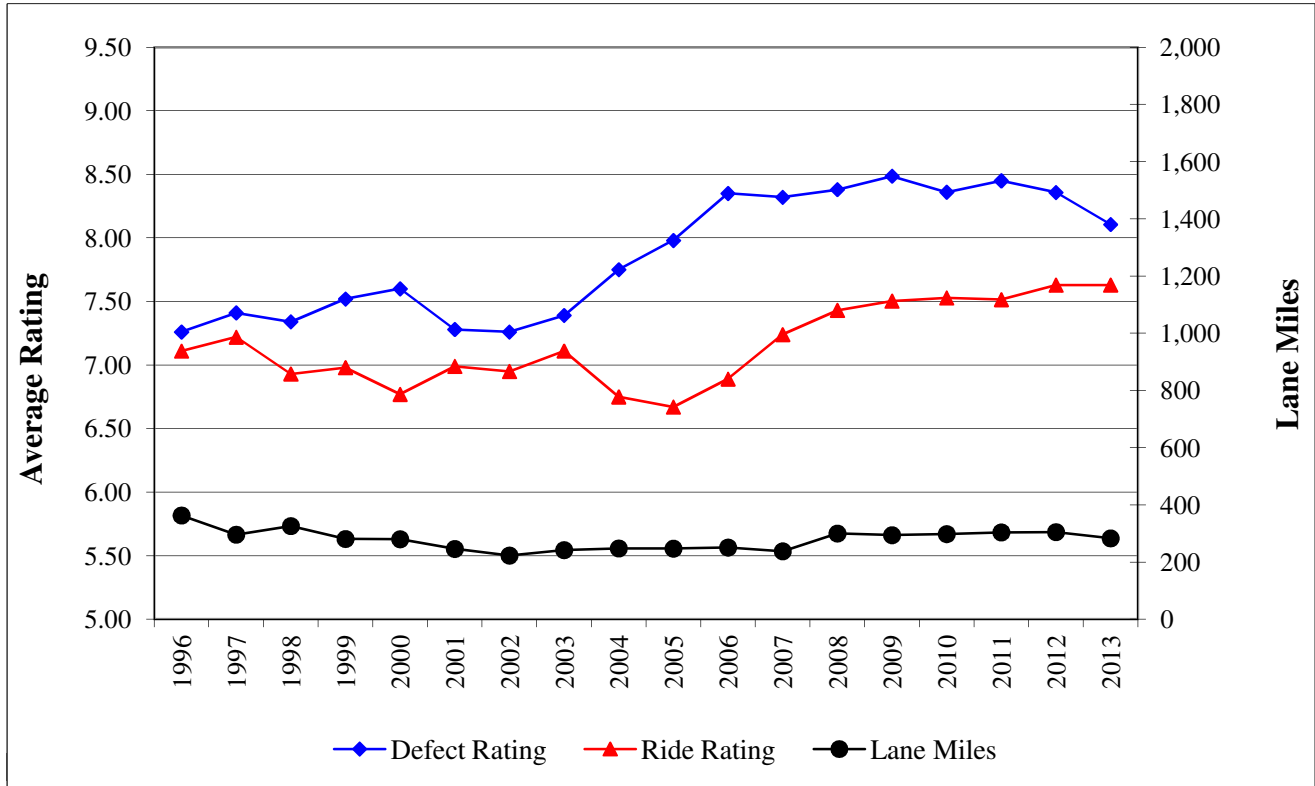
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	7.93	8.02	8.01	7.78	8.13	8.51	8.38	8.39	8.69
Ride Rating	7.19	7.01	6.95	6.80	7.00	8.11	8.04	7.72	7.36
Lane Miles	140	136	135	155	146	131	129	127	116

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	8.74	8.32	8.07	8.03	8.01	7.69	7.42	6.96	6.36
Ride Rating	7.29	7.15	6.82	6.99	7.17	7.05	6.61	6.79	6.70
Lane Miles	116	118	117	121	121	127	143	139	127

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.

Historical Distress Ratings - District 7

All Systems



Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	7.26	7.41	7.34	7.52	7.60	7.28	7.26	7.39	7.75
Ride Rating	7.11	7.22	6.93	6.98	6.77	6.99	6.95	7.11	6.75
Lane Miles	363	296	326	281	280	246	223	242	248

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	7.98	8.35	8.32	8.38	8.49	8.36	8.45	8.36	8.11
Ride Rating	6.67	6.89	7.24	7.43	7.50	7.53	7.51	7.63	7.63
Lane Miles	247	251	238	300	294	298	304	305	283

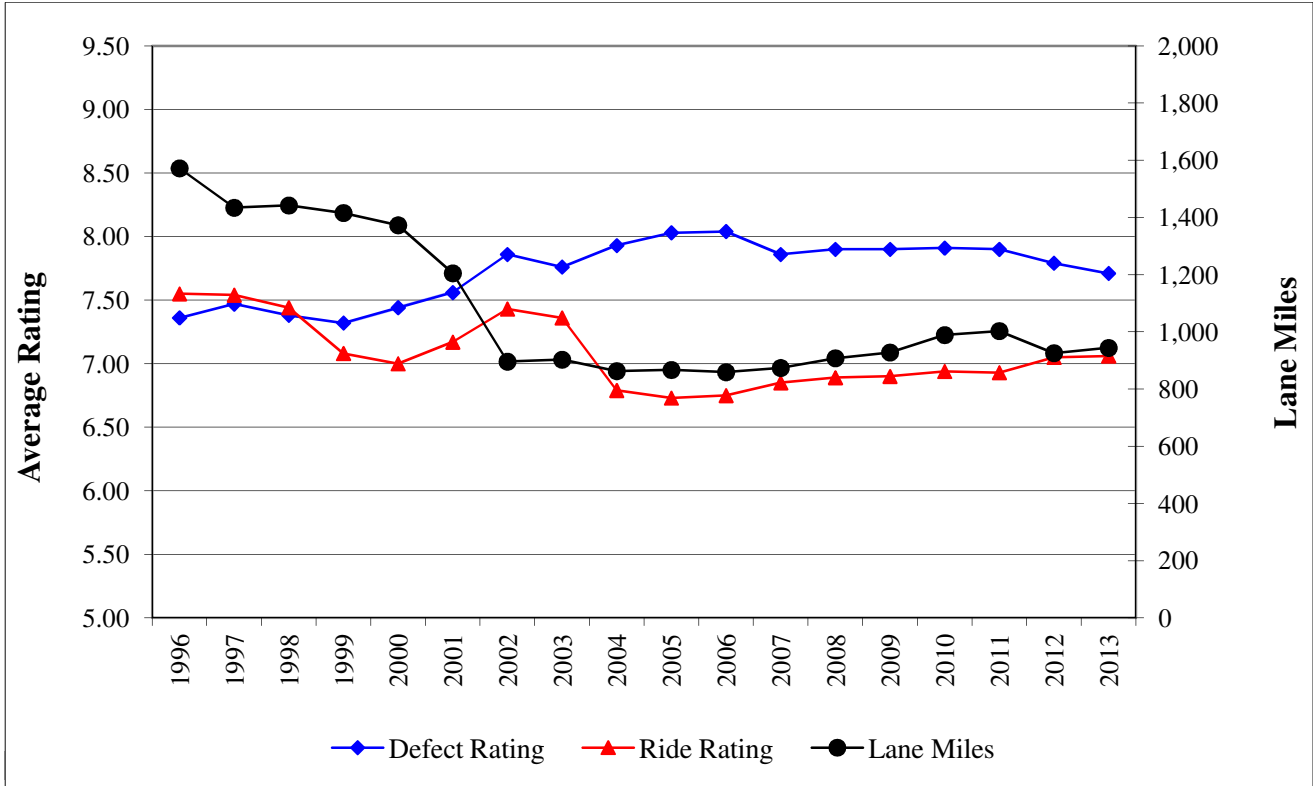
Note that with the start of the 2004 PCS, the profile data was collected using a sampling rate of 6 in. compared to a 12 in. sample interval used in previous years.

Section VI
Historical Distress Ratings
By System
1996 - 2013



Historical Distress Ratings - Statewide

All Systems - All Districts



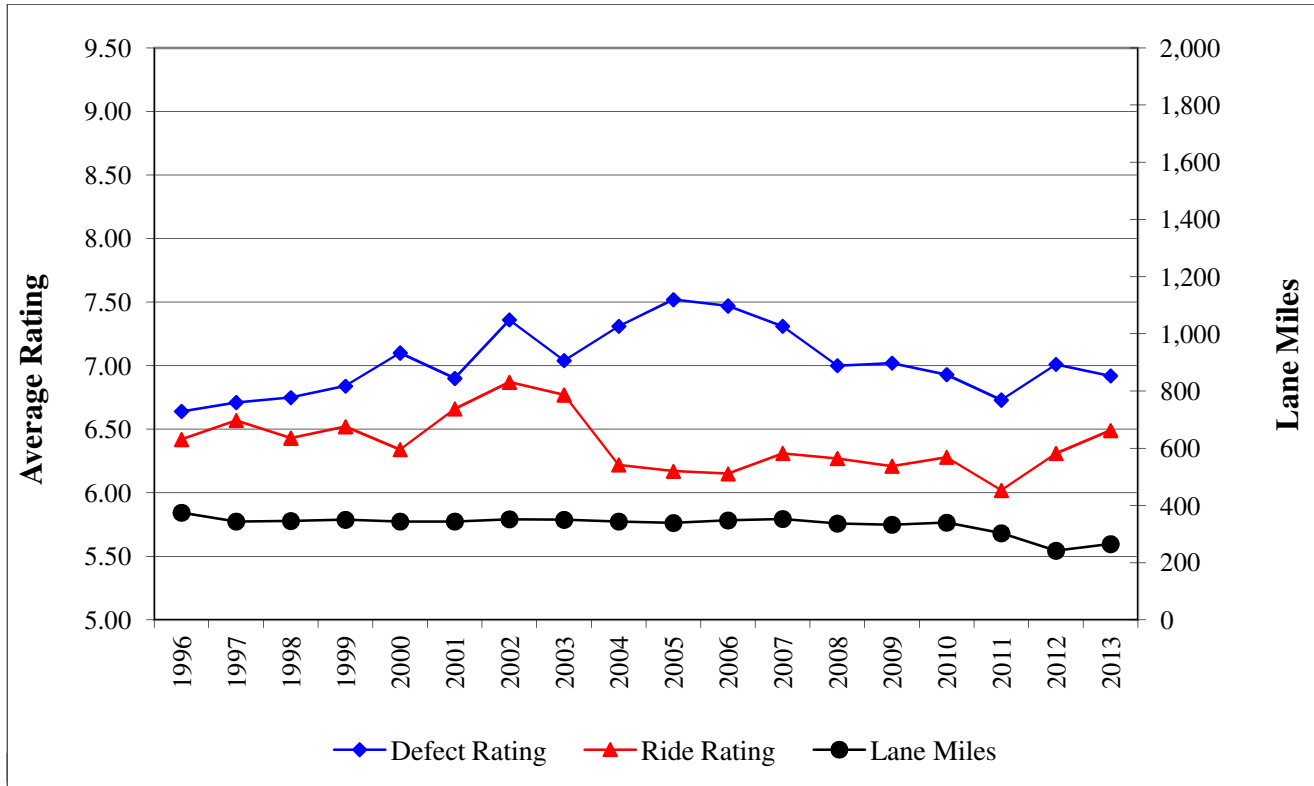
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	7.36	7.47	7.38	7.32	7.44	7.56	7.86	7.76	7.93
Ride Rating	7.55	7.54	7.44	7.08	7.00	7.17	7.43	7.36	6.79
Lane Miles	1572	1434	1442	1416	1373	1205	896	903	863

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	8.03	8.04	7.86	7.90	7.90	7.91	7.90	7.79	7.71
Ride Rating	6.73	6.75	6.85	6.89	6.90	6.94	6.93	7.05	7.06
Lane Miles	867	859	874	908	928	989	1003	926	944

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.

Historical Distress Ratings - Primary System

All Districts



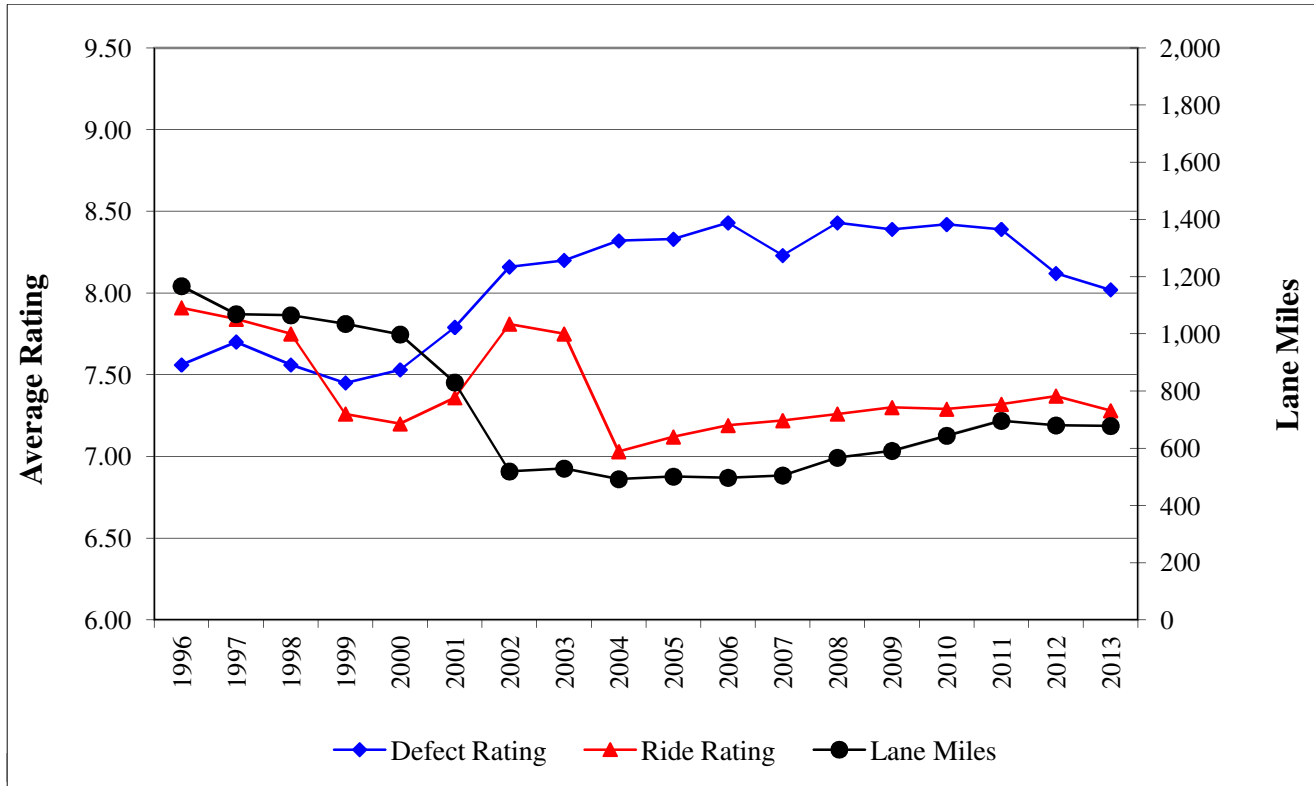
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	6.64	6.71	6.75	6.84	7.10	6.90	7.36	7.04	7.31
Ride Rating	6.42	6.57	6.43	6.52	6.34	6.66	6.87	6.77	6.22
Lane Miles	375	344	346	350	344	344	352	350	344

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	7.52	7.47	7.31	7.00	7.02	6.93	6.73	7.01	6.92
Ride Rating	6.17	6.15	6.31	6.27	6.21	6.28	6.02	6.31	6.49
Lane Miles	339	348	353	337	333	340	303	242	265

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.

Historical Distress Ratings - Interstate System

All Districts



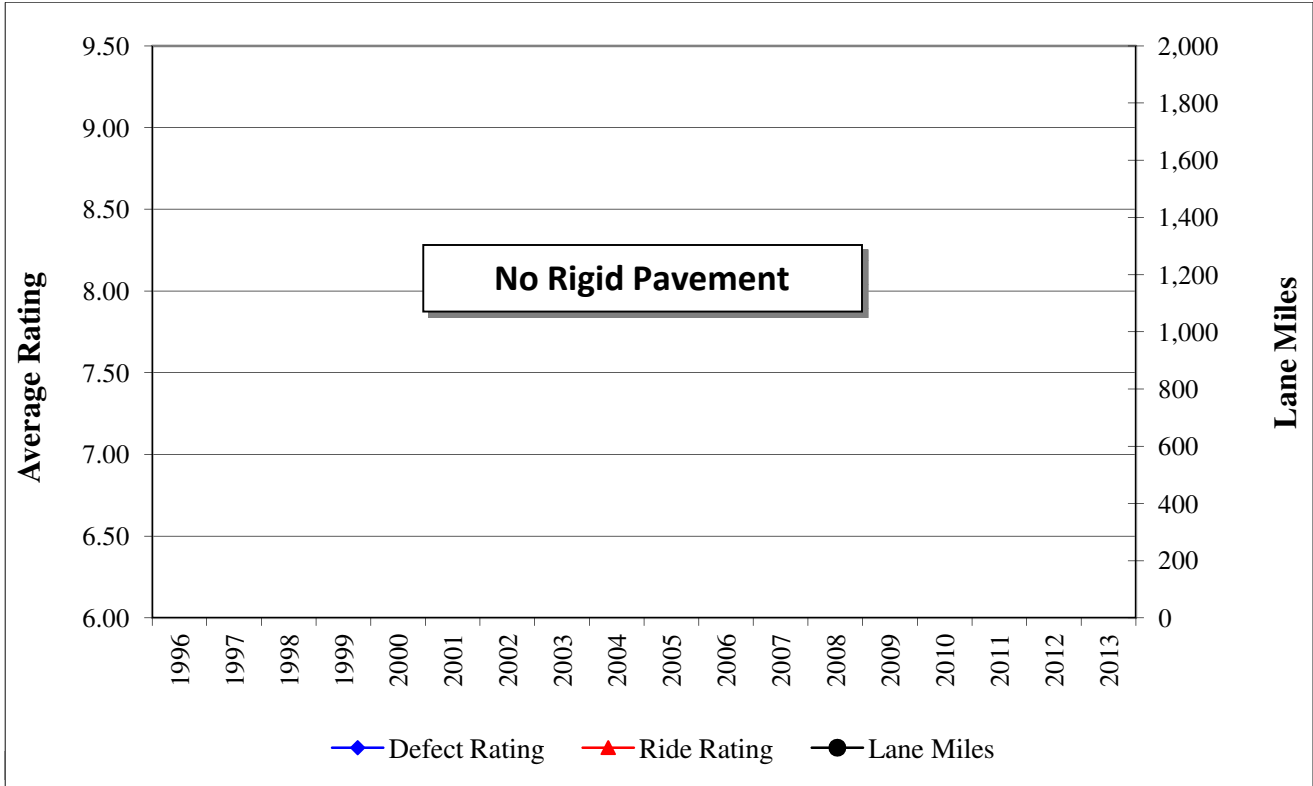
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	7.56	7.70	7.56	7.45	7.53	7.79	8.16	8.20	8.32
Ride Rating	7.91	7.84	7.75	7.26	7.20	7.36	7.81	7.75	7.03
Lane Miles	1167	1069	1065	1035	998	830	519	529	492

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	8.33	8.43	8.23	8.43	8.39	8.42	8.39	8.12	8.02
Ride Rating	7.12	7.19	7.22	7.26	7.30	7.29	7.32	7.37	7.28
Lane Miles	501	497	505	567	591	644	696	680	678

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.

Historical Distress Ratings - Turnpike System

All Districts



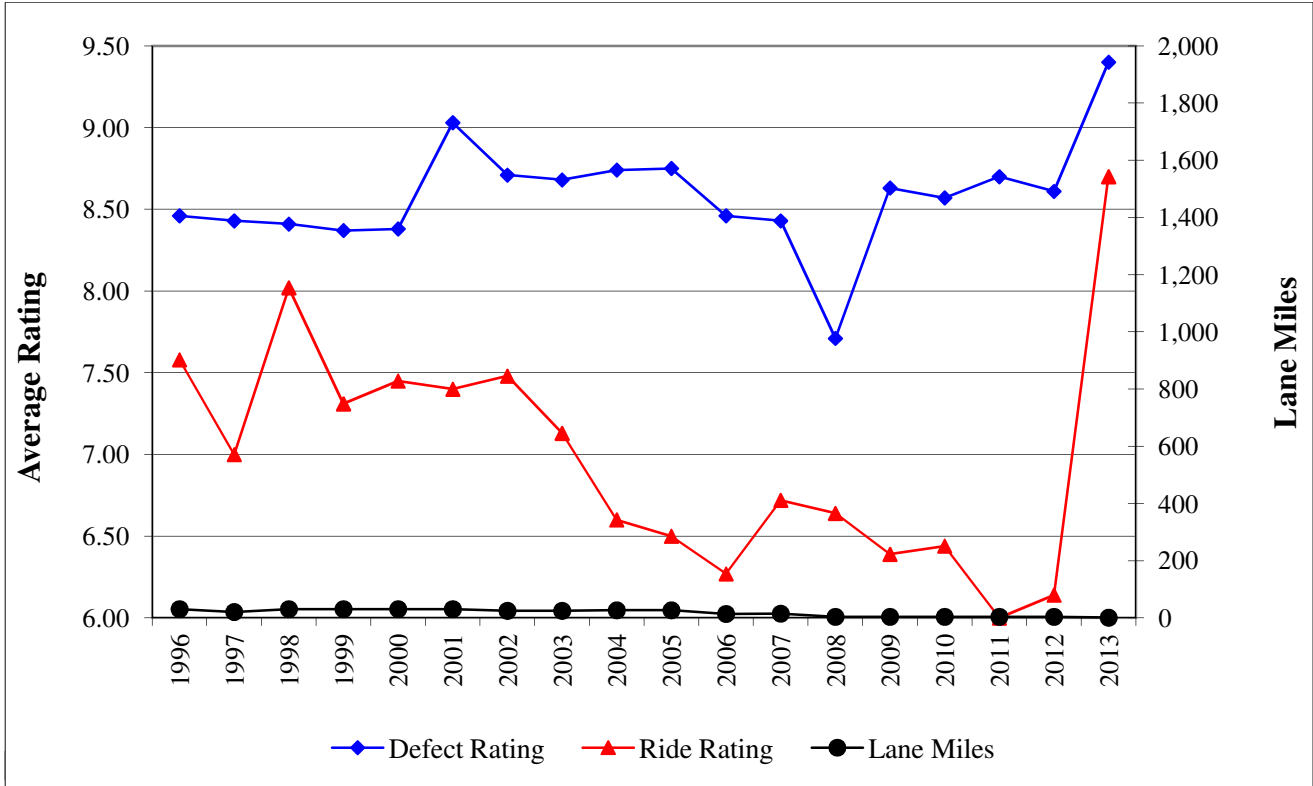
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating									
Ride Rating									
Lane Miles									

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating									
Ride Rating									
Lane Miles									

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.

Historical Distress Ratings - Toll System

All Districts

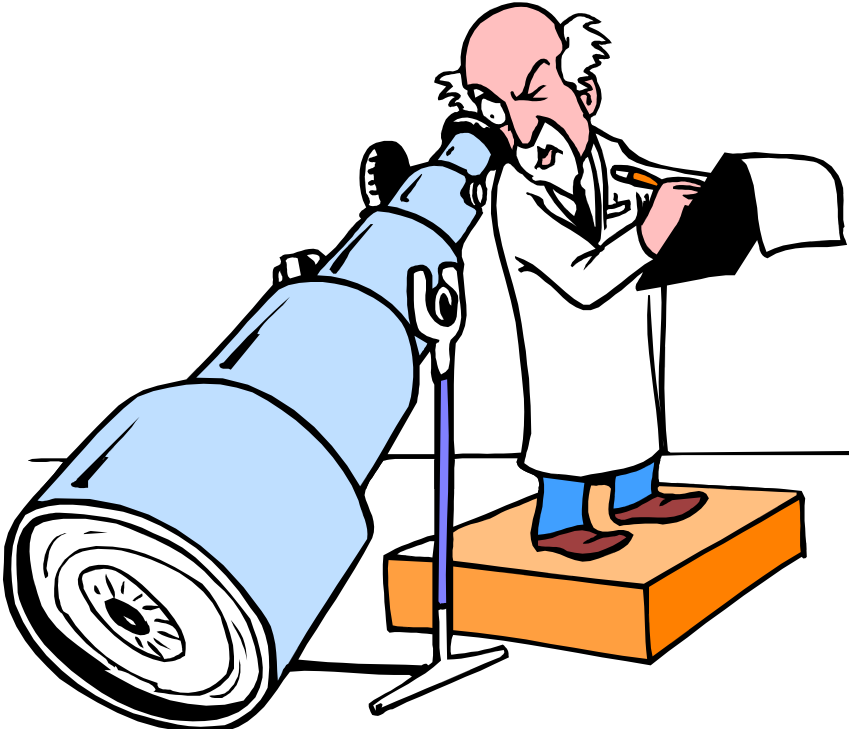


Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Defect Rating	8.46	8.43	8.41	8.37	8.38	9.03	8.71	8.68	8.74
Ride Rating	7.58	7.00	8.02	7.31	7.45	7.40	7.48	7.13	6.60
Lane Miles	31	21	31	31	31	31	25	25	27

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Defect Rating	8.75	8.46	8.43	7.71	8.63	8.57	8.70	8.61	9.40
Ride Rating	6.50	6.27	6.72	6.64	6.39	6.44	6.00	6.14	8.70
Lane Miles	27	14	15	4	4	4	4	4	1

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.

Section VII
Distress Ratings
Comparison
2012 vs. 2013



Section IX

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 - Rigid 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

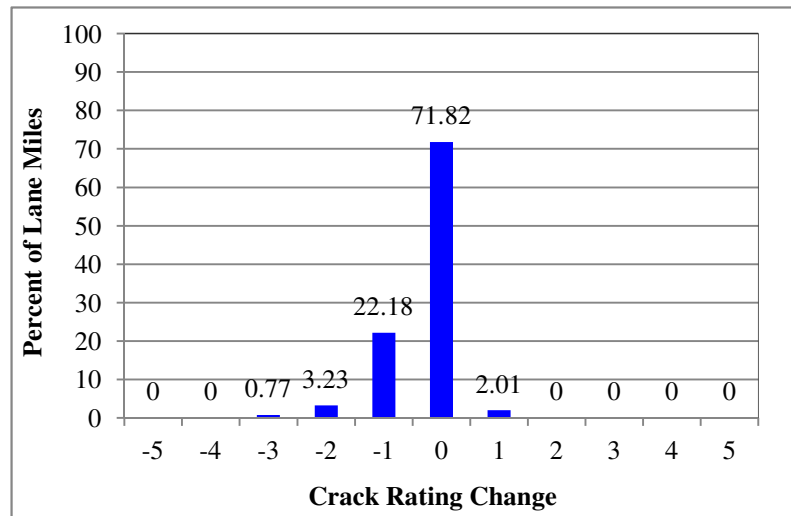
Type 8 - Under Construction

Type 9 - Structures or exceptions that are State-maintained

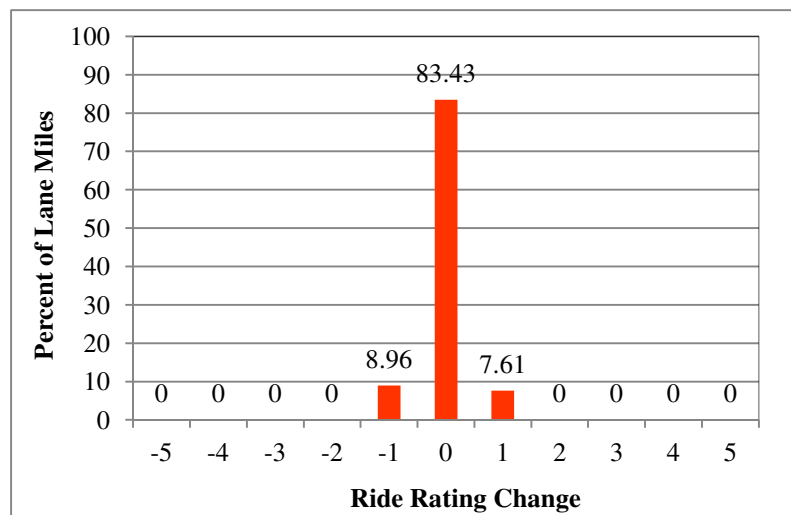
Defect and Ride Rating Changes

2012 compared to 2013

96% of the 2013 rated lane miles were within +/- 1 rating point of the 2012 rated lane miles



100% of the 2013 rated lanes miles were within +/- 1 point of the 2012 rated lane miles'



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.

Section VIII

Customer Service Survey



2013 Flexible 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: _____ City/State/Zip: _____
Phone: _____ E-mail: _____

*Please rate each of the following on the scale provided. **One** corresponds to **Very Poor**, and **Five** corresponds to **Excellent**.*

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?

What was the least useful/informative part of this report?

What changes do you recommend to improve this report?

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