State of Florida

Department of Transportation

Flexible Pavement Smoothness Acceptance Report

International Roughness Index Edition

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Executive Summary

The traveling public wants smooth, safe, and long lasting pavements. Initial pavement smoothness has been shown to improve the overall pavement performance. The Florida Department of Transportation (FDOT) has developed smoothness specifications for the acceptance of asphalt pavements on high-speed facilities that incorporate smoothness results obtained using high-speed inertial profilers.

This report is a synthesis of statewide project smoothness data collected from January 2005 through December 2011, including more than 9,000 miles and 93,000 lots. It provides the end user with basic statistics on the Ride quality of projects tested for Ride Acceptance (RA). The data analyzed herein consists of all lots greater than or equal to 0.01 mile and less than or equal to 0.1 mile in length.

This report expresses ride quality using International Roughness Index (IRI). This index was chosen to be used in future versions of FDOT's smoothness specifications because it is not influenced by differences in texture. Currently, FDOT's smoothness specifications use Ride Number (RN) to indicate the level of smoothness present on newly placed asphalt pavements. RN, however, is greatly influenced by differences in texture, especially dense graded versus open graded pavements.

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Introduction

According to National Cooperative Highway Research Program (NCHRP) project 1-31, conducted between February 1994 and December 1996 and published as NCHRP Web Document 1, "Smoothness Specifications for Pavements," the importance of pavement smoothness to the traveling public is undisputed. Smooth-riding pavements provide comfort, allow more efficient movement of vehicles over the roadway, raise optimum travel speeds, maintain traffic flow, reduce safety hazards to users and their vehicles, and may increase fuel efficiency, leading to lower traveling costs to roadway users. Pavement smoothness also imparts a positive reflection on the construction and maintanance proficiency of the owner agency, be it a state agency, city, county, or toll authority. In addition, American Association of State Highway and Transportation Officials (AASHTO) pavement design models suggest that initially smooth pavements last longer than initially rough pavements, though this has been never confirmed through long-term field investigation (AASHTO design equations are based on only 2 years of performance data).

FDOT RIDE QUALITY

Ride quality has been used by FDOT for evaluating new construction, overlay projects, special ride quality evaluations used for informational purposes, and for monitoring long-term pavement performance at the network level. To measure pavement ride quality, automated or manual methods can be used to measure roadway profiles from which a roughness value is calculated. Most states, including Florida, use high-speed inertial profilers to measure smoothness. The commonly used measures of roughness (or smoothness) are the International Roughness Index (IRI) and Ride Number (RN). Since 1998, FDOT has been using the RN for project level acceptance and evaluation in accordance with American Society for Testing and Materials (ASTM) E1489.

The FDOT has worked very closely with the Federal Highway Administration (FHWA) and the construction industry to improve pavement smoothness on Florida's state highways. To this end, a smoothness task team was created with representatives from FDOT, FHWA, and the paving industry to develop and implement non-contact profiler based smoothness specifications. Sub-article 330-12.4.6 of the FDOT Standard Specifications sets the requirements for Acceptance Testing for Pavement Smoothness by Laser Profiler.

RIDE QUALITY EVALUATION PROCESS

The Pavement Condition Unit of the State Materials (SMO) is responsible for conducting smoothness evaluation using an high-speed inertial laser profiler. Florida Test Method Fm 5-549, "Laser Profiler Roughness Evaluation," provides the method by which a pavement section is evaluated for smoothness using the longitudinal profiles recorded from each wheel path using as inertial profiler test vehicle.

The test vehicle is driven along the wheel paths of the pavement section to be evaluated and uses a system of three laser sensors and two accelerometers mounted in the front bumper of a full-size van. One laser is mounted in front of each tire to measure the longitudinal profile in the left and right wheel paths of the traveled surface. These 32 kHz lasers measure the vertical distance between the sensor and the pavement surface at a rate of 30 readings per inch as the vehicle travels at 60 mph. An accelerometer is mounted atop each of these two lasers to isolate the vehicle's vertical motion and thus provide a "zero" reference plane. The third laser, mounted equidistant from the two wheel path lasers, provides a height reading from which to calculate rut depth. The vehicle's data acquisition system uses the accelerometer data to provide a correction to the laser data, eliminating the effects of vehicle movement, and uses a Distance Measuring Instrument (DMI) connected to the vehicle transmission or axle to record the longitudinal distance traveled to summarize the corrected laser data into approximately 1 inch intervals. The exact interval is a function of each individual vehicle's DMI calibration settings. These summary values are then post-processed into exactly 6 inch intervals to generate a longitudinal profile for each wheel path as well as a combined value for both wheel paths, and an average rut depth.

The laser profilers currently in use by FDOT are manufactured by International Cybernetics Corporation (ICC) of Largo, Florida. All of these profilers are owned by FDOT with the exception of one unit that is provided through a contract with Applied Research Associates, Inc. (ARA). Currently, this profiler is the primary unit used by the SMO for the collection of project level smoothness data.

District project personnel may submit all requests for pavement evaluation using online request forms available at the SMO's website:

Intranet: http://materials.dot.state.fl.us/smo/pavement/pavementhome.htm
Internet: http://www.dot.state.fl.us/statematerialsoffice/pavement/index.shtm

WHAT IS THE INTERNATIONAL ROUGHNESS INDEX?

In "Guidelines for Conducting and Calibrating Road Roughness Measurements," published by the World Bank in 1986 as Technical Paper 46, International Roughness Index (IRI) is defined as a mathematical transform (a property) of a true profile describing surface roughness that causes vehicle vibration.

The underlying IRI model is a series of differential equations that relate the motions of a simulated quarter-car to a road profile. The IRI is computed as a linear accumulation of the simulated suspension motion, normalized by the length of the profile. IRI therefore has units of slope, typically "in/mi" or "m/km", and is computed from a single longitudinal wheel path profile. It has a demonstrated strong compatibility with the equipment used to develop pavement management systems. IRI is sensitive to wavelengths between 4 and 100 feet and is most sensitive to wavelengths of 7 and 50 feet.

All data is analyzed according to ASTM E1926, "Standard Practice for Computing International Roughness Index of Roads from Longitudinal Profile Measurements".

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Observations

Many roadway characteristics and construction practices are being monitored and included in the FDOT's smoothness database. Some of these have proven to be significant contributors to the ride quality of the pavements tested, and some factors have not been so valuable. Below is a summary list of key variables being monitored with a brief explanation of their effect on pavement smoothness.

- Average Annual Daily Traffic (AADT) - Analysis on Interstate pavements has shown that 150,000 AADT or greater exhibit higher average IRIs. Interstate pavements with AADT less than 150,000 have an average IRI of 48, compared to an IRI of 66 for Interstate pavements with AADT equal to or greater than 150,000.

- Material Transfer Device (MTD) Usage - Data shows that pavements placed using this equipment are typically smoother. When the MTD was used on the entire project, the average IRI is 46, versus 55 IRI when the MTD was not used at all. MTD usage on the Interstate system yielded even more benefit: 43 IRI with full-project MTD usage versus 55 for Interstate projects where the MTD was not used at all.

- Aggregate Type - Based on summary data from Florida projects, smooth pavements can be constructed regardless of the aggregate type used. However, on average, pavements using Granite aggregate in friction courses are smoother. Granite pavements have an average IRI of 48, compared to an IRI of 55 for Limestone pavements.

- Data by Year - Pavements placed in 2005 averaged 54 IRI, and have since shown a trend of improvement. Pavements placed in 2011 averaged 50 IRI.

- Binder Type - No significant difference was found when comparing the smoothness of pavements using polymer-modified binders in the friction course to pavements using other types of binders.

- Paving Time - No significant difference was found when comparing the smoothness of pavements placed at Night to those placed during the Day.

- System - No significant difference was found when comparing the smoothness of Primary and Interstate systems.

- Surface Type - No significant difference was found when comparing the smoothness, in terms of IRI, of pavements with open-graded friction courses and dense-graded friction courses.

In addition to these factors, there are many other variables that the data can be subdivided by. If any additional information is needed, please contact the following people.

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Ride Distribution of All Lots

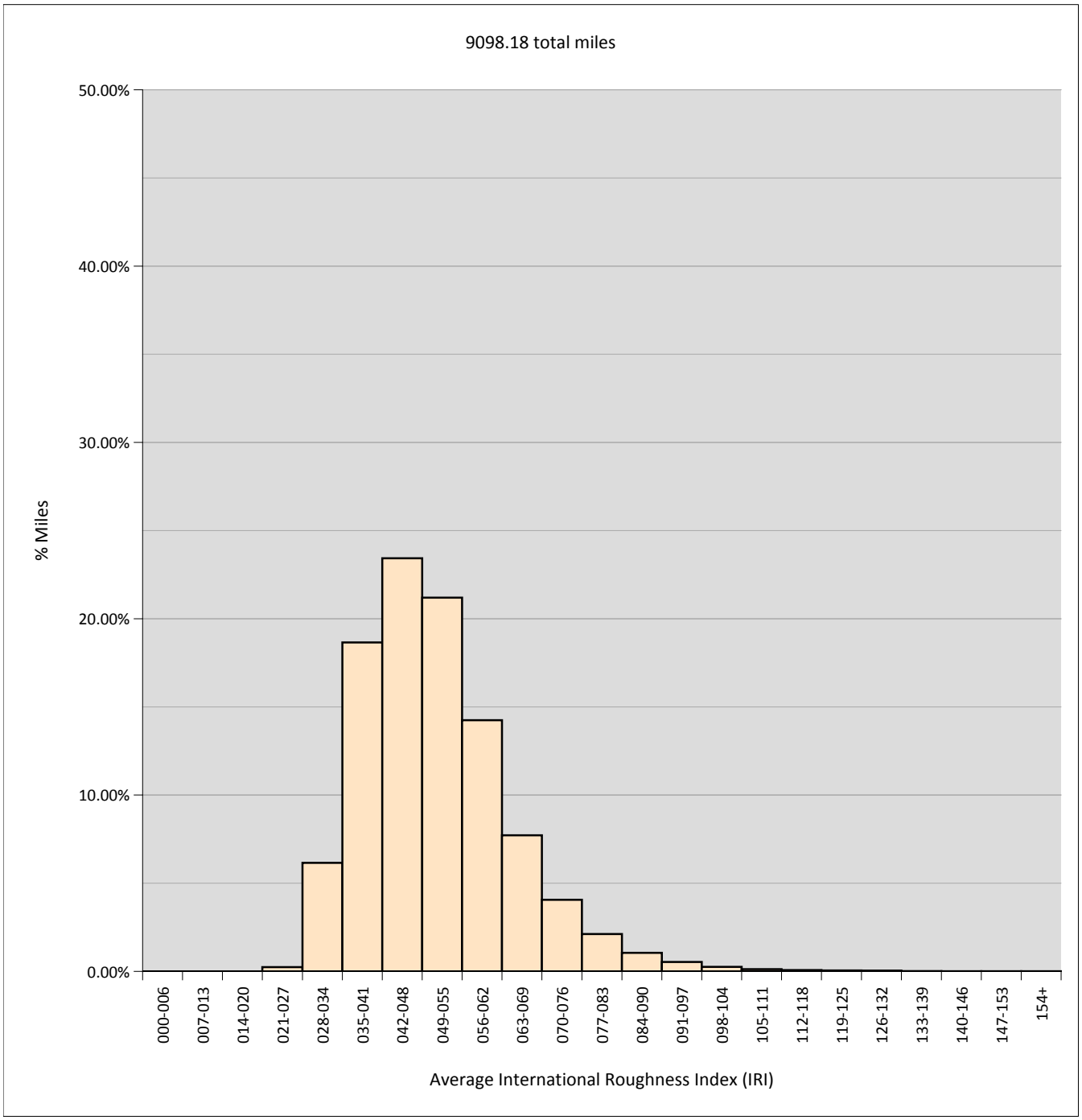

Figure 1: Statewide Ride Distribution, All Lots

Type	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
							Lots	Miles	% Miles
All Lots	93264	9098.18	20	51	356	13.1	775	63.50	0.70%

Ride Distribution by Friction Course and System

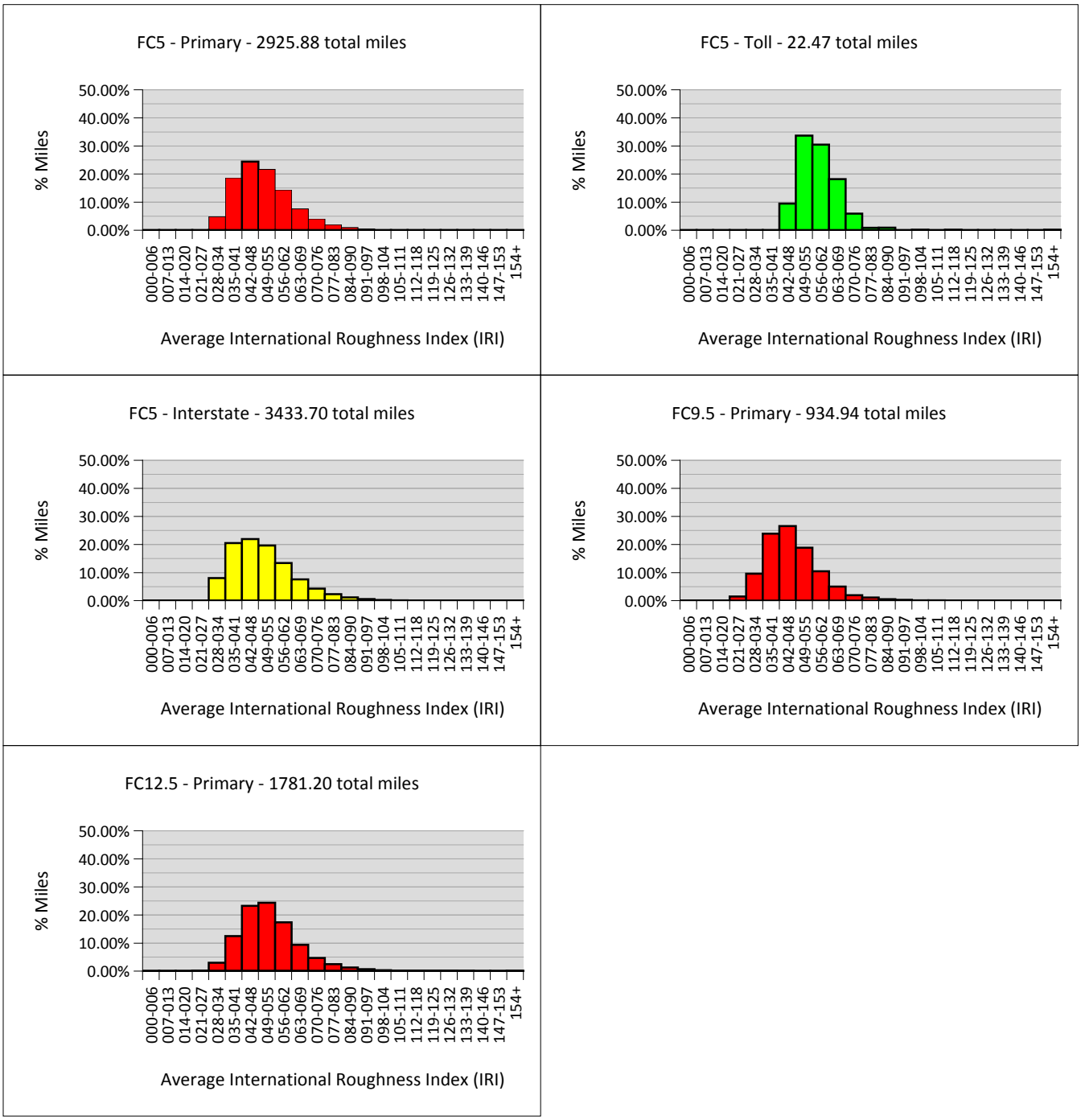

Figure 2: Statewide Ride Distribution by Friction Course and System

Friction Course	System	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
								Lots	Miles	% Miles
FC5	Primary	29880	2925.88	23	51	356	12.8	238	19.11	0.65%
FC5	Toll	243	22.47	42	58	228	9.8	4	0.10	0.43%
FC5	Interstate	35474	3433.70	25	50	166	13.4	275	22.73	0.66%
FC9.5	Primary	9519	934.94	23	47	204	11.8	45	3.42	0.37%
FC12.5	Primary	18148	1781.20	20	53	207	13.2	213	18.14	1.02%

Table 1: Statewide Statistical Summary by Friction Course, System, Year, and Aggregate

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	2005	Granite	1184	117.11	31	51	127	10.2	4	0.36	0.31%
FC5	Primary	2005	Limestone	929	87.51	39	60	134	10.8	16	0.95	1.08%
FC5	Primary	2006	Granite	1477	144.73	34	57	269	12.0	17	1.43	0.99%
FC5	Primary	2006	Limestone	1750	171.24	32	54	356	11.2	24	1.69	0.99%
FC5	Primary	2007	Granite	3744	369.77	28	46	98	9.5	1	0.10	0.03%
FC5	Primary	2007	Limestone	3049	300.31	30	58	163	13.8	50	4.14	1.38%
FC5	Primary	2008	Granite	3206	314.84	27	50	141	9.9	7	0.32	0.10%
FC5	Primary	2008	Limestone	1433	139.66	35	55	177	13.8	24	1.88	1.35%
FC5	Primary	2009	Granite	3615	352.37	24	47	164	12.0	15	1.19	0.34%
FC5	Primary	2009	Limestone	1813	178.34	33	57	144	13.3	24	2.18	1.22%
FC5	Primary	2010	Granite	2656	257.75	23	43	106	10.7	3	0.15	0.06%
FC5	Primary	2010	Limestone	1503	147.16	32	53	127	12.0	11	0.95	0.65%
FC5	Primary	2011	Granite	1975	193.55	26	47	131	10.1	4	0.24	0.13%
FC5	Primary	2011	Limestone	1432	140.77	30	53	212	16.0	38	3.52	2.50%
FC5	Toll	2006	Granite	207	19.47	42	57	85	7.4	0	0.00	0.00%
FC5	Toll	2006	Limestone	36	3.00	47	67	228	16.4	4	0.10	3.20%
FC5	Interstate	2005	Granite	870	82.94	29	53	100	10.4	2	0.13	0.15%
FC5	Interstate	2005	Limestone	2205	212.41	28	53	127	14.2	15	1.23	0.58%
FC5	Interstate	2006	Granite	2669	261.44	28	53	142	13.2	28	2.74	1.05%
FC5	Interstate	2006	Limestone	1420	138.50	42	66	141	12.4	42	3.90	2.82%
FC5	Interstate	2007	Granite	4190	410.21	28	47	127	10.1	9	0.65	0.16%
FC5	Interstate	2007	Limestone	1721	164.78	30	61	166	14.1	29	2.09	1.27%
FC5	Interstate	2008	Granite	3640	355.96	25	44	110	11.4	7	0.56	0.16%
FC5	Interstate	2008	Limestone	3500	333.75	31	57	151	13.9	71	5.96	1.79%
FC5	Interstate	2009	Granite	3560	343.91	27	45	130	10.4	6	0.47	0.14%
FC5	Interstate	2009	Limestone	2231	215.02	32	50	117	12.2	14	1.15	0.54%
FC5	Interstate	2010	Granite	3688	359.56	27	42	99	9.9	2	0.12	0.03%
FC5	Interstate	2010	Limestone	2038	195.02	35	56	146	12.7	36	2.91	1.49%
FC5	Interstate	2011	Granite	1499	145.50	27	47	99	10.6	3	0.13	0.09%
FC5	Interstate	2011	Limestone	2243	214.71	29	53	119	10.7	11	0.70	0.32%
FC9.5	Primary	2005	Granite	625	60.77	33	55	147	11.5	6	0.32	0.52%
FC9.5	Primary	2006	Limestone	919	89.86	29	47	189	12.8	8	0.63	0.70%
FC9.5	Primary	2007	Granite	980	96.45	28	47	105	9.8	3	0.16	0.17%
FC9.5	Primary	2008	Granite	1319	130.15	25	41	85	7.4	0	0.00	0.00%
FC9.5	Primary	2008	Limestone	918	89.06	31	55	111	10.9	3	0.19	0.21%
FC9.5	Primary	2009	Granite	1560	154.14	25	46	121	10.9	8	0.80	0.52%
FC9.5	Primary	2009	Limestone	464	45.63	34	53	127	9.0	1	0.06	0.13%
FC9.5	Primary	2010	Granite	751	74.22	25	45	136	11.4	3	0.30	0.40%

Table 1: Statewide Statistical Summary by Friction Course, System, Year, and Aggregate, continued

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC9.5	Primary	2010	Limestone	502	49.27	29	48	89	9.2	0	0.00	0.00%
FC9.5	Primary	2011	Granite	964	94.96	23	40	101	12.2	3	0.27	0.28%
FC9.5	Primary	2011	Limestone	69	6.16	43	71	123	16.2	7	0.49	7.89%
FC12.5	Primary	2005	Granite	606	59.51	41	68	207	17.8	29	2.57	4.32%
FC12.5	Primary	2005	Limestone	486	47.94	33	46	70	6.0	0	0.00	0.00%
FC12.5	Primary	2006	Granite	1653	162.40	24	52	161	10.7	13	0.88	0.54%
FC12.5	Primary	2006	Limestone	1041	101.96	35	56	153	12.4	17	1.53	1.50%
FC12.5	Primary	2007	Granite	1841	180.66	27	57	127	12.1	17	1.33	0.74%
FC12.5	Primary	2007	Limestone	247	24.03	37	53	115	11.2	3	0.15	0.62%
FC12.5	Primary	2008	Granite	2535	249.74	26	48	109	10.9	4	0.34	0.14%
FC12.5	Primary	2008	Limestone	490	47.62	32	64	148	19.7	42	3.97	8.34%
FC12.5	Primary	2009	Granite	1955	191.60	26	52	121	12.1	11	0.97	0.51%
FC12.5	Primary	2009	Limestone	136	13.53	42	60	96	10.2	1	0.10	0.74%
FC12.5	Primary	2010	Granite	3843	377.00	20	53	158	12.4	26	1.92	0.51%
FC12.5	Primary	2010	Limestone	42	4.10	41	85	114	19.6	16	1.58	38.56%
FC12.5	Primary	2011	Granite	2516	246.93	24	53	159	12.8	25	2.16	0.88%
FC12.5	Primary	2011	Limestone	280	27.65	30	45	150	12.9	6	0.43	1.55%

Aggregate Type of "Mixed" has been excluded from this report.

Table 2: Statewide Statistical Summary by Friction Course, System, Aggregate, and Material Transfer Device Status

Friction Course	System	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Fully Used	5428	532.65	23	43	131	10.7	11	1.04	0.20%
FC5	Primary	Granite	Not Used	2027	194.71	32	53	164	11.5	10	0.60	0.31%
FC5	Primary	Limestone	Fully Used	2998	295.27	32	52	117	11.5	16	1.35	0.46%
FC5	Primary	Limestone	Not Used	949	92.17	35	56	144	13.6	16	1.34	1.45%
FC5	Interstate	Granite	Fully Used	4735	458.70	27	41	130	8.9	3	0.17	0.04%
FC5	Interstate	Granite	Not Used	1203	116.04	31	50	99	10.1	3	0.13	0.11%
FC5	Interstate	Limestone	Fully Used	2244	218.63	29	47	115	9.3	4	0.21	0.10%
FC5	Interstate	Limestone	Not Used	1624	154.54	36	59	146	13.7	43	3.64	2.36%
FC9.5	Primary	Granite	Fully Used	2208	218.35	23	42	136	11.8	10	0.96	0.44%
FC9.5	Primary	Granite	Not Used	549	54.03	26	47	101	8.1	1	0.10	0.19%
FC9.5	Primary	Limestone	Fully Used	404	39.78	29	50	127	10.1	1	0.06	0.15%
FC9.5	Primary	Limestone	Not Used	80	7.68	30	48	89	10.8	0	0.00	0.00%
FC12.5	Primary	Granite	Fully Used	3536	346.93	20	50	138	11.2	14	1.13	0.33%
FC12.5	Primary	Granite	Not Used	3461	339.20	25	56	159	12.3	32	2.67	0.79%
FC12.5	Primary	Limestone	Fully Used	236	23.31	34	53	96	12.6	1	0.10	0.43%
FC12.5	Primary	Limestone	Not Used	32	3.16	77	95	114	8.8	16	1.58	50.00%
All	All	Granite & Limestone	Fully Used	21789	2133.62	20	45	138	11.3	60	5.03	0.24%
All	All	Granite & Limestone	Not Used	9925	961.53	25	55	164	12.7	121	10.07	1.05%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

Table 3: Statewide Statistical Summary by Friction Course, System, Aggregate, and Paving Time

Friction Course	System	Aggregate	Paving Time	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Day	9683	950.72	25	46	110	10.2	10	0.57	0.06%
FC5	Primary	Granite	Night	3299	318.89	31	51	164	10.5	13	0.74	0.23%
FC5	Primary	Limestone	Day	5817	573.16	30	54	212	12.6	63	5.51	0.96%
FC5	Primary	Limestone	Night	2390	232.20	35	61	177	14.1	66	5.42	2.33%
FC5	Toll	Granite	Night	207	19.47	42	57	85	7.4	0	0.00	0.00%
FC5	Toll	Limestone	Night	36	3.00	47	67	228	16.4	4	0.10	3.20%
FC5	Interstate	Granite	Day	2556	251.37	28	39	107	7.4	1	0.04	0.02%
FC5	Interstate	Granite	Night	10677	1034.56	25	45	111	10.7	14	0.90	0.09%
FC5	Interstate	Limestone	Day	3436	332.28	30	54	134	9.7	17	1.30	0.39%
FC5	Interstate	Limestone	Night	7767	740.09	32	59	166	14.5	133	10.99	1.49%
FC9.5	Primary	Granite	Day	3511	346.40	23	44	136	10.8	9	0.73	0.21%
FC9.5	Primary	Granite	Night	1033	101.67	26	47	104	10.8	3	0.30	0.30%
FC9.5	Primary	Limestone	Day	2473	241.81	29	51	189	11.2	8	0.55	0.23%
FC9.5	Primary	Limestone	Night	307	29.24	31	56	123	16.8	11	0.82	2.79%
FC12.5	Primary	Granite	Day	11027	1085.12	24	52	161	11.6	56	4.51	0.42%
FC12.5	Primary	Granite	Night	1039	100.19	20	59	138	16.3	26	2.24	2.24%
FC12.5	Primary	Limestone	Day	1456	143.40	30	56	133	13.2	35	3.25	2.27%
FC12.5	Primary	Limestone	Night	139	12.86	36	57	153	17.6	7	0.44	3.44%
All	All	Granite & Limestone	Day	39959	3924.26	23	49	212	11.9	199	16.47	0.42%
All	All	Granite & Limestone	Night	26894	2592.16	20	52	228	14.2	277	21.94	0.85%

Aggregate Type of "Mixed" has been excluded from this report.

Paving Times of "Both" and "Unknown" have been excluded from this report.

Table 4: Lane Miles Tested Per District by Friction Course and System

Total Lane Miles Tested								
Friction Course	System	District 1	District 2	District 3	District 4	District 5	District 6	District 7
FC5	Interstate	655.08	508.88	283.05	855.02	779.35	54.71	297.62
FC5	Toll	0.00	0.00	0.00	0.00	22.47	0.00	0.00
FC5	Primary	550.10	631.49	293.41	387.54	715.43	89.39	258.53
FC9.5	Primary	188.19	80.65	327.47	107.22	167.11	6.16	58.13
FC12.5	Primary	472.05	767.76	156.21	32.46	233.04	11.37	108.31
Total		**1,865.41**	**1,988.78**	**1,060.14**	**1,382.24**	**1,917.40**	**161.63**	**722.58**

Table 5: Statewide Pavement Smoothness Summary by Friction Course, System, and Year

Friction Course	System	Year	Total Projects	Total Miles	IRI ≤ 55		IRI ≥ 96	
					Miles	% Miles	Miles	% Miles
FC5	Primary	2005	15	204.62	118.73	58.03%	1.31	0.64%
FC5	Primary	2006	20	315.97	187.06	59.20%	3.12	0.99%
FC5	Primary	2007	35	670.09	447.95	66.85%	4.24	0.63%
FC5	Primary	2008	31	454.50	320.79	70.58%	2.21	0.49%
FC5	Primary	2009	38	541.48	388.28	71.71%	3.36	0.62%
FC5	Primary	2010	24	404.91	321.19	79.32%	1.11	0.27%
FC5	Primary	2011	29	334.32	258.58	77.34%	3.77	1.13%
FC5	Toll	2006	2	22.47	9.70	43.19%	0.10	0.43%
FC5	Interstate	2005	9	295.36	179.02	60.61%	1.36	0.46%
FC5	Interstate	2006	12	399.94	180.76	45.20%	6.64	1.66%
FC5	Interstate	2007	18	574.98	407.52	70.87%	2.75	0.48%
FC5	Interstate	2008	24	689.71	493.34	71.53%	6.52	0.94%
FC5	Interstate	2009	22	558.93	449.30	80.38%	1.62	0.29%
FC5	Interstate	2010	17	554.57	438.91	79.14%	3.03	0.55%
FC5	Interstate	2011	11	360.21	261.27	72.53%	0.83	0.23%
FC9.5	Primary	2005	8	91.81	65.27	71.09%	0.53	0.58%
FC9.5	Primary	2006	10	103.10	81.52	79.07%	0.63	0.61%
FC9.5	Primary	2007	6	96.45	79.05	81.96%	0.16	0.17%
FC9.5	Primary	2008	13	219.21	172.52	78.70%	0.19	0.09%
FC9.5	Primary	2009	13	199.77	161.30	80.74%	0.86	0.43%
FC9.5	Primary	2010	8	123.49	104.64	84.73%	0.30	0.24%
FC9.5	Primary	2011	8	101.12	86.75	85.80%	0.75	0.74%
FC12.5	Primary	2005	9	107.45	59.73	55.59%	2.57	2.39%
FC12.5	Primary	2006	35	282.43	179.25	63.47%	2.41	0.85%
FC12.5	Primary	2007	22	215.79	107.47	49.80%	1.58	0.73%
FC12.5	Primary	2008	27	306.72	223.81	72.97%	4.31	1.41%
FC12.5	Primary	2009	23	213.12	136.83	64.20%	1.18	0.55%
FC12.5	Primary	2010	32	381.10	241.01	63.24%	3.50	0.92%
FC12.5	Primary	2011	27	274.58	178.75	65.10%	2.59	0.94%
All	All	2005	41	699.23	422.74	60.46%	5.76	0.82%
All	All	2006	78	1123.91	638.30	56.79%	12.89	1.15%
All	All	2007	80	1557.31	1041.99	66.91%	8.73	0.56%
All	All	2008	94	1670.14	1210.46	72.48%	13.22	0.79%
All	All	2009	94	1513.30	1135.70	75.05%	7.02	0.46%
All	All	2010	81	1464.07	1105.75	75.53%	7.93	0.54%
All	All	2011	73	1070.23	785.36	73.38%	7.94	0.74%

Table 6: Statewide Statistical Summary by Contractor, Friction Course, Aggregate, and Material Transfer Device Status

Contractor	Friction Course	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
A.P.A.C.	FC5	Granite	Fully Used	1530	150.94	28	41	88	7.8	0	0.00	0.00%
A.P.A.C.	FC5	Granite	Not Used	625	59.67	32	54	164	10.6	2	0.04	0.06%
A.P.A.C.	FC5	Limestone	Not Used	473	45.14	36	55	93	9.3	0	0.00	0.00%
A.P.A.C.	FC9.5	Granite	Fully Used	124	12.27	29	42	63	6.9	0	0.00	0.00%
A.P.A.C.	FC9.5	Granite	Not Used	41	3.83	39	49	74	6.9	0	0.00	0.00%
A.P.A.C.	FC12.5	Granite	Fully Used	326	31.56	31	50	130	8.6	2	0.03	0.08%
A.P.A.C.	FC12.5	Granite	Not Used	930	90.46	28	57	135	10.2	2	0.11	0.12%
Ajax Paving Industry	FC5	Granite	Fully Used	3117	301.47	27	42	107	8.7	2	0.15	0.05%
Ajax Paving Industry	FC5	Granite	Not Used	510	48.60	33	54	99	10.7	3	0.13	0.27%
Ajax Paving Industry	FC5	Limestone	Fully Used	626	61.56	32	43	94	7.4	0	0.00	0.00%
Ajax Paving Industry	FC9.5	Granite	Not Used	101	9.90	26	44	79	10.9	0	0.00	0.00%
Ajax Paving Industry	FC12.5	Granite	Fully Used	485	47.57	20	46	101	12.4	1	0.10	0.21%
Ajax Paving Industry	FC12.5	Granite	Not Used	73	7.23	25	35	64	8.8	0	0.00	0.00%
Anderson Columbia	FC5	Granite	Fully Used	2028	199.60	25	40	95	8.1	0	0.00	0.00%
Anderson Columbia	FC5	Granite	Not Used	330	31.73	31	42	71	6.8	0	0.00	0.00%
Anderson Columbia	FC9.5	Granite	Fully Used	395	38.64	26	47	121	12.5	5	0.47	1.21%
Anderson Columbia	FC12.5	Granite	Fully Used	1352	132.98	32	51	116	10.2	4	0.31	0.23%
Anderson Columbia	FC12.5	Granite	Not Used	593	58.84	28	51	98	13.0	3	0.30	0.51%
Asphalt Group, Inc.	FC5	Limestone	Not Used	670	64.46	42	59	144	10.7	12	0.92	1.42%
Atlantic Coast	FC5	Granite	Fully Used	482	45.71	24	38	90	7.8	0	0.00	0.00%
Atlantic Coast	FC12.5	Granite	Fully Used	42	4.09	36	54	80	9.9	0	0.00	0.00%
Better Roads Inc.	FC5	Limestone	Fully Used	132	13.10	36	47	66	5.5	0	0.00	0.00%
Better Roads Inc.	FC5	Limestone	Not Used	350	33.65	39	50	84	7.5	0	0.00	0.00%
Better Roads Inc.	FC9.5	Limestone	Not Used	12	1.17	40	55	89	16.7	0	0.00	0.00%
Better Roads Inc.	FC12.5	Limestone	Fully Used	16	1.57	36	50	79	11.8	0	0.00	0.00%
C. W. Roberts Contracting	FC5	Granite	Fully Used	811	80.29	27	37	94	7.1	0	0.00	0.00%
C. W. Roberts Contracting	FC5	Limestone	Fully Used	67	6.39	35	49	77	8.6	0	0.00	0.00%
C. W. Roberts Contracting	FC9.5	Granite	Fully Used	847	84.08	23	37	100	10.7	2	0.20	0.24%
C. W. Roberts Contracting	FC12.5	Granite	Fully Used	758	74.59	25	47	111	10.8	3	0.30	0.40%
C. W. Roberts Contracting	FC12.5	Limestone	Fully Used	74	7.28	34	41	61	5.1	0	0.00	0.00%
Community Asphalt Corp.	FC5	Limestone	Fully Used	1982	196.19	29	54	115	10.9	9	0.64	0.33%
Community Asphalt Corp.	FC5	Limestone	Not Used	239	21.43	37	59	146	15.5	10	0.64	2.98%
Community Asphalt Corp.	FC12.5	Limestone	Fully Used	136	13.53	42	60	96	10.2	1	0.10	0.74%
D.A.B. Constructors	FC5	Granite	Fully Used	104	10.07	32	42	66	5.8	0	0.00	0.00%
D.A.B. Constructors	FC5	Granite	Not Used	509	49.81	34	51	103	8.7	1	0.10	0.20%
D.A.B. Constructors	FC5	Limestone	Not Used	287	28.57	35	46	66	5.3	0	0.00	0.00%
D.A.B. Constructors	FC12.5	Granite	Not Used	282	27.72	40	56	121	8.6	3	0.26	0.92%
Dickerson Asphalt	FC5	Limestone	Fully Used	1086	105.64	32	42	89	6.3	0	0.00	0.00%

Table 6: Statewide Statistical Summary by Contractor, Friction Course, Aggregate, and Material Transfer Device Status, continued

Contractor	Friction Course	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
Dickerson Asphalt	FC9.5	Limestone	Fully Used	146	14.20	34	54	127	10.7	1	0.06	0.43%
Dickerson Asphalt	FC12.5	Limestone	Fully Used	10	0.94	41	54	73	10.8	0	0.00	0.00%
Duval Asphalt	FC5	Granite	Fully Used	274	25.71	38	50	97	8.6	1	0.05	0.19%
Duval Asphalt	FC12.5	Granite	Fully Used	82	8.02	35	47	75	6.2	0	0.00	0.00%
Duval Asphalt	FC12.5	Granite	Not Used	50	4.77	59	81	114	12.9	7	0.62	12.89%
GAC Contractors	FC5	Granite	Fully Used	260	25.61	23	34	60	5.7	0	0.00	0.00%
General Asphalt Company	FC5	Limestone	Fully Used	133	13.04	48	67	117	10.8	4	0.31	2.39%
General Asphalt Company	FC5	Limestone	Not Used	53	5.03	55	78	107	10.6	5	0.50	9.93%
Halifax Paving Inc.	FC5	Granite	Not Used	554	54.16	32	53	101	10.4	1	0.08	0.16%
Hardrives of Delray	FC12.5	Limestone	Not Used	32	3.16	77	95	114	8.8	16	1.58	50.00%
Hubbard Construction	FC5	Granite	Fully Used	40	3.81	37	49	70	8.3	0	0.00	0.00%
Hubbard Construction	FC5	Granite	Not Used	70	6.10	37	62	106	16.0	3	0.23	3.79%
Hubbard Construction	FC5	Limestone	Fully Used	238	23.09	33	52	108	11.7	4	0.40	1.73%
J. W. Cheatham, LLC.	FC5	Limestone	Fully Used	114	10.27	42	55	84	6.8	0	0.00	0.00%
J. W. Cheatham, LLC.	FC9.5	Limestone	Not Used	16	1.43	42	51	67	7.2	0	0.00	0.00%
Jones Construction	FC9.5	Granite	Not Used	128	12.80	38	50	101	7.2	1	0.10	0.78%
Lane Construction Corp.	FC5	Granite	Fully Used	186	18.16	36	59	91	10.8	0	0.00	0.00%
Lane Construction Corp.	FC5	Limestone	Fully Used	96	9.59	38	53	82	9.1	0	0.00	0.00%
Lane Construction Corp.	FC9.5	Granite	Not Used	166	16.44	36	45	71	5.4	0	0.00	0.00%
Lane Construction Corp.	FC12.5	Granite	Fully Used	138	13.58	34	67	138	14.7	4	0.40	2.95%
Lane Construction Corp.	FC12.5	Granite	Not Used	70	6.65	50	71	159	12.5	5	0.42	6.28%
Middlesex Corp.	FC5	Granite	Not Used	164	15.70	32	50	106	11.0	1	0.02	0.13%
Middlesex Corp.	FC9.5	Granite	Not Used	113	11.07	34	47	77	8.6	0	0.00	0.00%
Middlesex Corp.	FC12.5	Granite	Not Used	115	11.04	46	63	100	8.3	1	0.04	0.40%
Orlando Paving Company	FC5	Granite	Fully Used	155	15.48	42	72	110	14.8	9	0.89	5.75%
P & S Paving	FC5	Granite	Not Used	150	14.38	36	53	87	9.2	0	0.00	0.00%
P & S Paving	FC12.5	Granite	Fully Used	253	24.75	34	48	84	7.6	0	0.00	0.00%
P & S Paving	FC12.5	Granite	Not Used	388	37.65	37	54	99	10.0	1	0.08	0.21%
Panhandle Grading & Paving	FC9.5	Granite	Fully Used	452	44.86	25	46	136	13.1	3	0.30	0.67%
Peavy and Sons	FC5	Granite	Fully Used	726	70.15	26	43	130	7.9	1	0.01	0.02%
Peavy and Sons	FC9.5	Granite	Fully Used	390	38.50	25	44	76	8.3	0	0.00	0.00%
Peavy and Sons	FC12.5	Granite	Fully Used	100	9.81	39	54	73	7.9	0	0.00	0.00%
Rainey Asphalt	FC5	Granite	Not Used	84	8.36	37	46	67	6.3	0	0.00	0.00%
Ranger Construction	FC5	Granite	Fully Used	324	31.83	34	52	131	9.8	1	0.10	0.31%
Ranger Construction	FC5	Granite	Not Used	178	16.93	34	59	124	15.0	2	0.13	0.77%
Ranger Construction	FC5	Limestone	Fully Used	750	73.37	36	53	90	8.4	0	0.00	0.00%
Ranger Construction	FC5	Limestone	Not Used	177	17.30	35	59	105	16.4	9	0.84	4.88%
Ranger Construction	FC9.5	Limestone	Fully Used	258	25.57	29	47	78	8.9	0	0.00	0.00%

Table 6: Statewide Statistical Summary by Contractor, Friction Course, Aggregate, and Material Transfer Device Status, continued

Contractor	Friction Course	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
Ranger Construction	FC9.5	Limestone	Not Used	52	5.08	30	45	76	8.5	0	0.00	0.00%
Ranger Construction	FC12.5	Granite	Not Used	70	6.87	48	62	78	6.3	0	0.00	0.00%
S. T. Wooten Corp.	FC5	Limestone	Not Used	76	7.02	41	69	115	14.3	4	0.31	4.35%
Sonny Riley	FC5	Granite	Not Used	56	5.31	37	52	82	9.9	0	0.00	0.00%
Steven Counts Inc.	FC12.5	Granite	Not Used	28	2.63	45	77	158	27.2	4	0.34	12.93%
Superior Asphalt Inc.	FC12.5	Granite	Not Used	597	58.90	35	54	132	10.2	4	0.31	0.53%
Tampa Pavement Constructors	FC5	Granite	Fully Used	126	12.52	37	49	67	6.0	0	0.00	0.00%
Weekley Asphalt Paving	FC5	Limestone	Fully Used	18	1.66	57	74	113	14.1	3	0.21	12.44%
Weekley Asphalt Paving	FC5	Limestone	Not Used	248	24.12	44	74	123	14.2	19	1.78	7.37%
Whitehurst	FC12.5	Granite	Not Used	265	26.43	45	63	98	9.9	2	0.20	0.76%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

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Ride Distribution of All Lots

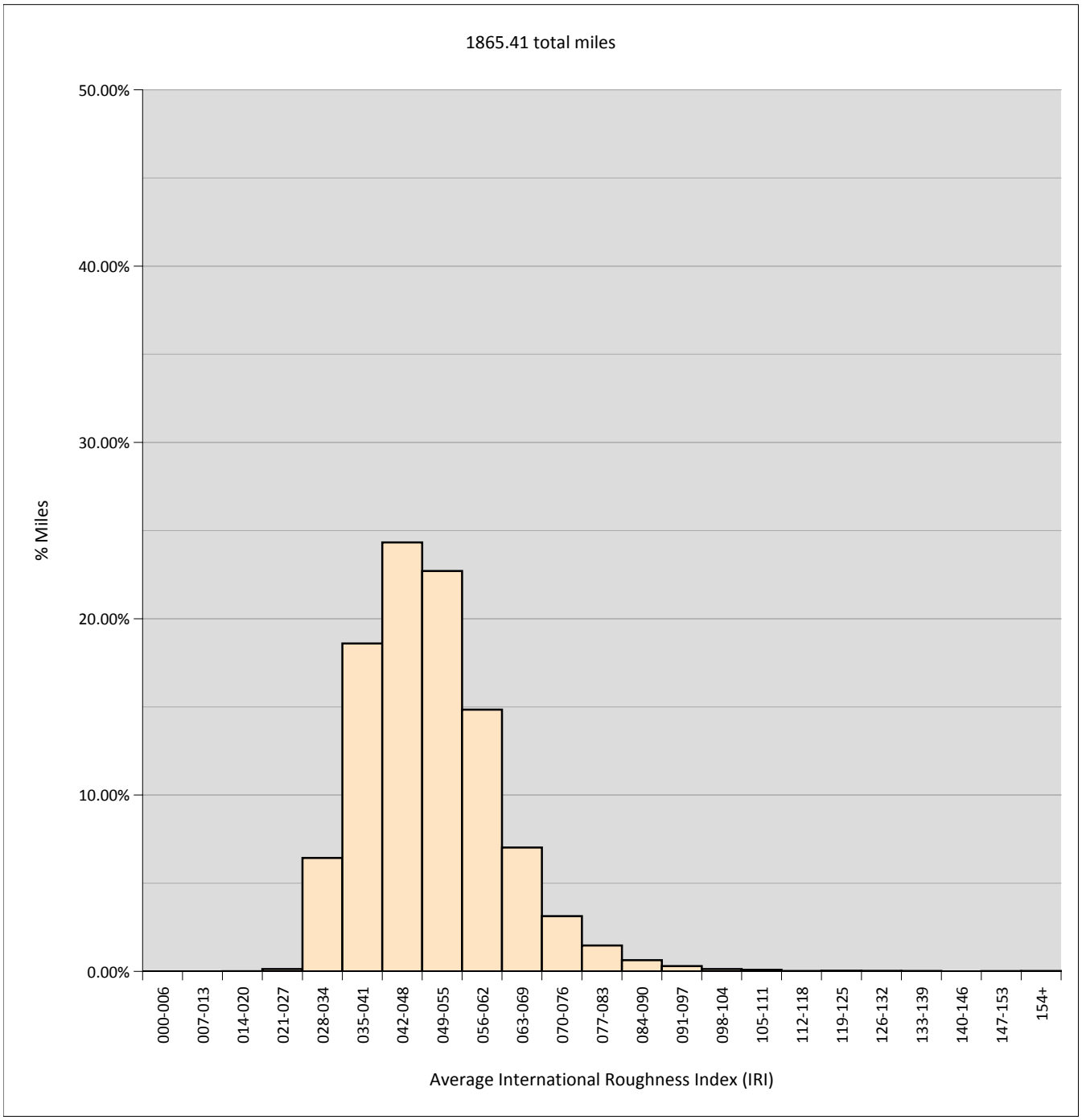

Figure 3: District 1 Ride Distribution, All Lots

Type	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
							Lots	Miles	% Miles
All Lots	19179	1865.41	20	50	207	12.1	99	7.50	0.40%

Ride Distribution by Friction Course and System

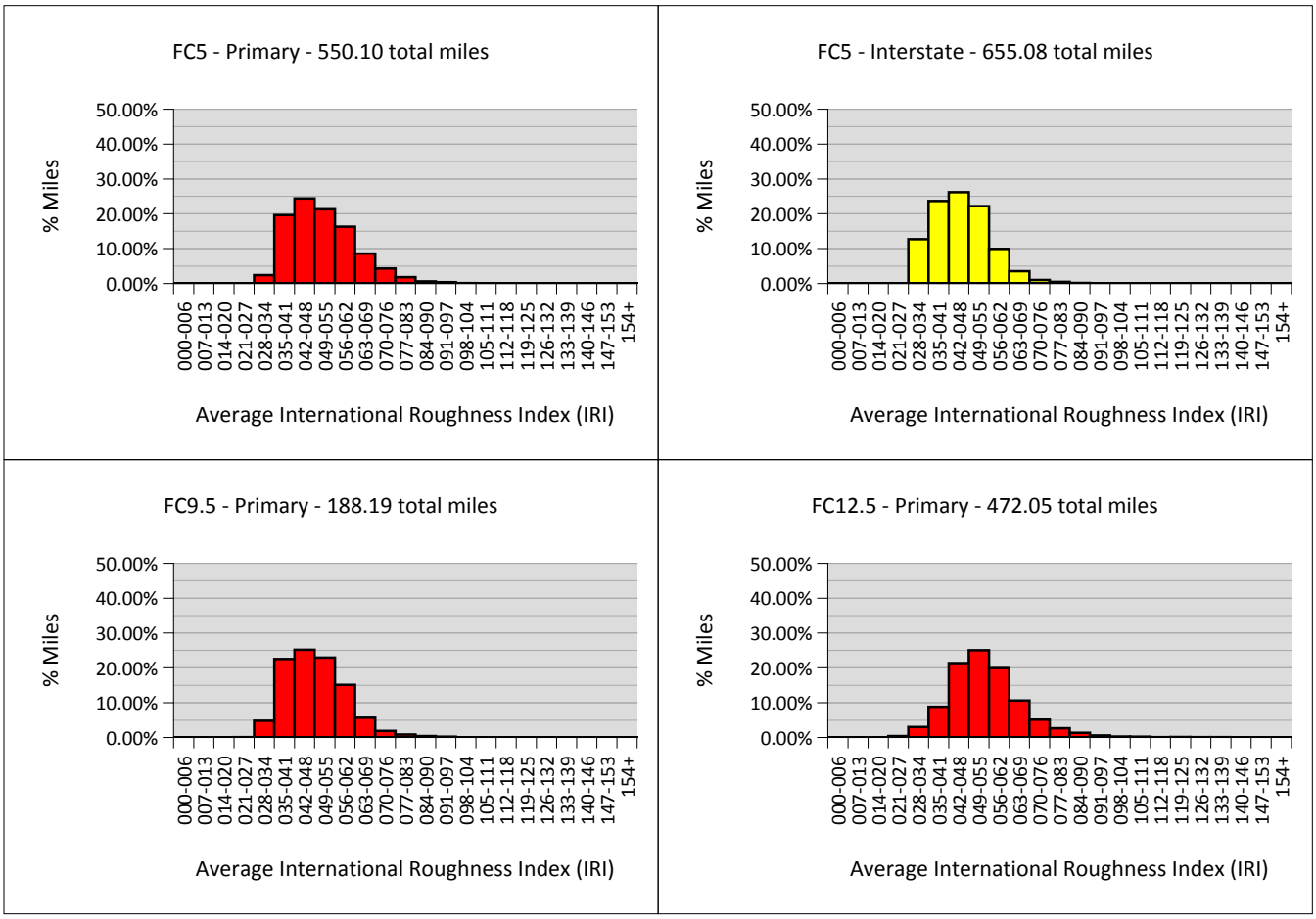

Figure 4: District 1 Ride Distribution by Friction Course and System

Friction Course	System	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
								Lots	Miles	% Miles
FC5	Primary	5628	550.10	29	51	198	11.7	24	1.67	0.30%
FC5	Interstate	6796	655.08	27	46	127	9.9	5	0.34	0.05%
FC9.5	Primary	1928	188.19	26	49	204	11.0	8	0.44	0.23%
FC12.5	Primary	4827	472.05	20	55	207	13.6	62	5.05	1.07%

Table 7: District 1 Statistical Summary by Friction Course, System, Year, and Aggregate

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	2005	Limestone	410	39.25	40	59	102	9.9	2	0.20	0.51%
FC5	Primary	2006	Limestone	843	81.95	34	53	198	9.0	6	0.10	0.13%
FC5	Primary	2007	Granite	14	1.40	52	66	91	10.8	0	0.00	0.00%
FC5	Primary	2007	Limestone	1325	130.65	30	51	107	10.9	1	0.01	0.01%
FC5	Primary	2008	Granite	136	13.23	31	47	81	8.7	0	0.00	0.00%
FC5	Primary	2008	Limestone	293	28.22	39	59	123	10.8	2	0.16	0.58%
FC5	Primary	2009	Granite	961	94.38	29	49	110	13.7	9	0.89	0.94%
FC5	Primary	2009	Limestone	434	42.51	34	54	88	10.5	0	0.00	0.00%
FC5	Primary	2010	Granite	78	7.63	31	50	77	11.4	0	0.00	0.00%
FC5	Primary	2010	Limestone	360	35.35	32	47	106	10.5	1	0.06	0.16%
FC5	Primary	2011	Granite	117	11.33	34	49	76	7.6	0	0.00	0.00%
FC5	Primary	2011	Limestone	657	64.20	30	47	115	12.0	3	0.25	0.39%
FC5	Interstate	2005	Limestone	595	58.43	41	54	127	6.9	1	0.02	0.04%
FC5	Interstate	2006	Granite	91	8.04	35	47	85	8.1	0	0.00	0.00%
FC5	Interstate	2006	Limestone	56	5.27	45	60	82	7.7	0	0.00	0.00%
FC5	Interstate	2007	Limestone	728	71.72	30	50	101	8.9	1	0.10	0.14%
FC5	Interstate	2008	Granite	49	4.12	33	40	90	5.3	0	0.00	0.00%
FC5	Interstate	2008	Limestone	1056	99.13	34	52	101	8.0	1	0.07	0.07%
FC5	Interstate	2009	Granite	1556	150.28	27	45	107	10.1	2	0.15	0.10%
FC5	Interstate	2009	Limestone	418	40.57	36	48	65	5.1	0	0.00	0.00%
FC5	Interstate	2010	Granite	2052	199.54	27	38	86	6.1	0	0.00	0.00%
FC5	Interstate	2011	Limestone	195	17.97	42	57	93	9.1	0	0.00	0.00%
FC9.5	Primary	2005	Granite	53	5.01	42	58	106	9.2	1	0.03	0.60%
FC9.5	Primary	2006	Limestone	697	68.21	29	46	189	11.7	4	0.30	0.44%
FC9.5	Primary	2008	Granite	176	17.53	33	44	60	4.7	0	0.00	0.00%
FC9.5	Primary	2008	Limestone	780	75.57	31	53	111	9.7	2	0.09	0.12%
FC9.5	Primary	2009	Limestone	12	1.17	40	55	89	16.7	0	0.00	0.00%
FC9.5	Primary	2011	Granite	101	9.90	26	44	79	10.9	0	0.00	0.00%
FC12.5	Primary	2005	Granite	198	19.49	47	75	207	23.4	25	2.34	12.02%
FC12.5	Primary	2005	Limestone	486	47.94	33	46	70	6.0	0	0.00	0.00%
FC12.5	Primary	2006	Granite	253	24.88	33	56	90	10.1	0	0.00	0.00%
FC12.5	Primary	2006	Limestone	961	94.31	35	57	153	11.9	14	1.23	1.31%
FC12.5	Primary	2007	Granite	94	9.25	50	76	106	11.7	5	0.43	4.61%
FC12.5	Primary	2007	Limestone	133	12.71	37	50	115	8.4	2	0.05	0.39%
FC12.5	Primary	2008	Limestone	382	37.08	32	55	94	9.3	0	0.00	0.00%
FC12.5	Primary	2009	Granite	379	36.31	26	54	106	12.7	2	0.20	0.55%
FC12.5	Primary	2009	Limestone	136	13.53	42	60	96	10.2	1	0.10	0.74%
FC12.5	Primary	2010	Granite	1284	126.00	20	54	135	12.6	9	0.56	0.44%

Table 7: District 1 Statistical Summary by Friction Course, System, Year, and Aggregate, continued

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC12.5	Primary	2010	Limestone	10	0.94	41	54	73	10.8	0	0.00	0.00%
FC12.5	Primary	2011	Granite	375	36.39	24	46	159	11.6	4	0.14	0.39%
FC12.5	Primary	2011	Limestone	90	8.85	34	43	79	7.6	0	0.00	0.00%

Aggregate Type of "Mixed" has been excluded from this report.

Table 8: District 1 Statistical Summary by Friction Course, System, Aggregate, and Material Transfer Device Status

Friction Course	System	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Fully Used	1156	113.33	29	49	110	13.1	9	0.89	0.79%
FC5	Primary	Limestone	Fully Used	921	90.64	32	45	94	8.1	0	0.00	0.00%
FC5	Primary	Limestone	Not Used	374	35.92	41	62	115	10.8	4	0.31	0.85%
FC5	Interstate	Granite	Fully Used	2867	277.18	27	41	107	8.3	2	0.15	0.06%
FC5	Interstate	Granite	Not Used	270	26.43	39	52	80	6.8	0	0.00	0.00%
FC5	Interstate	Limestone	Not Used	613	58.54	36	51	93	7.8	0	0.00	0.00%
FC9.5	Primary	Granite	Not Used	101	9.90	26	44	79	10.9	0	0.00	0.00%
FC9.5	Primary	Limestone	Not Used	12	1.17	40	55	89	16.7	0	0.00	0.00%
FC12.5	Primary	Granite	Fully Used	741	72.45	20	50	130	13.3	4	0.23	0.31%
FC12.5	Primary	Granite	Not Used	1129	109.94	25	55	159	11.7	9	0.58	0.53%
FC12.5	Primary	Limestone	Fully Used	236	23.31	34	53	96	12.6	1	0.10	0.43%
All	All	Granite & Limestone	Fully Used	5921	576.92	20	45	130	11.1	16	1.37	0.24%
All	All	Granite & Limestone	Not Used	2499	241.89	25	54	159	11.1	13	0.89	0.37%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

Table 9: District 1 Statistical Summary by Friction Course, System, Aggregate, and Paving Time

Friction Course	System	Aggregate	Paving Time	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Day	500	48.78	30	45	91	8.3	0	0.00	0.00%
FC5	Primary	Granite	Night	118	11.57	31	49	81	11.2	0	0.00	0.00%
FC5	Primary	Limestone	Day	1547	151.97	30	51	136	10.8	2	0.03	0.02%
FC5	Primary	Limestone	Night	1050	102.20	36	57	123	10.9	7	0.48	0.47%
FC5	Interstate	Granite	Night	3748	361.98	27	41	107	8.7	2	0.15	0.04%
FC5	Interstate	Limestone	Day	1964	190.10	30	50	101	7.9	2	0.17	0.09%
FC5	Interstate	Limestone	Night	349	32.83	36	53	93	8.9	0	0.00	0.00%
FC9.5	Primary	Granite	Day	101	9.90	26	44	79	10.9	0	0.00	0.00%
FC9.5	Primary	Limestone	Day	1397	136.02	29	50	189	11.3	6	0.39	0.29%
FC12.5	Primary	Granite	Day	1820	178.22	24	55	159	13.5	16	1.25	0.70%
FC12.5	Primary	Granite	Night	274	26.65	20	49	135	14.2	1	0.01	0.04%
FC12.5	Primary	Limestone	Day	1202	118.24	35	56	133	11.1	16	1.37	1.16%
FC12.5	Primary	Limestone	Night	91	8.40	36	57	153	12.7	1	0.01	0.17%
All	All	Granite & Limestone	Day	8531	833.21	24	52	189	11.3	42	3.20	0.38%
All	All	Granite & Limestone	Night	5630	543.63	20	46	153	11.6	11	0.66	0.12%

Aggregate Type of "Mixed" has been excluded from this report.

Paving Times of "Both" and "Unknown" have been excluded from this report.

Table 10: District 1 Pavement Smoothness Summary by Friction Course, System, and Year

Friction Course	System	Year	Total Projects	Total Miles	IRI ≤ 55		IRI ≥ 96	
					Miles	% Miles	Miles	% Miles
FC5	Primary	2005	5	39.25	14.38	36.63%	0.20	0.51%
FC5	Primary	2006	7	81.95	54.02	65.92%	0.10	0.13%
FC5	Primary	2007	10	132.05	87.72	66.43%	0.01	0.01%
FC5	Primary	2008	5	41.45	22.97	55.42%	0.16	0.40%
FC5	Primary	2009	12	136.89	97.85	71.48%	0.89	0.65%
FC5	Primary	2010	4	42.98	34.48	80.24%	0.06	0.13%
FC5	Primary	2011	7	75.53	61.27	81.11%	0.25	0.33%
FC5	Interstate	2005	1	58.43	39.74	68.02%	0.02	0.04%
FC5	Interstate	2006	2	13.31	8.45	63.48%	0.00	0.00%
FC5	Interstate	2007	2	71.72	56.65	78.99%	0.10	0.14%
FC5	Interstate	2008	3	103.25	78.12	75.66%	0.07	0.06%
FC5	Interstate	2009	8	190.85	166.08	87.02%	0.15	0.08%
FC5	Interstate	2010	2	199.54	196.63	98.54%	0.00	0.00%
FC5	Interstate	2011	2	17.97	9.44	52.51%	0.00	0.00%
FC9.5	Primary	2005	2	15.82	12.46	78.73%	0.05	0.30%
FC9.5	Primary	2006	5	68.21	57.04	83.63%	0.30	0.44%
FC9.5	Primary	2008	4	93.09	63.59	68.30%	0.09	0.09%
FC9.5	Primary	2009	1	1.17	0.78	67.10%	0.00	0.00%
FC9.5	Primary	2011	1	9.90	8.47	85.63%	0.00	0.00%
FC12.5	Primary	2005	5	67.43	46.03	68.26%	2.34	3.47%
FC12.5	Primary	2006	14	119.19	62.76	52.66%	1.23	1.04%
FC12.5	Primary	2007	4	21.96	10.51	47.86%	0.48	2.17%
FC12.5	Primary	2008	5	37.08	20.85	56.24%	0.00	0.00%
FC12.5	Primary	2009	8	54.22	27.74	51.17%	0.30	0.55%
FC12.5	Primary	2010	9	126.94	70.45	55.50%	0.56	0.44%
FC12.5	Primary	2011	6	45.23	38.65	85.45%	0.14	0.32%
All	All	2005	13	180.92	112.60	62.24%	2.61	1.44%
All	All	2006	28	282.66	182.27	64.49%	1.64	0.58%
All	All	2007	16	225.74	154.89	68.61%	0.59	0.26%
All	All	2008	17	274.88	185.53	67.50%	0.32	0.12%
All	All	2009	29	383.12	292.45	76.33%	1.34	0.35%
All	All	2010	15	369.46	301.56	81.62%	0.61	0.17%
All	All	2011	15	148.63	117.83	79.27%	0.39	0.26%

Table 11: District 1 Statistical Summary by Contractor, Friction Course, Aggregate, and Material Transfer Device Status

Contractor	Friction Course	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
A.P.A.C.	FC5	Granite	Fully Used	634	62.23	29	44	88	7.9	0	0.00	0.00%
A.P.A.C.	FC5	Granite	Not Used	270	26.43	39	52	80	6.8	0	0.00	0.00%
A.P.A.C.	FC5	Limestone	Not Used	473	45.14	36	55	93	9.3	0	0.00	0.00%
A.P.A.C.	FC12.5	Granite	Fully Used	176	16.92	37	51	130	7.2	2	0.03	0.15%
A.P.A.C.	FC12.5	Granite	Not Used	330	31.53	39	58	135	10.0	2	0.11	0.35%
Ajax Paving Industry	FC5	Granite	Fully Used	3117	301.47	27	42	107	8.7	2	0.15	0.05%
Ajax Paving Industry	FC5	Limestone	Fully Used	626	61.56	32	43	94	7.4	0	0.00	0.00%
Ajax Paving Industry	FC9.5	Granite	Not Used	101	9.90	26	44	79	10.9	0	0.00	0.00%
Ajax Paving Industry	FC12.5	Granite	Fully Used	485	47.57	20	46	101	12.4	1	0.10	0.21%
Ajax Paving Industry	FC12.5	Granite	Not Used	73	7.23	25	35	64	8.8	0	0.00	0.00%
Better Roads Inc.	FC5	Limestone	Fully Used	132	13.10	36	47	66	5.5	0	0.00	0.00%
Better Roads Inc.	FC5	Limestone	Not Used	350	33.65	39	50	84	7.5	0	0.00	0.00%
Better Roads Inc.	FC9.5	Limestone	Not Used	12	1.17	40	55	89	16.7	0	0.00	0.00%
Better Roads Inc.	FC12.5	Limestone	Fully Used	16	1.57	36	50	79	11.8	0	0.00	0.00%
C. W. Roberts Contracting	FC5	Limestone	Fully Used	67	6.39	35	49	77	8.6	0	0.00	0.00%
C. W. Roberts Contracting	FC12.5	Limestone	Fully Used	74	7.28	34	41	61	5.1	0	0.00	0.00%
Community Asphalt Corp.	FC12.5	Limestone	Fully Used	136	13.53	42	60	96	10.2	1	0.10	0.74%
Dickerson Asphalt	FC12.5	Limestone	Fully Used	10	0.94	41	54	73	10.8	0	0.00	0.00%
Lane Construction Corp.	FC5	Limestone	Fully Used	96	9.59	38	53	82	9.1	0	0.00	0.00%
Lane Construction Corp.	FC12.5	Granite	Fully Used	80	7.97	49	69	106	10.0	1	0.10	1.26%
Lane Construction Corp.	FC12.5	Granite	Not Used	14	1.23	50	72	159	17.2	2	0.12	9.49%
Middlesex Corp.	FC12.5	Granite	Not Used	115	11.04	46	63	100	8.3	1	0.04	0.40%
Orlando Paving Company	FC5	Granite	Fully Used	155	15.48	42	72	110	14.8	9	0.89	5.75%
Ranger Construction	FC5	Granite	Fully Used	117	11.33	34	49	76	7.6	0	0.00	0.00%
S. T. Wooten Corp.	FC5	Limestone	Not Used	76	7.02	41	69	115	14.3	4	0.31	4.35%
Superior Asphalt Inc.	FC12.5	Granite	Not Used	597	58.90	35	54	132	10.2	4	0.31	0.53%
Weekley Asphalt Paving	FC5	Limestone	Not Used	88	8.66	44	62	86	9.8	0	0.00	0.00%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

Ride Distribution of All Lots

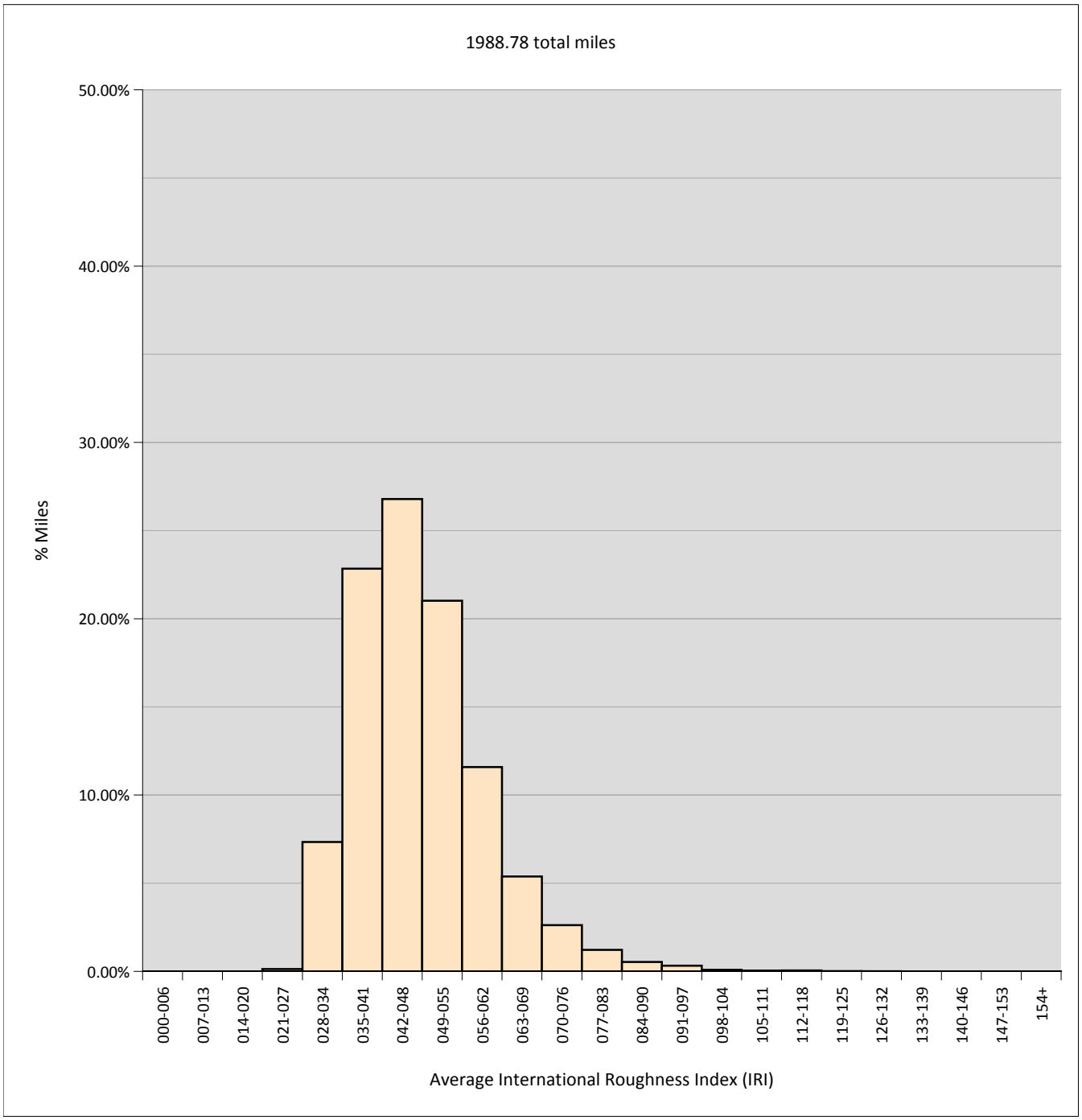

Figure 5: District 2 Ride Distribution, All Lots

Type	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
							Lots	Miles	% Miles
All Lots	20279	1988.78	24	48	161	11.4	71	5.25	0.26%

Ride Distribution by Friction Course and System

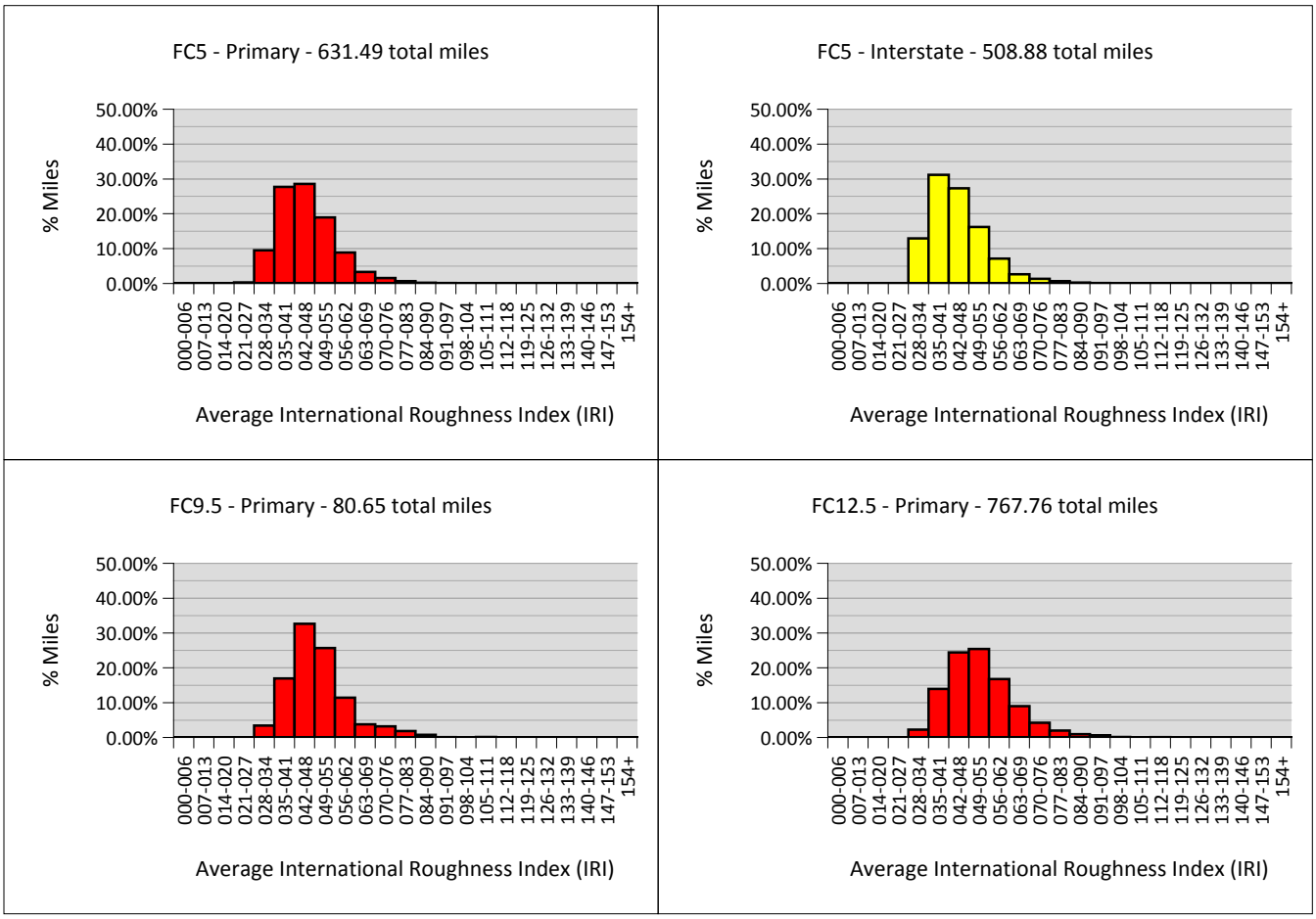

Figure 6: District 2 Ride Distribution by Friction Course and System

Friction Course	System	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
								Lots	Miles	% Miles
FC5	Primary	6428	631.49	24	46	131	10.2	13	0.73	0.12%
FC5	Interstate	5232	508.88	26	45	111	10.0	9	0.69	0.14%
FC9.5	Primary	827	80.65	29	49	147	10.6	2	0.11	0.14%
FC12.5	Primary	7792	767.76	24	53	161	11.7	47	3.72	0.48%

Table 12: District 2 Statistical Summary by Friction Course, System, Year, and Aggregate

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	2005	Granite	536	52.95	31	46	127	9.5	1	0.06	0.12%
FC5	Primary	2005	Limestone	72	6.13	44	65	131	12.1	6	0.21	3.38%
FC5	Primary	2006	Granite	445	44.07	35	52	98	9.8	1	0.10	0.23%
FC5	Primary	2006	Limestone	276	27.26	42	57	125	11.0	3	0.28	1.02%
FC5	Primary	2007	Granite	1563	154.56	30	45	91	7.7	0	0.00	0.00%
FC5	Primary	2008	Granite	577	55.94	36	52	99	9.0	1	0.04	0.07%
FC5	Primary	2009	Granite	847	83.48	24	43	90	7.8	0	0.00	0.00%
FC5	Primary	2010	Granite	1456	142.33	25	42	97	10.2	1	0.05	0.03%
FC5	Primary	2011	Granite	656	64.79	31	44	95	8.9	0	0.00	0.00%
FC5	Interstate	2005	Granite	492	47.04	29	55	97	11.6	1	0.10	0.21%
FC5	Interstate	2006	Granite	420	41.53	28	38	57	5.1	0	0.00	0.00%
FC5	Interstate	2007	Granite	2033	198.08	28	47	111	8.3	6	0.39	0.20%
FC5	Interstate	2008	Granite	1039	101.55	26	43	110	11.4	2	0.20	0.20%
FC5	Interstate	2009	Granite	296	29.00	28	39	74	7.4	0	0.00	0.00%
FC5	Interstate	2010	Granite	389	36.79	29	40	90	6.9	0	0.00	0.00%
FC5	Interstate	2011	Granite	563	54.89	27	43	89	8.1	0	0.00	0.00%
FC9.5	Primary	2005	Granite	397	38.85	33	53	147	11.1	1	0.01	0.03%
FC9.5	Primary	2007	Granite	224	22.04	30	49	105	8.4	1	0.10	0.45%
FC9.5	Primary	2008	Granite	165	15.92	29	41	70	7.7	0	0.00	0.00%
FC9.5	Primary	2010	Granite	41	3.83	39	49	74	6.9	0	0.00	0.00%
FC12.5	Primary	2005	Granite	196	19.48	41	58	104	11.4	3	0.21	1.10%
FC12.5	Primary	2006	Granite	1356	133.33	24	51	161	10.3	11	0.73	0.55%
FC12.5	Primary	2007	Granite	1115	109.76	32	55	122	10.3	3	0.13	0.11%
FC12.5	Primary	2008	Granite	1687	166.43	28	49	104	10.8	2	0.20	0.12%
FC12.5	Primary	2009	Granite	992	98.10	28	51	114	12.5	8	0.72	0.73%
FC12.5	Primary	2010	Granite	1199	117.76	31	53	107	12.2	8	0.61	0.52%
FC12.5	Primary	2011	Granite	1135	111.81	33	57	116	12.0	11	1.02	0.91%

Aggregate Type of "Mixed" has been excluded from this report.

Table 13: District 2 Statistical Summary by Friction Course, System, Aggregate, and Material Transfer Device Status

Friction Course	System	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Fully Used	2177	214.21	24	41	97	9.0	1	0.05	0.02%
FC5	Primary	Granite	Not Used	216	20.91	32	47	79	7.8	0	0.00	0.00%
FC5	Interstate	Granite	Fully Used	605	57.91	28	39	90	6.7	0	0.00	0.00%
FC9.5	Primary	Granite	Not Used	41	3.83	39	49	74	6.9	0	0.00	0.00%
FC12.5	Primary	Granite	Fully Used	1063	104.64	33	53	116	9.6	2	0.20	0.19%
FC12.5	Primary	Granite	Not Used	1240	122.47	28	55	114	13.2	12	1.09	0.89%
All	All	Granite	Fully Used	3845	376.76	24	44	116	10.4	3	0.25	0.07%
All	All	Granite	Not Used	1497	147.21	28	54	114	12.8	12	1.09	0.74%

Aggregate Type of "Mixed" has been excluded from this report.
Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

Table 14: District 2 Statistical Summary by Friction Course, System, Aggregate, and Paving Time

Friction Course	System	Aggregate	Paving Time	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Day	4142	407.69	25	46	98	9.6	2	0.15	0.04%
FC5	Primary	Granite	Night	205	18.82	36	56	99	11.5	1	0.04	0.20%
FC5	Primary	Limestone	Day	276	27.26	42	57	125	11.0	3	0.28	1.02%
FC5	Interstate	Granite	Day	420	41.53	28	38	57	5.1	0	0.00	0.00%
FC5	Interstate	Granite	Night	998	93.93	28	43	111	10.1	6	0.39	0.42%
FC9.5	Primary	Granite	Day	224	22.04	30	49	105	8.4	1	0.10	0.45%
FC9.5	Primary	Granite	Night	206	19.75	29	43	74	8.1	0	0.00	0.00%
FC12.5	Primary	Granite	Day	6593	650.41	28	51	161	11.1	27	2.23	0.34%
FC12.5	Primary	Granite	Night	157	14.70	37	68	114	16.1	9	0.79	5.39%
All	All	Granite & Limestone	Day	11655	1148.92	25	49	161	11.0	33	2.76	0.24%
All	All	Granite & Limestone	Night	1566	147.20	28	47	114	13.5	16	1.22	0.83%

Aggregate Type of "Mixed" has been excluded from this report.

Paving Times of "Both" and "Unknown" have been excluded from this report.

Table 15: District 2 Pavement Smoothness Summary by Friction Course, System, and Year

Friction Course	System	Year	Total Projects	Total Miles	IRI ≤ 55		IRI ≥ 96	
					Miles	% Miles	Miles	% Miles
FC5	Primary	2005	4	59.08	46.25	78.28%	0.27	0.46%
FC5	Primary	2006	3	71.32	43.63	61.17%	0.38	0.53%
FC5	Primary	2007	5	154.56	140.03	90.60%	0.00	0.00%
FC5	Primary	2008	3	55.94	40.91	73.13%	0.04	0.07%
FC5	Primary	2009	3	83.48	78.34	93.84%	0.00	0.00%
FC5	Primary	2010	4	142.33	128.19	90.07%	0.05	0.03%
FC5	Primary	2011	6	64.79	59.82	92.34%	0.00	0.00%
FC5	Interstate	2005	3	47.04	26.00	55.26%	0.10	0.21%
FC5	Interstate	2006	1	41.53	41.33	99.52%	0.00	0.00%
FC5	Interstate	2007	6	198.08	175.21	88.46%	0.39	0.20%
FC5	Interstate	2008	4	101.55	89.25	87.88%	0.20	0.20%
FC5	Interstate	2009	3	29.00	27.57	95.08%	0.00	0.00%
FC5	Interstate	2010	3	36.79	35.80	97.32%	0.00	0.00%
FC5	Interstate	2011	1	54.89	51.01	92.92%	0.00	0.00%
FC9.5	Primary	2005	2	38.85	27.02	69.55%	0.01	0.03%
FC9.5	Primary	2007	2	22.04	18.66	84.67%	0.10	0.45%
FC9.5	Primary	2008	1	15.92	14.80	92.94%	0.00	0.00%
FC9.5	Primary	2010	1	3.83	3.01	78.68%	0.00	0.00%
FC12.5	Primary	2005	1	19.48	10.00	51.34%	0.21	1.10%
FC12.5	Primary	2006	15	133.33	100.30	75.23%	0.73	0.55%
FC12.5	Primary	2007	12	120.86	64.13	53.06%	0.23	0.19%
FC12.5	Primary	2008	13	166.43	128.82	77.40%	0.20	0.12%
FC12.5	Primary	2009	9	98.10	71.06	72.44%	0.72	0.73%
FC12.5	Primary	2010	10	117.76	73.39	62.32%	0.61	0.52%
FC12.5	Primary	2011	9	111.81	59.22	52.96%	1.02	0.91%
All	All	2005	10	164.46	109.27	66.44%	0.60	0.36%
All	All	2006	19	246.18	185.25	75.25%	1.11	0.45%
All	All	2007	25	495.54	398.03	80.32%	0.72	0.14%
All	All	2008	20	339.84	273.78	80.56%	0.44	0.13%
All	All	2009	15	210.58	176.97	84.04%	0.72	0.34%
All	All	2010	18	300.70	240.39	79.94%	0.66	0.22%
All	All	2011	16	231.49	170.05	73.46%	1.02	0.44%

Table 16: District 2 Statistical Summary by Contractor, Friction Course, Aggregate, and Material Transfer Device Status

Contractor	Friction Course	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
A.P.A.C.	FC5	Granite	Fully Used	594	58.68	28	40	78	6.8	0	0.00	0.00%
A.P.A.C.	FC5	Granite	Not Used	60	5.73	32	41	60	5.5	0	0.00	0.00%
A.P.A.C.	FC9.5	Granite	Not Used	41	3.83	39	49	74	6.9	0	0.00	0.00%
A.P.A.C.	FC12.5	Granite	Fully Used	90	8.79	40	53	76	7.3	0	0.00	0.00%
A.P.A.C.	FC12.5	Granite	Not Used	380	37.71	37	55	92	9.8	0	0.00	0.00%
Anderson Columbia	FC5	Granite	Fully Used	1432	142.02	25	39	95	8.3	0	0.00	0.00%
Anderson Columbia	FC5	Granite	Not Used	60	5.80	35	44	57	5.3	0	0.00	0.00%
Anderson Columbia	FC12.5	Granite	Fully Used	749	73.93	33	53	116	10.2	2	0.20	0.27%
Anderson Columbia	FC12.5	Granite	Not Used	593	58.84	28	51	98	13.0	3	0.30	0.51%
Atlantic Coast	FC5	Granite	Fully Used	482	45.71	24	38	90	7.8	0	0.00	0.00%
Atlantic Coast	FC12.5	Granite	Fully Used	42	4.09	36	54	80	9.9	0	0.00	0.00%
D.A.B. Constructors	FC5	Granite	Not Used	96	9.38	40	53	79	6.0	0	0.00	0.00%
Duval Asphalt	FC5	Granite	Fully Used	274	25.71	38	50	97	8.6	1	0.05	0.19%
Duval Asphalt	FC12.5	Granite	Fully Used	82	8.02	35	47	75	6.2	0	0.00	0.00%
Duval Asphalt	FC12.5	Granite	Not Used	50	4.77	59	81	114	12.9	7	0.62	12.89%
P & S Paving	FC12.5	Granite	Not Used	20	1.47	53	71	99	14.1	1	0.08	5.30%
Peavy and Sons	FC12.5	Granite	Fully Used	100	9.81	39	54	73	7.9	0	0.00	0.00%
Whitehurst	FC12.5	Granite	Not Used	197	19.67	47	61	96	8.5	1	0.10	0.51%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

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Ride Distribution of All Lots

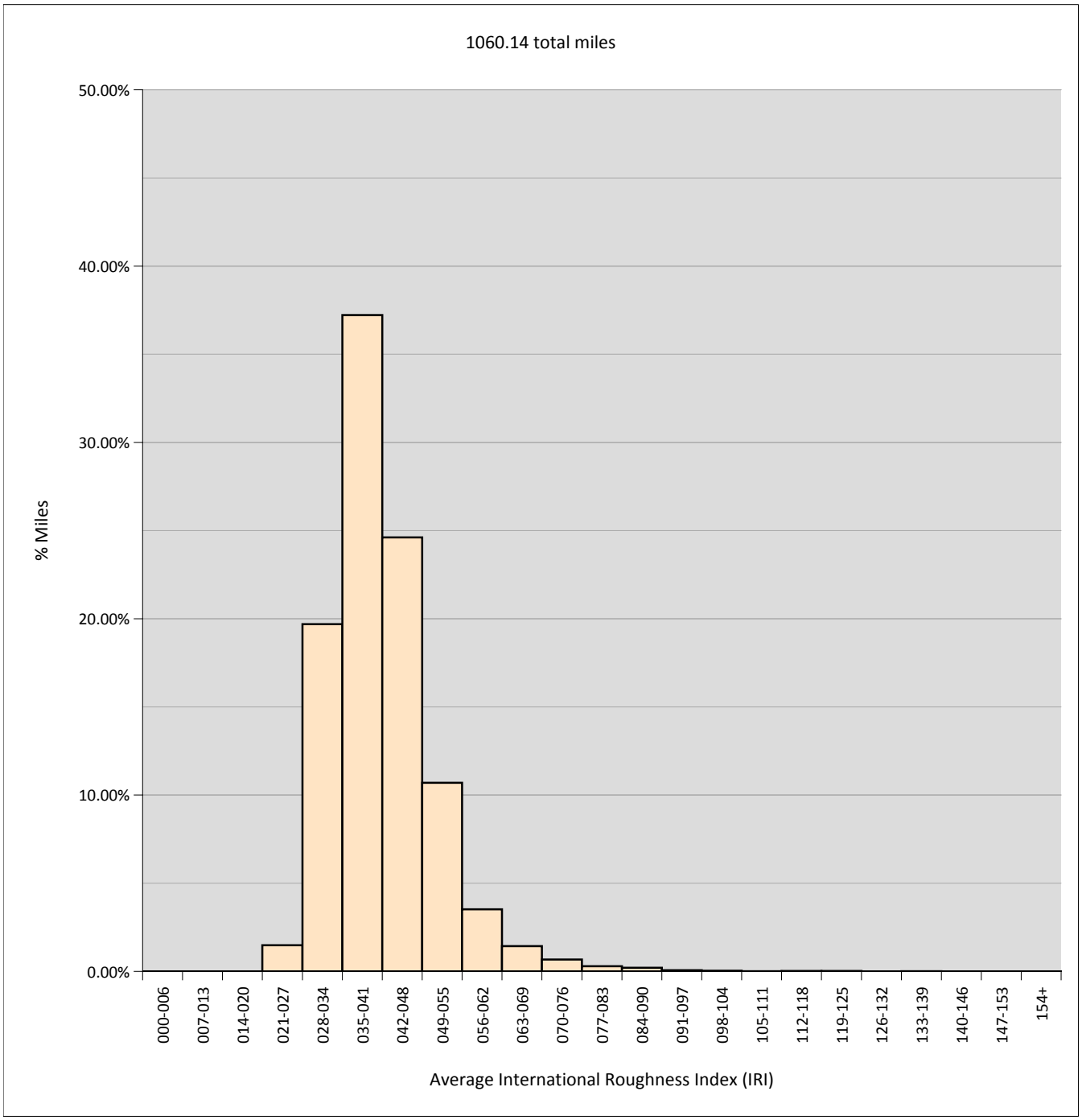

Figure 7: District 3 Ride Distribution, All Lots

Type	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
							Lots	Miles	% Miles
All Lots	10793	1060.14	23	41	136	9.1	15	1.09	0.10%

Ride Distribution by Friction Course and System

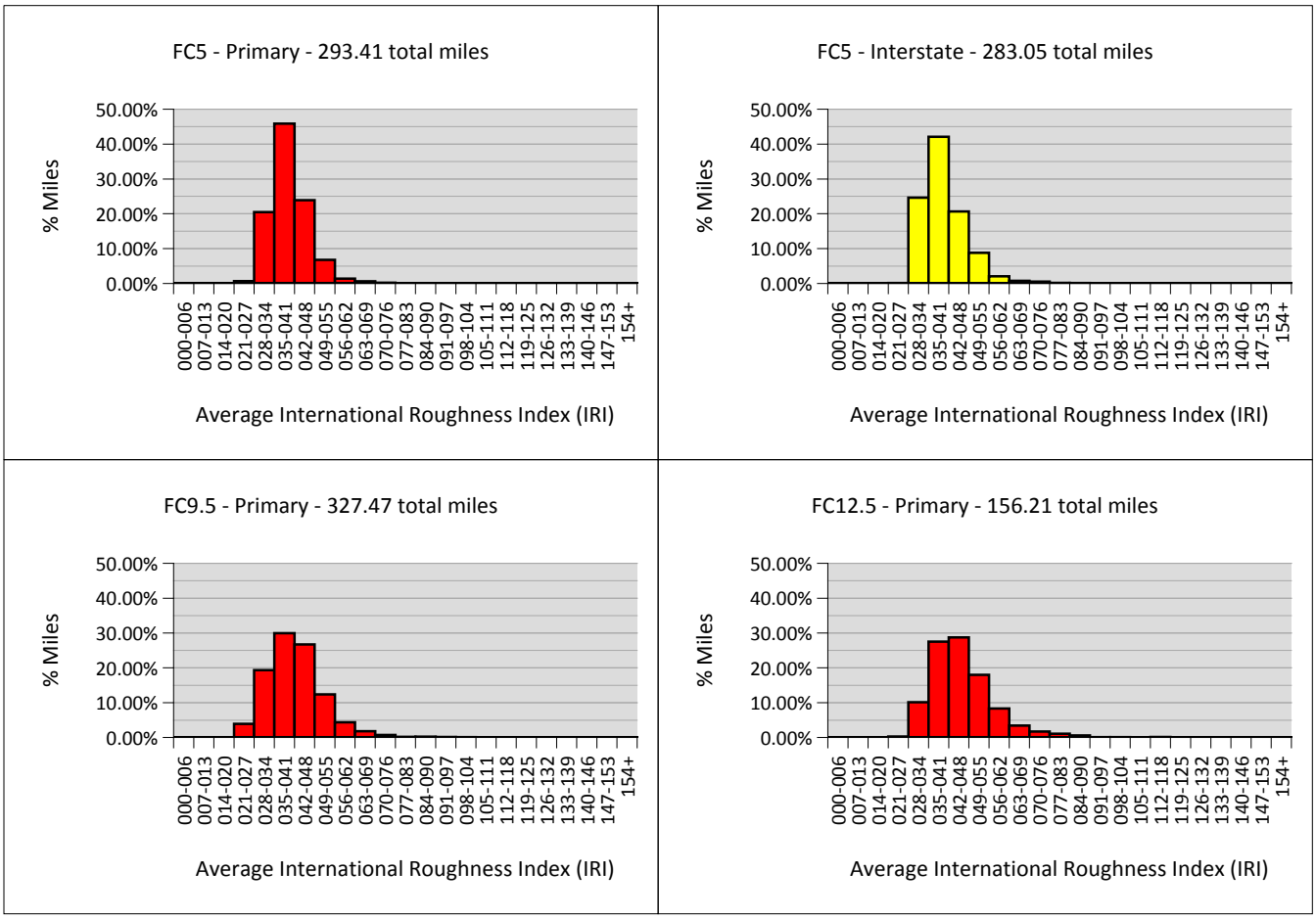

Figure 8: District 3 Ride Distribution by Friction Course and System

Friction Course	System	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
								Lots	Miles	% Miles
FC5	Primary	2980	293.41	23	40	94	6.9	0	0.00	0.00%
FC5	Interstate	2904	283.05	27	40	130	7.8	2	0.06	0.02%
FC9.5	Primary	3315	327.47	23	42	136	10.1	9	0.72	0.22%
FC12.5	Primary	1594	156.21	25	46	114	10.8	4	0.31	0.20%

Table 17: District 3 Statistical Summary by Friction Course, System, Year, and Aggregate

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	2007	Granite	1170	115.87	28	40	79	6.0	0	0.00	0.00%
FC5	Primary	2008	Granite	266	26.30	31	41	83	6.0	0	0.00	0.00%
FC5	Primary	2009	Granite	735	71.86	27	39	87	7.5	0	0.00	0.00%
FC5	Primary	2010	Granite	608	59.40	23	38	67	7.1	0	0.00	0.00%
FC5	Primary	2011	Granite	201	19.98	26	39	94	8.9	0	0.00	0.00%
FC5	Interstate	2006	Granite	341	32.78	34	46	77	5.7	0	0.00	0.00%
FC5	Interstate	2007	Granite	371	36.22	28	37	75	5.3	0	0.00	0.00%
FC5	Interstate	2008	Granite	1115	108.59	27	41	107	8.4	1	0.04	0.04%
FC5	Interstate	2009	Granite	775	75.43	28	40	130	7.7	1	0.01	0.02%
FC5	Interstate	2010	Granite	302	30.03	28	34	63	4.3	0	0.00	0.00%
FC9.5	Primary	2007	Granite	496	48.70	28	43	101	7.9	2	0.06	0.12%
FC9.5	Primary	2008	Granite	498	49.08	25	39	67	7.0	0	0.00	0.00%
FC9.5	Primary	2009	Granite	748	74.25	25	42	97	8.0	1	0.10	0.13%
FC9.5	Primary	2010	Granite	710	70.39	25	44	136	11.6	3	0.30	0.43%
FC9.5	Primary	2011	Granite	863	85.06	23	40	101	12.3	3	0.27	0.31%
FC12.5	Primary	2005	Granite	78	7.68	41	59	87	10.1	0	0.00	0.00%
FC12.5	Primary	2007	Granite	197	19.24	27	50	114	13.1	2	0.20	1.04%
FC12.5	Primary	2008	Granite	224	22.20	26	39	95	8.6	0	0.00	0.00%
FC12.5	Primary	2009	Granite	184	18.16	28	44	68	7.0	0	0.00	0.00%
FC12.5	Primary	2010	Granite	671	65.73	28	47	102	10.2	2	0.11	0.16%
FC12.5	Primary	2011	Granite	240	23.22	25	42	79	8.4	0	0.00	0.00%

Aggregate Type of "Mixed" has been excluded from this report.

Table 18: District 3 Statistical Summary by Friction Course, System, Aggregate, and Material Transfer Device Status

Friction Course	System	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Fully Used	1544	151.24	23	39	94	7.5	0	0.00	0.00%
FC5	Interstate	Granite	Fully Used	1077	105.46	28	39	130	7.5	1	0.01	0.01%
FC9.5	Primary	Granite	Fully Used	2145	212.19	23	42	136	11.1	6	0.56	0.27%
FC9.5	Primary	Granite	Not Used	128	12.80	38	50	101	7.2	1	0.10	0.78%
FC12.5	Primary	Granite	Fully Used	1095	107.10	25	46	102	9.6	2	0.11	0.10%
All	All	Granite	Fully Used	5861	575.99	23	41	136	9.7	9	0.69	0.12%
All	All	Granite	Not Used	128	12.80	38	50	101	7.2	1	0.10	0.78%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

Table 19: District 3 Statistical Summary by Friction Course, System, Aggregate, and Paving Time

Friction Course	System	Aggregate	Paving Time	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Day	2294	225.67	26	40	94	6.7	0	0.00	0.00%
FC5	Primary	Granite	Night	126	12.43	31	43	83	7.4	0	0.00	0.00%
FC5	Interstate	Granite	Day	2136	209.84	28	40	107	7.7	1	0.04	0.02%
FC5	Interstate	Granite	Night	429	41.24	27	37	74	5.9	0	0.00	0.00%
FC9.5	Primary	Granite	Day	2473	244.02	23	43	136	10.7	8	0.63	0.26%
FC9.5	Primary	Granite	Night	80	7.99	26	35	48	4.8	0	0.00	0.00%
FC12.5	Primary	Granite	Day	1232	120.49	25	47	114	10.3	4	0.31	0.26%
FC12.5	Primary	Granite	Night	92	8.97	31	42	94	7.5	0	0.00	0.00%
All	All	Granite	Day	8135	800.02	23	42	136	9.2	13	0.98	0.12%
All	All	Granite	Night	727	70.63	26	39	94	6.8	0	0.00	0.00%

Aggregate Type of "Mixed" has been excluded from this report.

Paving Times of "Both" and "Unknown" have been excluded from this report.

Table 20: District 3 Pavement Smoothness Summary by Friction Course, System, and Year

Friction Course	System	Year	Total Projects	Total Miles	IRI ≤ 55		IRI ≥ 96	
					Miles	% Miles	Miles	% Miles
FC5	Primary	2007	4	115.87	113.45	97.91%	0.00	0.00%
FC5	Primary	2008	2	26.30	25.50	96.96%	0.00	0.00%
FC5	Primary	2009	5	71.86	69.78	97.10%	0.00	0.00%
FC5	Primary	2010	3	59.40	58.51	98.50%	0.00	0.00%
FC5	Primary	2011	2	19.98	19.26	96.38%	0.00	0.00%
FC5	Interstate	2006	1	32.78	31.53	96.18%	0.00	0.00%
FC5	Interstate	2007	1	36.22	35.80	98.83%	0.00	0.00%
FC5	Interstate	2008	5	108.59	103.24	95.08%	0.04	0.04%
FC5	Interstate	2009	3	75.43	72.07	95.55%	0.01	0.02%
FC5	Interstate	2010	1	30.03	29.82	99.29%	0.00	0.00%
FC9.5	Primary	2007	3	48.70	45.04	92.50%	0.06	0.12%
FC9.5	Primary	2008	5	49.08	47.49	96.78%	0.00	0.00%
FC9.5	Primary	2009	3	74.25	71.05	95.69%	0.10	0.13%
FC9.5	Primary	2010	4	70.39	61.87	87.89%	0.30	0.43%
FC9.5	Primary	2011	6	85.06	77.03	90.55%	0.27	0.31%
FC12.5	Primary	2005	2	7.68	3.40	44.30%	0.00	0.00%
FC12.5	Primary	2007	2	19.24	14.57	75.74%	0.20	1.04%
FC12.5	Primary	2008	2	22.20	21.16	95.31%	0.00	0.00%
FC12.5	Primary	2009	2	18.16	16.98	93.51%	0.00	0.00%
FC12.5	Primary	2010	5	65.73	54.38	82.74%	0.11	0.16%
FC12.5	Primary	2011	2	23.22	21.65	93.23%	0.00	0.00%
All	All	2005	2	7.68	3.40	44.30%	0.00	0.00%
All	All	2006	1	32.78	31.53	96.18%	0.00	0.00%
All	All	2007	10	220.03	208.87	94.93%	0.26	0.12%
All	All	2008	14	206.16	197.39	95.75%	0.04	0.02%
All	All	2009	12	239.69	229.87	95.91%	0.11	0.05%
All	All	2010	13	225.55	204.57	90.70%	0.41	0.18%
All	All	2011	9	128.27	117.94	91.95%	0.27	0.21%

Table 21: District 3 Statistical Summary by Contractor, Friction Course, Aggregate, and Material Transfer Device Status

Contractor	Friction Course	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
A.P.A.C.	FC5	Granite	Fully Used	302	30.03	28	34	63	4.3	0	0.00	0.00%
A.P.A.C.	FC9.5	Granite	Fully Used	124	12.27	29	42	63	6.9	0	0.00	0.00%
A.P.A.C.	FC12.5	Granite	Fully Used	60	5.85	31	42	94	8.7	0	0.00	0.00%
Anderson Columbia	FC5	Granite	Fully Used	522	50.62	29	41	84	6.1	0	0.00	0.00%
Anderson Columbia	FC9.5	Granite	Fully Used	332	32.48	26	44	98	8.9	1	0.07	0.20%
Anderson Columbia	FC12.5	Granite	Fully Used	603	59.05	32	48	102	9.6	2	0.11	0.18%
C. W. Roberts Contracting	FC5	Granite	Fully Used	811	80.29	27	37	94	7.1	0	0.00	0.00%
C. W. Roberts Contracting	FC9.5	Granite	Fully Used	847	84.08	23	37	100	10.7	2	0.20	0.24%
C. W. Roberts Contracting	FC12.5	Granite	Fully Used	432	42.21	25	43	79	8.5	0	0.00	0.00%
GAC Contractors	FC5	Granite	Fully Used	260	25.61	23	34	60	5.7	0	0.00	0.00%
Jones Construction	FC9.5	Granite	Not Used	128	12.80	38	50	101	7.2	1	0.10	0.78%
Panhandle Grading & Paving	FC9.5	Granite	Fully Used	452	44.86	25	46	136	13.1	3	0.30	0.67%
Peavy and Sons	FC5	Granite	Fully Used	726	70.15	26	43	130	7.9	1	0.01	0.02%
Peavy and Sons	FC9.5	Granite	Fully Used	390	38.50	25	44	76	8.3	0	0.00	0.00%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

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Ride Distribution of All Lots

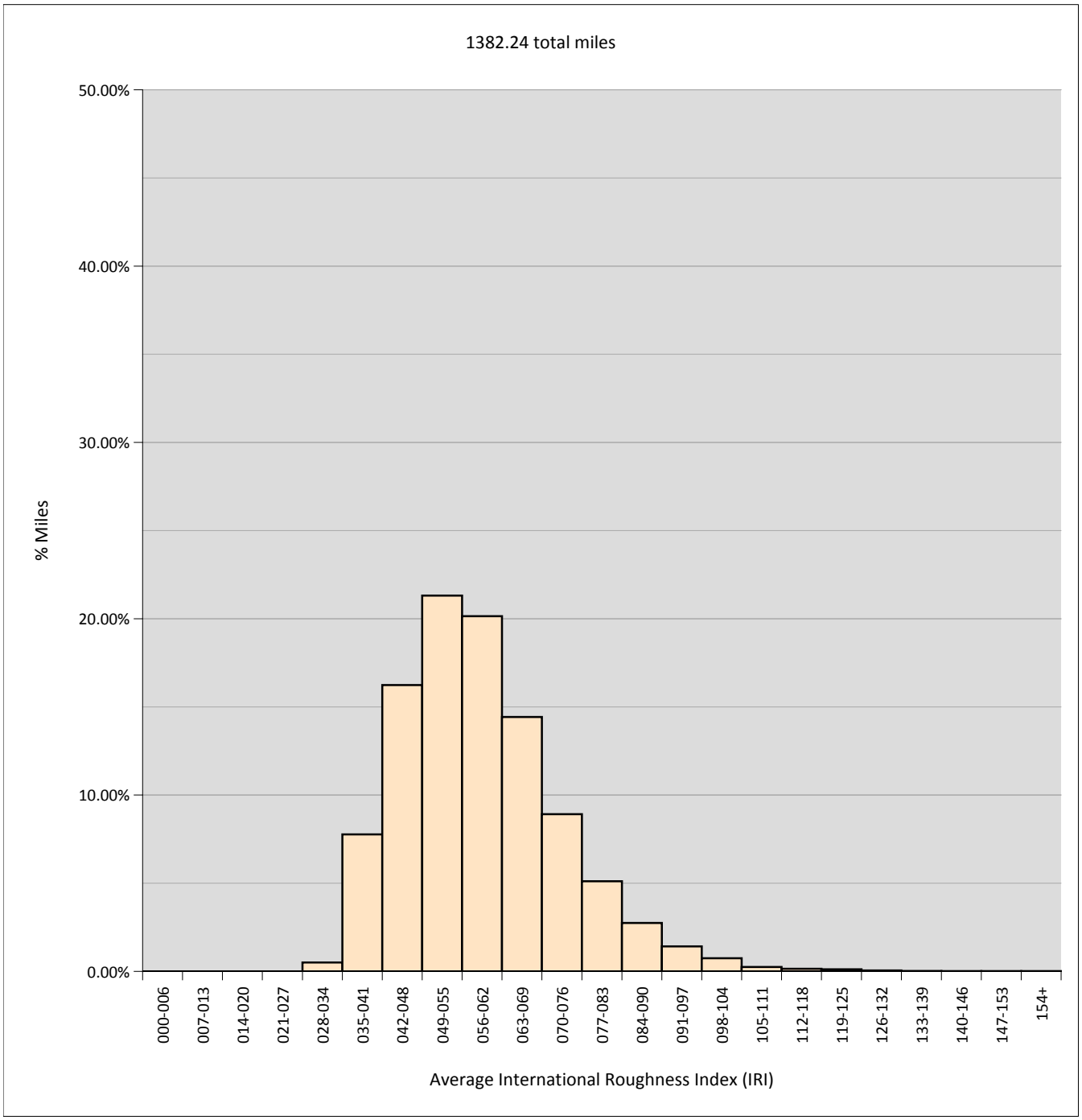

Figure 9: District 4 Ride Distribution, All Lots

Type	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
							Lots	Miles	% Miles
All Lots	14340	1382.24	29	59	212	14.1	277	23.51	1.70%

Ride Distribution by Friction Course and System

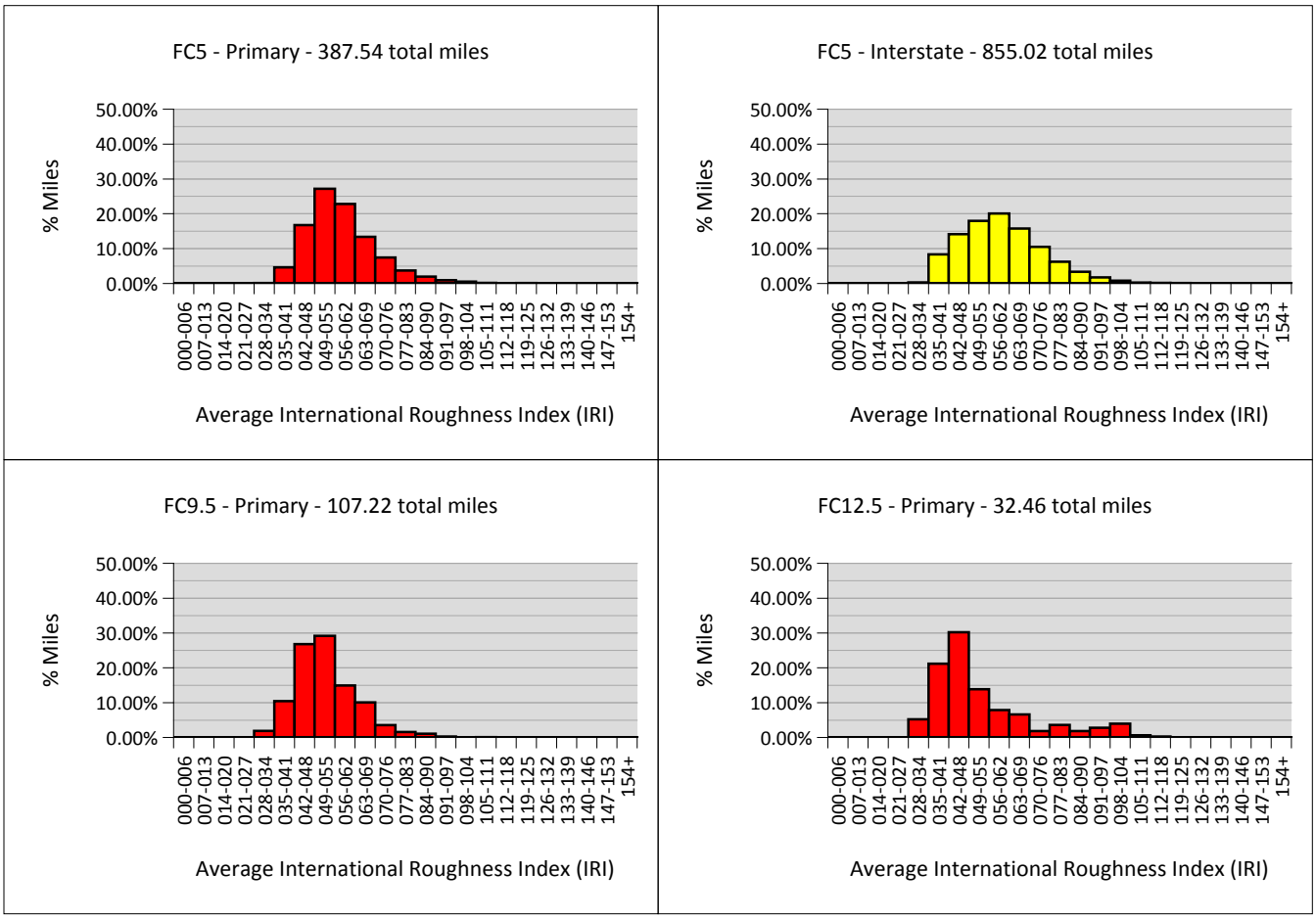

Figure 10: District 4 Ride Distribution by Friction Course and System

Friction Course	System	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
								Lots	Miles	% Miles
FC5	Primary	3946	387.54	33	58	212	12.7	60	4.99	1.29%
FC5	Interstate	8976	855.02	32	60	166	14.6	198	16.68	1.95%
FC9.5	Primary	1092	107.22	29	53	127	10.8	2	0.16	0.15%
FC12.5	Primary	326	32.46	30	53	114	17.9	17	1.68	5.18%

Table 22: District 4 Statistical Summary by Friction Course, System, Year, and Aggregate

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	2007	Limestone	1252	123.36	41	62	142	11.7	20	1.62	1.31%
FC5	Primary	2008	Limestone	485	46.64	36	56	177	10.9	6	0.28	0.59%
FC5	Primary	2009	Limestone	998	98.92	33	56	103	11.7	5	0.43	0.44%
FC5	Primary	2010	Limestone	857	83.92	33	53	96	9.3	1	0.09	0.10%
FC5	Primary	2011	Limestone	354	34.70	38	64	212	19.6	28	2.57	7.42%
FC5	Interstate	2005	Limestone	806	74.37	42	67	119	11.2	14	1.21	1.62%
FC5	Interstate	2006	Limestone	1364	133.23	42	67	141	12.5	42	3.90	2.93%
FC5	Interstate	2007	Limestone	993	93.05	44	69	166	11.1	28	1.99	2.14%
FC5	Interstate	2008	Limestone	1886	180.18	35	61	151	15.8	70	5.90	3.27%
FC5	Interstate	2009	Limestone	1351	129.05	32	50	105	13.8	11	0.94	0.73%
FC5	Interstate	2010	Limestone	1616	155.99	35	56	134	12.5	26	2.27	1.45%
FC5	Interstate	2011	Limestone	960	89.15	34	55	119	11.8	7	0.48	0.54%
FC9.5	Primary	2008	Limestone	138	13.49	42	65	105	11.5	1	0.10	0.74%
FC9.5	Primary	2009	Limestone	452	44.46	34	53	127	8.7	1	0.06	0.14%
FC9.5	Primary	2010	Limestone	502	49.27	29	48	89	9.2	0	0.00	0.00%
FC12.5	Primary	2007	Limestone	114	11.32	37	57	101	12.7	1	0.10	0.88%
FC12.5	Primary	2010	Limestone	32	3.16	77	95	114	8.8	16	1.58	50.00%
FC12.5	Primary	2011	Limestone	180	17.98	30	43	72	7.6	0	0.00	0.00%

Aggregate Type of "Mixed" has been excluded from this report.

Table 23: District 4 Statistical Summary by Friction Course, System, Aggregate, and Material Transfer Device Status

Friction Course	System	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Limestone	Fully Used	1688	166.84	33	55	103	10.7	5	0.43	0.26%
FC5	Primary	Limestone	Not Used	167	16.00	35	53	96	11.4	1	0.09	0.54%
FC5	Interstate	Limestone	Fully Used	908	87.31	32	42	84	6.5	0	0.00	0.00%
FC5	Interstate	Limestone	Not Used	856	82.38	42	64	134	13.8	34	3.09	3.75%
FC9.5	Primary	Limestone	Fully Used	404	39.78	29	50	127	10.1	1	0.06	0.15%
FC9.5	Primary	Limestone	Not Used	68	6.51	30	46	76	8.7	0	0.00	0.00%
FC12.5	Primary	Limestone	Not Used	32	3.16	77	95	114	8.8	16	1.58	50.00%
All	All	Limestone	Fully Used	3000	293.92	29	50	127	11.0	6	0.49	0.17%
All	All	Limestone	Not Used	1123	108.05	30	62	134	15.3	51	4.76	4.41%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

Table 24: District 4 Statistical Summary by Friction Course, System, Aggregate, and Paving Time

Friction Course	System	Aggregate	Paving Time	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Limestone	Day	2678	263.81	33	57	212	13.3	43	3.94	1.49%
FC5	Primary	Limestone	Night	740	71.48	35	57	177	10.8	7	0.36	0.51%
FC5	Interstate	Limestone	Day	1472	142.18	37	58	134	10.0	15	1.14	0.80%
FC5	Interstate	Limestone	Night	6472	616.48	32	60	166	14.9	120	10.14	1.64%
FC9.5	Primary	Limestone	Day	1076	105.79	29	53	127	10.8	2	0.16	0.15%
FC9.5	Primary	Limestone	Night	16	1.43	42	51	67	7.2	0	0.00	0.00%
FC12.5	Primary	Limestone	Day	212	21.14	30	51	114	19.8	16	1.58	7.48%
All	All	Limestone	Day	5438	532.92	29	56	212	12.6	76	6.82	1.28%
All	All	Limestone	Night	7228	689.39	32	59	177	14.5	127	10.50	1.52%

Aggregate Type of "Mixed" has been excluded from this report.

Paving Times of "Both" and "Unknown" have been excluded from this report.

Table 25: District 4 Pavement Smoothness Summary by Friction Course, System, and Year

Friction Course	System	Year	Total Projects	Total Miles	IRI ≤ 55		IRI ≥ 96	
					Miles	% Miles	Miles	% Miles
FC5	Primary	2007	7	123.36	39.47	32.00%	1.62	1.31%
FC5	Primary	2008	3	46.64	23.89	51.22%	0.28	0.59%
FC5	Primary	2009	3	98.92	55.42	56.03%	0.43	0.44%
FC5	Primary	2010	4	83.92	56.53	67.36%	0.09	0.10%
FC5	Primary	2011	1	34.70	13.27	38.25%	2.57	7.42%
FC5	Interstate	2005	3	74.37	10.06	13.53%	1.21	1.62%
FC5	Interstate	2006	4	133.23	21.30	15.99%	3.90	2.93%
FC5	Interstate	2007	4	93.05	6.24	6.70%	1.99	2.14%
FC5	Interstate	2008	5	180.18	78.80	43.73%	5.90	3.27%
FC5	Interstate	2009	3	129.05	87.66	67.93%	0.94	0.73%
FC5	Interstate	2010	3	155.99	90.84	58.24%	2.27	1.45%
FC5	Interstate	2011	4	89.15	54.06	60.64%	0.48	0.54%
FC9.5	Primary	2008	1	13.49	2.80	20.75%	0.10	0.74%
FC9.5	Primary	2009	3	44.46	30.67	68.99%	0.06	0.14%
FC9.5	Primary	2010	3	49.27	39.76	80.70%	0.00	0.00%
FC12.5	Primary	2007	1	11.32	6.10	53.88%	0.10	0.88%
FC12.5	Primary	2010	1	3.16	0.00	0.00%	1.58	50.00%
FC12.5	Primary	2011	1	17.98	16.78	93.33%	0.00	0.00%
All	All	2005	3	74.37	10.06	13.53%	1.21	1.62%
All	All	2006	4	133.23	21.30	15.99%	3.90	2.93%
All	All	2007	12	227.73	51.81	22.75%	3.71	1.63%
All	All	2008	9	240.31	105.49	43.90%	6.27	2.61%
All	All	2009	9	272.44	173.76	63.78%	1.43	0.52%
All	All	2010	11	292.34	187.13	64.01%	3.93	1.35%
All	All	2011	6	141.83	84.11	59.30%	3.06	2.16%

Table 26: District 4 Statistical Summary by Contractor, Friction Course, Aggregate, and Material Transfer Device Status

Contractor	Friction Course	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
Asphalt Group, Inc.	FC5	Limestone	Not Used	646	62.21	42	58	134	9.1	6	0.47	0.76%
Community Asphalt Corp.	FC5	Limestone	Fully Used	894	88.61	33	57	103	11.5	5	0.43	0.49%
Community Asphalt Corp.	FC5	Limestone	Not Used	84	7.81	37	55	96	12.8	1	0.09	1.11%
Dickerson Asphalt	FC5	Limestone	Fully Used	1086	105.64	32	42	89	6.3	0	0.00	0.00%
Dickerson Asphalt	FC9.5	Limestone	Fully Used	146	14.20	34	54	127	10.7	1	0.06	0.43%
Hardrives of Delray	FC12.5	Limestone	Not Used	32	3.16	77	95	114	8.8	16	1.58	50.00%
J. W. Cheatham, LLC.	FC5	Limestone	Fully Used	114	10.27	42	55	84	6.8	0	0.00	0.00%
J. W. Cheatham, LLC.	FC9.5	Limestone	Not Used	16	1.43	42	51	67	7.2	0	0.00	0.00%
Ranger Construction	FC5	Limestone	Fully Used	502	49.63	36	55	88	8.5	0	0.00	0.00%
Ranger Construction	FC5	Limestone	Not Used	133	12.90	35	62	105	17.7	9	0.84	6.54%
Ranger Construction	FC9.5	Limestone	Fully Used	258	25.57	29	47	78	8.9	0	0.00	0.00%
Ranger Construction	FC9.5	Limestone	Not Used	52	5.08	30	45	76	8.5	0	0.00	0.00%
Weekley Asphalt Paving	FC5	Limestone	Not Used	160	15.46	53	81	123	11.6	19	1.78	11.50%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

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Ride Distribution of All Lots

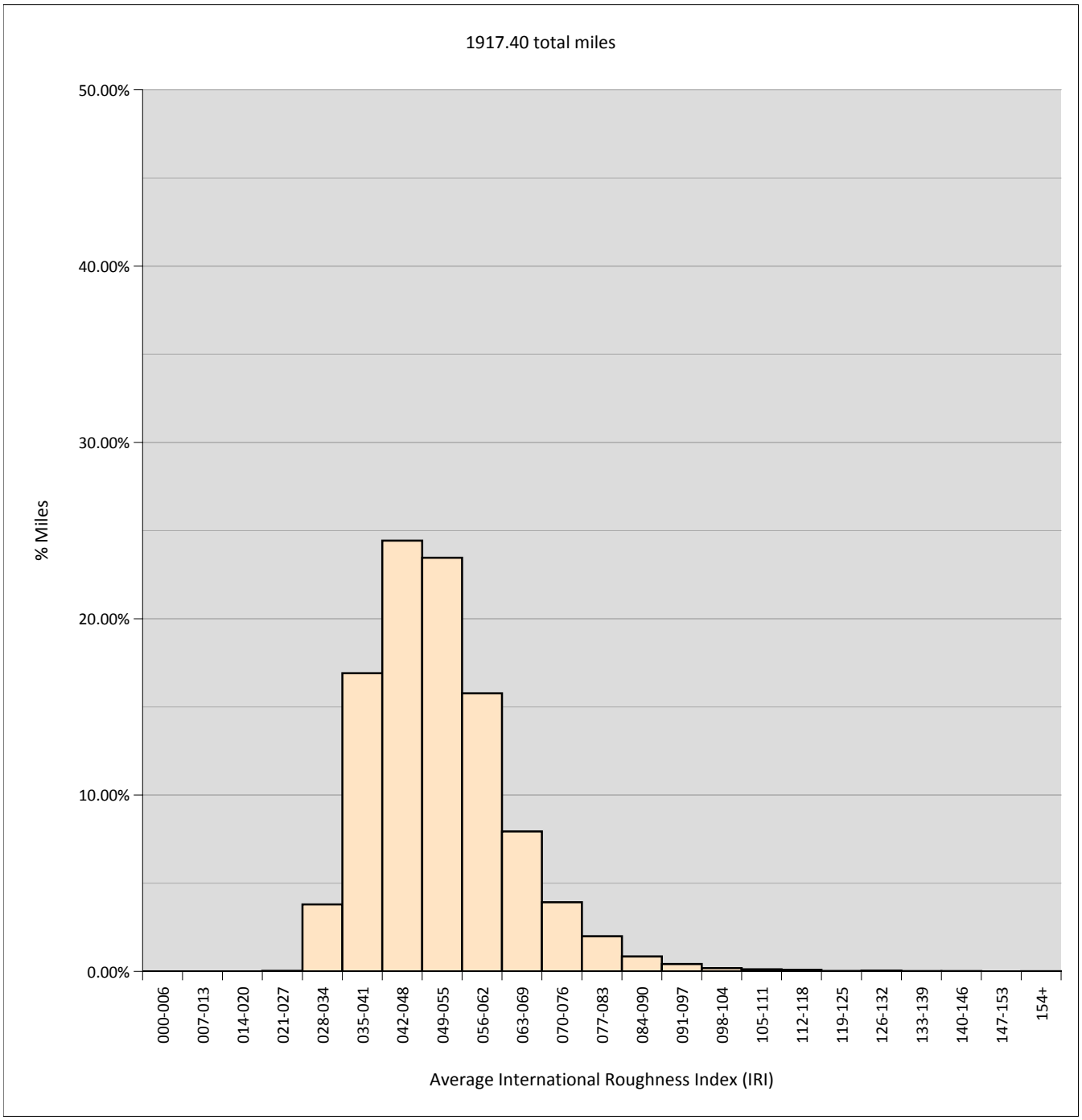

Figure 11: District 5 Ride Distribution, All Lots

Type	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
							Lots	Miles	% Miles
All Lots	19568	1917.40	25	52	356	12.2	137	11.36	0.59%

Ride Distribution by Friction Course and System

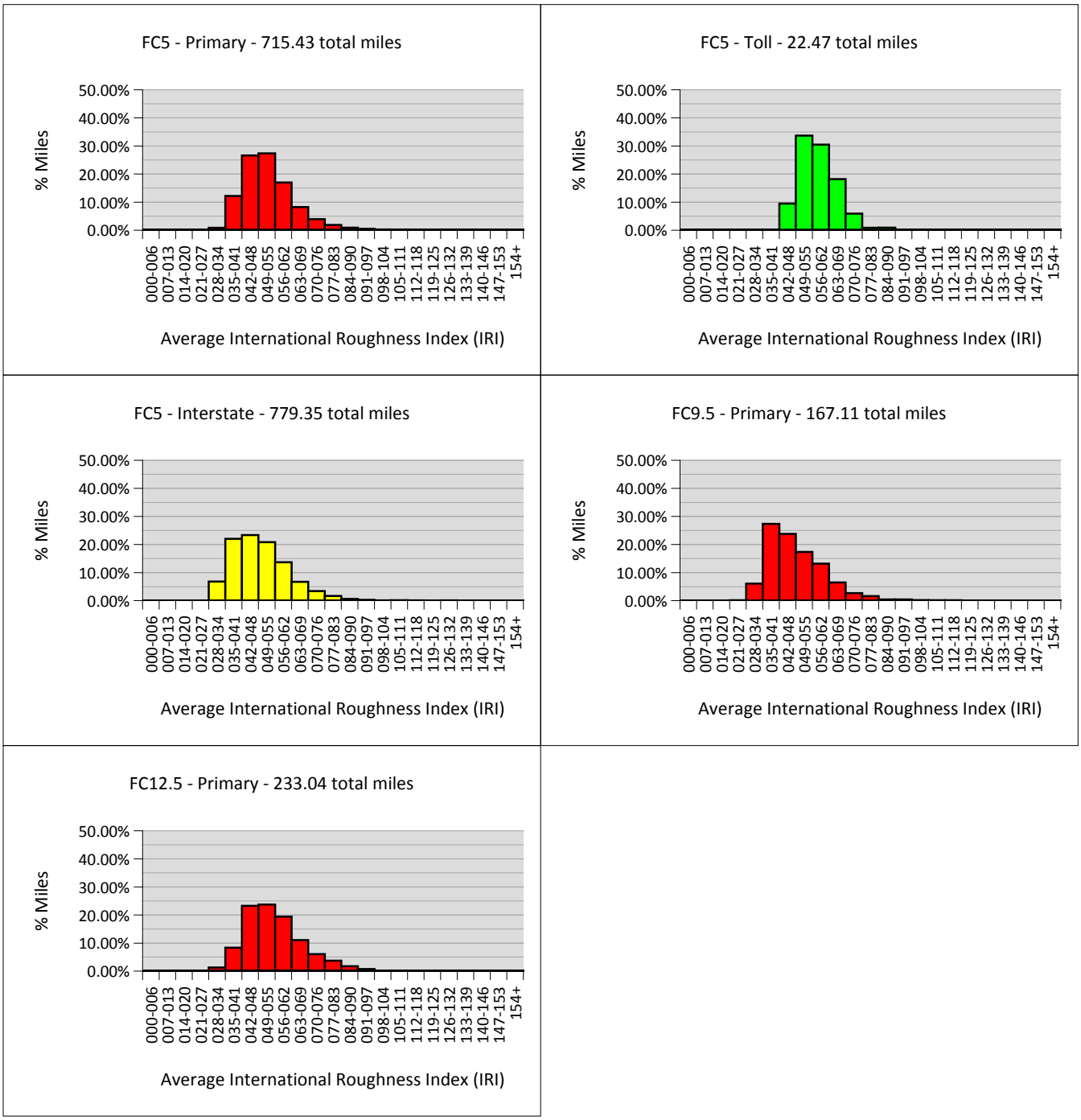

Figure 12: District 5 Ride Distribution by Friction Course and System

Friction Course	System	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
								Lots	Miles	% Miles
FC5	Primary	7326	715.43	29	53	356	11.4	58	4.64	0.65%
FC5	Toll	243	22.47	42	58	228	9.8	4	0.10	0.43%
FC5	Interstate	7918	779.35	25	50	142	12.3	44	3.94	0.51%
FC9.5	Primary	1696	167.11	27	49	121	12.3	11	1.06	0.64%
FC12.5	Primary	2385	233.04	28	55	158	12.8	20	1.63	0.70%

Table 27: District 5 Statistical Summary by Friction Course, System, Year, and Aggregate

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	2005	Granite	648	64.16	33	54	110	9.6	3	0.30	0.47%
FC5	Primary	2005	Limestone	447	42.13	39	60	134	11.1	8	0.54	1.28%
FC5	Primary	2006	Granite	718	70.31	34	59	114	10.6	4	0.36	0.51%
FC5	Primary	2006	Limestone	631	62.04	32	54	356	13.4	15	1.31	2.11%
FC5	Primary	2007	Granite	785	77.22	38	55	92	9.2	0	0.00	0.00%
FC5	Primary	2007	Limestone	234	23.13	40	65	163	14.3	12	1.04	4.48%
FC5	Primary	2008	Granite	1139	112.15	33	47	141	8.7	4	0.12	0.11%
FC5	Primary	2008	Limestone	497	49.20	35	45	76	5.9	0	0.00	0.00%
FC5	Primary	2009	Granite	981	94.59	29	52	124	11.1	4	0.26	0.28%
FC5	Primary	2009	Limestone	238	23.09	33	52	108	11.7	4	0.40	1.73%
FC5	Primary	2010	Granite	362	34.12	32	50	106	11.4	2	0.10	0.31%
FC5	Primary	2010	Limestone	44	4.40	41	52	73	7.4	0	0.00	0.00%
FC5	Primary	2011	Granite	602	58.92	32	50	131	10.2	2	0.20	0.34%
FC5	Toll	2006	Granite	207	19.47	42	57	85	7.4	0	0.00	0.00%
FC5	Toll	2006	Limestone	36	3.00	47	67	228	16.4	4	0.10	3.20%
FC5	Interstate	2005	Limestone	804	79.62	28	40	75	6.2	0	0.00	0.00%
FC5	Interstate	2006	Granite	1306	128.49	41	61	142	11.8	28	2.74	2.13%
FC5	Interstate	2007	Granite	1691	167.21	28	49	127	11.1	3	0.26	0.15%
FC5	Interstate	2008	Granite	1417	139.74	25	46	108	12.8	4	0.31	0.22%
FC5	Interstate	2008	Limestone	248	24.36	31	45	85	9.0	0	0.00	0.00%
FC5	Interstate	2009	Granite	412	39.44	31	49	114	13.6	3	0.30	0.76%
FC5	Interstate	2009	Limestone	248	24.40	35	46	69	5.9	0	0.00	0.00%
FC5	Interstate	2010	Granite	30	2.76	43	61	99	13.2	2	0.12	4.32%
FC5	Interstate	2010	Limestone	248	23.74	37	51	90	7.6	0	0.00	0.00%
FC5	Interstate	2011	Granite	426	42.02	28	46	82	9.1	0	0.00	0.00%
FC5	Interstate	2011	Limestone	1088	107.59	29	51	115	9.5	4	0.21	0.20%
FC9.5	Primary	2005	Granite	60	5.63	35	58	112	15.0	1	0.06	1.12%
FC9.5	Primary	2006	Limestone	99	9.78	31	41	118	9.8	1	0.10	1.02%
FC9.5	Primary	2007	Granite	260	25.71	35	54	88	10.0	0	0.00	0.00%
FC9.5	Primary	2008	Granite	480	47.63	27	41	85	8.1	0	0.00	0.00%
FC9.5	Primary	2009	Granite	458	44.91	33	55	121	12.8	7	0.70	1.56%
FC12.5	Primary	2005	Granite	134	12.87	41	75	98	8.6	1	0.01	0.09%
FC12.5	Primary	2006	Limestone	80	7.65	35	53	121	16.7	3	0.30	3.92%
FC12.5	Primary	2007	Granite	435	42.41	41	61	127	10.8	7	0.58	1.37%
FC12.5	Primary	2008	Granite	480	47.25	29	49	109	9.6	1	0.04	0.08%
FC12.5	Primary	2009	Granite	236	23.07	39	55	121	9.8	1	0.06	0.24%
FC12.5	Primary	2010	Granite	503	49.22	34	53	158	12.3	4	0.34	0.69%
FC12.5	Primary	2011	Granite	316	31.13	28	57	98	12.5	3	0.30	0.96%

Table 27: District 5 Statistical Summary by Friction Course, System, Year, and Aggregate, continued

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles

Aggregate Type of "Mixed" has been excluded from this report.

Table 28: District 5 Statistical Summary by Friction Course, System, Aggregate, and Material Transfer Device Status

Friction Course	System	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Fully Used	425	41.35	32	50	131	10.2	1	0.10	0.24%
FC5	Primary	Granite	Not Used	1365	131.78	32	54	124	11.8	8	0.57	0.43%
FC5	Primary	Limestone	Fully Used	238	23.09	33	52	108	11.7	4	0.40	1.73%
FC5	Primary	Limestone	Not Used	44	4.40	41	52	73	7.4	0	0.00	0.00%
FC5	Interstate	Granite	Not Used	270	25.93	31	42	71	7.0	0	0.00	0.00%
FC5	Interstate	Limestone	Fully Used	1336	131.32	29	51	115	9.2	4	0.21	0.16%
FC9.5	Primary	Granite	Fully Used	63	6.16	33	60	121	18.8	4	0.40	6.49%
FC9.5	Primary	Granite	Not Used	113	11.07	34	47	77	8.6	0	0.00	0.00%
FC12.5	Primary	Granite	Fully Used	319	31.35	34	49	96	9.0	1	0.10	0.32%
FC12.5	Primary	Granite	Not Used	610	59.54	28	57	158	13.0	6	0.50	0.83%
All	All	Granite & Limestone	Fully Used	2381	233.27	29	51	131	10.1	14	1.21	0.52%
All	All	Granite & Limestone	Not Used	2402	232.72	28	53	158	12.4	14	1.06	0.46%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

Table 29: District 5 Statistical Summary by Friction Course, System, Aggregate, and Paving Time

Friction Course	System	Aggregate	Paving Time	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Day	2406	235.81	32	53	110	10.4	6	0.38	0.16%
FC5	Primary	Granite	Night	1662	160.73	32	50	141	10.0	7	0.40	0.25%
FC5	Primary	Limestone	Day	1182	116.77	32	50	163	10.9	13	1.06	0.91%
FC5	Primary	Limestone	Night	44	4.40	41	52	73	7.4	0	0.00	0.00%
FC5	Toll	Granite	Night	207	19.47	42	57	85	7.4	0	0.00	0.00%
FC5	Toll	Limestone	Night	36	3.00	47	67	228	16.4	4	0.10	3.20%
FC5	Interstate	Granite	Night	2950	289.31	25	45	99	11.0	3	0.22	0.08%
FC5	Interstate	Limestone	Night	248	24.40	35	46	69	5.9	0	0.00	0.00%
FC9.5	Primary	Granite	Day	713	70.45	27	46	88	10.7	0	0.00	0.00%
FC9.5	Primary	Granite	Night	393	38.94	31	54	104	11.4	3	0.30	0.77%
FC9.5	Primary	Limestone	Night	99	9.78	31	41	118	9.8	1	0.10	1.02%
FC12.5	Primary	Granite	Day	1296	127.77	29	52	158	10.5	6	0.48	0.37%
FC12.5	Primary	Granite	Night	402	38.85	37	64	127	12.9	10	0.84	2.15%
FC12.5	Primary	Limestone	Day	42	4.02	35	58	121	19.4	3	0.30	7.46%
FC12.5	Primary	Limestone	Night	38	3.63	36	48	78	10.5	0	0.00	0.00%
All	All	Granite & Limestone	Day	5639	554.81	27	51	163	10.9	28	2.22	0.40%
All	All	Granite & Limestone	Night	6079	592.52	25	49	228	11.9	28	1.95	0.33%

Aggregate Type of "Mixed" has been excluded from this report.

Paving Times of "Both" and "Unknown" have been excluded from this report.

Table 30: District 5 Pavement Smoothness Summary by Friction Course, System, and Year

Friction Course	System	Year	Total Projects	Total Miles	IRI ≤ 55		IRI ≥ 96	
					Miles	% Miles	Miles	% Miles
FC5	Primary	2005	6	106.29	58.10	54.67%	0.84	0.79%
FC5	Primary	2006	8	132.34	73.01	55.17%	1.67	1.26%
FC5	Primary	2007	5	100.34	51.77	51.59%	1.04	1.03%
FC5	Primary	2008	8	161.35	142.78	88.49%	0.12	0.08%
FC5	Primary	2009	9	117.67	79.74	67.77%	0.66	0.56%
FC5	Primary	2010	5	38.52	28.94	75.14%	0.10	0.27%
FC5	Primary	2011	6	58.92	44.97	76.31%	0.20	0.34%
FC5	Toll	2006	2	22.47	9.70	43.19%	0.10	0.43%
FC5	Interstate	2005	1	79.62	77.59	97.45%	0.00	0.00%
FC5	Interstate	2006	2	128.49	41.71	32.46%	2.74	2.13%
FC5	Interstate	2007	4	167.21	129.42	77.40%	0.26	0.15%
FC5	Interstate	2008	4	164.10	129.78	79.09%	0.31	0.19%
FC5	Interstate	2009	3	63.84	52.46	82.17%	0.30	0.47%
FC5	Interstate	2010	2	26.49	20.64	77.90%	0.12	0.45%
FC5	Interstate	2011	3	149.60	118.30	79.08%	0.21	0.14%
FC9.5	Primary	2005	3	25.85	20.19	78.10%	0.26	1.02%
FC9.5	Primary	2006	3	23.02	19.86	86.29%	0.10	0.43%
FC9.5	Primary	2007	1	25.71	15.34	59.66%	0.00	0.00%
FC9.5	Primary	2008	2	47.63	43.84	92.05%	0.00	0.00%
FC9.5	Primary	2009	4	44.91	25.54	56.86%	0.70	1.56%
FC12.5	Primary	2005	1	12.87	0.30	2.33%	0.01	0.09%
FC12.5	Primary	2006	4	17.73	10.05	56.68%	0.30	1.69%
FC12.5	Primary	2007	3	42.41	12.16	28.67%	0.58	1.37%
FC12.5	Primary	2008	4	56.62	45.22	79.87%	0.04	0.07%
FC12.5	Primary	2009	2	23.07	13.54	58.72%	0.06	0.24%
FC12.5	Primary	2010	5	49.22	33.65	68.36%	0.34	0.69%
FC12.5	Primary	2011	4	31.13	17.13	55.02%	0.30	0.96%
All	All	2005	11	224.62	156.18	69.53%	1.11	0.50%
All	All	2006	18	324.05	154.34	47.63%	4.90	1.51%
All	All	2007	12	335.67	208.69	62.17%	1.88	0.56%
All	All	2008	18	429.69	361.63	84.16%	0.48	0.11%
All	All	2009	17	249.49	171.28	68.65%	1.72	0.69%
All	All	2010	12	114.23	83.22	72.86%	0.56	0.49%
All	All	2011	13	239.66	180.39	75.27%	0.71	0.30%

Table 31: District 5 Statistical Summary by Contractor, Friction Course, Aggregate, and Material Transfer Device Status

Contractor	Friction Course	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
A.P.A.C.	FC5	Granite	Not Used	52	5.17	35	56	82	11.0	0	0.00	0.00%
A.P.A.C.	FC12.5	Granite	Not Used	56	5.25	28	54	85	13.7	0	0.00	0.00%
Anderson Columbia	FC5	Granite	Fully Used	74	6.97	37	50	90	9.0	0	0.00	0.00%
Anderson Columbia	FC5	Granite	Not Used	270	25.93	31	42	71	7.0	0	0.00	0.00%
Anderson Columbia	FC9.5	Granite	Fully Used	63	6.16	33	60	121	18.8	4	0.40	6.49%
C. W. Roberts Contracting	FC12.5	Granite	Fully Used	66	6.60	37	54	96	11.8	1	0.10	1.52%
Community Asphalt Corp.	FC5	Limestone	Fully Used	1088	107.59	29	51	115	9.5	4	0.21	0.20%
D.A.B. Constructors	FC5	Granite	Fully Used	104	10.07	32	42	66	5.8	0	0.00	0.00%
D.A.B. Constructors	FC5	Granite	Not Used	57	5.67	45	60	103	10.5	1	0.10	1.76%
D.A.B. Constructors	FC12.5	Granite	Not Used	20	1.86	41	54	121	14.6	1	0.06	3.02%
Halifax Paving Inc.	FC5	Granite	Not Used	554	54.16	32	53	101	10.4	1	0.08	0.16%
Hubbard Construction	FC5	Granite	Fully Used	40	3.81	37	49	70	8.3	0	0.00	0.00%
Hubbard Construction	FC5	Granite	Not Used	70	6.10	37	62	106	16.0	3	0.23	3.79%
Hubbard Construction	FC5	Limestone	Fully Used	238	23.09	33	52	108	11.7	4	0.40	1.73%
Middlesex Corp.	FC5	Granite	Not Used	164	15.70	32	50	106	11.0	1	0.02	0.13%
Middlesex Corp.	FC9.5	Granite	Not Used	113	11.07	34	47	77	8.6	0	0.00	0.00%
P & S Paving	FC5	Granite	Not Used	150	14.38	36	53	87	9.2	0	0.00	0.00%
P & S Paving	FC12.5	Granite	Fully Used	253	24.75	34	48	84	7.6	0	0.00	0.00%
P & S Paving	FC12.5	Granite	Not Used	368	36.18	37	54	92	9.1	0	0.00	0.00%
Rainey Asphalt	FC5	Granite	Not Used	84	8.36	37	46	67	6.3	0	0.00	0.00%
Ranger Construction	FC5	Granite	Fully Used	207	20.50	35	54	131	10.5	1	0.10	0.49%
Ranger Construction	FC5	Granite	Not Used	178	16.93	34	59	124	15.0	2	0.13	0.77%
Ranger Construction	FC5	Limestone	Fully Used	248	23.74	37	51	90	7.6	0	0.00	0.00%
Ranger Construction	FC5	Limestone	Not Used	44	4.40	41	52	73	7.4	0	0.00	0.00%
Ranger Construction	FC12.5	Granite	Not Used	70	6.87	48	62	78	6.3	0	0.00	0.00%
Sonny Riley	FC5	Granite	Not Used	56	5.31	37	52	82	9.9	0	0.00	0.00%
Steven Counts Inc.	FC12.5	Granite	Not Used	28	2.63	45	77	158	27.2	4	0.34	12.93%
Whitehurst	FC12.5	Granite	Not Used	68	6.76	45	68	98	11.7	1	0.10	1.48%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

Ride Distribution of All Lots

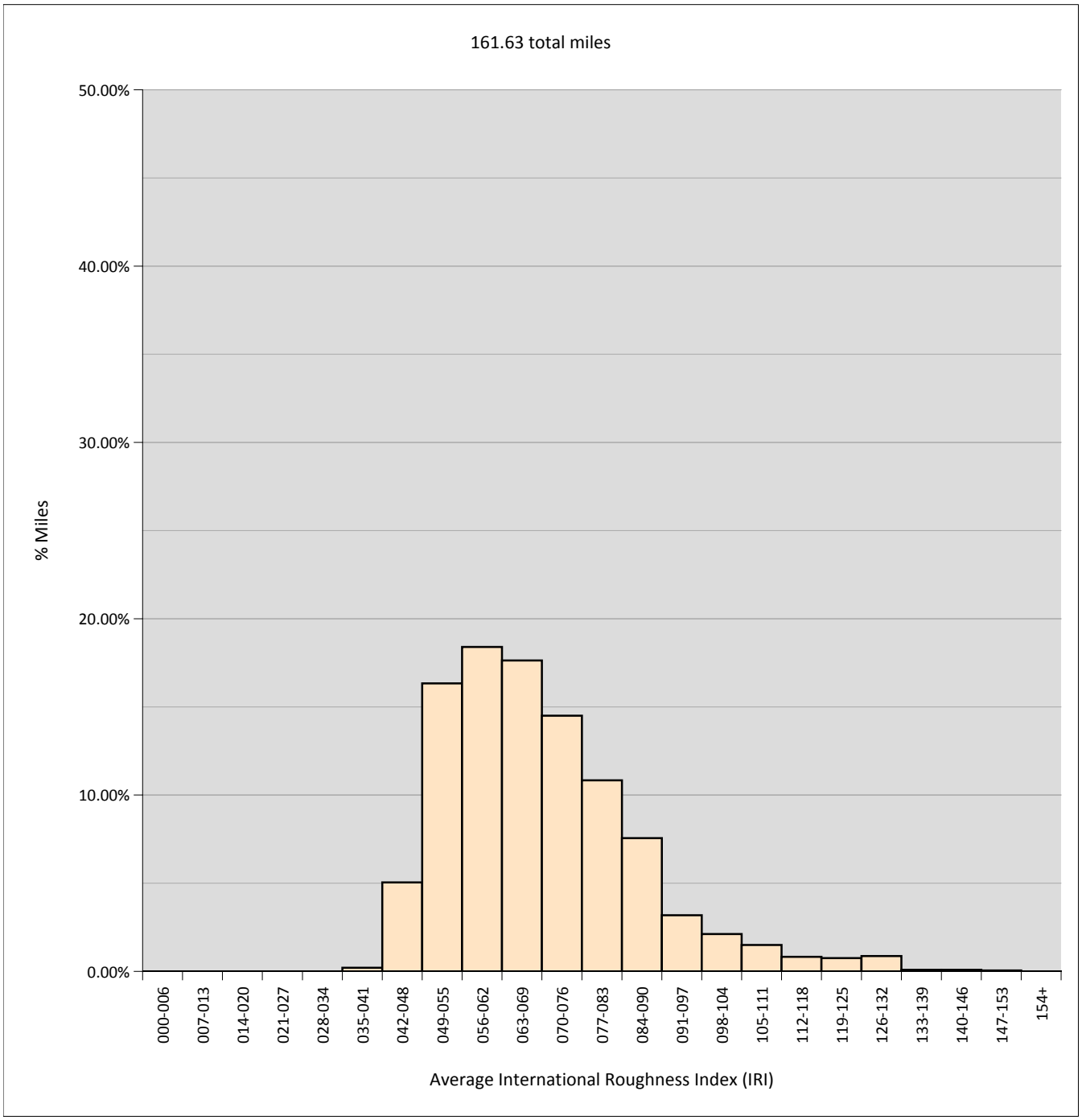

Figure 13: District 6 Ride Distribution, All Lots

Type	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
							Lots	Miles	% Miles
All Lots	1677	161.63	38	69	150	16.8	131	11.43	7.07%

Ride Distribution by Friction Course and System

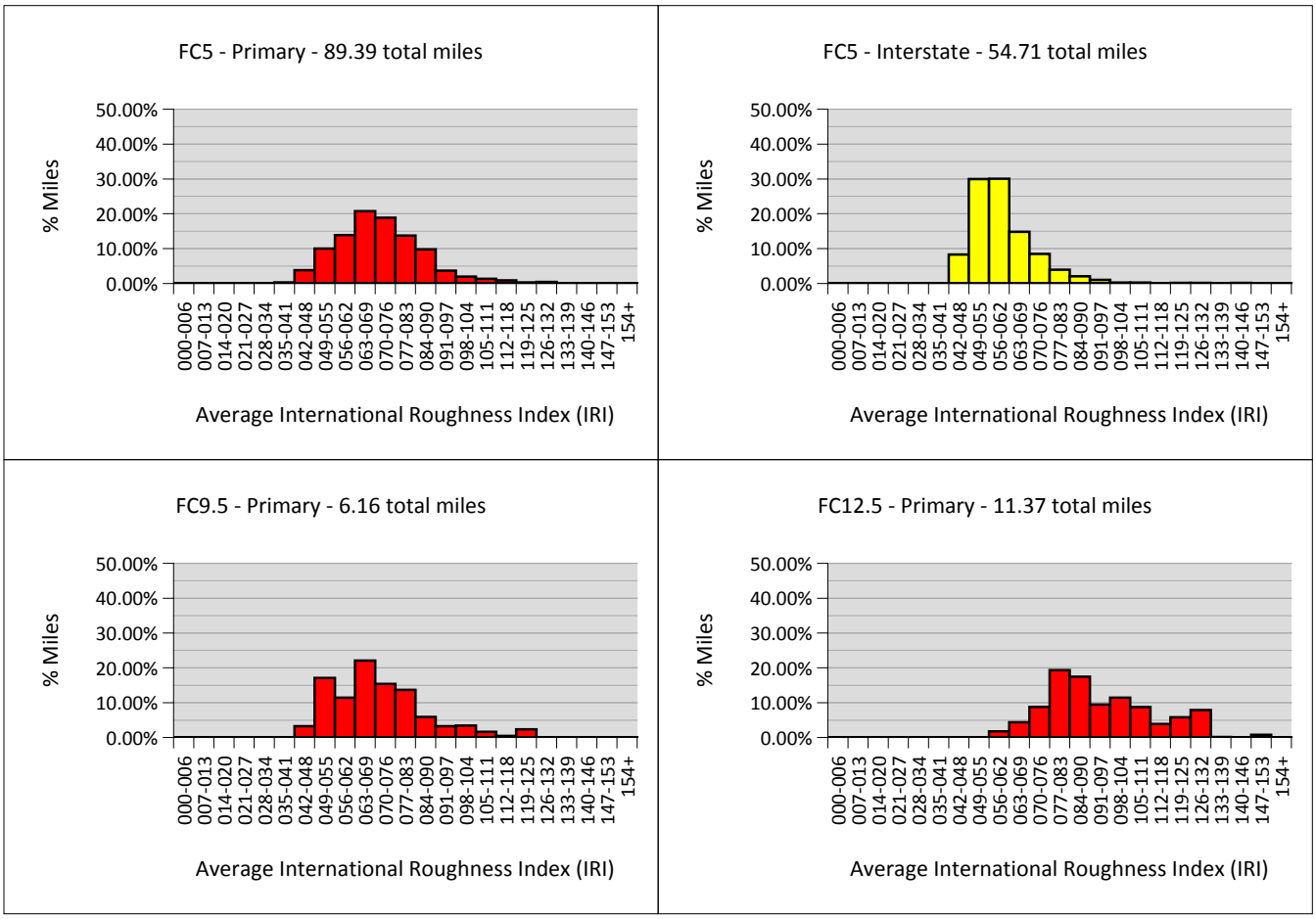

Figure 14: District 6 Ride Distribution by Friction Course and System

Friction Course	System	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
								Lots	Miles	% Miles
FC5	Primary	915	89.39	38	71	146	15.2	64	5.77	6.46%
FC5	Interstate	575	54.71	40	60	146	11.9	12	0.77	1.40%
FC9.5	Primary	69	6.16	43	71	123	16.2	7	0.49	7.89%
FC12.5	Primary	118	11.37	60	94	150	18.5	48	4.40	38.73%

Table 32: District 6 Statistical Summary by Friction Course, System, Year, and Aggregate

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	2007	Limestone	238	23.18	50	73	125	13.1	17	1.48	6.38%
FC5	Primary	2008	Limestone	158	15.61	52	77	146	14.4	16	1.44	9.24%
FC5	Primary	2009	Limestone	143	13.82	55	79	144	12.2	15	1.35	9.73%
FC5	Primary	2010	Limestone	242	23.49	41	66	127	13.7	9	0.81	3.44%
FC5	Primary	2011	Limestone	134	13.29	38	63	125	16.8	7	0.70	5.27%
FC5	Interstate	2008	Limestone	206	20.10	43	59	94	8.9	0	0.00	0.00%
FC5	Interstate	2009	Limestone	214	21.00	42	62	117	10.9	3	0.21	1.02%
FC5	Interstate	2010	Limestone	155	13.62	40	61	146	16.4	9	0.55	4.05%
FC9.5	Primary	2011	Limestone	69	6.16	43	71	123	16.2	7	0.49	7.89%
FC12.5	Primary	2008	Limestone	108	10.54	60	93	148	18.3	42	3.97	37.70%
FC12.5	Primary	2011	Limestone	10	0.83	81	102	150	18.8	6	0.43	51.75%

Aggregate Type of "Mixed" has been excluded from this report.

Table 33: District 6 Statistical Summary by Friction Course, System, Aggregate, and Material Transfer Device Status

Friction Course	System	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Limestone	Fully Used	151	14.70	48	68	117	11.5	7	0.52	3.53%
FC5	Primary	Limestone	Not Used	77	7.28	55	80	144	13.8	11	0.95	12.98%
FC5	Interstate	Limestone	Not Used	155	13.62	40	61	146	16.4	9	0.55	4.05%
All	All	Limestone	Fully Used	151	14.70	48	68	117	11.5	7	0.52	3.53%
All	All	Limestone	Not Used	232	20.90	40	68	146	18.0	20	1.50	7.16%

Aggregate Type of "Mixed" has been excluded from this report.
Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

Table 34: District 6 Statistical Summary by Friction Course, System, Aggregate, and Paving Time

Friction Course	System	Aggregate	Paving Time	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Limestone	Day	134	13.36	38	60	136	13.6	2	0.20	1.50%
FC5	Primary	Limestone	Night	556	54.12	48	76	146	13.5	52	4.57	8.45%
FC5	Interstate	Limestone	Night	575	54.71	40	60	146	11.9	12	0.77	1.40%
FC9.5	Primary	Limestone	Night	69	6.16	43	71	123	16.2	7	0.49	7.89%
FC12.5	Primary	Limestone	Night	10	0.83	81	102	150	18.8	6	0.43	51.75%
All	All	Limestone	Day	134	13.36	38	60	136	13.6	2	0.20	1.50%
All	All	Limestone	Night	1210	115.82	40	68	150	15.3	77	6.25	5.40%

Aggregate Type of "Mixed" has been excluded from this report.
Paving Times of "Both" and "Unknown" have been excluded from this report.

Table 35: District 6 Pavement Smoothness Summary by Friction Course, System, and Year

Friction Course	System	Year	Total Projects	Total Miles	IRI ≤ 55		IRI ≥ 96	
					Miles	% Miles	Miles	% Miles
FC5	Primary	2007	3	23.18	1.40	6.04%	1.48	6.38%
FC5	Primary	2008	4	15.61	0.30	1.92%	1.44	9.24%
FC5	Primary	2009	4	13.82	0.10	0.72%	1.35	9.73%
FC5	Primary	2010	3	23.49	5.25	22.34%	0.81	3.44%
FC5	Primary	2011	2	13.29	5.60	42.11%	0.70	5.27%
FC5	Interstate	2008	1	20.10	8.12	40.39%	0.00	0.00%
FC5	Interstate	2009	1	21.00	7.11	33.86%	0.21	1.02%
FC5	Interstate	2010	1	13.62	5.77	42.38%	0.55	4.05%
FC9.5	Primary	2011	1	6.16	1.25	20.36%	0.49	7.89%
FC12.5	Primary	2008	2	10.54	0.00	0.00%	3.97	37.70%
FC12.5	Primary	2011	1	0.83	0.00	0.00%	0.43	51.75%
All	All	2007	3	23.18	1.40	6.04%	1.48	6.38%
All	All	2008	7	46.24	8.42	18.20%	5.42	11.71%
All	All	2009	5	34.82	7.21	20.71%	1.56	4.48%
All	All	2010	4	37.11	11.02	29.69%	1.36	3.66%
All	All	2011	4	20.28	6.85	33.78%	1.62	7.96%

Table 36: District 6 Statistical Summary by Contractor, Friction Course, Aggregate, and Material Transfer Device Status

Contractor	Friction Course	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
Asphalt Group, Inc.	FC5	Limestone	Not Used	24	2.25	58	85	144	18.1	6	0.45	19.82%
Community Asphalt Corp.	FC5	Limestone	Not Used	155	13.62	40	61	146	16.4	9	0.55	4.05%
General Asphalt Company	FC5	Limestone	Fully Used	133	13.04	48	67	117	10.8	4	0.31	2.39%
General Asphalt Company	FC5	Limestone	Not Used	53	5.03	55	78	107	10.6	5	0.50	9.93%
Weekley Asphalt Paving	FC5	Limestone	Fully Used	18	1.66	57	74	113	14.1	3	0.21	12.44%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

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Ride Distribution of All Lots

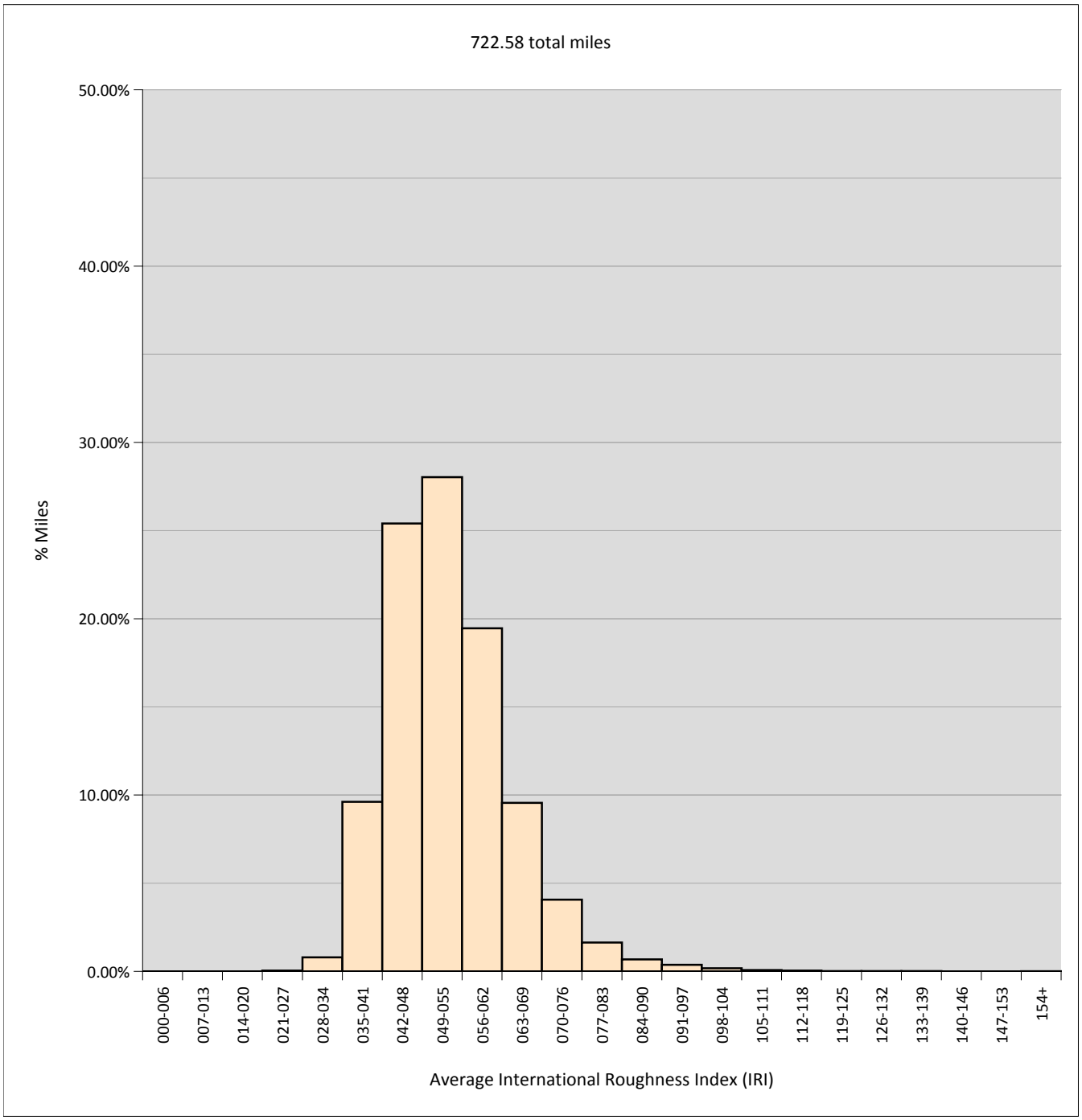

Figure 15: District 7 Ride Distribution, All Lots

Type	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
							Lots	Miles	% Miles
All Lots	7428	722.58	27	53	269	10.8	45	3.35	0.46%

Ride Distribution by Friction Course and System

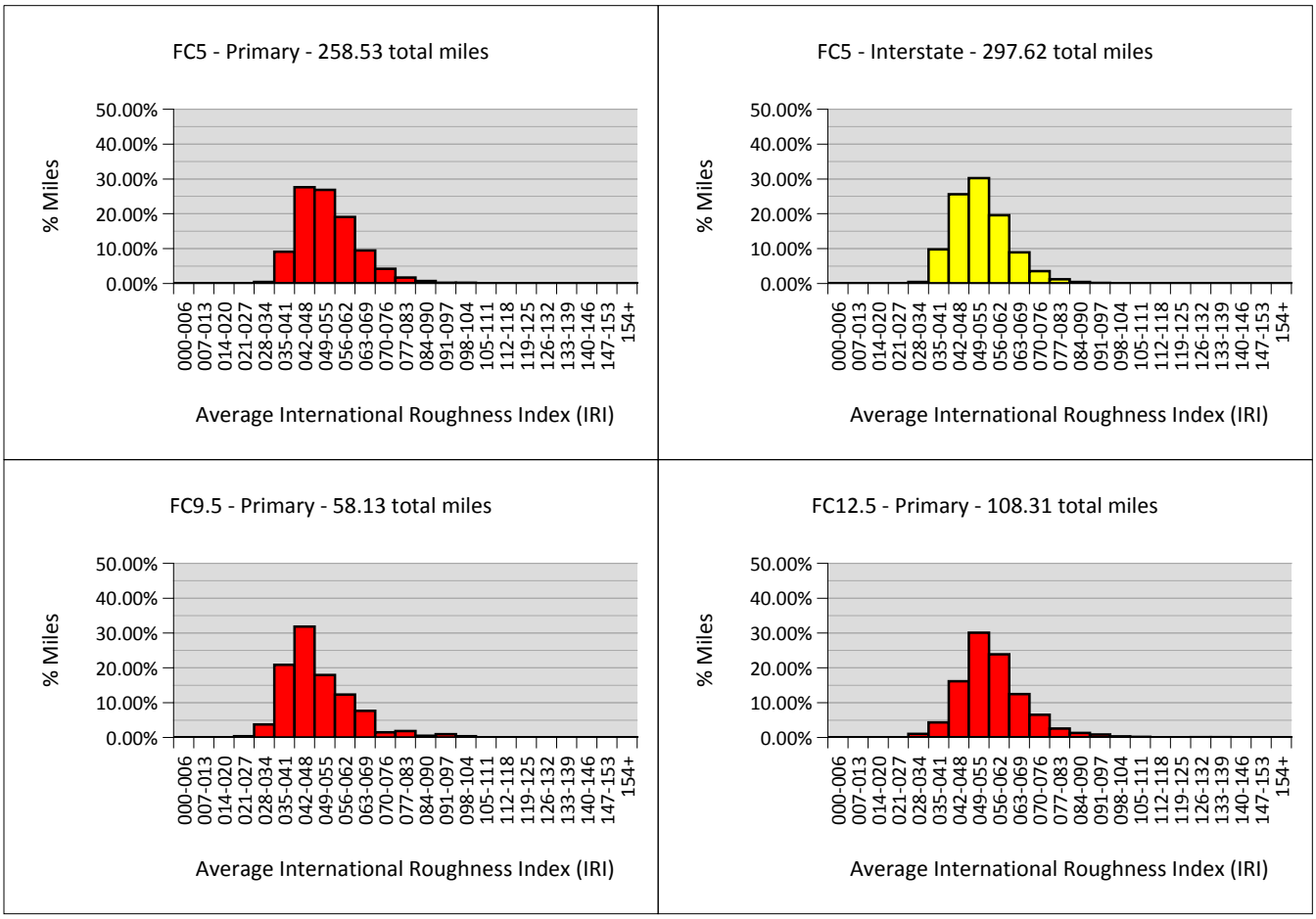

Figure 16: District 7 Ride Distribution by Friction Course and System

Friction Course	System	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
								Lots	Miles	% Miles
FC5	Primary	2657	258.53	27	53	269	11.0	19	1.31	0.51%
FC5	Interstate	3073	297.62	33	53	108	9.6	5	0.25	0.08%
FC9.5	Primary	592	58.13	27	49	106	11.9	6	0.44	0.76%
FC12.5	Primary	1106	108.31	30	57	138	11.7	15	1.35	1.25%

Table 37: District 7 Statistical Summary by Friction Course, System, Year, and Aggregate

Friction Course	System	Year	Aggregate	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	2006	Granite	314	30.36	37	58	269	15.5	12	0.97	3.19%
FC5	Primary	2007	Granite	212	20.73	38	53	98	8.7	1	0.10	0.48%
FC5	Primary	2008	Granite	1088	107.23	27	53	103	10.3	2	0.16	0.15%
FC5	Primary	2009	Granite	91	8.06	41	66	164	11.4	2	0.04	0.46%
FC5	Primary	2010	Granite	152	14.28	33	53	87	9.7	0	0.00	0.00%
FC5	Primary	2011	Granite	399	38.53	34	51	105	8.7	2	0.04	0.11%
FC5	Primary	2011	Limestone	287	28.57	35	46	66	5.3	0	0.00	0.00%
FC5	Interstate	2005	Granite	378	35.90	36	51	100	8.1	1	0.03	0.07%
FC5	Interstate	2006	Granite	511	50.61	33	50	90	9.7	0	0.00	0.00%
FC5	Interstate	2007	Granite	95	8.69	42	58	93	10.1	0	0.00	0.00%
FC5	Interstate	2008	Granite	20	1.95	49	58	72	6.1	0	0.00	0.00%
FC5	Interstate	2008	Limestone	104	9.99	45	56	91	7.5	0	0.00	0.00%
FC5	Interstate	2009	Granite	521	49.77	33	51	90	8.9	0	0.00	0.00%
FC5	Interstate	2010	Granite	915	90.44	35	53	91	8.9	0	0.00	0.00%
FC5	Interstate	2010	Limestone	19	1.68	55	74	108	11.7	1	0.09	5.54%
FC5	Interstate	2011	Granite	510	48.60	33	54	99	10.7	3	0.13	0.27%
FC9.5	Primary	2005	Granite	115	11.28	36	57	106	11.1	3	0.21	1.86%
FC9.5	Primary	2006	Limestone	123	11.87	35	60	100	13.1	3	0.23	1.93%
FC9.5	Primary	2009	Granite	354	34.99	27	43	71	6.7	0	0.00	0.00%
FC12.5	Primary	2006	Granite	44	4.19	42	64	98	14.3	2	0.15	3.46%
FC12.5	Primary	2008	Granite	144	13.86	35	55	98	11.2	1	0.10	0.72%
FC12.5	Primary	2009	Granite	164	15.97	45	60	89	8.7	0	0.00	0.00%
FC12.5	Primary	2010	Granite	186	18.29	39	58	100	13.0	3	0.30	1.64%
FC12.5	Primary	2011	Granite	450	44.38	30	55	138	12.0	7	0.70	1.58%

Aggregate Type of "Mixed" has been excluded from this report.

Table 38: District 7 Statistical Summary by Friction Course, System, Aggregate, and Material Transfer Device Status

Friction Course	System	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Fully Used	126	12.52	37	49	67	6.0	0	0.00	0.00%
FC5	Primary	Granite	Not Used	446	42.02	33	54	164	11.2	2	0.04	0.09%
FC5	Primary	Limestone	Not Used	287	28.57	35	46	66	5.3	0	0.00	0.00%
FC5	Interstate	Granite	Fully Used	186	18.16	36	59	91	10.8	0	0.00	0.00%
FC5	Interstate	Granite	Not Used	663	63.68	33	53	99	10.4	3	0.13	0.20%
FC9.5	Primary	Granite	Not Used	166	16.44	36	45	71	5.4	0	0.00	0.00%
FC12.5	Primary	Granite	Fully Used	318	31.39	30	53	138	13.8	5	0.50	1.59%
FC12.5	Primary	Granite	Not Used	482	47.25	40	59	105	9.7	5	0.50	1.06%
All	All	Granite	Fully Used	630	62.07	30	54	138	12.2	5	0.50	0.81%
All	All	Granite	Not Used	2044	197.96	33	53	164	10.5	10	0.67	0.34%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

Table 39: District 7 Statistical Summary by Friction Course, System, Aggregate, and Paving Time

Friction Course	System	Aggregate	Paving Time	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
FC5	Primary	Granite	Day	341	32.77	27	50	105	10.5	2	0.04	0.13%
FC5	Primary	Granite	Night	1188	115.34	33	54	164	10.1	5	0.30	0.26%
FC5	Interstate	Granite	Night	2552	248.11	33	53	99	9.7	3	0.13	0.05%
FC5	Interstate	Limestone	Night	123	11.67	45	59	108	10.3	1	0.09	0.80%
FC9.5	Primary	Granite	Night	354	34.99	27	43	71	6.7	0	0.00	0.00%
FC9.5	Primary	Limestone	Night	123	11.87	35	60	100	13.1	3	0.23	1.93%
FC12.5	Primary	Granite	Day	86	8.24	40	61	98	12.8	3	0.25	2.97%
FC12.5	Primary	Granite	Night	114	11.02	34	66	138	16.1	6	0.60	5.44%
All	All	Granite & Limestone	Day	427	41.01	27	52	105	11.8	5	0.29	0.70%
All	All	Granite & Limestone	Night	4454	432.98	27	53	164	10.6	18	1.35	0.31%

Aggregate Type of "Mixed" has been excluded from this report.

Paving Times of "Both" and "Unknown" have been excluded from this report.

Table 40: District 7 Pavement Smoothness Summary by Friction Course, System, and Year

Friction Course	System	Year	Total Projects	Total Miles	IRI ≤ 55		IRI ≥ 96	
					Miles	% Miles	Miles	% Miles
FC5	Primary	2006	2	30.36	16.41	54.04%	0.97	3.19%
FC5	Primary	2007	1	20.73	14.11	68.08%	0.10	0.48%
FC5	Primary	2008	6	107.23	64.44	60.09%	0.16	0.15%
FC5	Primary	2009	2	18.83	7.05	37.44%	0.04	0.20%
FC5	Primary	2010	1	14.28	9.30	65.09%	0.00	0.00%
FC5	Primary	2011	5	67.10	54.39	81.06%	0.04	0.07%
FC5	Interstate	2005	1	35.90	25.63	71.40%	0.03	0.07%
FC5	Interstate	2006	2	50.61	36.46	72.03%	0.00	0.00%
FC5	Interstate	2007	1	8.69	4.19	48.24%	0.00	0.00%
FC5	Interstate	2008	2	11.93	6.03	50.56%	0.00	0.00%
FC5	Interstate	2009	1	49.77	36.35	73.04%	0.00	0.00%
FC5	Interstate	2010	5	92.12	59.42	64.51%	0.09	0.10%
FC5	Interstate	2011	1	48.60	28.48	58.60%	0.13	0.27%
FC9.5	Primary	2005	1	11.28	5.60	49.64%	0.21	1.86%
FC9.5	Primary	2006	2	11.87	4.62	38.90%	0.23	1.93%
FC9.5	Primary	2009	2	34.99	33.26	95.08%	0.00	0.00%
FC12.5	Primary	2006	2	12.19	6.14	50.40%	0.15	1.19%
FC12.5	Primary	2008	1	13.86	7.76	55.98%	0.10	0.72%
FC12.5	Primary	2009	2	19.59	7.50	38.29%	0.11	0.56%
FC12.5	Primary	2010	2	18.29	9.15	50.01%	0.30	1.64%
FC12.5	Primary	2011	4	44.38	25.33	57.07%	0.70	1.58%
All	All	2005	2	47.18	31.23	66.20%	0.24	0.50%
All	All	2006	8	105.02	63.62	60.58%	1.34	1.28%
All	All	2007	2	29.42	18.31	62.22%	0.10	0.34%
All	All	2008	9	133.02	78.23	58.81%	0.26	0.20%
All	All	2009	7	123.17	84.16	68.33%	0.15	0.12%
All	All	2010	8	124.69	77.87	62.45%	0.39	0.32%
All	All	2011	10	160.08	108.20	67.59%	0.87	0.55%

Table 41: District 7 Statistical Summary by Contractor, Friction Course, Aggregate, and Material Transfer Device Status

Contractor	Friction Course	Aggregate	Material Transfer Device Status	Total Lots	Total Miles	Min	Mean	Max	St. Dev	IRI ≥ 96		
										Lots	Miles	% Miles
A.P.A.C.	FC5	Granite	Not Used	243	22.35	33	58	164	12.3	2	0.04	0.17%
A.P.A.C.	FC12.5	Granite	Not Used	164	15.97	45	60	89	8.7	0	0.00	0.00%
Ajax Paving Industry	FC5	Granite	Not Used	510	48.60	33	54	99	10.7	3	0.13	0.27%
C. W. Roberts Contracting	FC12.5	Granite	Fully Used	260	25.78	30	51	111	11.3	2	0.20	0.78%
D.A.B. Constructors	FC5	Granite	Not Used	356	34.76	34	49	81	7.9	0	0.00	0.00%
D.A.B. Constructors	FC5	Limestone	Not Used	287	28.57	35	46	66	5.3	0	0.00	0.00%
D.A.B. Constructors	FC12.5	Granite	Not Used	262	25.87	40	56	105	7.9	2	0.20	0.77%
Lane Construction Corp.	FC5	Granite	Fully Used	186	18.16	36	59	91	10.8	0	0.00	0.00%
Lane Construction Corp.	FC9.5	Granite	Not Used	166	16.44	36	45	71	5.4	0	0.00	0.00%
Lane Construction Corp.	FC12.5	Granite	Fully Used	58	5.61	34	63	138	18.9	3	0.30	5.35%
Lane Construction Corp.	FC12.5	Granite	Not Used	56	5.41	53	70	100	11.2	3	0.30	5.54%
Tampa Pavement Constructors	FC5	Granite	Fully Used	126	12.52	37	49	67	6.0	0	0.00	0.00%

Aggregate Type of "Mixed" has been excluded from this report.

Material Transfer Device Statuses of "Partially Used" and "Unknown" have been excluded from this report.

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Appendix

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RIDE NUMBER REPORT SUMMARY

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WHAT IS RIDE NUMBER?

The Pavement Serviceability Index (PSI) has been used by engineers since the AASHTO road test in the 1950's as an estimate of the opinion of the traveling public on the roughness (or lack of smoothness) of roads. The Ride Number (RN) is a profile index similar to the PSI, and was a result of NCHRP projects 1-23, conducted between January 1982 and November 1984 and published as NCHRP report 275, "Pavement Roughness and Rideability," and 1-23(2), conductd between January 1986 and December 1987 and published as NCHRP Report 308, "Pavement Roughness and Rideability - Field Evaluation." It is an index that rates rideability of a road using a 0 to 5 scale, where an RN of 5.0 is considered to be a perfect ride quality road, and an RN of zero is an impassable road. The RN was chosen because it corresponds to users' perception of pavement roughness. The definition of this method is given in Section 4.3.2 of ASTM E1489. The Profile Index (PI), equation (2), statistic is derived from the longitudinal profile and then processed through a non-linear mathematical transformation, equation (1), to yield RN value(s) for each 0.1 mile or any other desired reporting interval.

The RN is defined by the following equation:

$$RN = 5e^{-160\,PI} \quad \text{.....} \quad (1)$$

Where:

$$PI = \sqrt{\frac{\left(PI_L{}^2 + PI_R{}^2\right)}{2}} \quad \text{.....} \quad (2)$$

PI_L = Profile Index in the Left wheel path (ft/ft)

PI_R = Profile Index in the Right wheel path (ft/ft)

This summary expresses ride quality using Ride Number (RN). Currently. FDOT's smoothness specifications use RN to indicate the level of smoothness present on newly placed asphalt pavements. RN, howevere, is freatly influenced by differences in texture, especially dense-graded versus open-graded pavements.

The full Ride Number edition of this report can be found at the following link and is titled "Flexible Pavement Smoothness Acceptance Report - Ride Number Edition".

http://materials.dot.state.fl.us/smo/administration/resources/library/publications/researchreports/2011-2015.htm

Ride Number Report Observations

Many roadway characteristics and construction practices are being monitored and included in the FDOT's smoothness database. Some of these have proven to be significant contributors to the ride quality of the pavements tested, and some factors have not been so valuable. Below is a summary list of key variables being monitored with a brief explanation of their effect on pavement smoothness.

- Average Annual Daily Traffic (AADT) - Analysis on Interstate pavements has shown that 150,000 AADT or greater exhibit lower average RNs. Interstate pavements with AADT less than 150,000 have an average RN of 4.1, compared to an RN of 3.9 for Interstate pavements with AADT equal to or greater than 150,000.

- Material Transfer Device (MTD) Usage - Data shows that pavements placed using this equipment can be smoother. Overall, full MTD usage on the entire project shows no significant improvement over no MTD usage, both having an average RN of 4.2. MTD usage on the Interstate system yielded some benefit; 4.2 RN with full-project MTD usage versus 4.0 for Interstate projects where the MTD was not used at all.

- Aggregate Type - Based on summary data from Florida projects, smooth pavements can be constructed regardless of the aggregate type used. However, on average, pavements using Granite aggregate in friction courses are smoother. Granite pavements have an average RN of 4.2, compared to an RN of 4.0 for Limestone pavements.

- Data by Year - No significant improvement was found when comparing the average RN over time.

- Binder Type - No significant difference was found when comparing the smoothness of pavements using polymer-modified binders in the friction course to pavements using other types of binders.

- Paving Time - No significant difference was found when comparing the smoothness of pavements placed at Night to those placed during the Day.

- System - No significant difference was found when comparing the smoothness of Primary and Interstate systems.

- Surface Type - It is well documented that pavements with dense-graded friction courses are consistently smoother, in terms of RN, than those with open-graded friction courses. Dense-graded friction courses have an average RN of 4.3, compared to 4.1 for open-graded friction courses.

In addition to these factors, there are many other variables that the data can be subdivided by. If any additional information is needed, please use the contact information located at the bottom of page 7.

Appendix

B

CUSTOMER SERVICE FORM

Customer Service Form

In an effort to continuously improve our customer service, the Pavement Material Systems section of the State Materials Office requests your input by filling out and returning this survey form.

(Optional)

Company/Office/Organization: _____

Address: _____

City: _____ State: _____ ZIP: _____

Your Name: _____ Title: _____

Phone: _____ E-Mail: _____

Please rate each of the following factors using the scale provided. A "1" corresponds to ***Very Poor****, and a "5" corresponds to* ***Excellent****.*

Usefulness of Content	1	2	3	4	5
Organization of Information	1	2	3	4	5
Clarity of Graphical Information	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. Use additional sheet(s) if necessary.

What was the most useful/informative part of this report? _____

_____

_____

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

_____

_____

What changes would you recommend to improve this report? _____

_____

_____

Detach and mail to:

FDOT State Materials Office

Attn: Stacy Scott

5007 NE 39th Ave.

Gainesville, FL 32609

Or E-Mail to: stacy.scott@dot.state.fl.us