APPENDIX C
COMPARISON OF PMIS SCORES FOR TREATMENTS APPLIED IN THE DISTRICT WITH PMIS TREATMENT RECOMMENDATIONS 2007–2009

BEAUMONT DISTRICT

Table C1. Condition Scores by Treatment Category, Beaumont District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1341	0	44	100	97.40	7.67
Preventive Maintenance	559	1602	30	100	85.28	15.78
Light Rehabilitation	51	213	20	100	73.20	18.01
Medium Rehabilitation	120	267	1	84	47.32	21.50
Heavy Rehabilitation	62	51	2	77	24.29	15.63

Table C2. Distress Scores by Treatment Category, Beaumont District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1341	0	59	100	98.13	6.48
Preventive Maintenance	559	1602	34	100	86.80	14.80
Light Rehabilitation	51	213	28	100	86.73	16.82
Medium Rehabilitation	120	267	3	100	74.50	30.70
Heavy Rehabilitation	62	51	2	100	41.35	26.72

Table C3. Ride Scores by Treatment Category, Beaumont District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1341	0	2.5	5	3.78	0.57
Preventive Maintenance	559	1602	2.5	4.7	3.35	0.41
Light Rehabilitation	51	213	2	3.8	2.63	0.38
Medium Rehabilitation	120	267	0.9	3.8	2.58	0.46
Heavy Rehabilitation	62	51	1.3	3.3	2.53	0.51

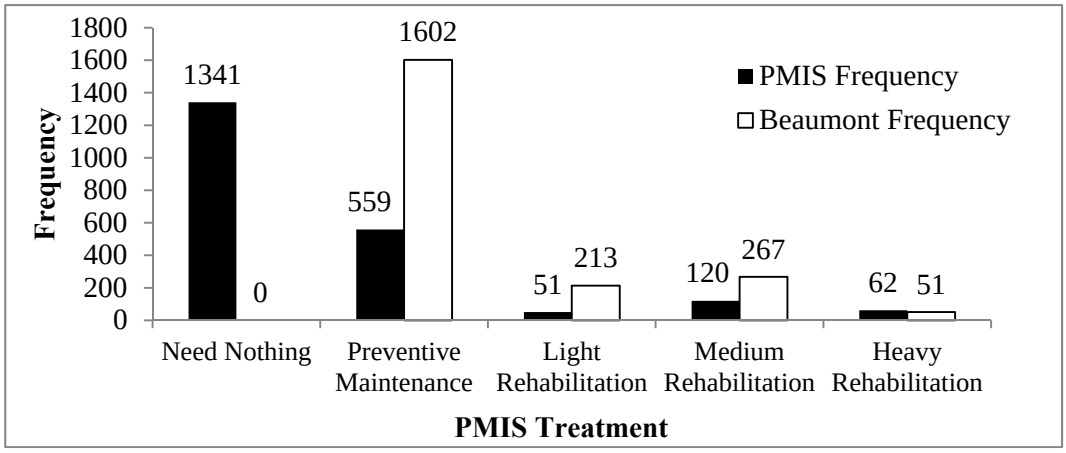

Figure C1. Frequency by PMIS Treatment for Beaumont District (All Pavements, 2007–2009).

Table C4. Condition Scores by Treatment Category, Beaumont District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1314	0	44	100	97.62	7.25
Preventive Maintenance	552	1548	30	100	85.19	15.83
Light Rehabilitation	42	201	41	100	73.57	14.80
Medium Rehabilitation	52	178	8	84	43.65	17.39
Heavy Rehabilitation	7	40	5	48	20.71	14.52

Table C5. Distress Scores by Treatment Category, Beaumont District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1314	0	59	100	98.14	6.48
Preventive Maintenance	552	1548	34	100	86.63	14.81
Light Rehabilitation	42	201	42	100	87.64	14.61
Medium Rehabilitation	52	178	12	100	61.42	28.41
Heavy Rehabilitation	7	40	21	100	68.29	37.14

Table C6. Ride Scores by Treatment Category, Beaumont District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1314	0	2.5	5	3.80	0.57
Preventive Maintenance	552	1548	2.5	4.7	3.35	0.41
Light Rehabilitation	42	201	2	2.9	2.53	0.28
Medium Rehabilitation	52	178	1.9	3.8	2.78	0.49
Heavy Rehabilitation	7	40	1.5	2.3	1.84	0.26

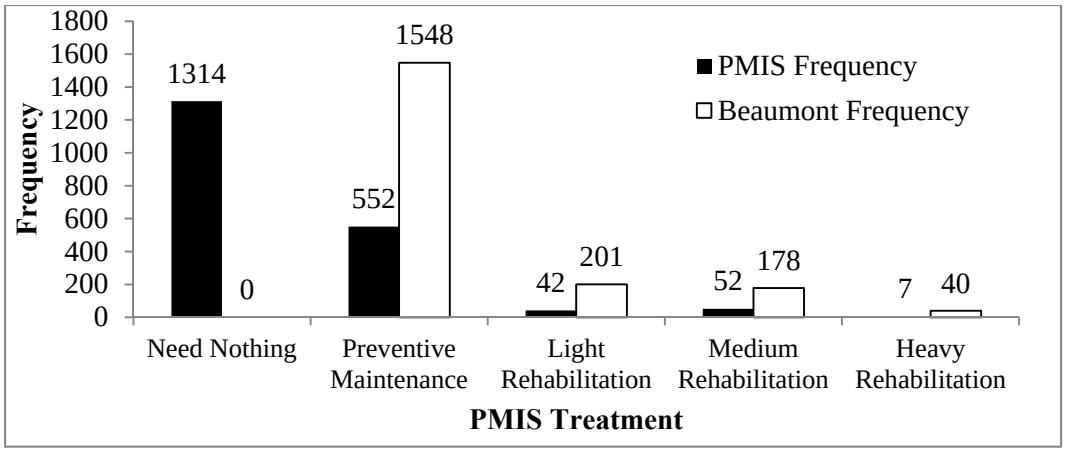

Figure C2. Frequency by PMIS Treatment for Beaumont District (Asphalt Pavements, 2007–2009).

Table C7. Condition Scores by Treatment Category, Beaumont District (CRCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	4	0	51	71	60.00	9.59
Preventive Maintenance	0	3	-	-	-	-
Light Rehabilitation	0	10	-	-	-	-
Medium Rehabilitation	9	23	10	83	47.56	24.89
Heavy Rehabilitation	23	0	2	63	20.74	15.38

Table C8. Distress Scores by Treatment Category, Beaumont District (CRCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	4	0	75	91	83.50	7.00
Preventive Maintenance	0	3	-	-	-	-
Light Rehabilitation	0	10	-	-	-	-
Medium Rehabilitation	9	23	18	99	68.78	24.34
Heavy Rehabilitation	23	0	2	64	23.57	15.41

Table C9. Ride Scores by Treatment Category, Beaumont District (CRCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	4	0	2.5	2.7	2.60	0.08
Preventive Maintenance	0	3	-	-	-	-
Light Rehabilitation	0	10	-	-	-	-
Medium Rehabilitation	9	23	2.2	3.2	2.63	0.36
Heavy Rehabilitation	23	0	2	3.3	2.77	0.33

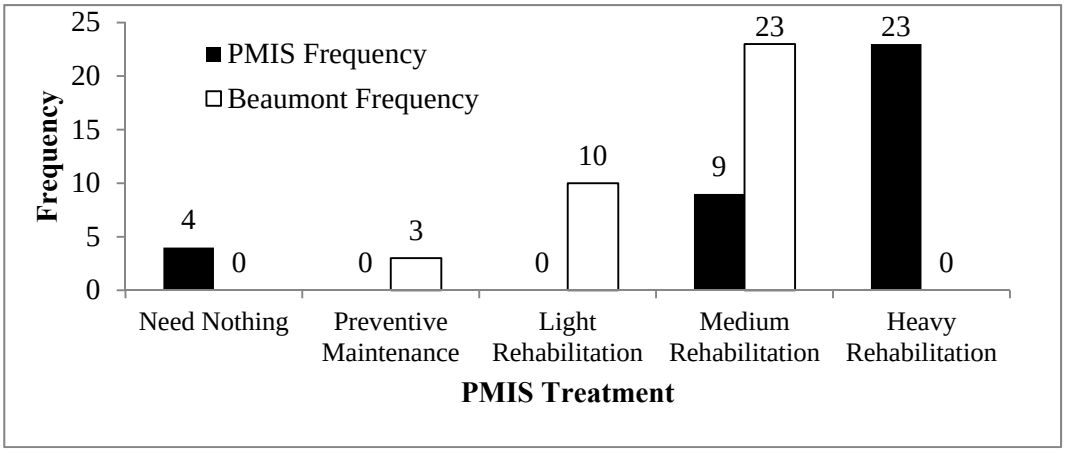

Figure C3. Frequency by PMIS Treatment for Beaumont District (CRCP Pavements, 2007–2009).

Table C10. Condition Scores by Treatment Category, Beaumont District (JCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	23	0	59	100	91.61	11.59
Preventive Maintenance	7	51	71	100	92.14	10.29
Light Rehabilitation	9	2	20	100	71.44	30.02
Medium Rehabilitation	59	66	1	84	50.51	23.97
Heavy Rehabilitation	32	11	3	77	27.63	15.77

Table C11. Distress Scores by Treatment Category, Beaumont District (JCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	23	0	95	100	99.78	1.04
Preventive Maintenance	7	51	100	100	100.00	0.00
Light Rehabilitation	9	2	28	100	82.44	25.47
Medium Rehabilitation	59	66	3	100	86.90	28.76
Heavy Rehabilitation	32	11	13	86	48.25	22.85

Table C12. Ride Scores by Treatment Category, Beaumont District (JCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	23	0	2.5	3.8	3.14	0.38
Preventive Maintenance	7	51	2.7	3.6	3.13	0.28
Light Rehabilitation	9	2	2.6	3.8	3.07	0.47
Medium Rehabilitation	59	66	0.9	2.9	2.39	0.38
Heavy Rehabilitation	32	11	1.3	3.3	2.50	0.51

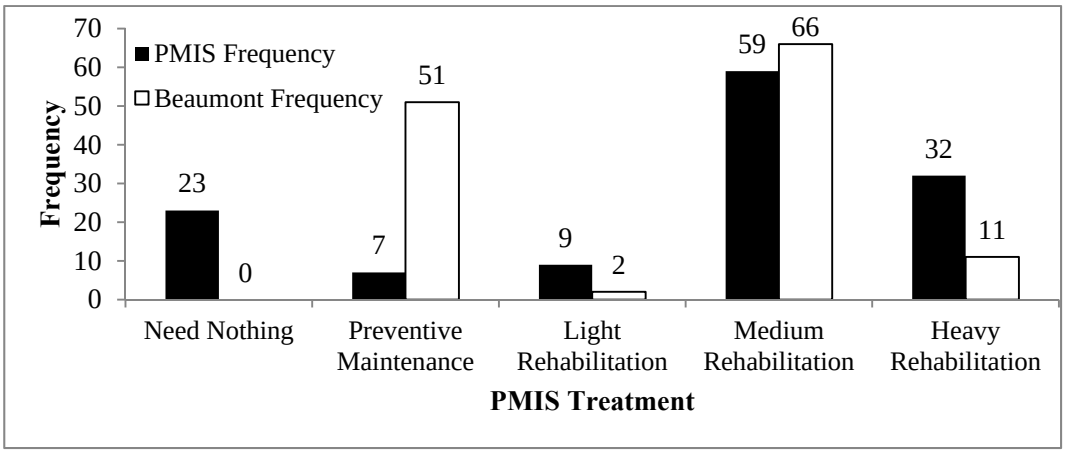

Figure C4. Frequency by PMIS Treatment for Beaumont District (JCP Pavements, 2007–2009).

PMIS Score for Preventive Maintenance Treatments Applied in Beaumont District, 2007–2009

Table C13. Condition Score by Treatment Category for Preventive Maintenance, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1082	0	59	100	97.72	6.98
Preventive Maintenance	436	1602	30	100	87.43	15.23
Light Rehabilitation	34	0	20	100	78.21	17.18
Medium Rehabilitation	46	0	10	84	51.98	19.73
Heavy Rehabilitation	4	0	5	32	22.75	12.18

Table C14. Distress Score by Treatment Category for Preventive Maintenance, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1082	0	59	100	98.17	6.48
Preventive Maintenance	436	1602	34	100	88.26	14.73
Light Rehabilitation	34	0	28	100	88.62	15.62
Medium Rehabilitation	46	0	15	100	80.33	28.64
Heavy Rehabilitation	4	0	21	99	45.50	35.99

Table C15. Ride Score by Treatment Category for Preventive Maintenance, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1082	0	2.5	5	3.78	0.58
Preventive Maintenance	436	1602	2.5	4.6	3.33	0.39
Light Rehabilitation	34	0	2	3.8	2.60	0.44
Medium Rehabilitation	46	0	1.3	3.7	2.57	0.41
Heavy Rehabilitation	4	0	1.8	3	2.33	0.62

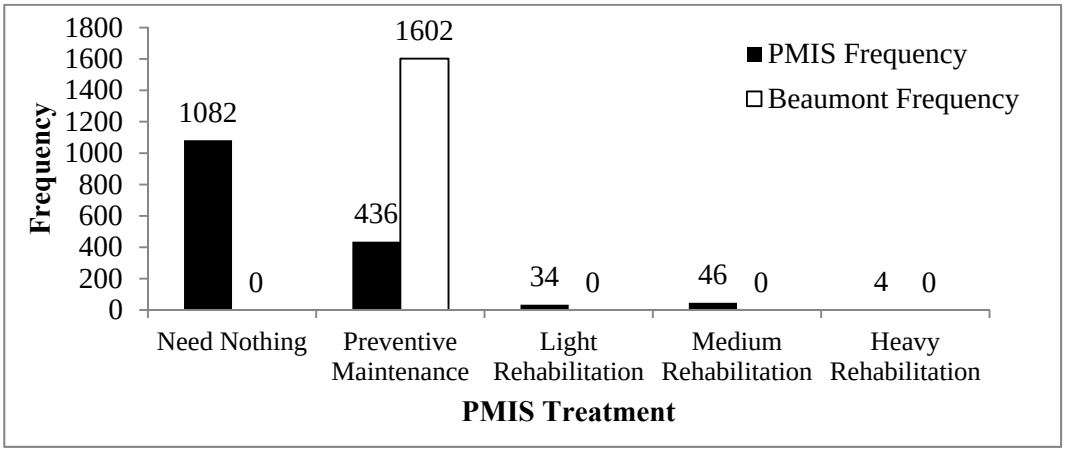

Figure C5. Frequency for Preventive Maintenance Treatments (Beaumont District, 2007–2009).

PMIS Score for Light Rehabilitation Treatments Applied in Beaumont District, 2007–2009

Table C16. Condition Score by Treatment Category for Light Rehabilitation, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	158	0	51	100	98.17	7.14
Preventive Maintenance	33	0	59	100	79.76	13.91
Light Rehabilitation	6	213	41	90	68.33	19.15
Medium Rehabilitation	14	0	18	79	44.36	16.97
Heavy Rehabilitation	2	0	9	41	25.00	22.63

Table C17. Distress Score by Treatment Category for Light Rehabilitation, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	158	0	62	100	98.77	4.35
Preventive Maintenance	33	0	60	100	81.94	14.12
Light Rehabilitation	6	213	42	100	83.17	23.89
Medium Rehabilitation	14	0	18	100	56.29	25.91
Heavy Rehabilitation	2	0	19	42	30.50	16.26

Table C18. Ride Score by Treatment Category for Light Rehabilitation, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	158	0	2.5	4.7	3.95	0.47
Preventive Maintenance	33	0	2.5	4.5	3.47	0.50
Light Rehabilitation	6	213	2.2	2.9	2.62	0.27
Medium Rehabilitation	14	0	2.2	3.8	3.01	0.52
Heavy Rehabilitation	2	0	2.3	3.2	2.75	0.64

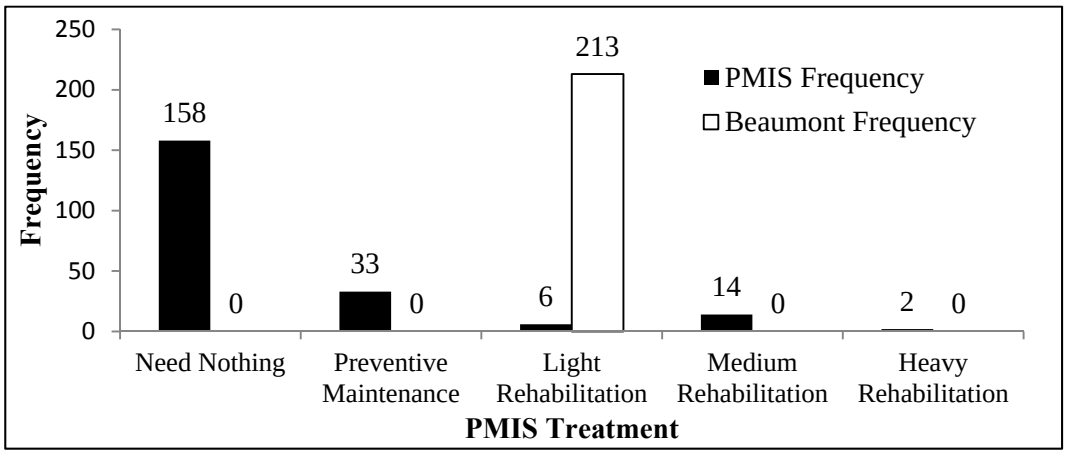

Figure C6. Frequency for Light Rehabilitation Treatments (Beaumont District, 2007–2009).

PMIS Score for Medium Rehabilitation Treatments Applied in Beaumont District, 2007–2009

Table C19. Condition Score by Treatment Category for Medium Rehabilitation, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	72	0	58	100	94.78	9.88
Preventive Maintenance	84	0	44	100	77.45	14.96
Light Rehabilitation	11	0	42	83	60.36	13.54
Medium Rehabilitation	52	267	1	84	47.25	22.44
Heavy Rehabilitation	48	0	2	77	25.10	16.60

Table C20. Distress Score by Treatment Category for Medium Rehabilitation, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	72	0	75	100	98.79	3.78
Preventive Maintenance	84	0	51	100	82.02	13.03
Light Rehabilitation	11	0	53	99	82.82	16.94
Medium Rehabilitation	52	267	3	100	79.75	30.05
Heavy Rehabilitation	48	0	2	100	38.65	26.71

Table C21. Ride Score by Treatment Category for Medium Rehabilitation, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	72	0	2.5	4.6	3.49	0.49
Preventive Maintenance	84	0	2.5	4.7	3.41	0.46
Light Rehabilitation	11	0	2.5	2.9	2.73	0.12
Medium Rehabilitation	52	267	0.9	3.5	2.48	0.45
Heavy Rehabilitation	48	0	1.3	3.3	2.64	0.46

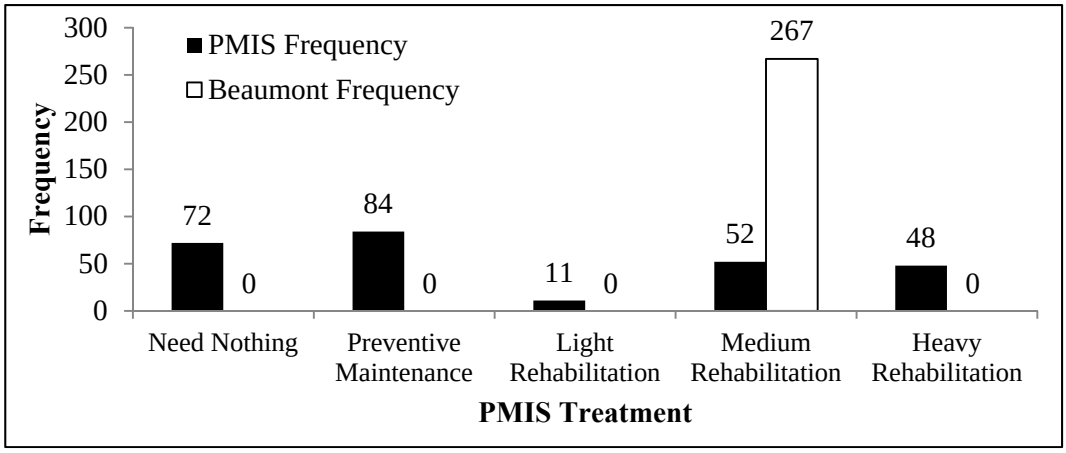

Figure C7. Frequency for Medium Rehabilitation Treatments (Beaumont District, 2007–2009).

PMIS Score for Heavy Rehabilitation Treatments Applied in Beaumont District, 2007–2009

Table C22. Condition Score by Treatment Category for Heavy Rehabilitation, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	29	0	44	100	88.14	16.94
Preventive Maintenance	6	0	36	98	69.00	26.71
Light Rehabilitation	0	0	-	-	-	-
Medium Rehabilitation	8	0	7	65	26.13	21.81
Heavy Rehabilitation	8	51	9	38	20.00	10.81

Table C23. Distress Score by Treatment Category for Heavy Rehabilitation, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	29	0	61	100	91.31	13.94
Preventive Maintenance	6	0	38	99	74.17	23.16
Light Rehabilitation	0	0	-	-	-	-
Medium Rehabilitation	8	0	16	77	38.75	19.14
Heavy Rehabilitation	8	51	29	81	58.25	20.45

Table C24. Ride Score by Treatment Category for Heavy Rehabilitation, Beaumont District, 2007–2009.

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	29	0	2.7	4.4	3.64	0.49
Preventive Maintenance	6	0	2.8	3.8	3.25	0.45
Light Rehabilitation	0	0	-	-	-	-
Medium Rehabilitation	8	0	1.9	3.3	2.51	0.45
Heavy Rehabilitation	8	51	1.5	2.3	1.93	0.29

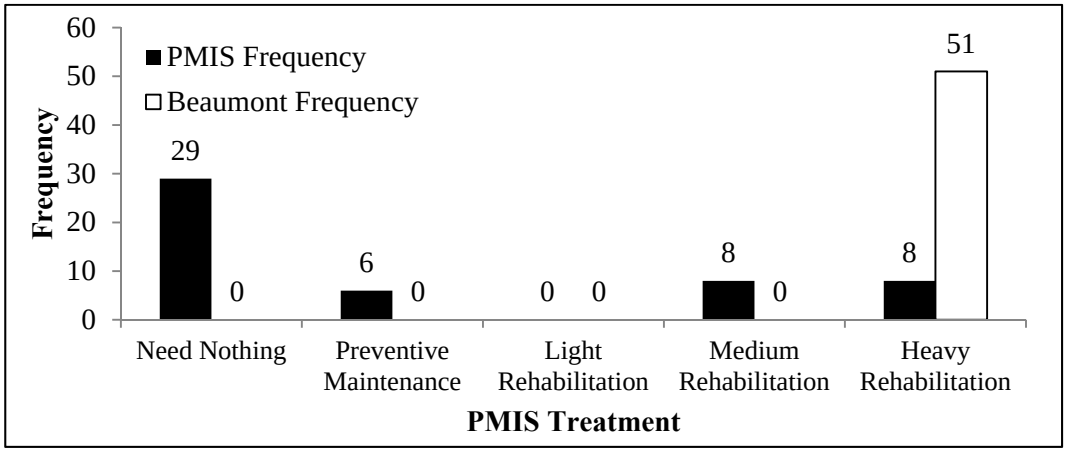

Figure C8. Frequency for Heavy Rehabilitation Treatments (Beaumont District, 2007–2009).

PMIS Condition Score by Treatment Category for Beaumont District (All Pavements, 2007–2009)

Table C25.1 Condition Score versus Treatment Category (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1341	0	-	-	-	-
Preventive Maintenance	559	1602	5	100	93.00	14.21
Light Rehabilitation	51	213	9	100	90.25	18.78
Medium Rehabilitation	120	267	1	100	66.13	29.76
Heavy Rehabilitation	62	51	7	100	65.47	34.54

Total number of sections analyzed: 2133

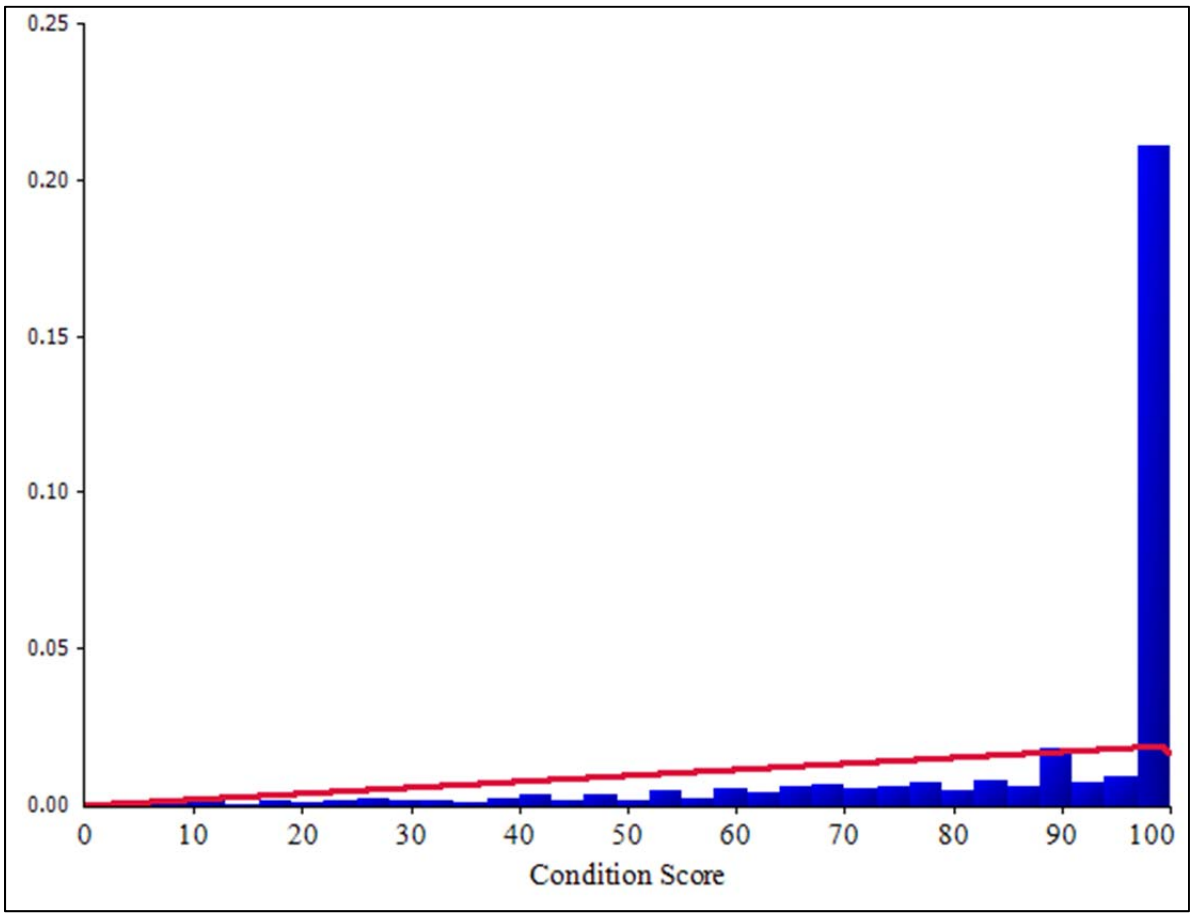

Figure C25.1. Histogram for Condition Score for Treatments Applied in Beaumont District, 2007–2009 (All Pavements).

Table C25.2. Condition Score for Treatments Applied in Beaumont District (All Pavements, 2007–2009).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	0.0	-	-	-	-
Preventive Maintenance	5.0	92.0	100.0	100.0	100.0
Light Rehabilitation	9.0	90.0	100.0	100.0	100.0
Medium Rehabilitation	1.0	43.5	72.0	93.0	100.0
Heavy Rehabilitation	7.0	33.0	77.0	100.0	100.0

Total number of sections analyzed: 2133

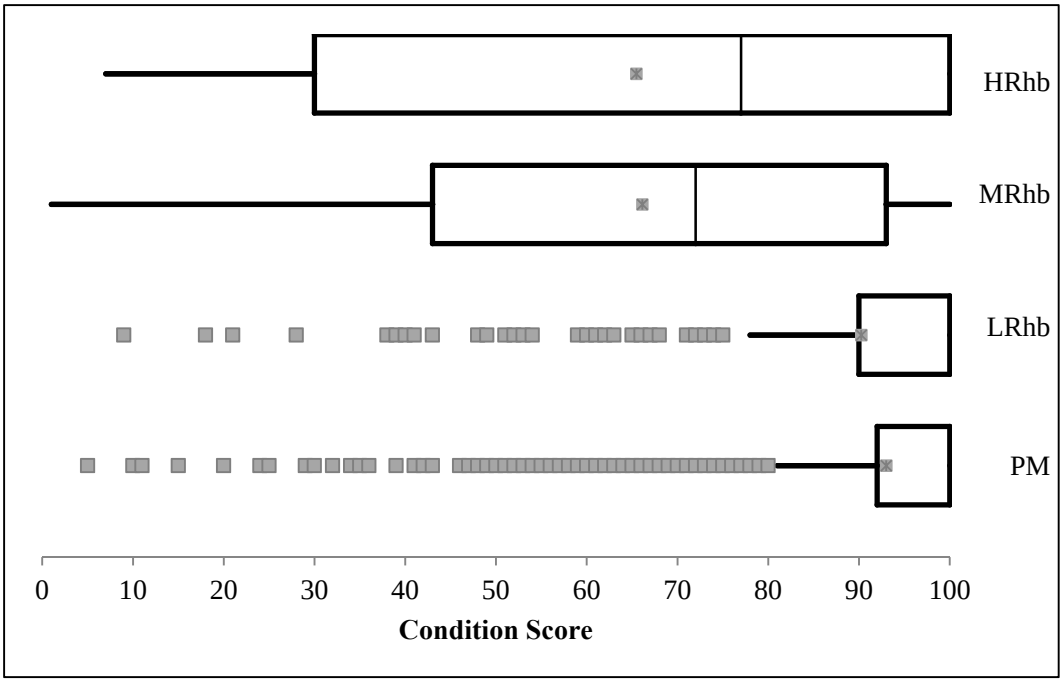

Figure C25.2. Box Plots for Condition Score for Treatments Applied in Beaumont District, 2007–2009.

Table C26.1 Distress Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1341	0	-	-	-	-
Preventive Maintenance	559	1602	15	100	94.63	12.25
Light Rehabilitation	51	213	18	100	92.29	16.49
Medium Rehabilitation	120	267	2	100	78.34	27.75
Heavy Rehabilitation	62	51	16	100	75.86	26.10

Total number of sections analyzed: 2133

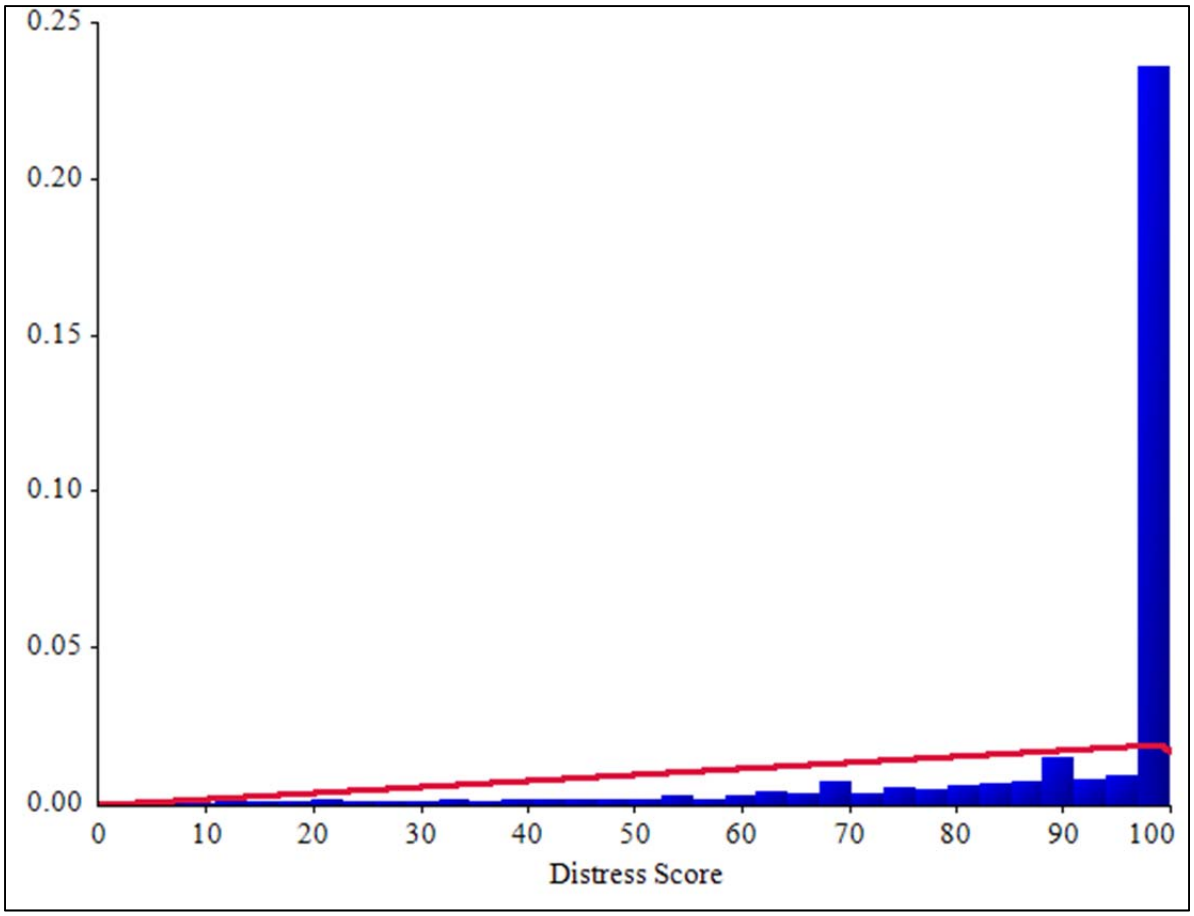

Figure C26.1. Histogram for Distress Score for Treatments Applied in Beaumont District, 2007–2009 (All Pavements).

PMIS Distress Score by Treatment Category for Beaumont District (All Pavements, 2007–2009)

Table C26.2. Distress Score for Treatments Applied in Beaumont District (All Pavements, 2007–2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	15.0	98.0	100.0	100.0	100.0
Light Rehabilitation	18.0	95.0	100.0	100.0	100.0
Medium Rehabilitation	2.0	67.0	90.0	100.0	100.0
Heavy Rehabilitation	16.0	61.5	81.0	100.0	100.0

Total number of sections analyzed: 2133

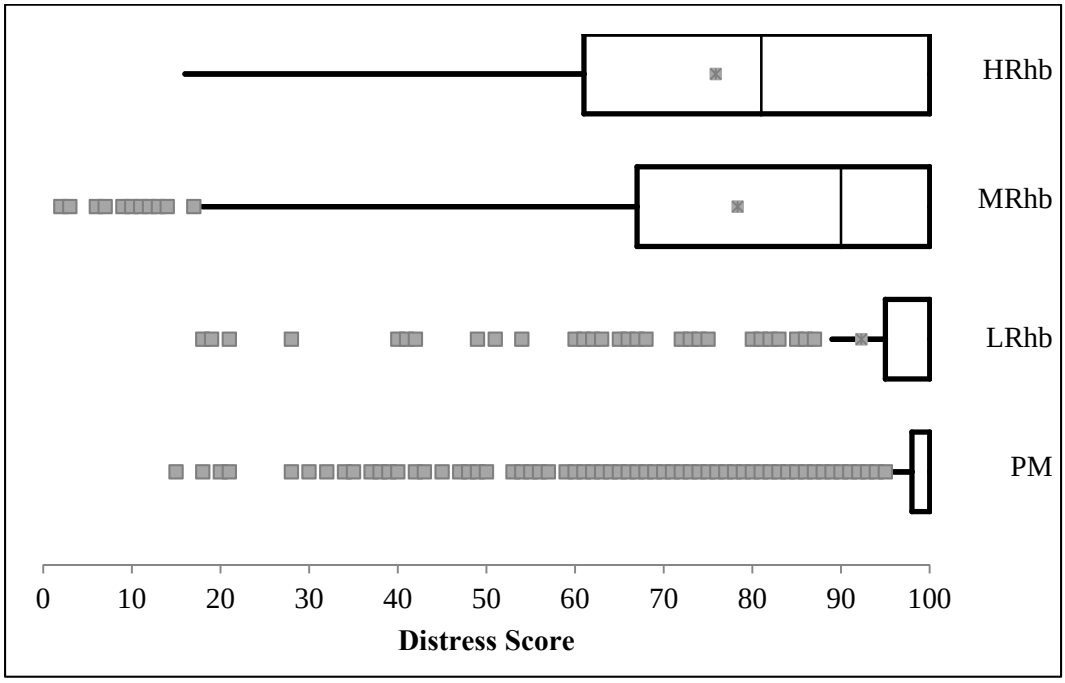

Figure C26.2. Box Plots for Condition Score for Treatments Applied in Beaumont District (All Pavements, 2007–2009).

Table C27.1. Ride Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1341	0	-	-	-	-
Preventive Maintenance	559	1602	1.3	5	3.60	0.62
Light Rehabilitation	51	213	2.2	4.7	3.76	0.59
Medium Rehabilitation	120	267	0.9	4.7	3.08	0.63
Heavy Rehabilitation	62	51	1.5	4.4	3.15	0.80

Total number of sections analyzed: 2133

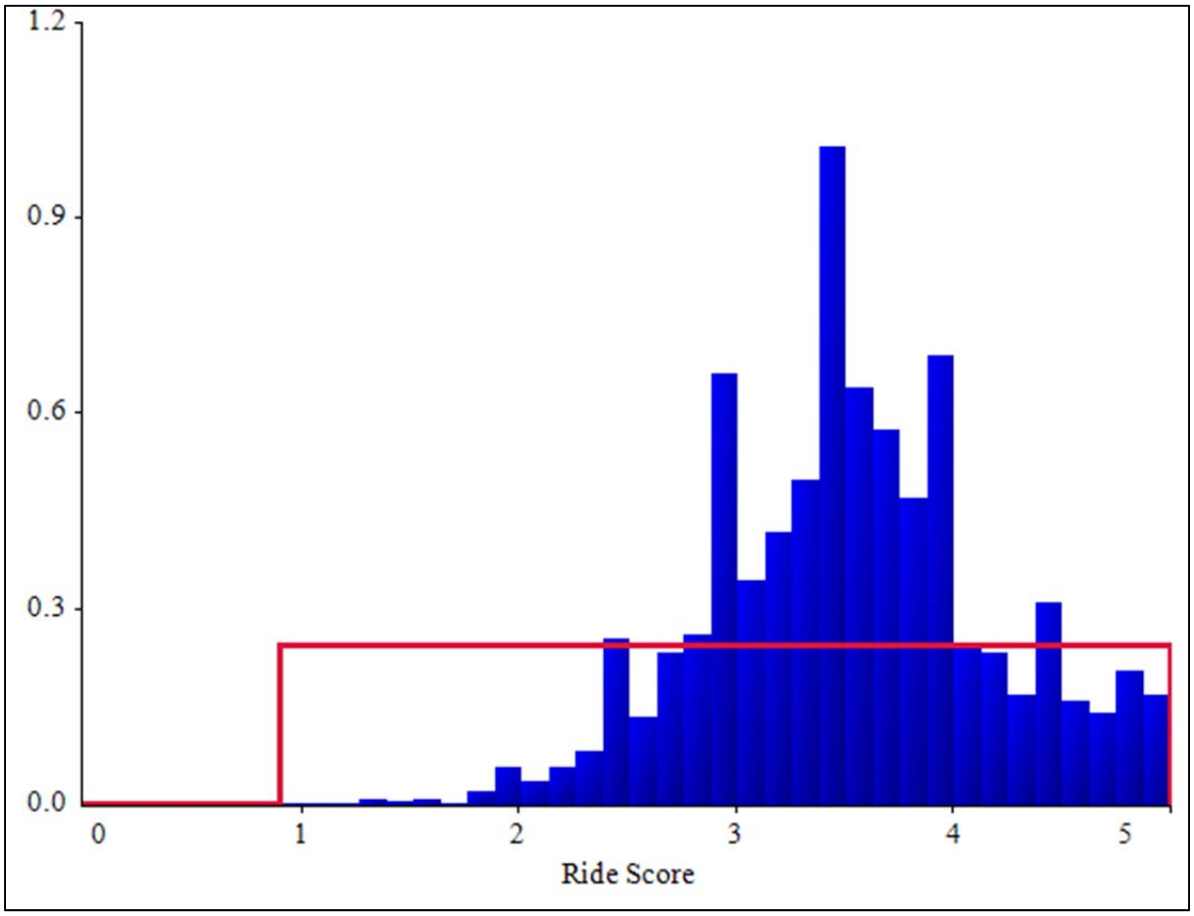

Figure C27.1. Histogram for Distress Score for Treatments Applied in Beaumont District (All Pavements, 2007–2009).

PMIS Ride Score by Treatment Category for Beaumont District (All Pavements, 2007–2009)

Table C27.2. Ride Score for Treatments Applied in Beaumont District (All Pavements, 2007–2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	0.0	-	-	-	-
Preventive Maintenance	1.3	3.2	3.6	3.9	5.0
Light Rehabilitation	2.2	3.5	3.8	4.2	4.7
Medium Rehabilitation	0.9	2.7	3.0	3.6	4.7
Heavy Rehabilitation	1.5	2.6	3.3	3.9	4.4

Total number of sections analyzed: 2133

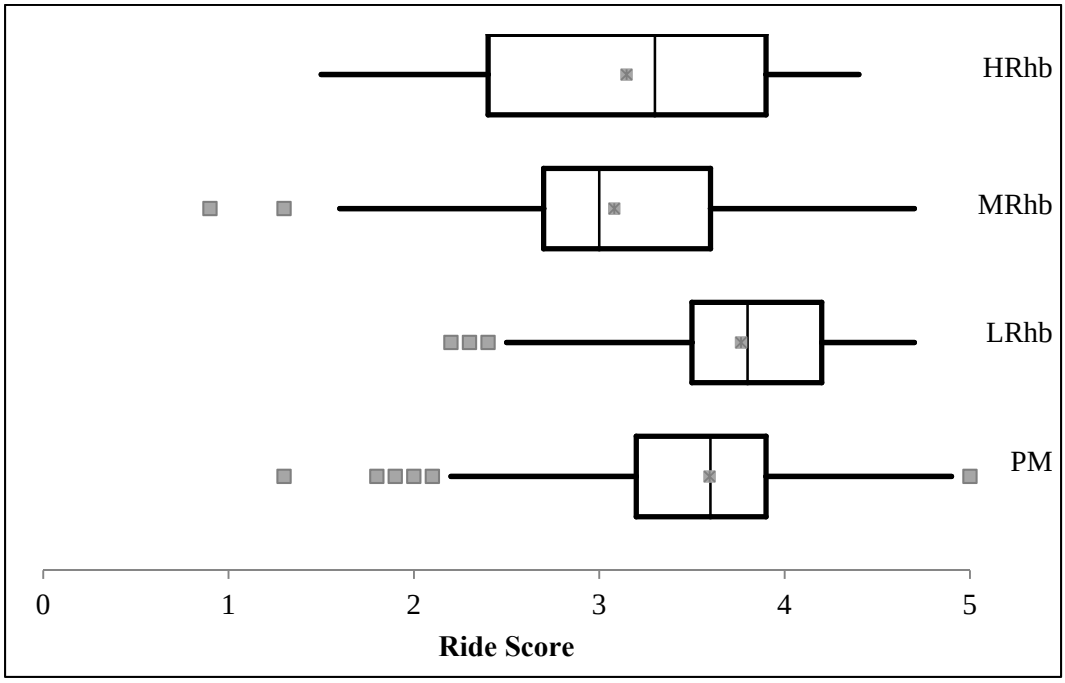

Figure C27.2. Box Plots for Ride Score for Treatments Applied in Beaumont District (All Pavements, 2007–2009).

PMIS Condition Score by Treatment Category for Beaumont District (All Pavements, 2009)

Table C28.1 Condition Score versus Treatment Category (All Pavements 2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	341	0	-	-	-	-
Preventive Maintenance	184	407	15	100	91.69	14.61
Light Rehabilitation	14	113	9	100	87.19	21.06
Medium Rehabilitation	30	42	8	100	69.64	23.19
Heavy Rehabilitation	10	17	7	100	29.94	28.84

Total number of sections analyzed: 579

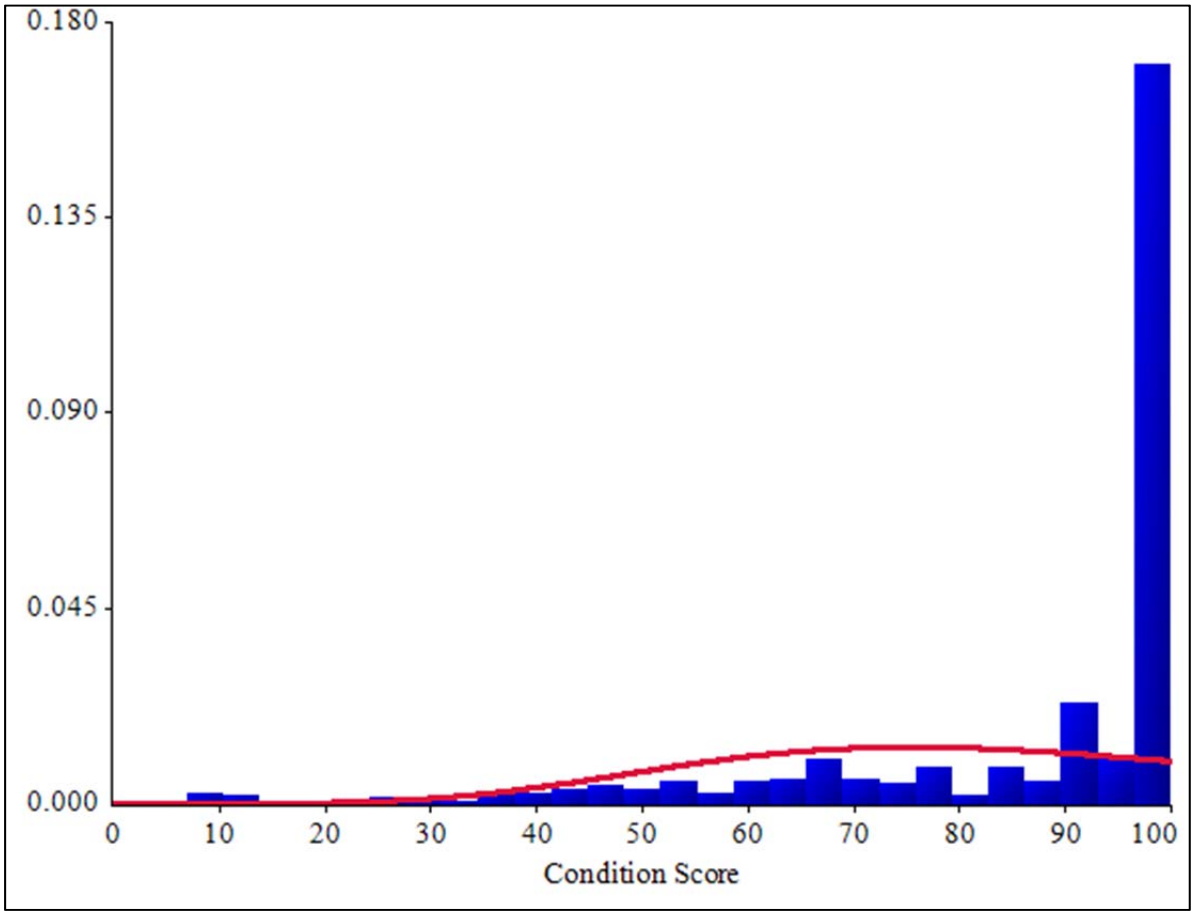

Figure C28.1. Histogram for Condition Score for Treatments Applied in Beaumont District, 2009 (All Pavements).

PMIS Condition Score by Treatment Category for Beaumont District (All Pavements, 2009)

Table C28.2. Condition Score for Treatments Applied in Beaumont District (All Pavements, 2009).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	15.0	90.0	100.0	100.0	100.0
Light Rehabilitation	9.0	78.0	100.0	100.0	100.0
Medium Rehabilitation	8.0	54.3	67.5	93.8	100.0
Heavy Rehabilitation	7.0	12.0	23.0	36.0	100.0

Total number of sections analyzed: 579

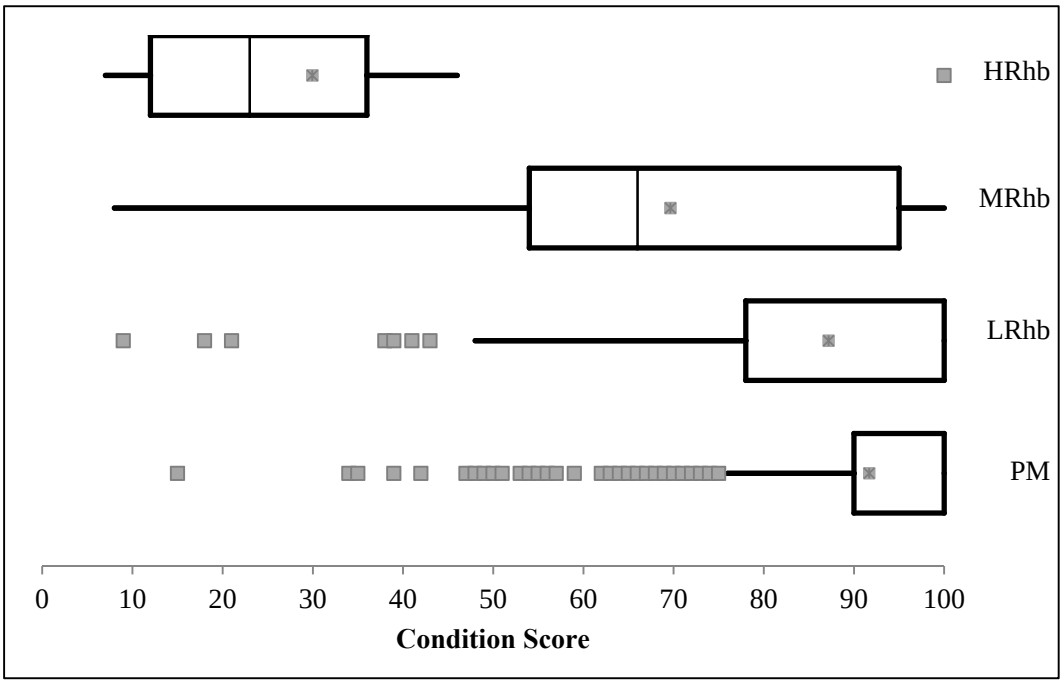

Figure C28.2. Box Plots for Condition Score for Treatments Applied in Beaumont District, 2009.

PMIS Distress Score by Treatment Category for Beaumont District (All Pavements, 2009)

Table C29.1 Distress Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	341	0	-	-	-	-
Preventive Maintenance	184	407	15	100	93.17	13.46
Light Rehabilitation	14	113	18	100	90.51	17.77
Medium Rehabilitation	30	42	12	100	81.36	21.36
Heavy Rehabilitation	10	17	16	100	52.88	26.62

Total number of sections analyzed: 579

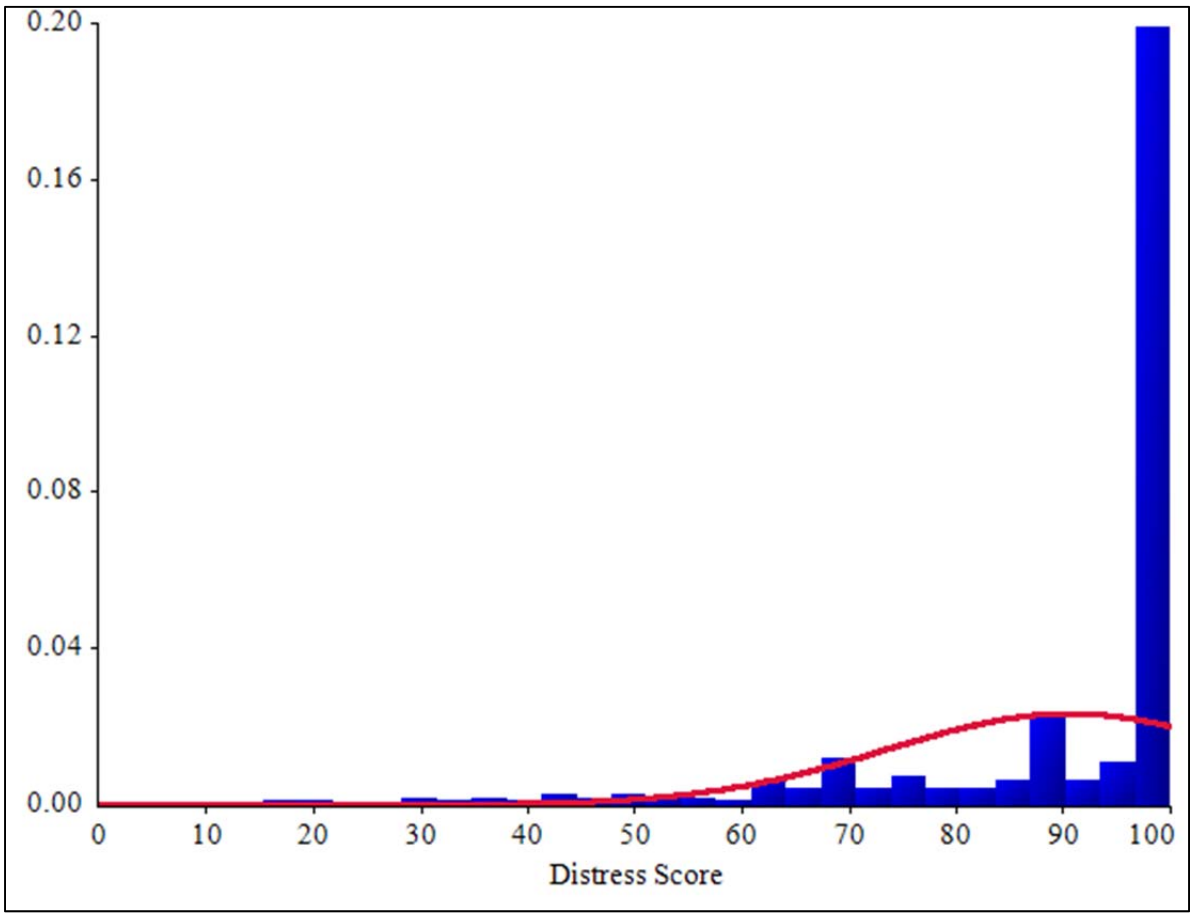

Figure C29.1. Histogram for Distress Score for Treatments Applied in Beaumont District (All Pavements, 2009).

PMIS Distress Score by Treatment Category for Beaumont District (All Pavements, 2009)

Table C29.2. Distress Score for Treatments Applied in Beaumont District (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	15.0	90.0	100.0	100.0	100.0
Light Rehabilitation	18.0	89.0	100.0	100.0	100.0
Medium Rehabilitation	12.0	69.0	90.0	99.8	100.0
Heavy Rehabilitation	16.0	30.0	40.0	77.0	100.0

Total number of sections analyzed: 579

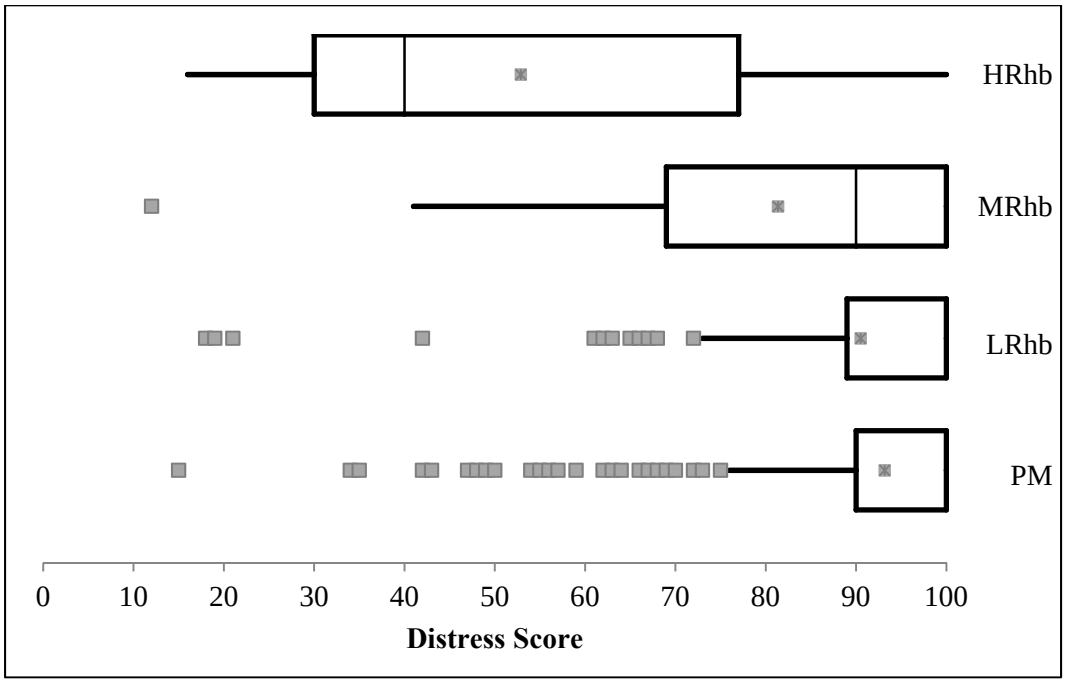

Figure C29.2. Box Plots for Condition Score for Treatments Applied in Beaumont District (All Pavements, 2009).

PMIS Ride Score by Treatment Category for Beaumont District (All Pavements, 2009)

Table C30.1. Ride Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	341	0	-	-	-	-
Preventive Maintenance	184	407	2	4.6	3.48	0.54
Light Rehabilitation	14	113	2.2	4.7	3.82	0.71
Medium Rehabilitation	30	42	2.4	4.3	3.09	0.48
Heavy Rehabilitation	10	17	1.5	4.4	2.42	0.78

Total number of sections analyzed: 579

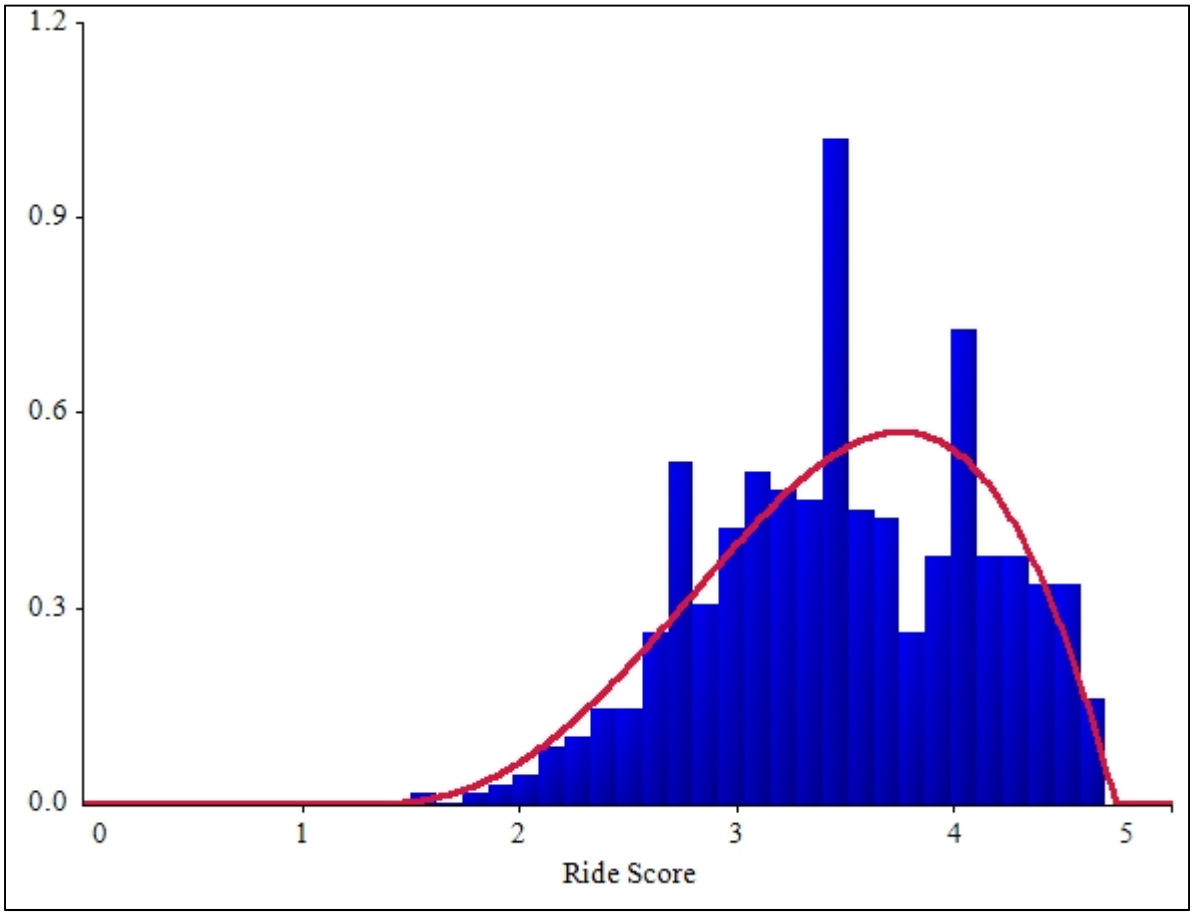

Figure C30.1. Histogram for Distress Score for Treatments Applied in Beaumont District (All Pavements, 2009).

PMIS Ride Score by Treatment Category for Beaumont District (All Pavements, 2009)

Table C30.2. Ride Score for Treatments Applied in Beaumont District (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	2.0	3.1	3.5	3.9	4.6
Light Rehabilitation	2.2	3.3	4.1	4.4	4.7
Medium Rehabilitation	2.4	2.7	3.0	3.4	4.3
Heavy Rehabilitation	1.5	1.9	2.3	2.8	4.4

Total number of sections analyzed: 579

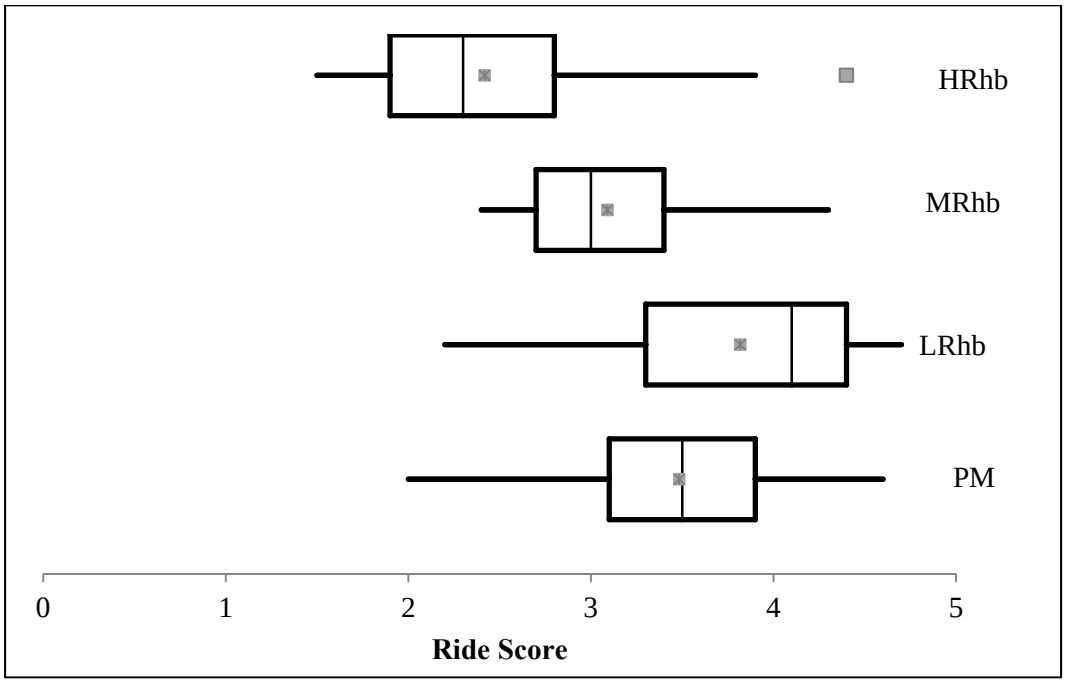

Figure C30.2. Box Plots for Ride Score for Treatments Applied in Beaumont District (All Pavements, 2009).

PMIS Condition Score by Treatment Category for Beaumont District (All Pavements, 2008)

Table C31.1 Condition Score versus Treatment Category (All Pavements 2008).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	549	0	-	-	-	-
Preventive Maintenance	226	671	5	100	93.49	14.18
Light Rehabilitation	17	62	59	100	96.40	8.79
Medium Rehabilitation	18	94	1	100	69.43	29.77
Heavy Rehabilitation	17	0	-	-	-	-

Total number of sections analyzed: 827

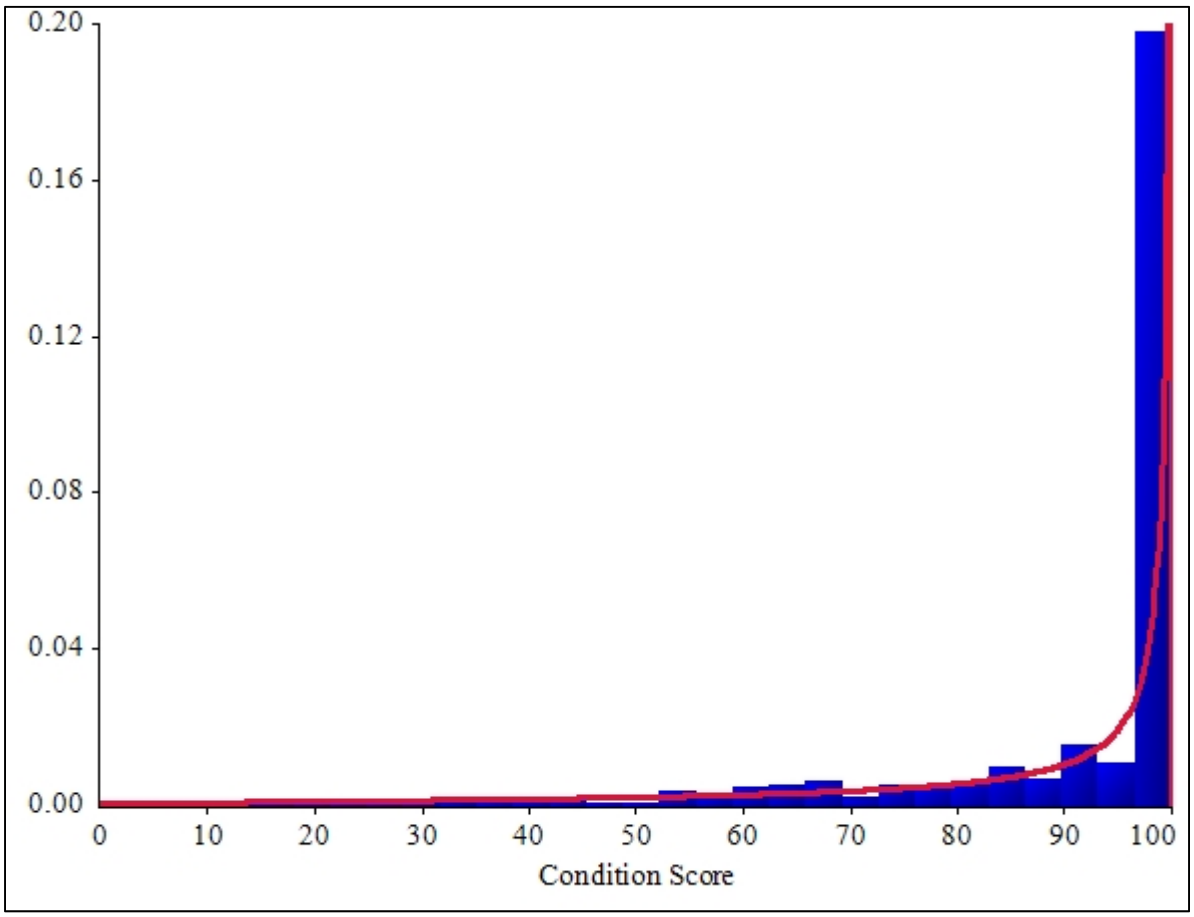

Figure C31.1. Histogram for Condition Score for Treatments Applied in Beaumont District, 2008 (All Pavements).

PMIS Condition Score by Treatment Category for Beaumont District (All Pavements, 2008)

Table C31.2. Condition Score for Treatments Applied in Beaumont District (All Pavements, 2008).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	5.0	95.0	100.0	100.0	100.0
Light Rehabilitation	59.0	100.0	100.0	100.0	100.0
Medium Rehabilitation	1.0	61.0	78.0	93.0	100.0
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 827

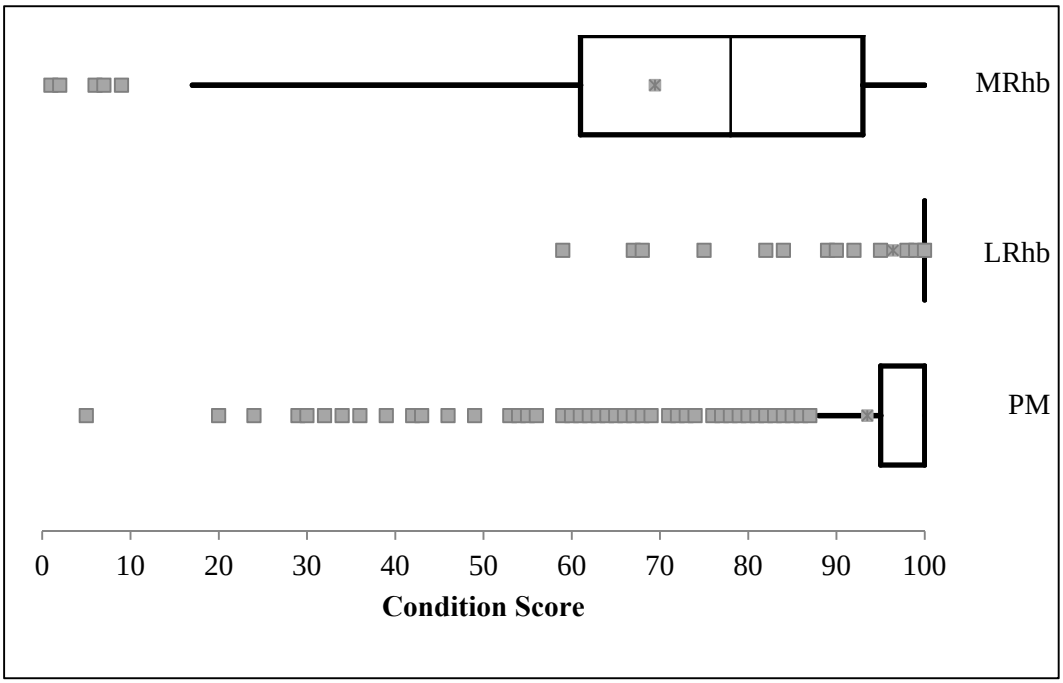

Figure C31.2. Box Plots for Condition Score for Treatments Applied in Beaumont District, 2008.

PMIS Distress Score by Treatment Category for Beaumont District (All Pavements, 2008)

Table C32.1 Distress Score versus Treatment Category (All Pavement Types, 2008).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	549	0	-	-	-	-
Preventive Maintenance	226	671	20	100	94.50	12.94
Light Rehabilitation	17	62	67	100	97.31	7.16
Medium Rehabilitation	18	94	2	100	74.30	29.37
Heavy Rehabilitation	17	0	-	-	-	-

Total number of sections analyzed: 827

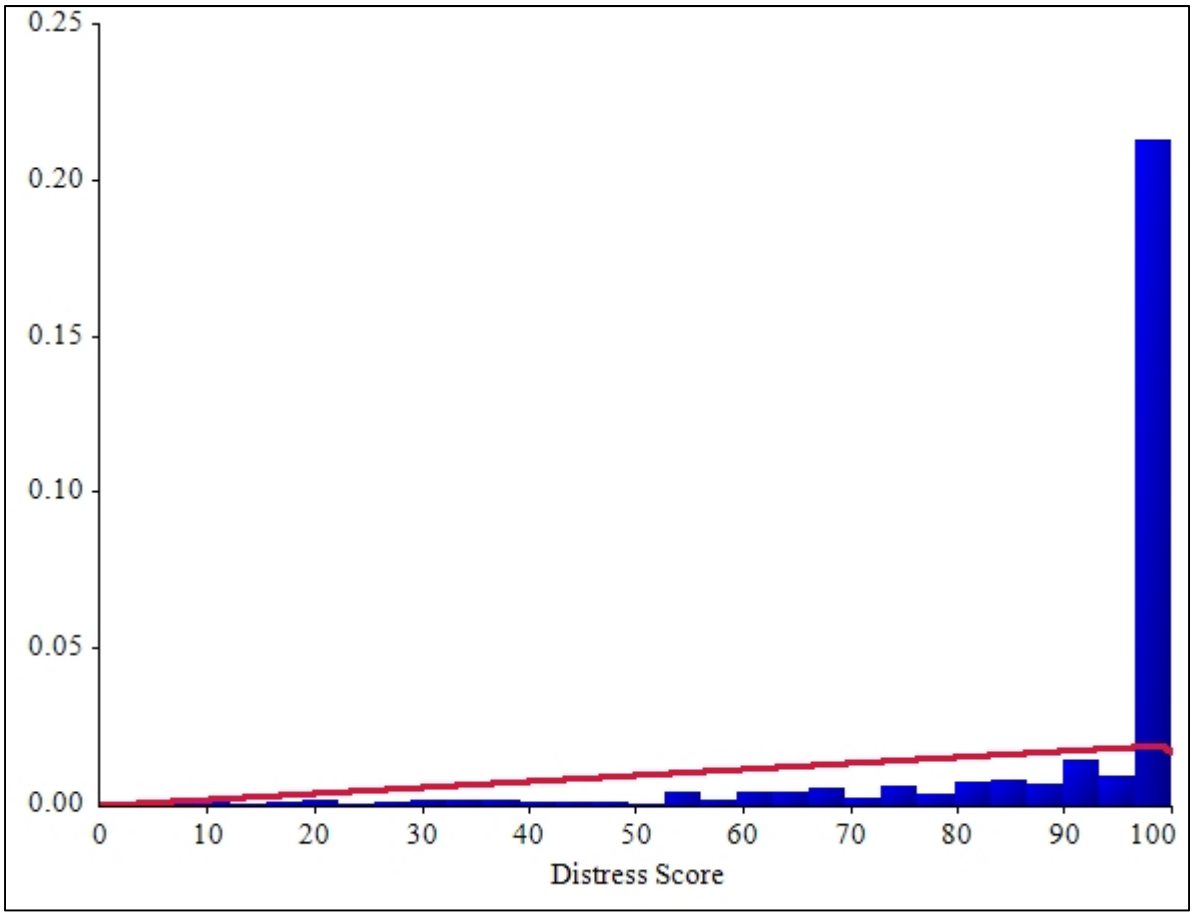

Figure C32.1. Histogram for Distress Score for Treatments Applied in Beaumont District (All Pavements, 2008).

PMIS Distress Score by Treatment Category for Beaumont District (All Pavements, 2008)

Table C32.2. Distress Score for Treatments Applied in Beaumont (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	20.0	98.0	100.0	100.0	100.0
Light Rehabilitation	67.0	100.0	100.0	100.0	100.0
Medium Rehabilitation	2.0	64.3	84.0	99.0	100.0
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 827

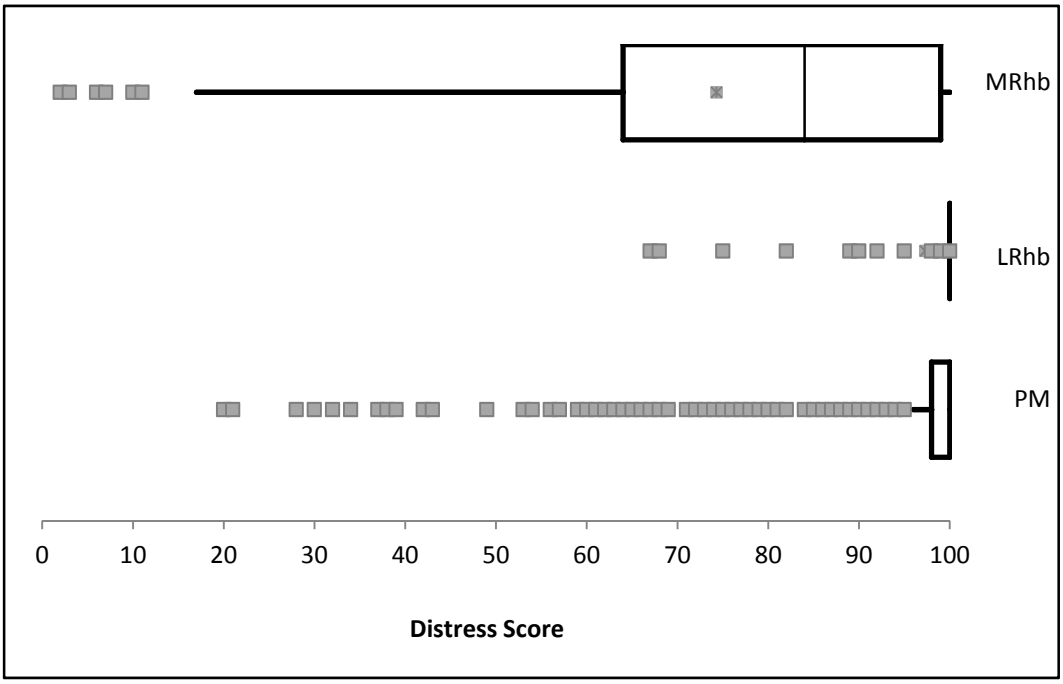

Figure C32.2. Box Plots for Condition Score for Treatments Applied in Beaumont (All Pavements, 2008).

PMIS Ride Score by Treatment Category for Beaumont District (All Pavements, 2008)

Table C33.1. Ride Score versus Treatment Category (All Pavement Types, 2008).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	549	0	-	-	-	-
Preventive Maintenance	226	671	1.8	5	3.75	0.64
Light Rehabilitation	17	62	2.5	4.6	3.68	0.36
Medium Rehabilitation	18	94	0.9	4.3	3.28	0.63
Heavy Rehabilitation	17	0	-	-	-	-

Total number of sections analyzed: 827

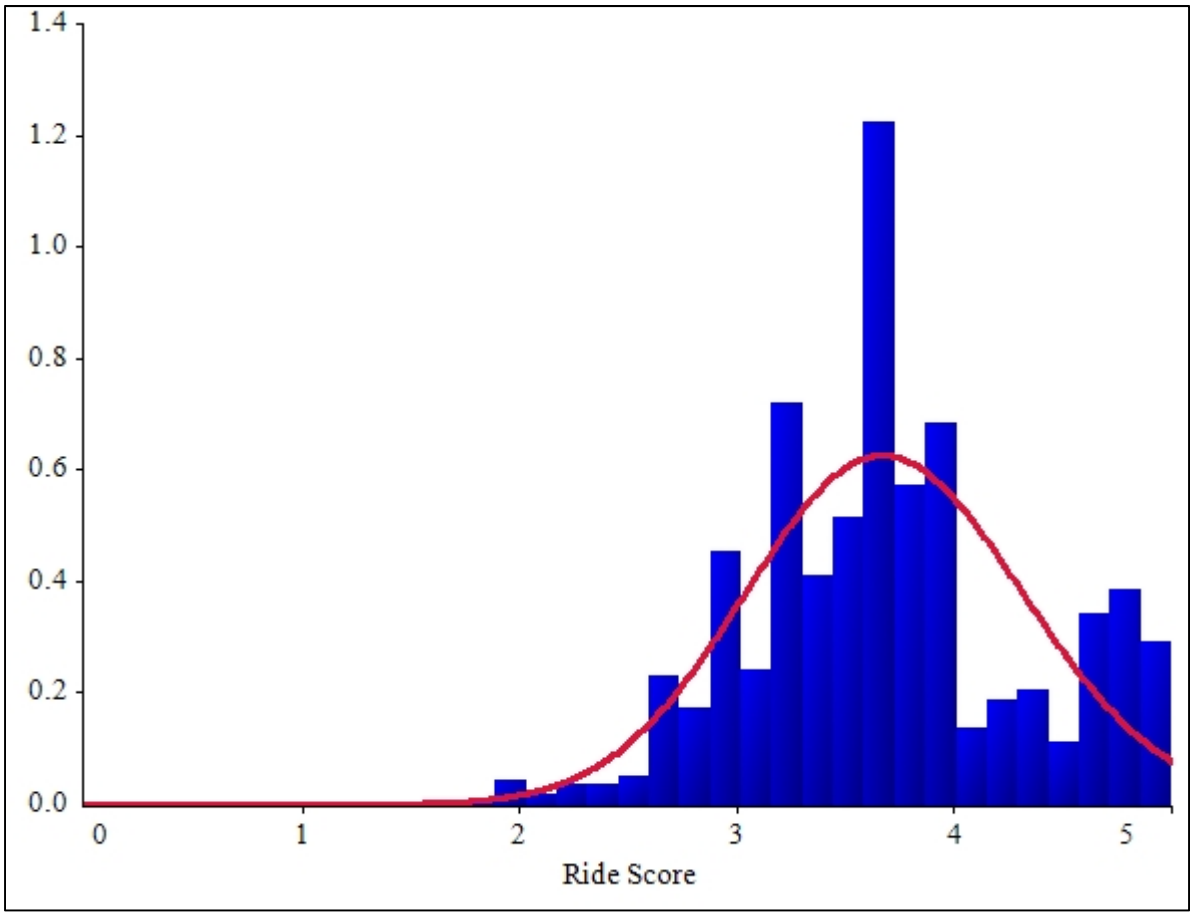

Figure C33.1. Histogram for Distress Score for Treatments Applied in Beaumont District (All Pavements, 2008).

PMIS Ride Score by Treatment Category for Beaumont District (All Pavements, 2008)

Table C33.2. Ride Score for Treatments Applied in Beaumont District (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.8	3.3	3.7	4.1	5.0
Light Rehabilitation	2.5	3.5	3.7	3.9	4.6
Medium Rehabilitation	0.9	2.8	3.3	3.7	4.3
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 827

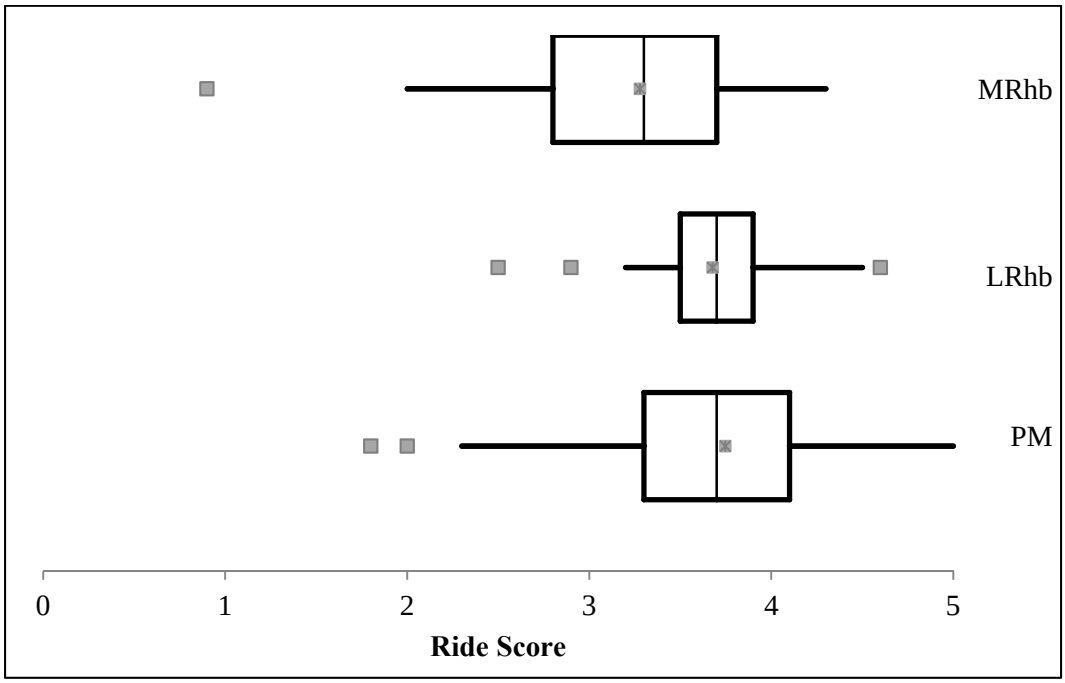

Figure C33.2. Box Plots for Ride Score for Treatments Applied in Beaumont District (All Pavements, 2008).

PMIS Condition Score by Treatment Category for Beaumont District (All Pavements, 2007)

Table C34.1 Condition Score versus Treatment Category (All Pavements 2007).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	451	0	-	-	-	-
Preventive Maintenance	149	524	10	100	93.40	13.90
Light Rehabilitation	20	38	28	100	89.34	21.38
Medium Rehabilitation	72	131	3	100	62.63	31.37
Heavy Rehabilitation	35	34	23	100	83.24	20.71

Total number of sections analyzed: 727

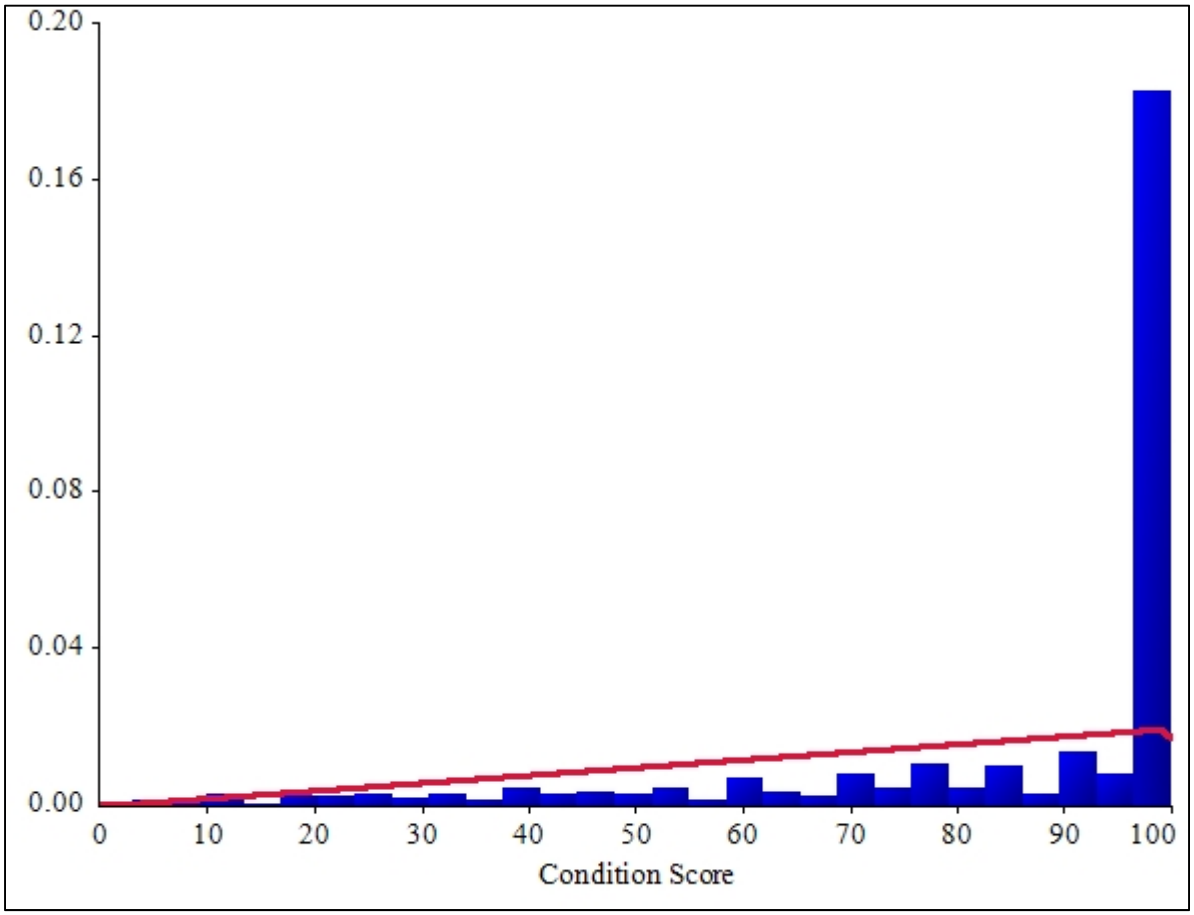

Figure C34.1. Histogram for Condition Score for Treatments Applied in Beaumont District (All Pavements, 2007).

PMIS Condition Score by Treatment Category for Beaumont District (All Pavements, 2007)

Table C34.2. Condition Score for Treatments Applied in Beaumont District (All Pavements, 2007).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	10.0	94.0	100.0	100.0	100.0
Light Rehabilitation	28.0	96.3	100.0	100.0	100.0
Medium Rehabilitation	3.0	34.5	61.0	93.0	100.0
Heavy Rehabilitation	23.0	67.3	94.0	100.0	100.0

Total number of sections analyzed: 727

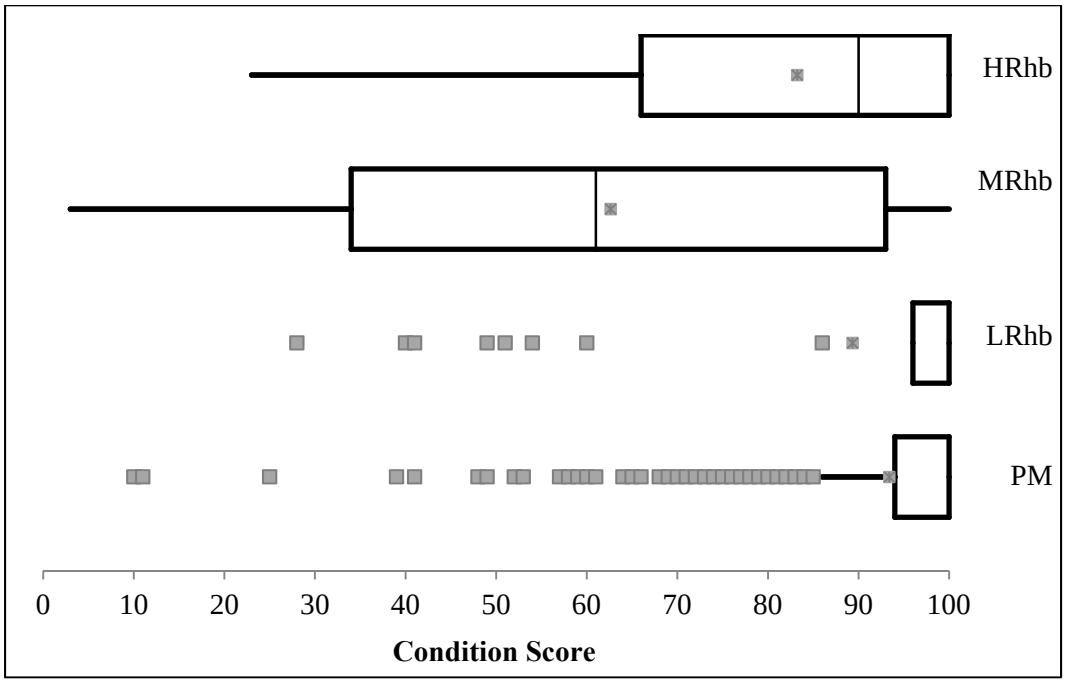

Figure C34.2. Box Plots for Condition Score for Treatments Applied in Beaumont District, 2007.

PMIS Distress Score by Treatment Category for Beaumont District (All Pavements, 2007)

Table C35.1 Distress Score versus Treatment Category (All Pavement Types, 2007).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	451	0	-	-	-	-
Preventive Maintenance	149	524	18	100	95.92	10.03
Light Rehabilitation	20	38	28	100	89.39	21.39
Medium Rehabilitation	72	131	6	100	80.27	28.20
Heavy Rehabilitation	35	34	43	100	87.35	16.74

Total number of sections analyzed: 727

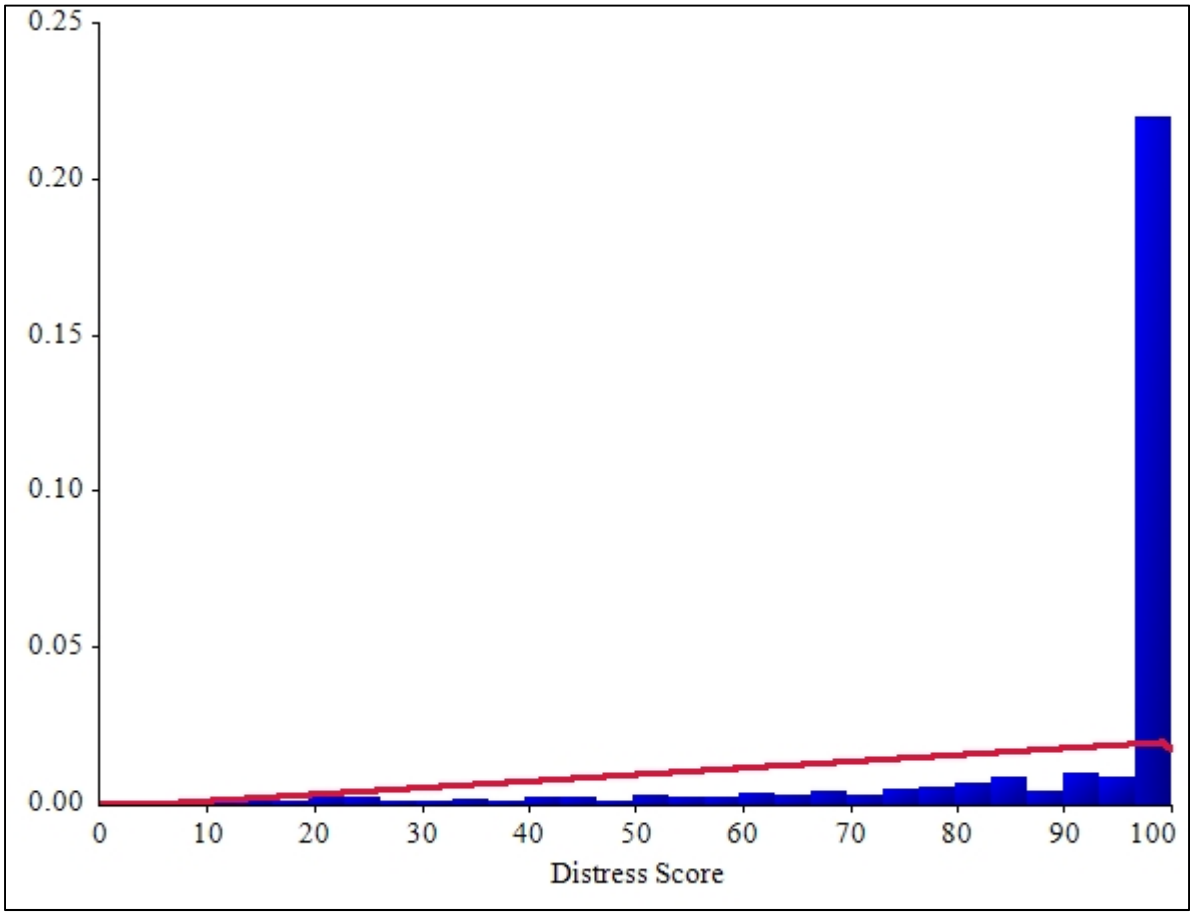

Figure C35.1. Histogram for Distress Score for Treatments Applied in Beaumont District (All Pavements, 2007).

PMIS Distress Score by Treatment Category for Beaumont District (All Pavements, 2007)

Table C35.2. Distress Score for Treatments Applied in Beaumont, (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	18.0	99.0	100.0	100.0	100.0
Light Rehabilitation	28.0	96.3	100.0	100.0	100.0
Medium Rehabilitation	6.0	65.0	99.0	100.0	100.0
Heavy Rehabilitation	43.0	77.0	99.5	100.0	100.0

Total number of sections analyzed: 727

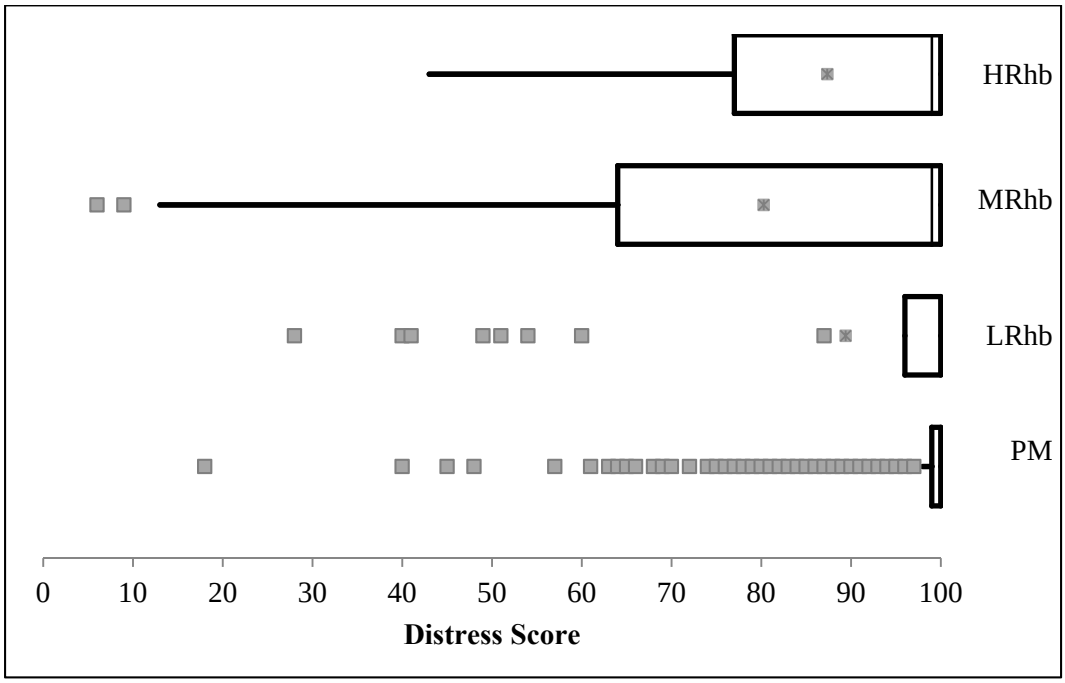

Figure C35.2. Box Plots for Condition Score for Treatments Applied in Beaumont District (All Pavements, 2007).

PMIS Ride Score by Treatment Category for Beaumont District (All Pavements, 2007)

Table C36.1. Ride Score versus Treatment Category (All Pavement Types, 2007).

Treatment Category	PMIS Frequency	Beaumont Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	451	0	-	-	-	-
Preventive Maintenance	149	524	1.3	5	3.49	0.60
Light Rehabilitation	20	38	2.8	4.6	3.75	0.47
Medium Rehabilitation	72	131	1.3	4.7	2.94	0.63
Heavy Rehabilitation	35	34	2.4	4.3	3.51	0.51

Total number of sections analyzed: 727

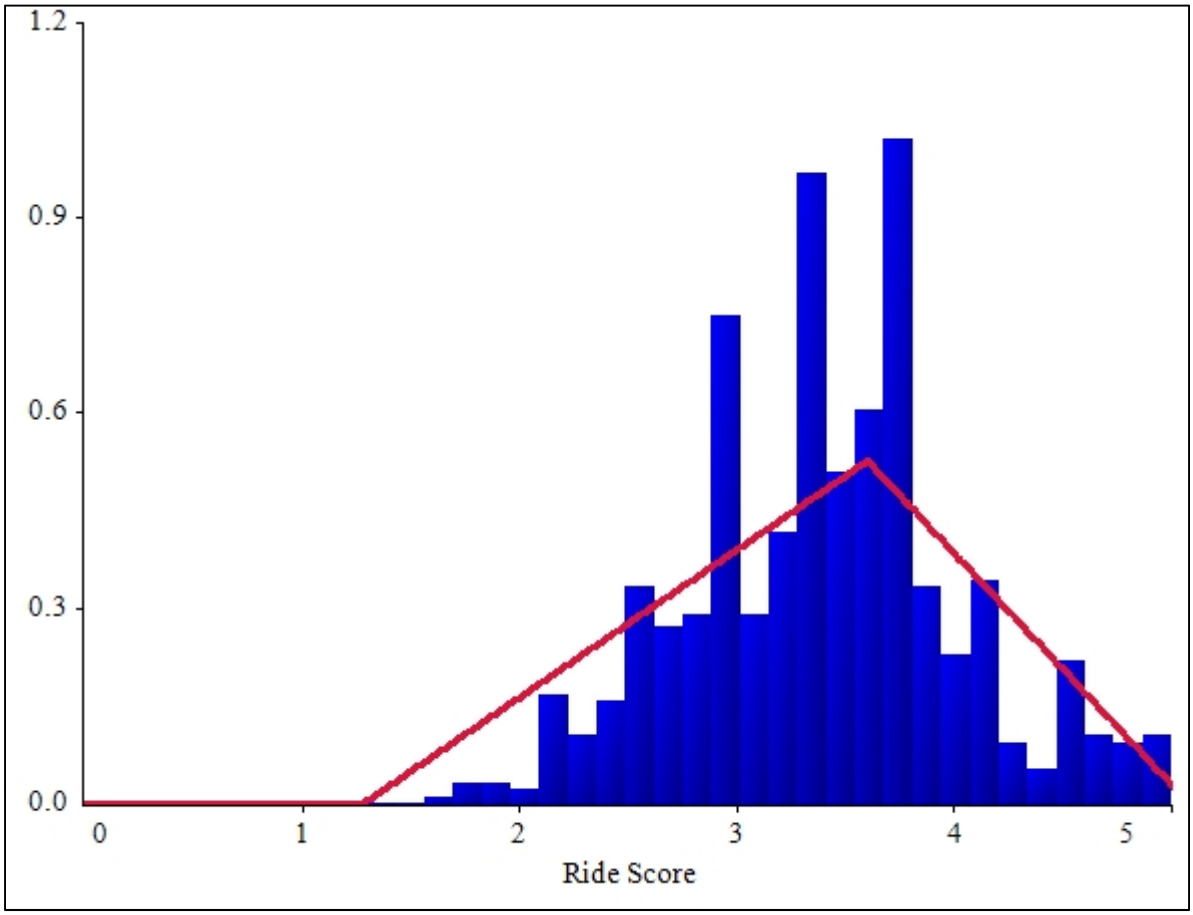

Figure C36.1. Histogram for Distress Score for Treatments Applied in Beaumont District (All Pavements, 2007).

PMIS Ride Score by Treatment Category for Beaumont District (All Pavements, 2007)

Table C36.2. Ride Score for Treatments Applied in Beaumont District (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.3	3.1	3.5	3.8	5.0
Light Rehabilitation	2.8	3.5	3.7	4.2	4.6
Medium Rehabilitation	1.3	2.5	2.9	3.4	4.7
Heavy Rehabilitation	2.4	3.2	3.7	4.0	4.3

Total number of sections analyzed: 727

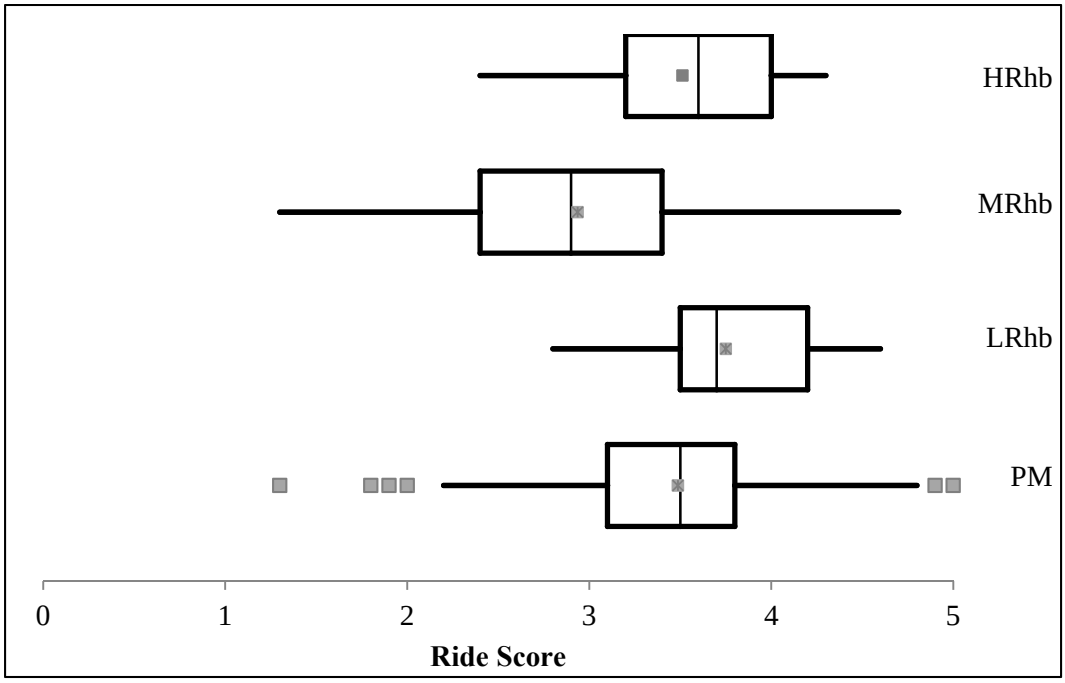

Figure C36.2. Box Plots for Ride Score for Treatments Applied in Beaumont District (All Pavements, 2007).

APPENDIX C
COMPARISON OF PMIS SCORES FOR TREATMENTS APPLIED IN THE DISTRICT WITH PMIS TREATMENT RECOMMENDATIONS 2007–2009

BROWNWOOD DISTRICT

PMIS Score for Reconstruction Treatments, 2009

Table C1. Condition Score by Treatment Category for Brownwood District, Reconstruction, 2009.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	0	0	0	0	-	-
Preventive Maintenance	17	0	69	100	90.88	8.268
Light Rehabilitation	0	0	0	0	-	-
Medium Rehabilitation	3	0	22	36	27.67	7.371
Heavy Rehabilitation	0	20	0	0	-	-

Table C2. Distress Score by Treatment Category for Brownwood District, Reconstruction, 2009.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	0	0	0	0	-	-
Preventive Maintenance	17	0	70	100	91.53	8.315
Light Rehabilitation	0	0	0	0	-	-
Medium Rehabilitation	3	0	22	36	31.00	7.810
Heavy Rehabilitation	0	20	0	0	-	-

Table C3. Ride Score by Treatment Category for Brownwood District, Reconstruction, 2009.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	0	0	0	0	-	-
Preventive Maintenance	17	0	3	4.3	3.7	0.335
Light Rehabilitation	0	0	0	0	-	-
Medium Rehabilitation	3	0	2.7	3.7	3.3	0.551
Heavy Rehabilitation	0	20	0	0	-	-

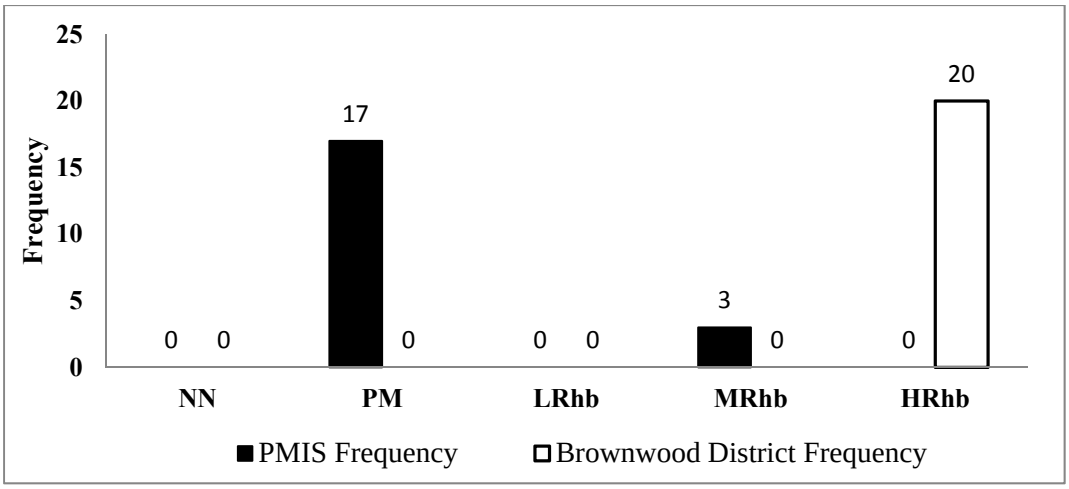

Figure C1. Frequency by Reconstruction Treatment (Brownwood District, 2009).

PMIS Score for Mill and Overlay Treatments, 2009

Table C4. Condition Score by Treatment Category for Brownwood District, Mill and Overlay, 2009.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	6	0	98	100	99.50	0.837
Preventive Maintenance	12	0	59	90	77.67	12.183
Light Rehabilitation	0	0	0	0	-	-
Medium Rehabilitation	0	18	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

Table C5. Distress Score by Treatment Category for Brownwood District, Mill and Overlay, 2009.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	6	0	98	100	99.67	0.816
Preventive Maintenance	12	0	61	90	80.50	9.803
Light Rehabilitation	0	0	0	0	-	-
Medium Rehabilitation	0	18	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

Table C6. Ride Score by Treatment Category for Brownwood District, Mill and Overlay, 2009.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	6	0	3.3	4.5	3.9	0.479
Preventive Maintenance	12	0	2.8	3.8	3.3	0.289
Light Rehabilitation	0	0	0	0	-	-
Medium Rehabilitation	0	18	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

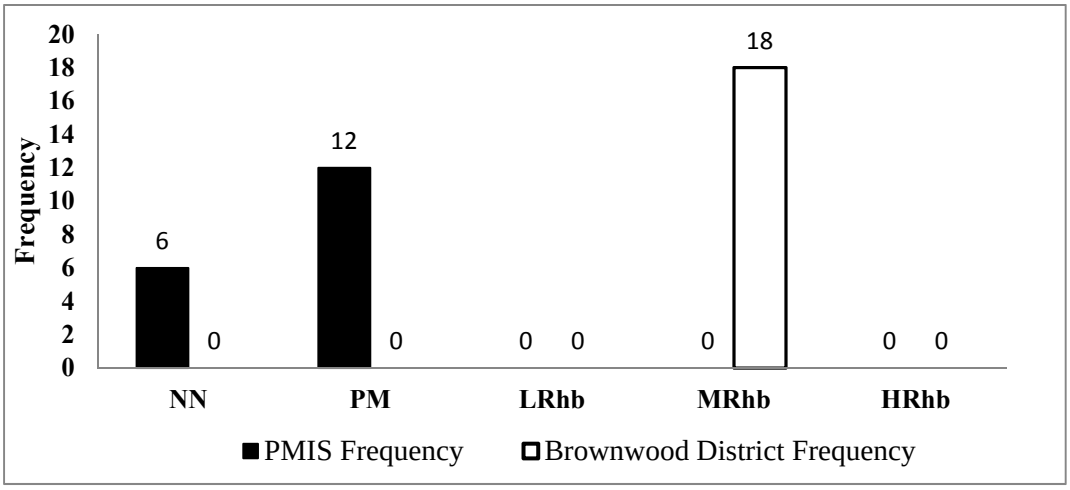

Figure C2. Frequency by Mill and Overlay Treatments (Brownwood District, 2009).

PMIS Score for Pavement Rehabilitation Treatments, 2009

Table C7. Condition Score by Treatment Category for Brownwood District, Rehab Pavement, 2009.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	16	0	68	100	92.69	11.853
Preventive Maintenance	7	0	78	98	86.43	8.059
Light Rehabilitation	0	23	0	0	-	-
Medium Rehabilitation	0	0	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

Table C8. Distress Score by Treatment Category for Brownwood District, Rehab Pavement, 2009.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	16	0	68	100	93.25	11.573
Preventive Maintenance	7	0	78	98	86.43	8.059
Light Rehabilitation	0	23	0	0	-	-
Medium Rehabilitation	0	0	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

Table C9. Ride Score by Treatment Category for Brownwood District, Rehab Pavement, 2009.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	16	0	3	4.3	3.6	0.384
Preventive Maintenance	7	0	2.8	3.7	3.2	0.326
Light Rehabilitation	0	23	0	0	-	-
Medium Rehabilitation	0	0	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

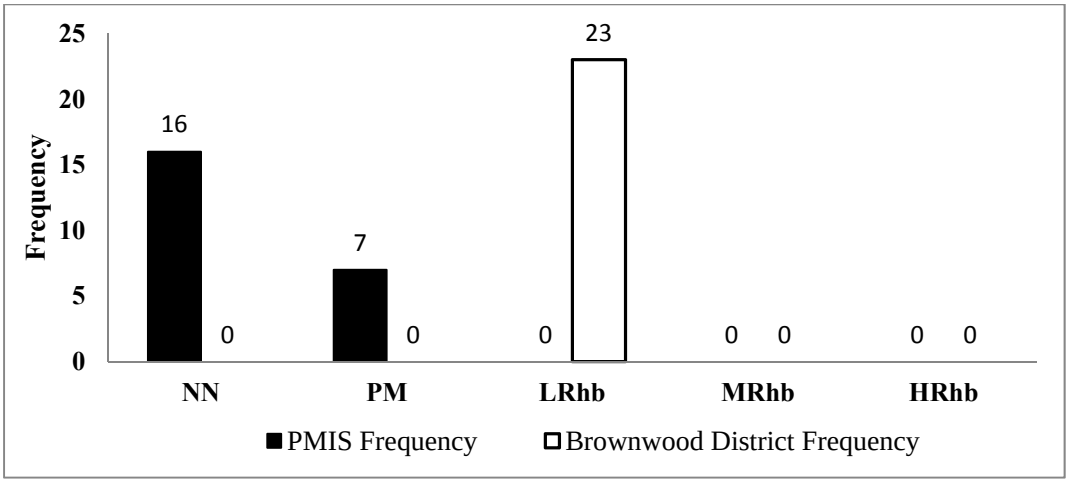

Figure C3. Frequency by Pavement Rehabilitation Treatment (Brownwood District, 2009).

PMIS Score for Seal Coat Treatments, 2008

Table C10. Condition Score by Treatment Category for Seal Coat Treatments, Brownwood District, 2008.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	175	0	61	100	92.97	11.532
Preventive Maintenance	602	865	25	100	92.14	12.778
Light Rehabilitation	74	0	34	100	86.99	15.613
Medium Rehabilitation	12	0	37	84	67.42	15.577
Heavy Rehabilitation	2	0	10	23	16.50	9.192

Table C11. Distress Score by Treatment Category for Seal Coat Treatments, Brownwood District, 2008.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	175	0	61	100	93.18	11.530
Preventive Maintenance	602	865	25	100	92.33	12.616
Light Rehabilitation	74	0	40	100	88.97	15.003
Medium Rehabilitation	12	0	37	100	88.67	17.396
Heavy Rehabilitation	2	0	66	99	82.50	23.335

Table C12. Ride Score by Treatment Category for Seal Coat Treatments, Brownwood District, 2008.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	175	0	0	4.4	3.5	0.453
Preventive Maintenance	602	865	81	4.6	3.2	0.423
Light Rehabilitation	74	0	0	2.9	2.3	0.154
Medium Rehabilitation	12	0	0	3.6	2.0	0.547
Heavy Rehabilitation	2	0	0	1	0.9	0.141

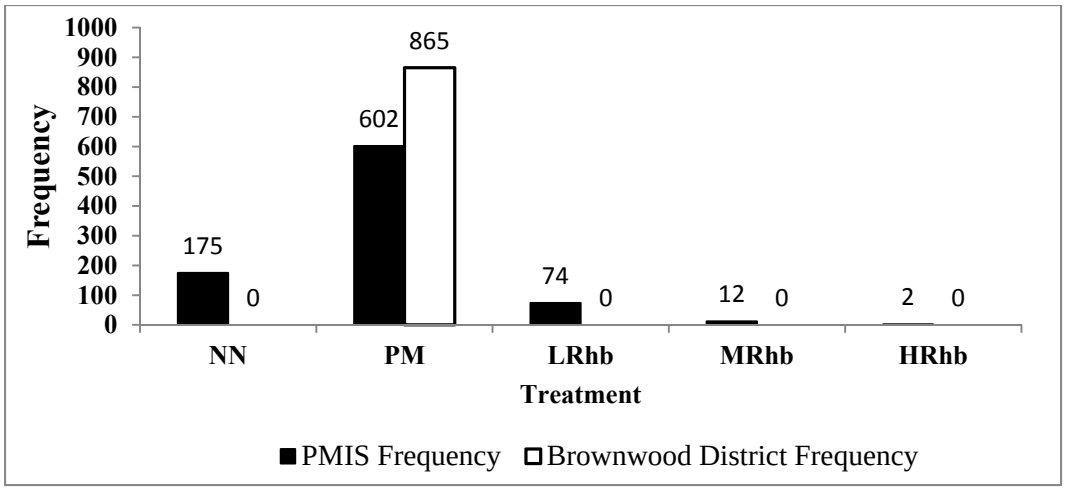

Figure C4. Frequency by Seal Coat Treatment (Brownwood District, 2009).

PMIS Score for Seal Coat Treatments, 2007

Table C13. Condition Score by Treatment Category for Seal Coat Treatments, Brownwood District, 2007.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	57	0	59	100	96.18	10.258
Preventive Maintenance	296	363	47	100	93.63	10.739
Light Rehabilitation	6	0	65	91	74.67	10.367
Medium Rehabilitation	4	0	44	71	56.00	11.747
Heavy Rehabilitation	0	0	0	0	-	-

Table C14. Distress Score by Treatment Category for Seal Coat Treatments, Brownwood District, 2007.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	57	0	59	100	96.18	10.258
Preventive Maintenance	296	363	47	100	93.78	10.691
Light Rehabilitation	6	0	66	91	76.17	9.496
Medium Rehabilitation	4	0	62	100	75.50	16.763
Heavy Rehabilitation	0	0	0	0	-	-

Table C15. Ride Score by Treatment Category for Seal Coat Treatments, Brownwood District, 2007.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	Standard Deviation
Need Nothing	57	0	2.6	4.5	3.9	0.516
Preventive Maintenance	296	363	2.5	4.5	3.7	0.415
Light Rehabilitation	6	0	2.1	2.4	2.2	0.117
Medium Rehabilitation	4	0	1.7	1.9	1.8	0.100
Heavy Rehabilitation	0	0	0	0	-	-

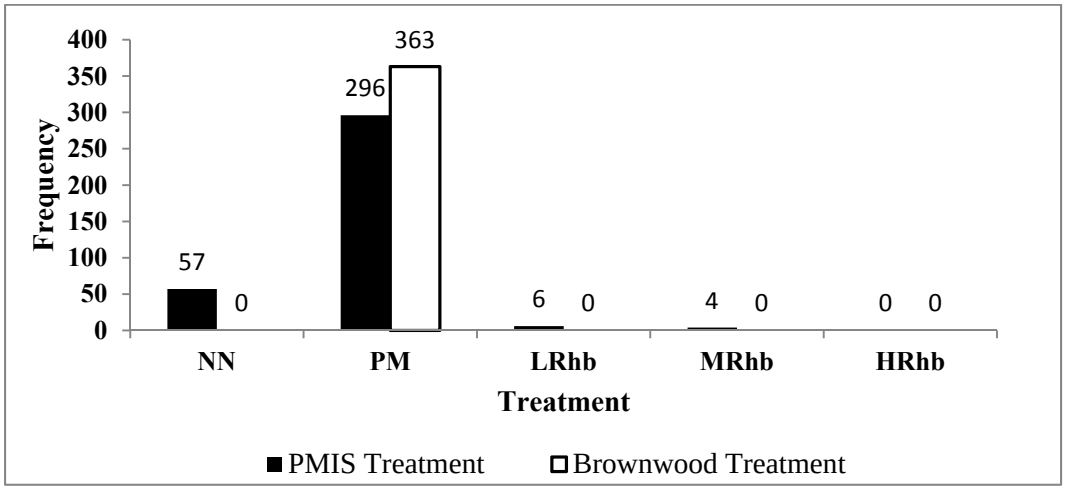

Figure C5. Frequency by Seal Coat Treatment (Brownwood District, 2007).

PMIS Score for Pavement Rehabilitation Treatments, 2007

Table C16. Condition Score by Treatment Category for Brownwood District, Rehab Pavement, 2007.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	2	0	100	100	100.00	0.000
Preventive Maintenance	2	0	85	91	88.00	4.243
Light Rehabilitation	0	4	0	0	-	-
Medium Rehabilitation	0	0	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

Table C17. Distress Score by Treatment Category for Brownwood District, Rehab Pavement, 2007.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	Standard Deviation
Need Nothing	2	0	100	100	100.00	0.000
Preventive Maintenance	2	0	89	95	92.00	4.243
Light Rehabilitation	0	4	0	0	-	-
Medium Rehabilitation	0	0	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

Table C18. Ride Score by Treatment Category for Brownwood District, Rehab Pavement, 2007.

Treatment Category	PMIS Frequency	Brownwood Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	2	0	3.5	3.6	3.6	0.071
Preventive Maintenance	2	0	3.1	3.1	3.1	0.000
Light Rehabilitation	0	4	0	0	-	-
Medium Rehabilitation	0	0	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

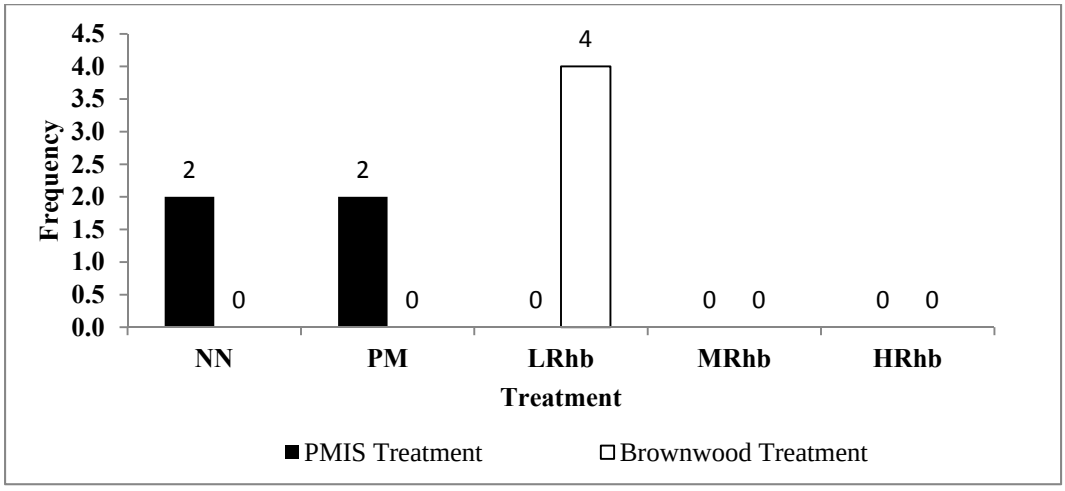

Figure C6. Frequency by Pavement Rehabilitation Treatment (Brownwood District, 2007).

Table C19.1. Condition Score by PMIS Treatment Category (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	255	0	-	-	-	-
Preventive Maintenance	929	1204	8	100	90.73	14.87
Light Rehabilitation	52	27	28	100	79.67	24.21
Medium Rehabilitation	32	18	53	100	86.33	16.00
Heavy Rehabilitation	1	20	10	99	61.25	32.90

Total number of sections analyzed: 1,269

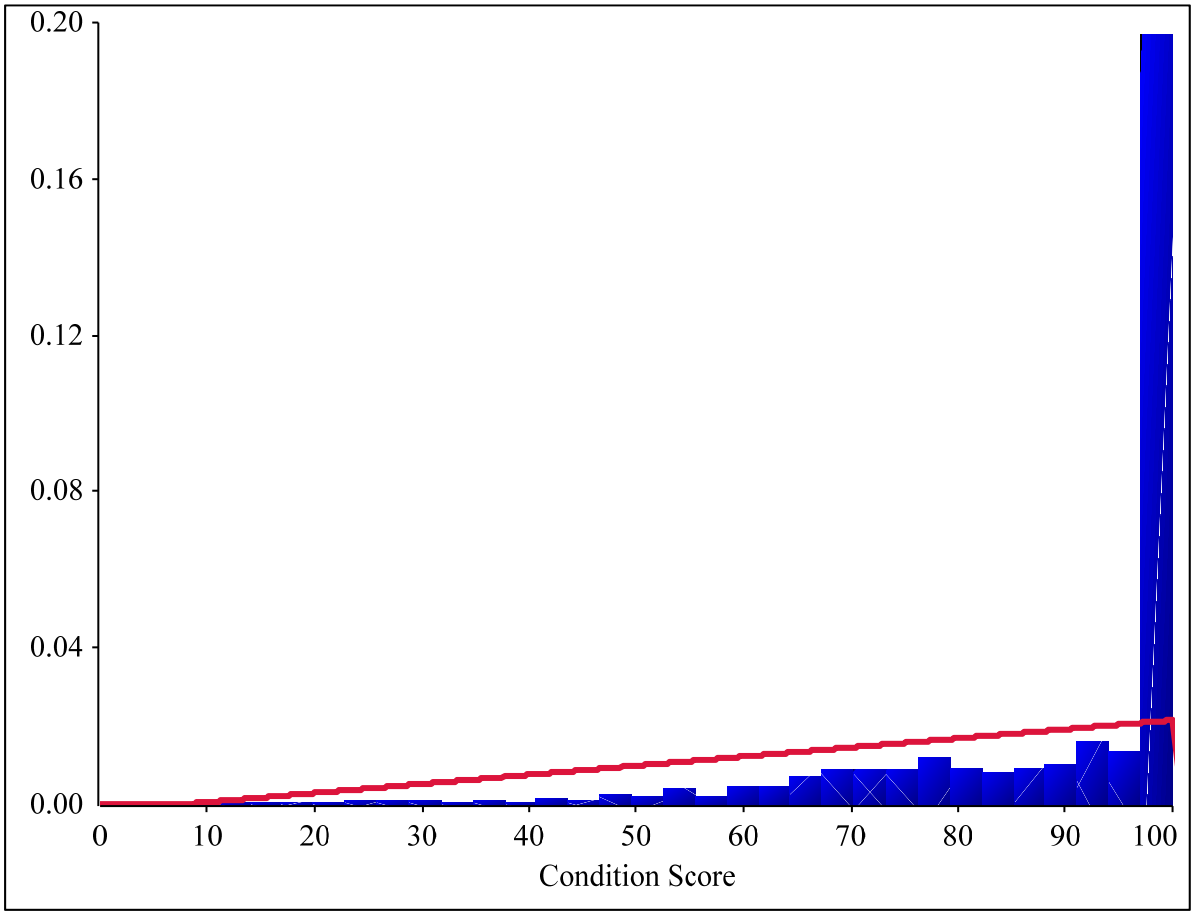

Figure C19.1. Histogram for Condition Score for Treatments Applied in Brownwood District (All Pavements, 2007–2009).

PMIS Condition Score by Treatment Category for Brownwood District (All Pavements, 2007-2009)

Table C19.2. Condition Score for Treatments Applied in Brownwood District (All Pavements, 2007–2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	8.0	85.0	100.0	100.0	100.0
Light Rehabilitation	28.0	62.0	88.0	99.5	100.0
Medium Rehabilitation	53.0	74.0	94.0	100.0	100.0
Heavy Rehabilitation	10.0	26.0	70.5	91.5	99.0

Total number of sections analyzed: 1,269

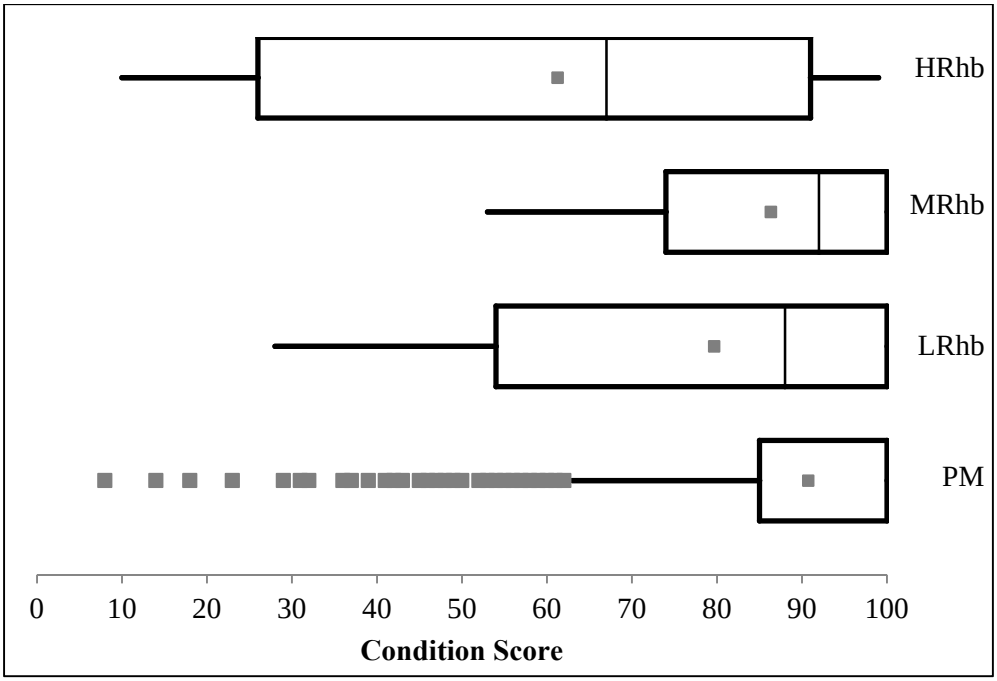

Figure C19.2. Box Plots for Condition Score for Treatments Applied in Brownwood (All Pavements, 2007–2009).

PMIS Distress Score by Treatment Category for Brownwood District (All Pavements, 2007–2009)

Table C20.1. Distress Score by PMIS Treatment Category (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	255	0	-	-	-	-
Preventive Maintenance	929	1204	14	100	91.15	14.43
Light Rehabilitation	52	27	28	100	80.70	23.06
Medium Rehabilitation	32	18	59	100	86.94	15.03
Heavy Rehabilitation	1	20	10	100	61.45	32.80

Total number of sections analyzed: 1,269

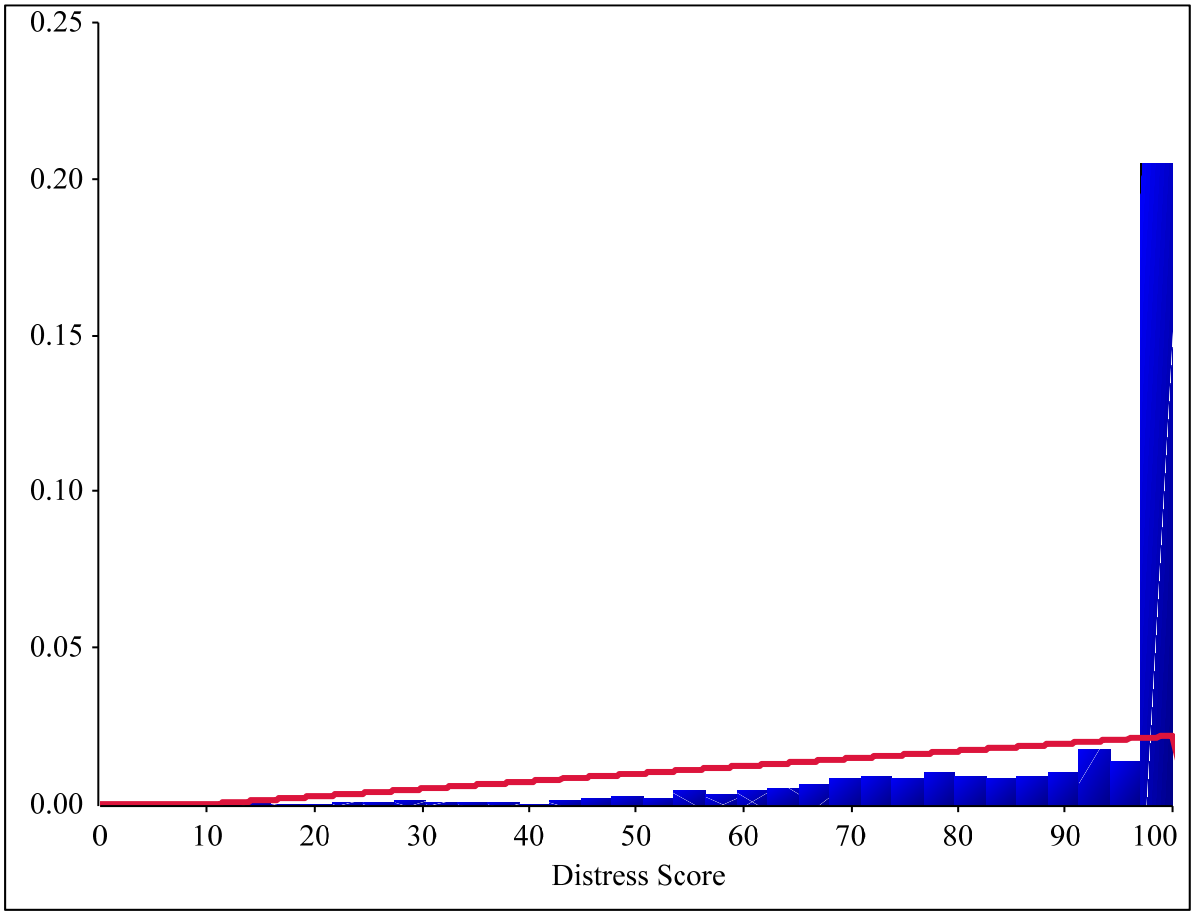

Figure C20.1. Histogram for Distress Score for Treatments Applied in Brownwood District (All Pavements, 2007–2009).

Table C20.2. Distress Score for Treatments Applied in Brownwood (All Pavements, 2007–2009)

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	14.0	86.0	100.0	100.0	100.0
Light Rehabilitation	28.0	63.0	93.0	99.5	100.0
Medium Rehabilitation	59.0	74.3	94.0	100.0	100.0
Heavy Rehabilitation	10.0	26.0	70.5	91.5	100.0

Total number of sections analyzed: 1,269

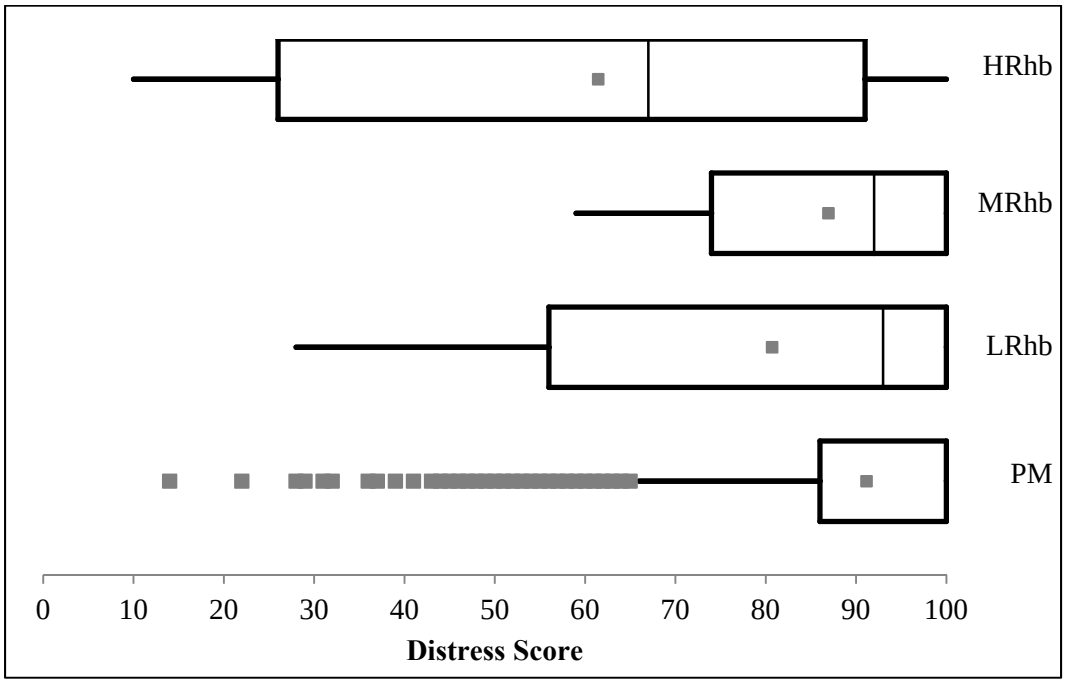

Figure C20.2. Box Plots for Distress Score for Treatments Applied in Brownwood (All Pavements, 2007–2009).

PMIS Ride Score by Treatment Category for Brownwood District (All Pavements, 2007–2009)

Table C21.1. Ride Score by PMIS Treatment Category (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	255	0	-	-	-	-
Preventive Maintenance	929	1204	1.4	4.6	3.33	0.53
Light Rehabilitation	52	27	2.7	4.3	3.42	0.43
Medium Rehabilitation	32	18	3	4.5	3.67	0.44
Heavy Rehabilitation	1	20	2.9	4.1	3.65	0.37

Total number of sections analyzed: 1,269

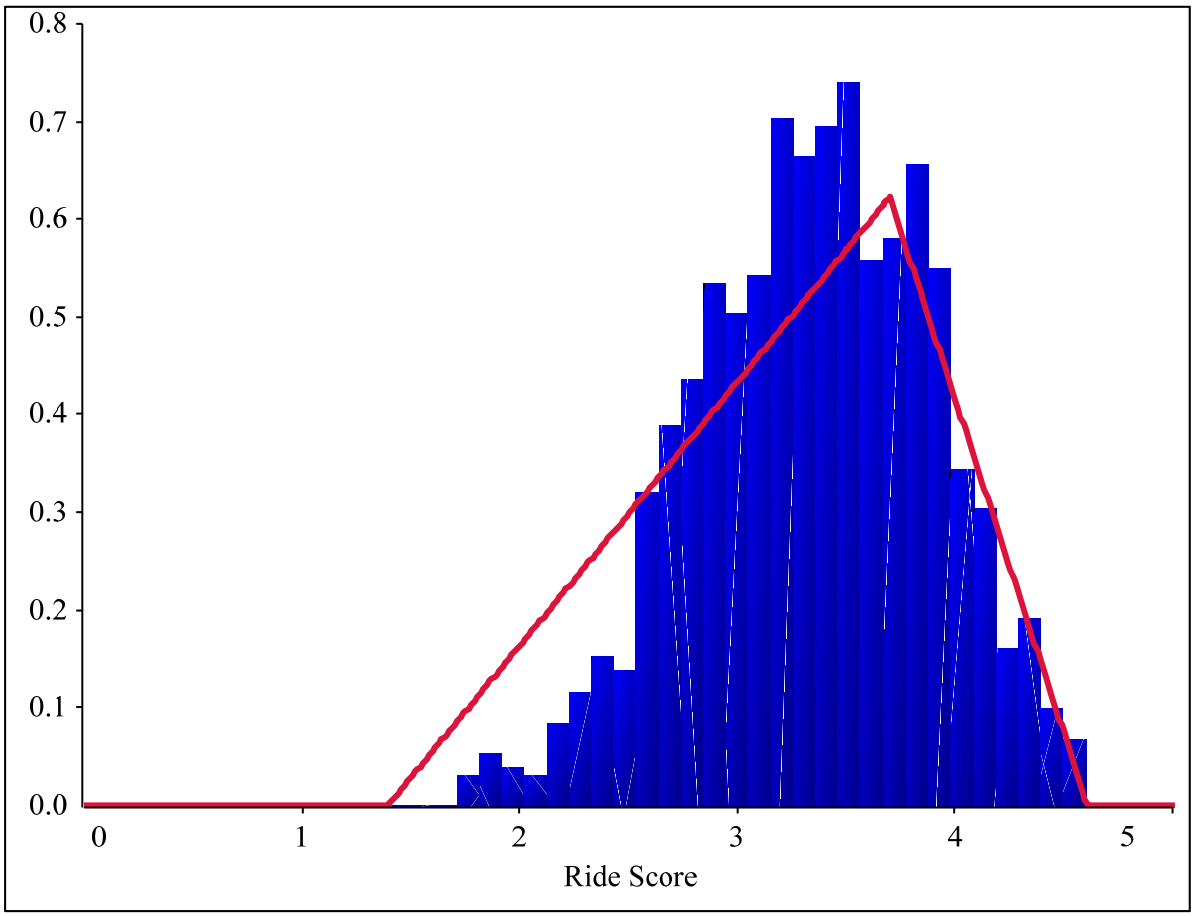

Figure C21.1. Histogram for Ride Score for Treatments Applied in Brownwood District (All Pavements, 2007–2009).

PMIS Ride Score by Treatment Category for Brownwood District (All Pavements, 2007–2009)

Table C21.2. Ride Score for Treatments Applied in Brownwood (All Pavements, 2007–2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.4	3.0	3.4	3.7	4.6
Light Rehabilitation	2.7	3.2	3.4	3.7	4.3
Medium Rehabilitation	3.0	3.3	3.7	4.0	4.5
Heavy Rehabilitation	2.9	3.4	3.7	4.0	4.1

Total number of sections analyzed: 1,269

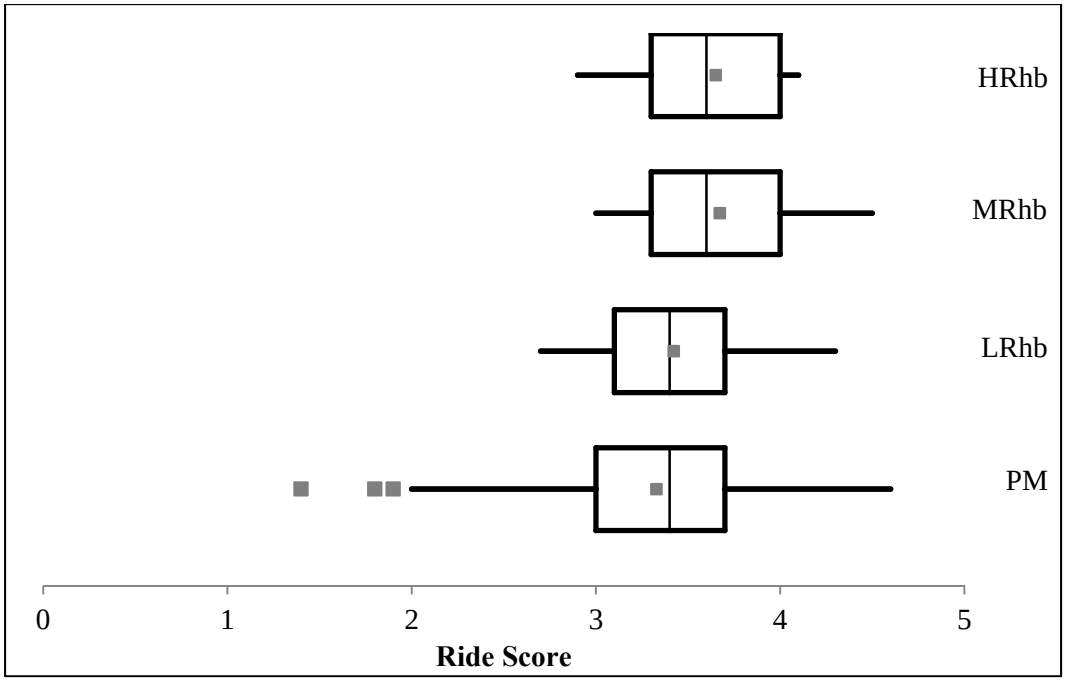

Figure C21.2. Box Plots for Ride Score for Treatments Applied in Brownwood (All Pavements, 2007–2009).

Table C22.1. Condition Score by PMIS Treatment Category (All Pavements, 2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	23	0	-	-	-	-
Preventive Maintenance	25	0	-	-	-	-
Light Rehabilitation	0	23	28	100	80.04	24.97
Medium Rehabilitation	13	18	53	100	86.33	16.00
Heavy Rehabilitation	0	20	10	99	61.25	32.90

Total number of sections analyzed: 61

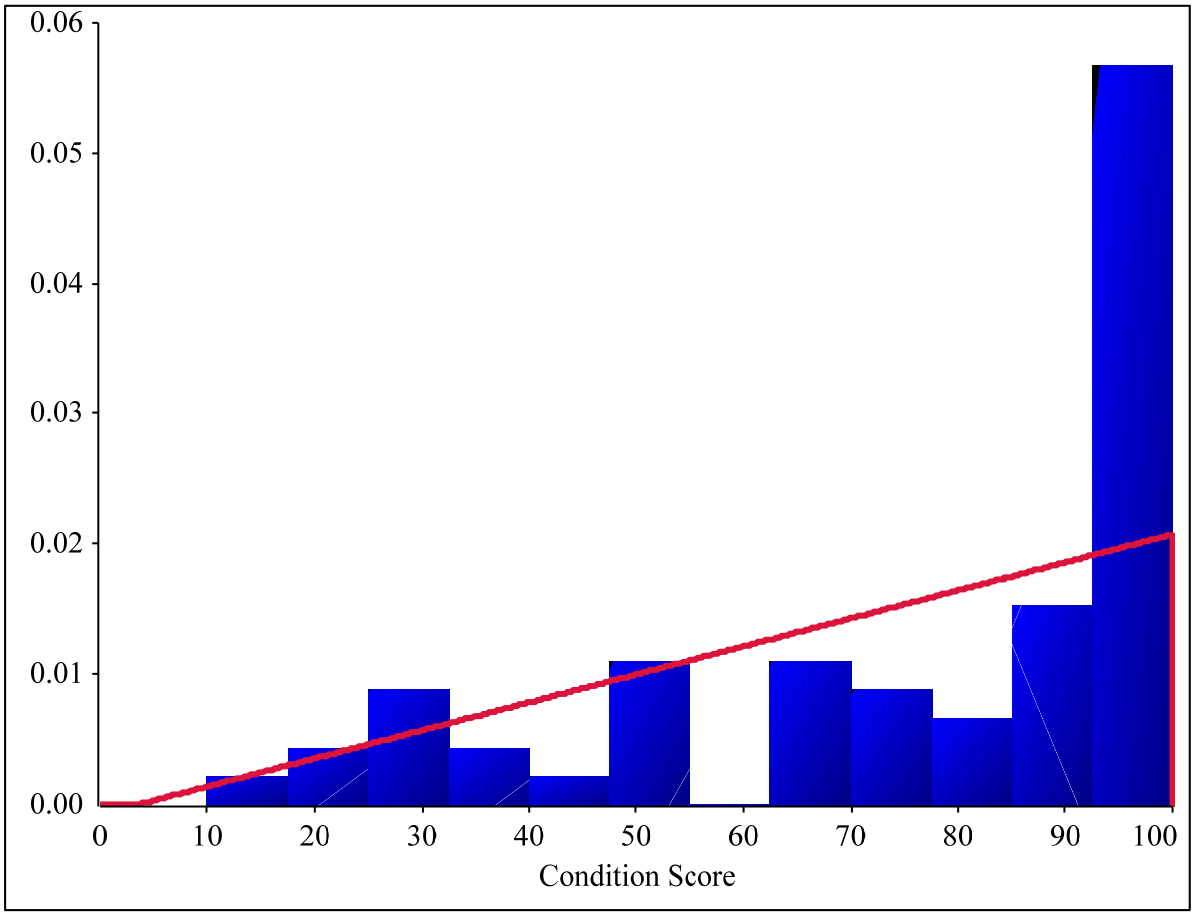

Figure C22.1. Histogram for Condition Score for Treatments Applied in Brownwood District (All Pavements, 2009).

PMIS Condition Score by Treatment Category for Brownwood District (All Pavements, 2009)

Table C22.2. Condition Score for Treatments Applied in Brownwood (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-
Light Rehabilitation	28.0	62.0	95.0	100.0	100.0
Medium Rehabilitation	53.0	74.0	94.0	100.0	100.0
Heavy Rehabilitation	10.0	26.0	70.5	91.5	99.0

Total number of sections analyzed: 61

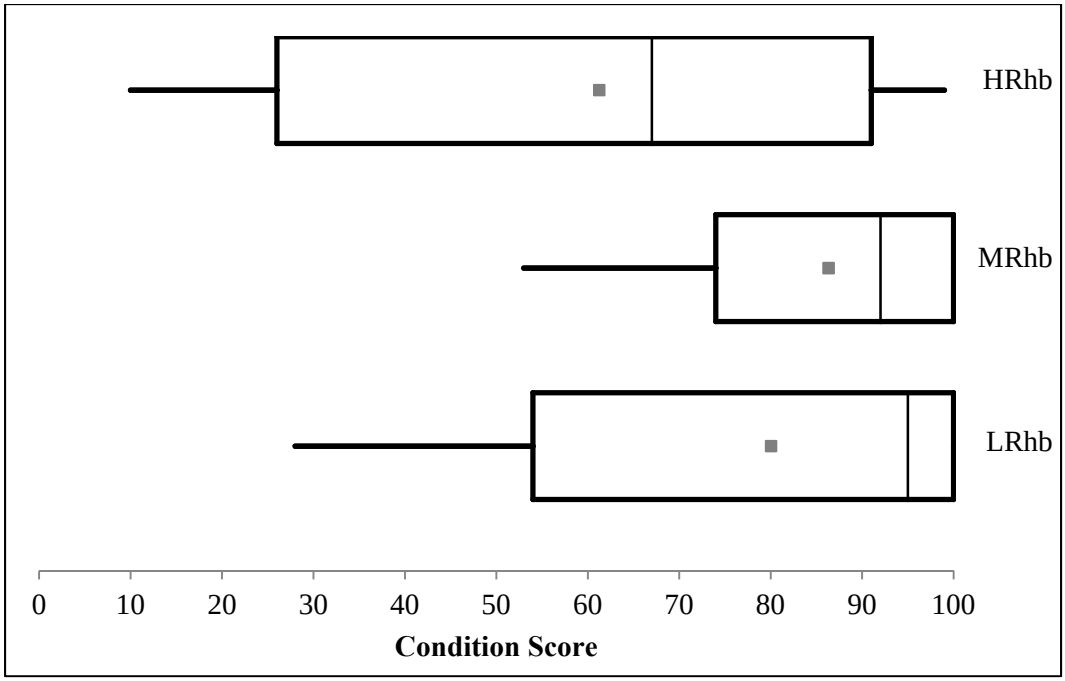

Figure C22.2. Box Plots for Condition Score for Treatments Applied in Brownwood (All Pavements, 2009).

PMIS Distress Score by Treatment Category for Brownwood District (All Pavements, 2009)

Table C23.1. Distress Score by PMIS Treatment Category (All Pavements, 2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	23	0	-	-	-	-
Preventive Maintenance	25	0	-	-	-	-
Light Rehabilitation	0	23	28	100	80.65	24.04
Medium Rehabilitation	13	18	59	100	86.94	15.03
Heavy Rehabilitation	0	20	10	100	61.45	32.80

Total number of sections analyzed: 61

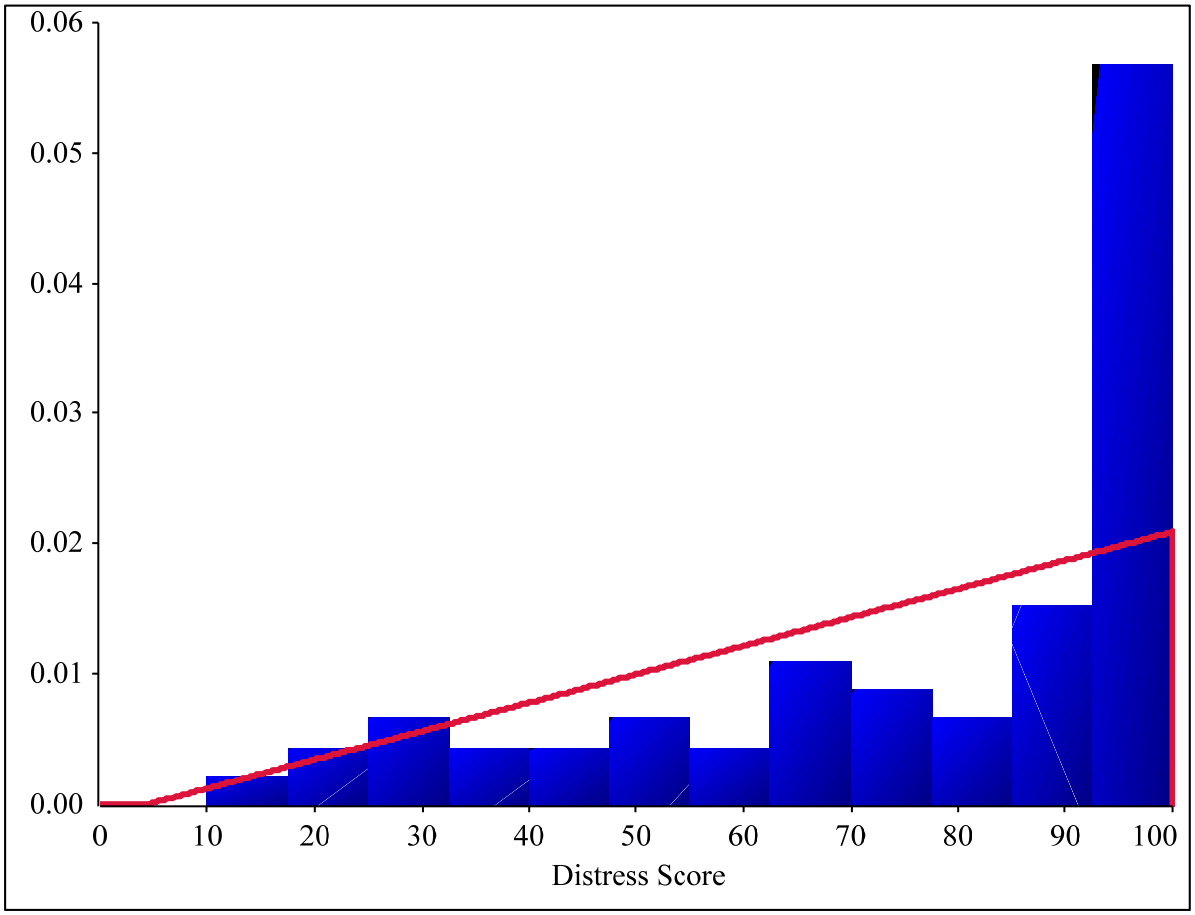

Figure C23.1. Histogram for Distress Score for Treatments Applied in Brownwood District (All Pavements, 2009).

PMIS Distress Score by Treatment Category for Brownwood District (All Pavements, 2009)

Table C23.2. Distress Score for Treatments Applied in Brownwood (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-
Light Rehabilitation	28.0	62.0	95.0	100.0	100.0
Medium Rehabilitation	59.0	74.3	94.0	100.0	100.0
Heavy Rehabilitation	10.0	26.0	70.5	91.5	100.0

Total number of sections analyzed: 61

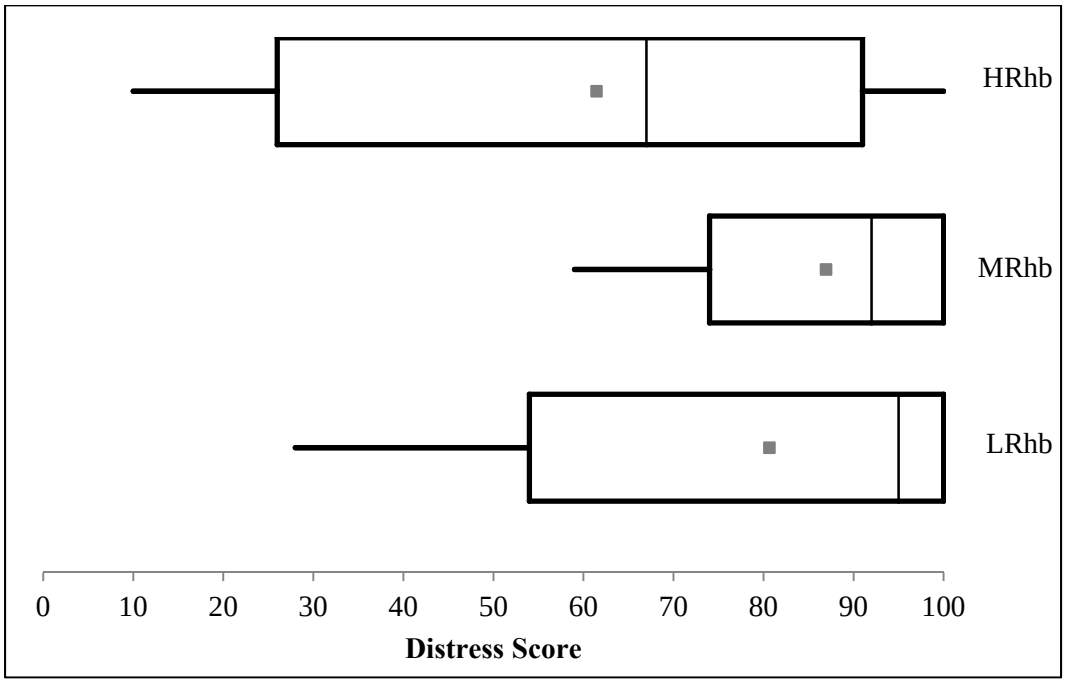

Figure C23.2. Box Plots for Distress Score for Treatments Applied in Brownwood (All Pavements, 2009).

PMIS Ride Score by Treatment Category for Brownwood District (All Pavements, 2009)

Table C24.1. Ride Score by PMIS Treatment Category (All Pavements, 2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	23	0	-	-	-	-
Preventive Maintenance	25	0	-	-	-	-
Light Rehabilitation	0	23	2.7	4.3	3.45	0.44
Medium Rehabilitation	13	18	3	4.5	3.67	0.44
Heavy Rehabilitation	0	20	2.9	4.1	3.65	0.37

Total number of sections analyzed: 61

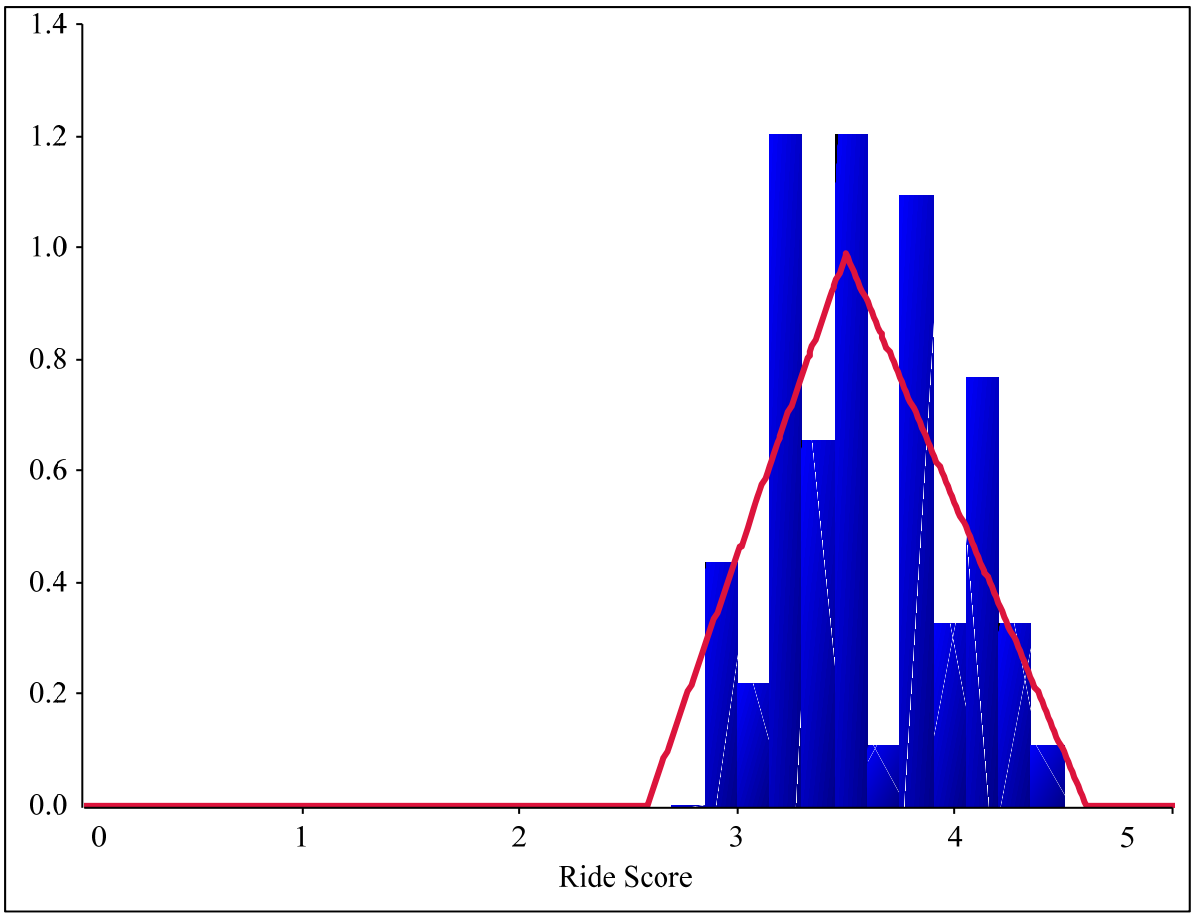

Figure C24.1. Histogram for Ride Score for Treatments Applied in Brownwood District (All Pavements, 2009).

PMIS Ride Score by Treatment Category for Brownwood District (All Pavements, 2009)

Table C24.2. Ride Score for Treatments Applied in Brownwood (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-
Light Rehabilitation	2.7	3.2	3.5	3.7	4.3
Medium Rehabilitation	3.0	3.3	3.7	4.0	4.5
Heavy Rehabilitation	2.9	3.4	3.7	4.0	4.1

Total number of sections analyzed: 61

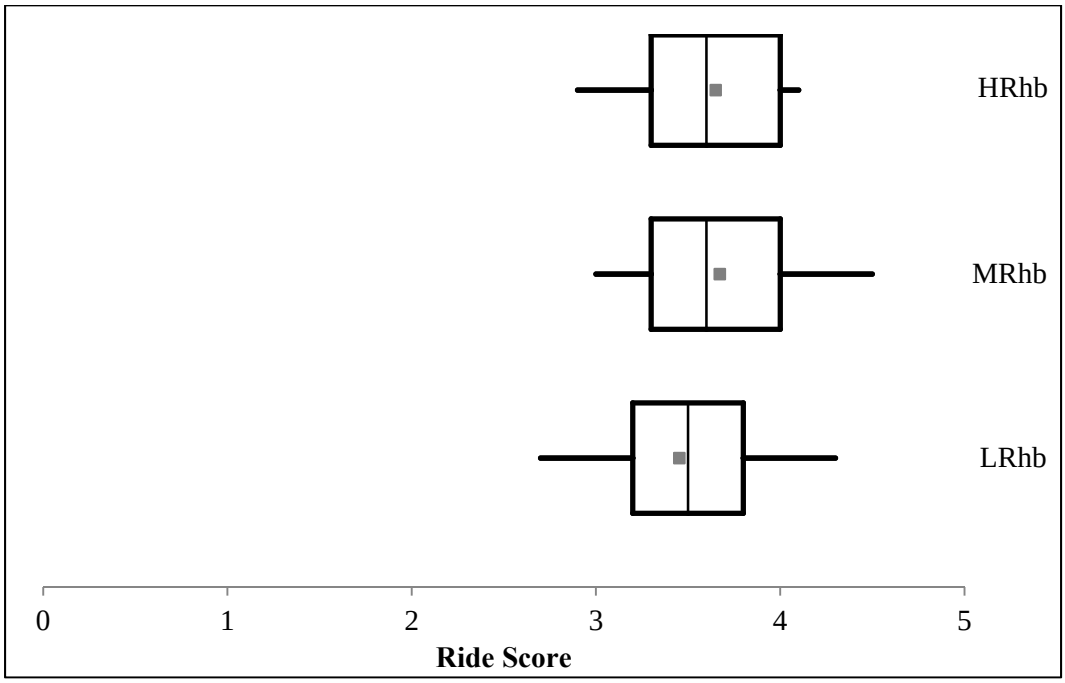

Figure C24.2. Box Plots for Ride Score for Treatments Applied in Brownwood (All Pavements, 2009).

PMIS Condition Score by Treatment Category for Brownwood District (All Pavements, 2008)

Table C25.1. Condition Score by PMIS Treatment Category (All Pavements, 2008).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	180	0	-	-	-	-
Preventive Maintenance	602	846	8	100	90.91	14.59
Light Rehabilitation	50	0	-	-	-	-
Medium Rehabilitation	13	0	-	-	-	-
Heavy Rehabilitation	1	0	-	-	-	-

Total number of sections analyzed: 846

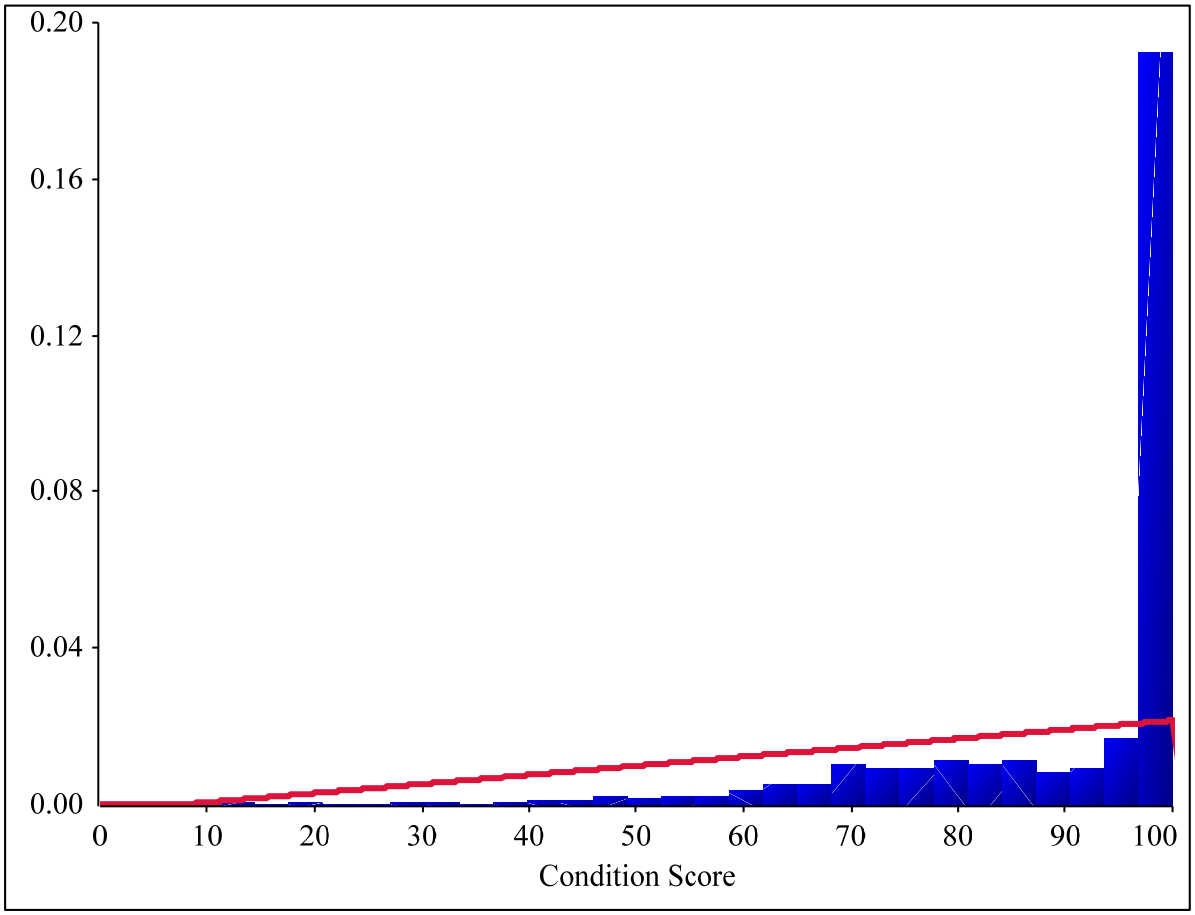

Figure C25.1. Histogram for Condition Score for Treatments Applied in Brownwood District (All Pavements, 2008).

PMIS Condition Score by Treatment Category for Brownwood District (All Pavements, 2008)

Table C25.2. Condition Score for Treatments Applied in Brownwood (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	8.0	85.0	100.0	100.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 846

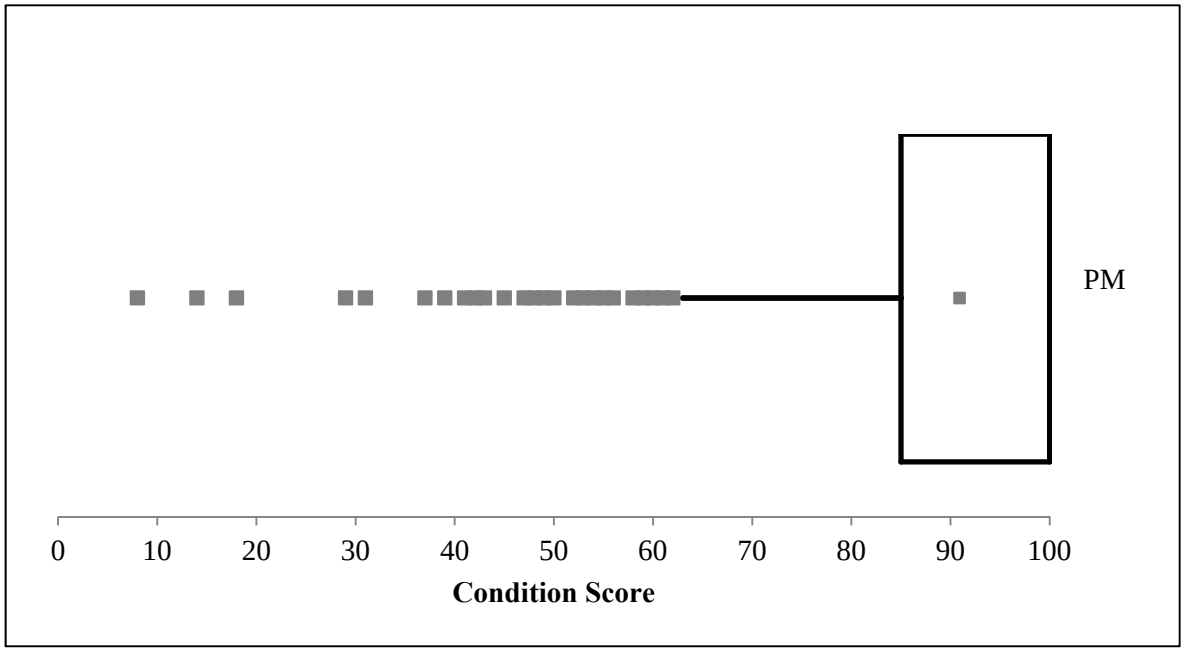

Figure C25.2. Box Plots for Condition Score for Treatments Applied in Brownwood (All Pavements, 2008).

PMIS Distress Score by Treatment Category for Brownwood District (All Pavements, 2008)

Table C26.1. Distress Score by PMIS Treatment Category (All Pavements, 2008).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	180	0	-	-	-	-
Preventive Maintenance	602	846	14	100	91.41	14.05
Light Rehabilitation	50	0	-	-	-	-
Medium Rehabilitation	13	0	-	-	-	-
Heavy Rehabilitation	1	0	-	-	-	-

Total number of sections analyzed: 846

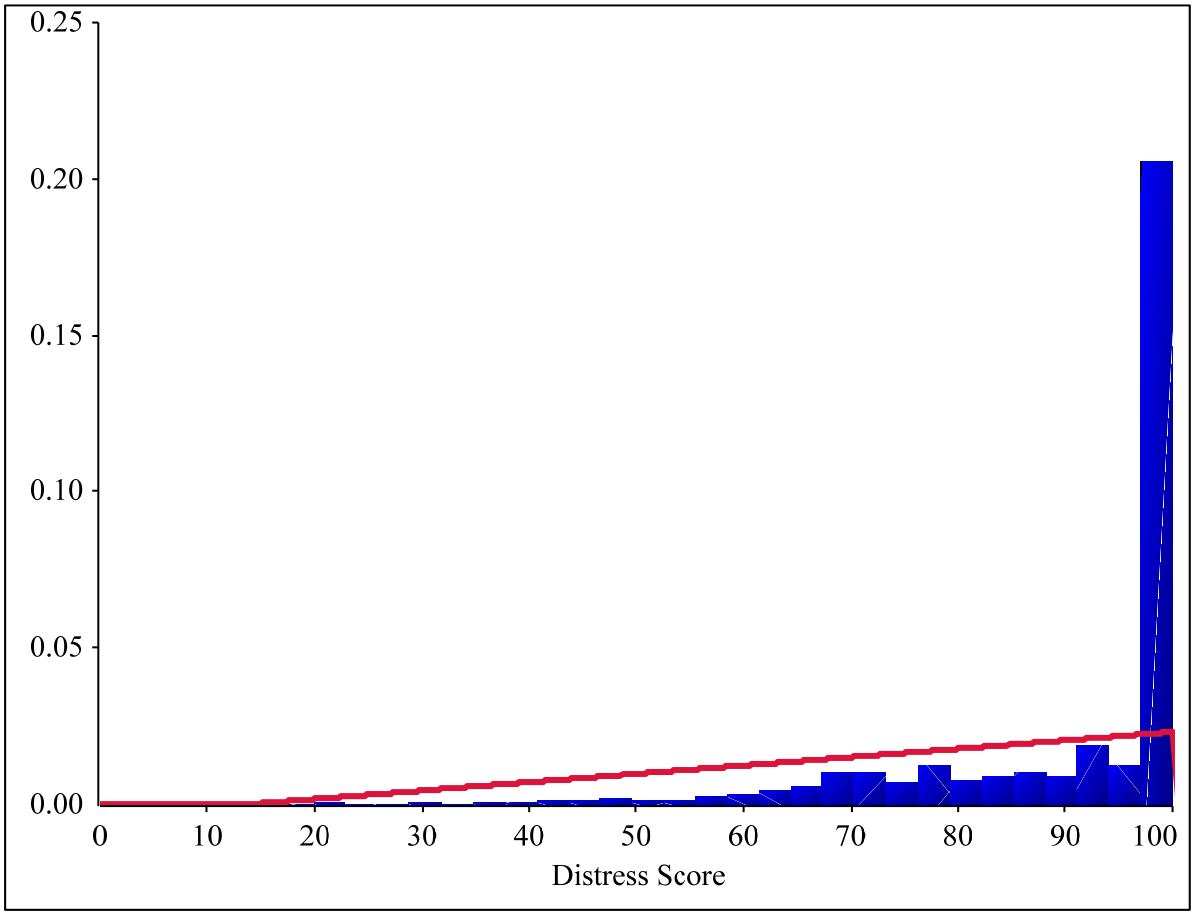

Figure C26.1. Histogram for Distress Score for Treatments Applied in Brownwood District (All Pavements, 2008).

PMIS Distress Score by Treatment Category for Brownwood District (All Pavements, 2008)

Table C26.2. Distress Score for Treatments Applied in Brownwood (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	14.0	87.0	100.0	100.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 846

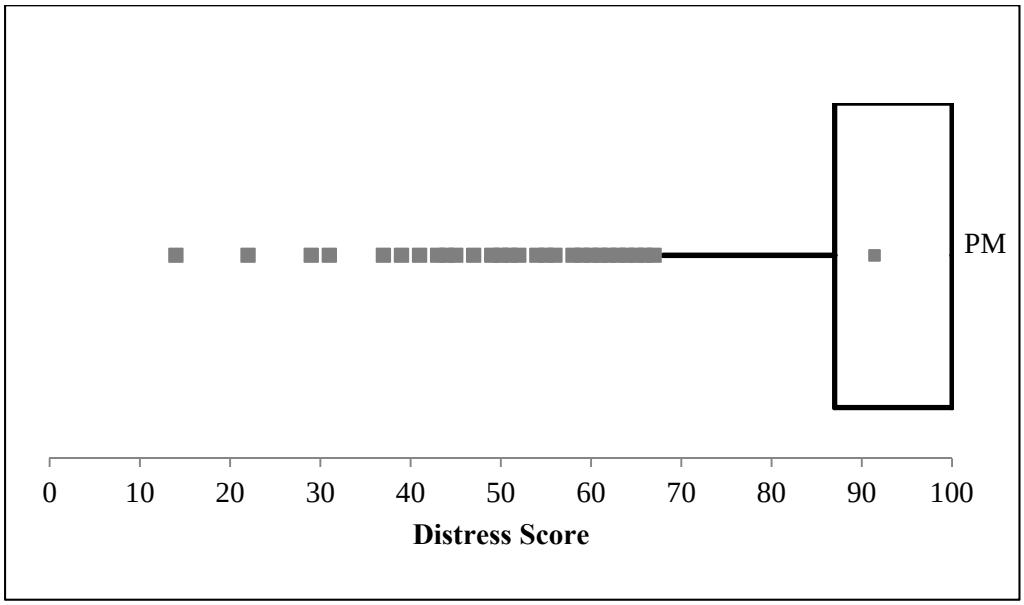

Figure C26.2. Box Plots for Distress Score for Treatments Applied in Brownwood (All Pavements, 2008).

Table C27.1. Ride Score by PMIS Treatment Category (All Pavements, 2008).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	180	0	-	-	-	-
Preventive Maintenance	602	846	1.4	4.5	3.18	0.49
Light Rehabilitation	50	0	-	-	-	-
Medium Rehabilitation	13	0	-	-	-	-
Heavy Rehabilitation	1	0	-	-	-	-

Total number of sections analyzed: 846

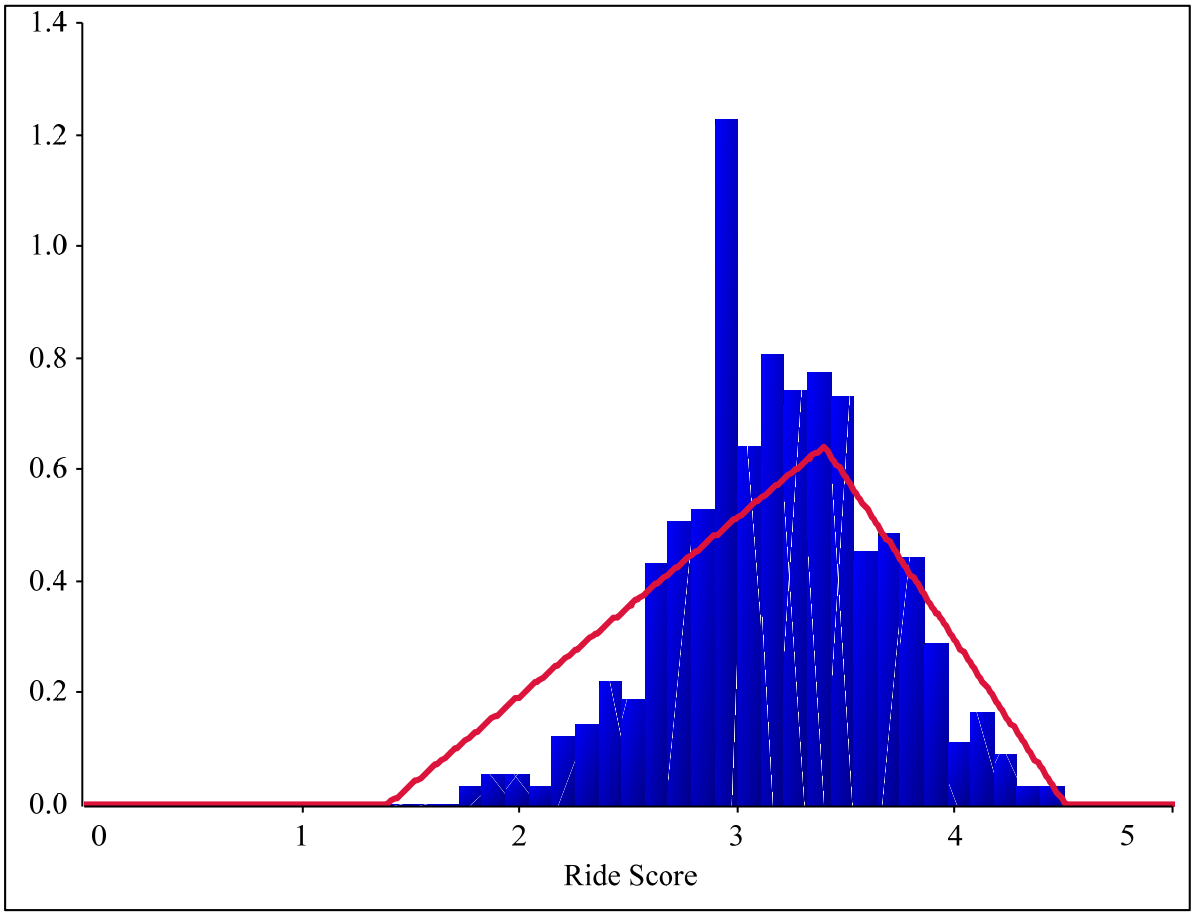

Figure C27.1. Histogram for Ride Score for Treatments Applied in Brownwood District (All Pavements, 2008).

PMIS Ride Score by Treatment Category for Brownwood District (All Pavements, 2008)

Table C27.2. Ride Score for Treatments Applied in Brownwood (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.4	2.9	3.2	3.5	4.5
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 846

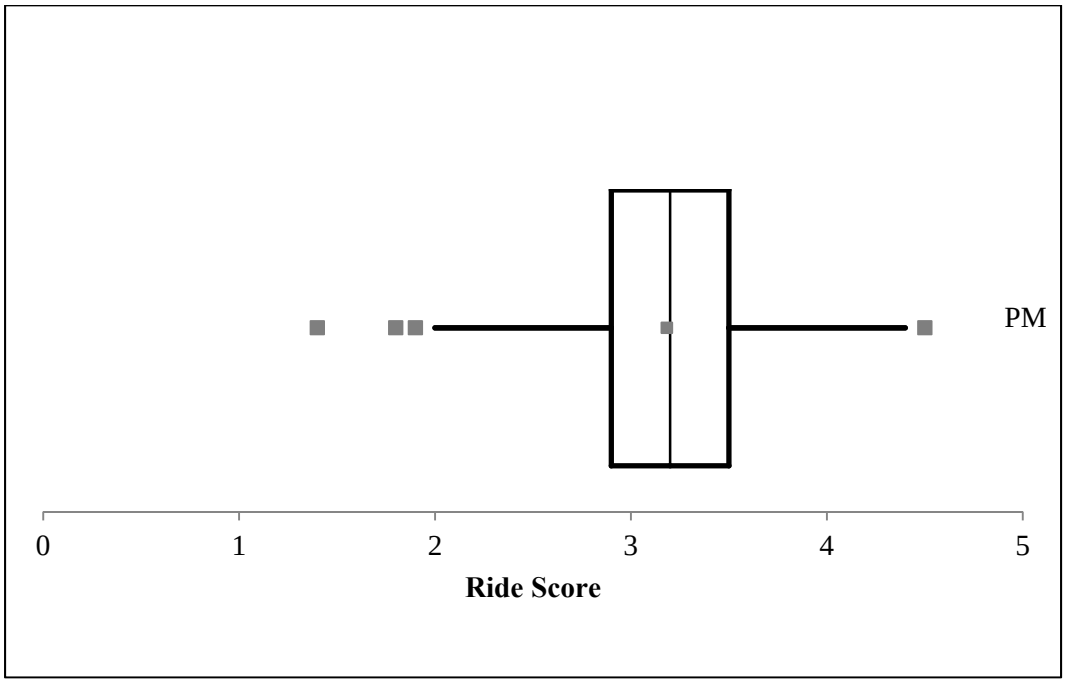

Figure C27.2. Box Plots for Ride Score for Treatments Applied in Brownwood (All Pavements, 2008).

PMIS Condition Score by Treatment Category for Brownwood District (All Pavements, 2007)

Table C28.1. Condition Score by PMIS Treatment Category (All Pavements, 2007).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	52	0	-	-	-	-
Preventive Maintenance	302	358	23	100	90.33	15.54
Light Rehabilitation	2	4	47	99	77.50	22.40
Medium Rehabilitation	6	0	-	-	-	-
Heavy Rehabilitation	0	0	-	-	-	-

Total number of sections analyzed: 362

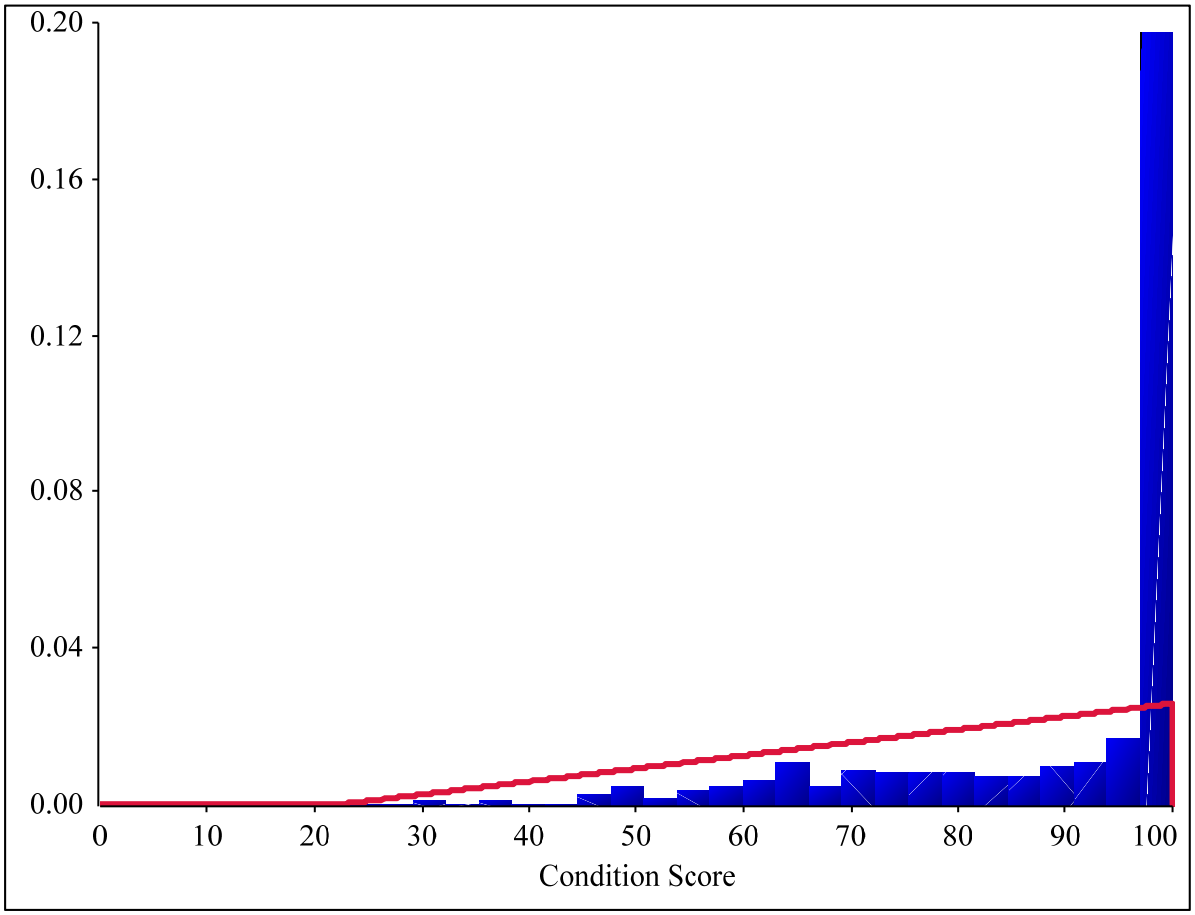

Figure C28.1. Histogram for Condition Score for Treatments Applied in Brownwood District (All Pavements, 2007).

PMIS Condition Score by Treatment Category for Brownwood District (All Pavements, 2007)

Table C28.2. Condition Score for Treatments Applied in Brownwood (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	
Preventive Maintenance	23.0	84.3	100.0	100.0	100.0
Light Rehabilitation	47.0	68.8	82.0	90.8	99.0
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 362

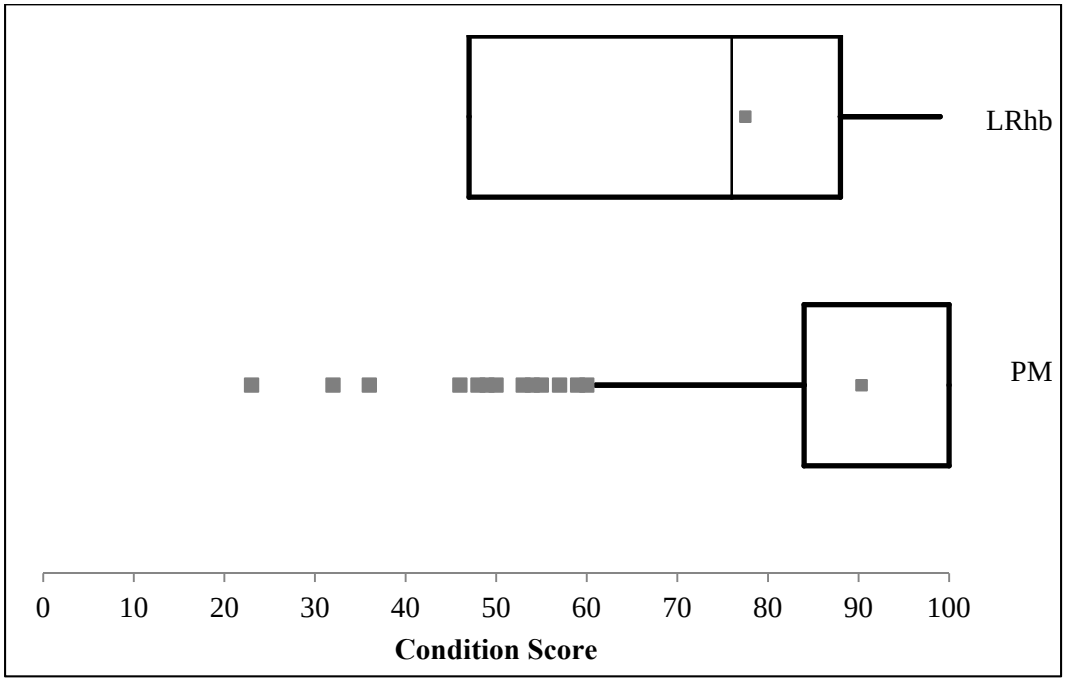

Figure C28.2. Box Plots for Condition Score for Treatments Applied in Brownwood (All Pavements, 2007).

Table C29.1. Distress Score by PMIS Treatment Category (All Pavements, 2007).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	52	0	-	-	-	-
Preventive Maintenance	302	358	28	100	90.54	15.31
Light Rehabilitation	2	4	56	99	81.00	19.30
Medium Rehabilitation	6	0	-	-	-	-
Heavy Rehabilitation	0	0	-	-	-	-

Total number of sections analyzed: 362

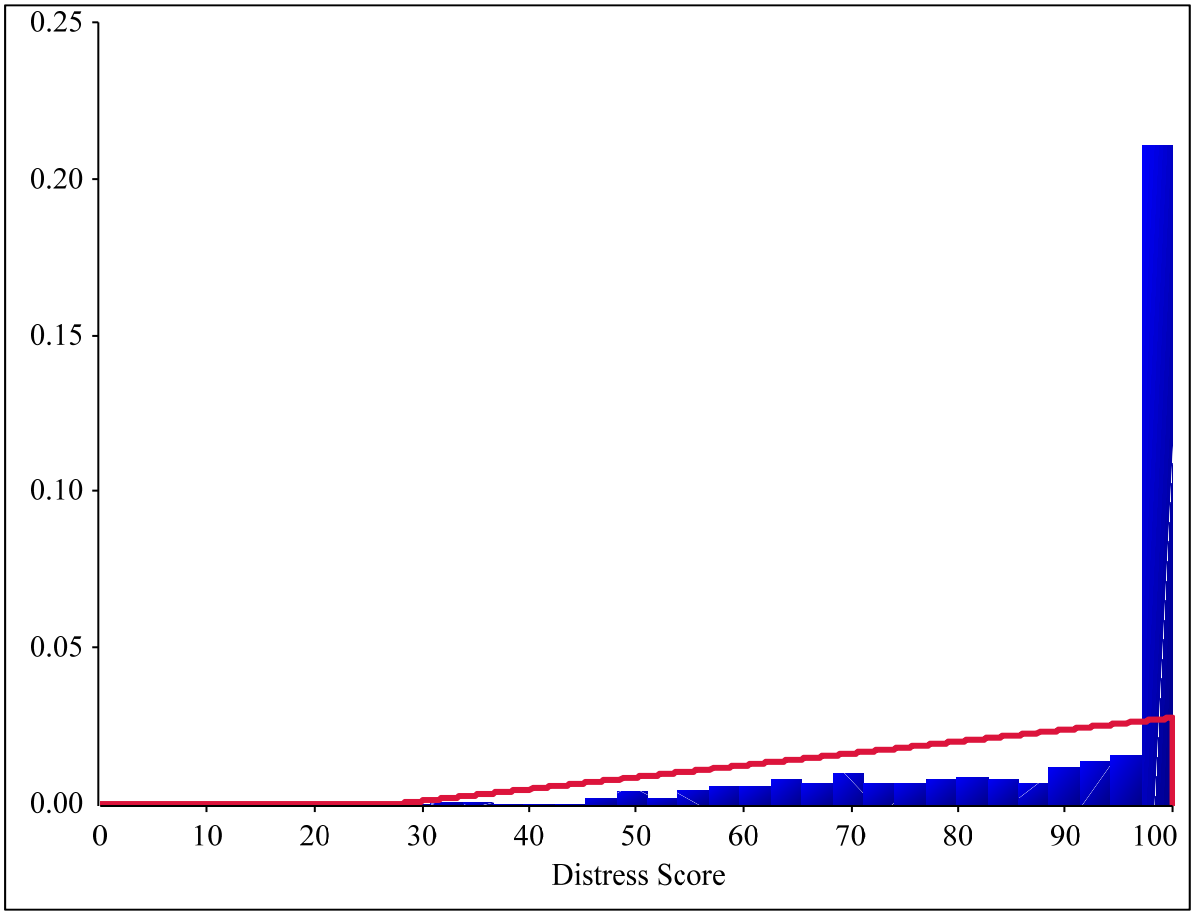

Figure C29.1. Histogram for Distress Score for Treatments Applied in Brownwood District (All Pavements, 2007).

PMIS Distress Score by Treatment Category for Brownwood District (All Pavements, 2007)

Table C29.2. Condition Score for Treatments Applied in Brownwood (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	28.0	85.0	100.0	100.0	100.0
Light Rehabilitation	56.0	71.0	84.5	94.5	99.0
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 362

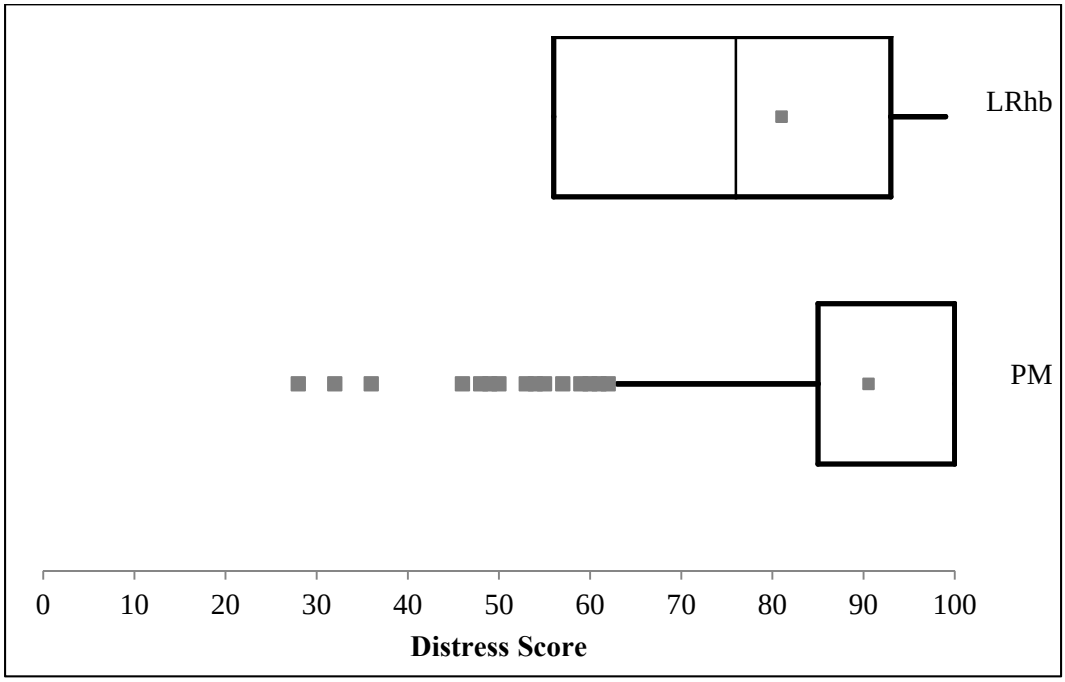

Figure C29.2. Box Plots for Distress Score for Treatments Applied in Brownwood (All Pavements, 2007).

PMIS Ride Score by Treatment Category for Brownwood District (All Pavements, 2007)

Table C30.1. Ride Score by PMIS Treatment Category (All Pavements, 2007).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	52	0	-	-	-	-
Preventive Maintenance	302	358	1.8	4.6	3.67	0.48
Light Rehabilitation	2	4	2.9	3.7	3.25	0.34
Medium Rehabilitation	6	0	-	-	-	-
Heavy Rehabilitation	0	0	-	-	-	-

Total number of sections analyzed: 362

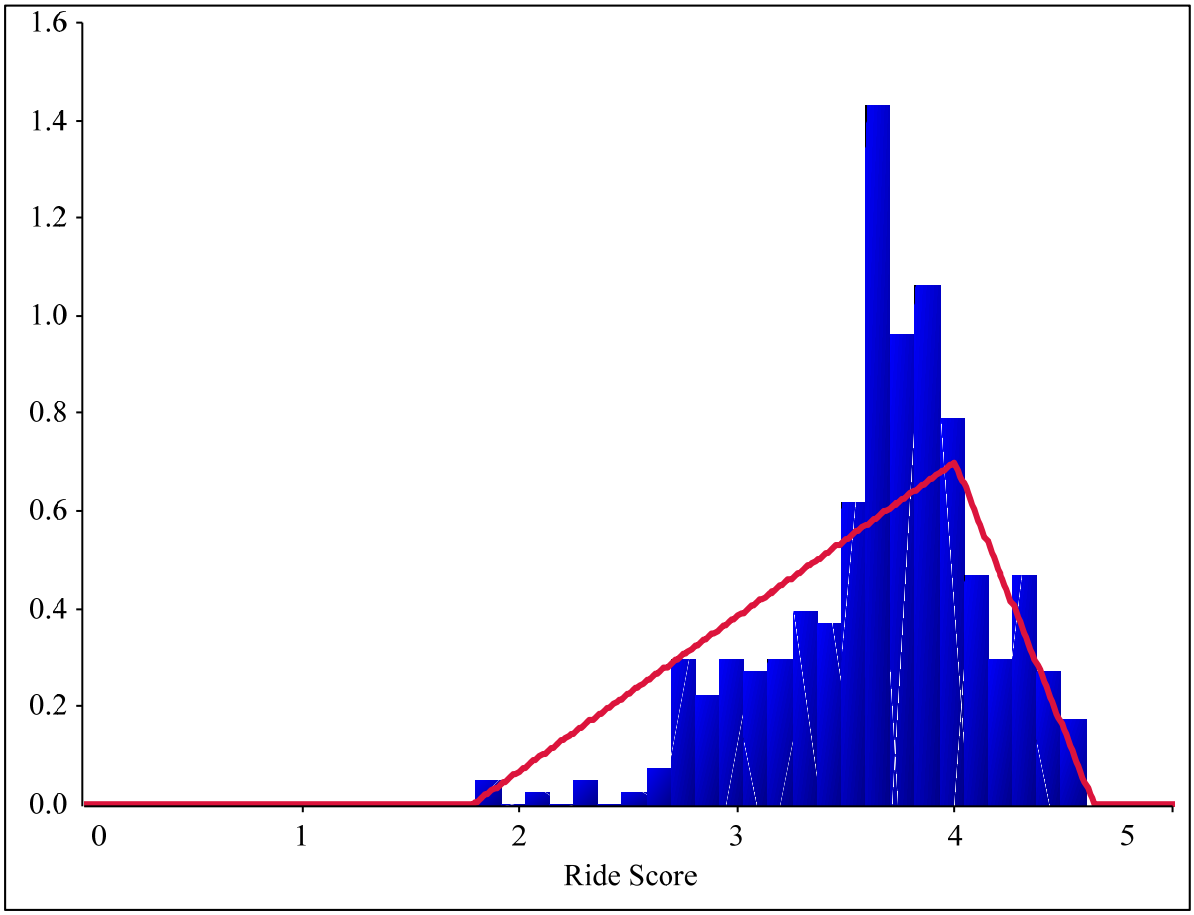

Figure C30.1. Histogram for Ride Score for Treatments Applied in Brownwood District (All Pavements, 2007).

Table C30.2. Ride Score for Treatments Applied in Brownwood (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.8	3.4	3.8	4.0	4.6
Light Rehabilitation	2.9	3.1	3.2	3.4	3.7
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 362

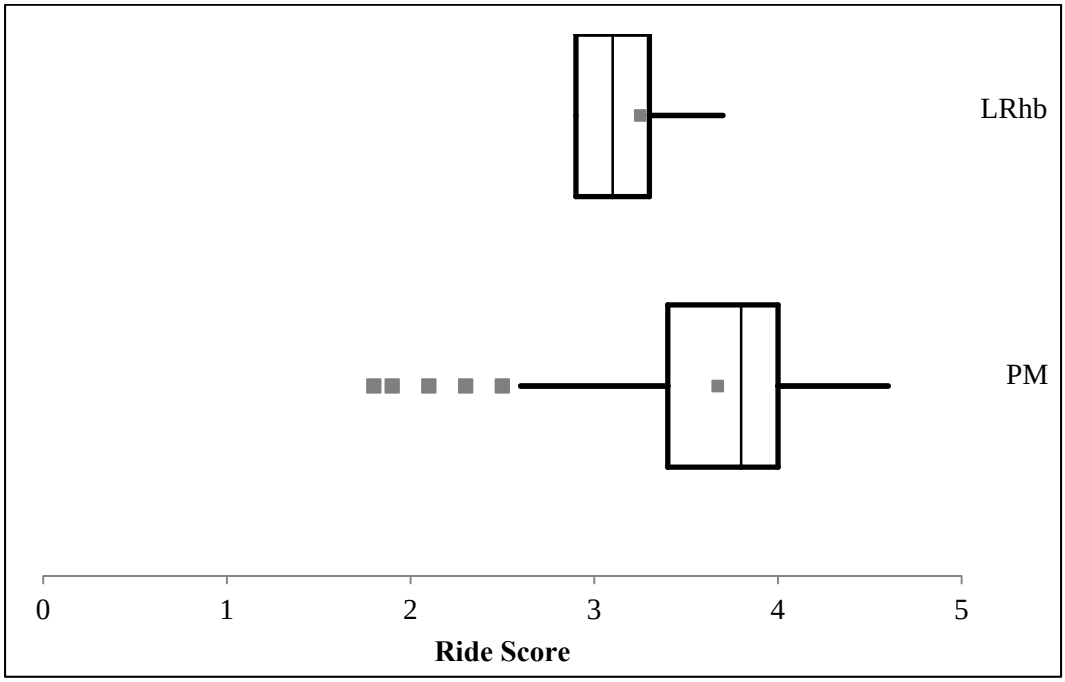

Figure C30.2. Box Plots for Ride Score for Treatments Applied in Brownwood (All Pavements, 2007).

APPENDIX C
COMPARISON OF PMIS SCORES FOR TREATMENTS APPLIED IN THE DISTRICT WITH PMIS TREATMENT RECOMMENDATIONS 2007–2009

BRYAN DISTRICT

Table C1. Condition Scores by Treatment Category, Bryan District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	801	0	13	100	94.55	10.59
Preventive Maintenance	558	1459	18	100	83.36	16.40
Light Rehabilitation	202	33	10	100	64.10	19.66
Medium Rehabilitation	135	171	9	98	45.23	19.57
Heavy Rehabilitation	134	167	7	100	68.51	30.25

Table C2. Distress Scores by Treatment Category, Bryan District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	801	0	14	100	95.70	9.44
Preventive Maintenance	558	1459	22	100	84.61	15.59
Light Rehabilitation	202	33	22	100	78.43	19.28
Medium Rehabilitation	135	171	13	100	72.33	23.02
Heavy Rehabilitation	134	167	15	100	77.69	23.28

Table C3. Ride Scores by Treatment Category, Bryan District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	801	0	2	4.9	3.44	0.59
Preventive Maintenance	558	1459	2	4.9	3.39	0.64
Light Rehabilitation	202	33	1.3	4.5	2.28	0.32
Medium Rehabilitation	135	171	1.5	3.9	1.99	0.39
Heavy Rehabilitation	134	167	0.9	4.9	3.39	1.13

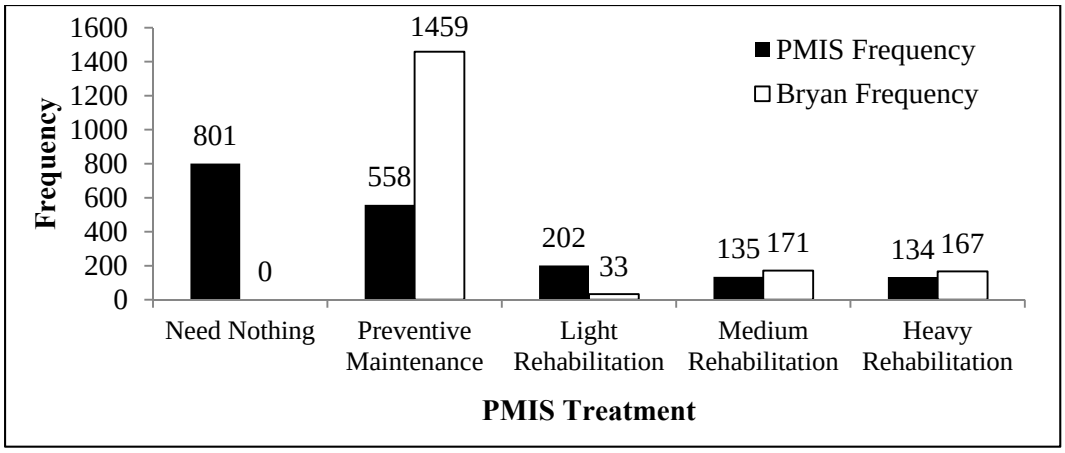

Figure C1. Frequency by PMIS Treatment for Bryan District (All Pavements, 2007–2009).

PMIS Score for Treatments Applied in Bryan District (Asphalt Pavement Types, 2007–2009)

Table C4. Condition Scores by Treatment Category, Bryan District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	796	0	13	100	94.54	10.61
Preventive Maintenance	558	1449	18	100	83.36	16.40
Light Rehabilitation	202	33	10	100	64.10	19.66
Medium Rehabilitation	128	171	9	98	43.36	17.79
Heavy Rehabilitation	128	159	7	100	69.09	30.01

Table C5. Distress Scores by Treatment Category, Bryan District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	796	0	14	100	95.68	9.46
Preventive Maintenance	558	1449	22	100	84.61	15.59
Light Rehabilitation	202	33	22	100	78.43	19.28
Medium Rehabilitation	128	171	13	100	70.85	22.72
Heavy Rehabilitation	128	159	18	100	78.70	22.24

Table C6. Ride Scores by Treatment Category, Bryan District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	796	0	2	4.9	3.44	0.59
Preventive Maintenance	558	1449	2	4.9	3.39	0.64
Light Rehabilitation	202	33	1.3	4.5	2.28	0.32
Medium Rehabilitation	128	171	1.5	3.9	1.99	0.40
Heavy Rehabilitation	128	159	0.9	4.9	3.36	1.14

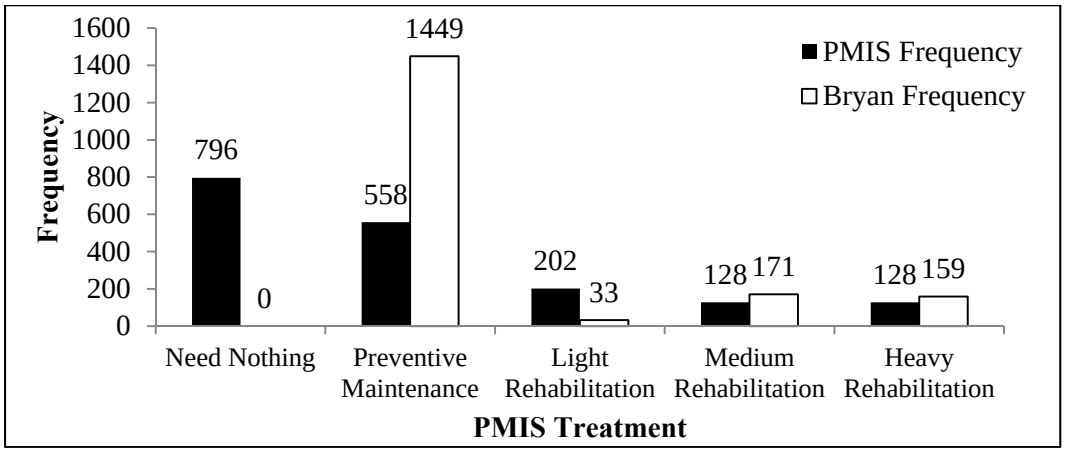

Figure C2. Frequency by PMIS Treatment for Bryan District Asphalt Pavements (2007–2009).

PMIS Score for Treatments Applied in Bryan District (CRCP Pavement Types, 2007–2009)

Table C7. Condition Scores by Treatment Category, Bryan District (CRCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	4	0	92	100	97.75	3.86
Preventive Maintenance	0	10	-	-	-	-
Light Rehabilitation	0	0	-	-	-	-
Medium Rehabilitation	0	0	-	-	-	-
Heavy Rehabilitation	6	0	15	100	56.17	35.65

Table C8. Distress Scores by Treatment Category, Bryan District (CRCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	4	0	92	100	97.75	3.86
Preventive Maintenance	0	10	-	-	-	-
Light Rehabilitation	0	0	-	-	-	-
Medium Rehabilitation	0	0	-	-	-	-
Heavy Rehabilitation	6	0	15	100	56.17	35.65

Table C9. Ride Scores by Treatment Category, Bryan District (CRCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	4	0	4.2	4.4	4.33	0.10
Preventive Maintenance	0	10	0	0	#DIV/0!	#DIV/0!
Light Rehabilitation	0	0	0	0	#DIV/0!	#DIV/0!
Medium Rehabilitation	0	0	0	0	#DIV/0!	#DIV/0!
Heavy Rehabilitation	6	0	3.5	4.5	4.07	0.42

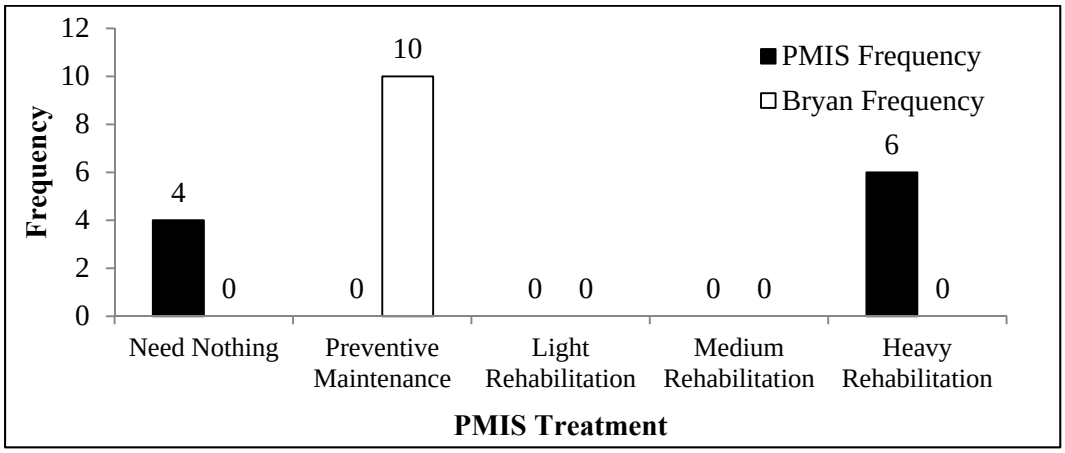

Figure C3. Frequency by PMIS Treatment for Bryan District (CRCP Pavements, 2007–2009).

PMIS Score for Treatments Applied in Bryan District (JCP Pavement Types, 2007–2009)

Table C10. Condition Scores by Treatment Category, Bryan District (JCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1	0	90	90	90.00	-
Preventive Maintenance	0	0	-	-	-	-
Light Rehabilitation	0	0	-	-	-	-
Medium Rehabilitation	7	0	57	98	79.43	20.39
Heavy Rehabilitation	0	8	-	-	-	-

Table C11. Distress Scores by Treatment Category, Bryan District (JCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1	0	100	100	100.00	-
Preventive Maintenance	0	0	-	-	-	-
Light Rehabilitation	0	0	-	-	-	-
Medium Rehabilitation	7	0	98	100	99.43	0.98
Heavy Rehabilitation	0	8	-	-	-	-

Table C12. Ride Scores by Treatment Category, Bryan District (JCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	1	0	2.5	2.5	2.50	-
Preventive Maintenance	0	0	-	-	-	-
Light Rehabilitation	0	0	-	-	-	-
Medium Rehabilitation	7	0	1.5	2.4	1.96	0.34
Heavy Rehabilitation	0	8	-	-	-	-

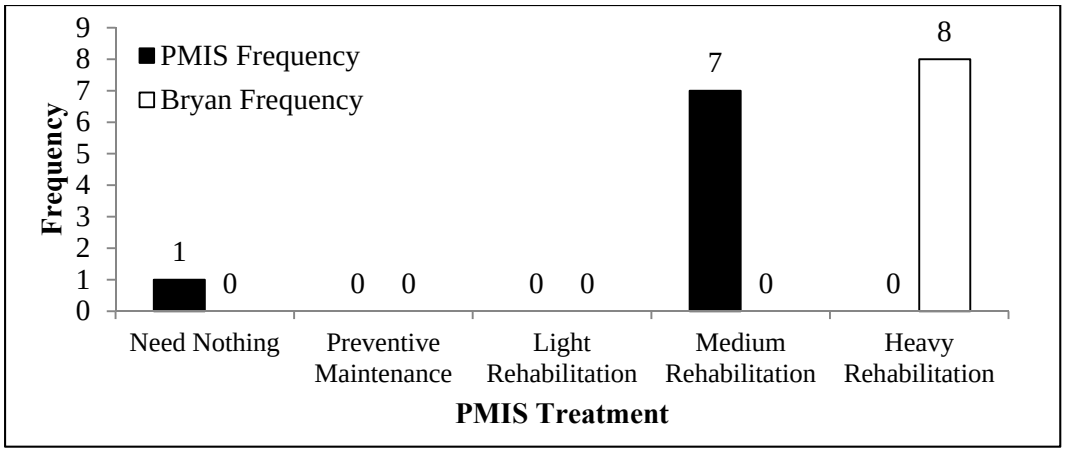

Figure C4. Frequency by PMIS Treatment for Bryan District, JCP Pavements (2007–2009).

PMIS Score for Preventive Maintenance Treatments Applied in Bryan District, 2007–2009

Table C13. Condition Score by Treatment Category for Preventive Maintenance, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	702	0	46	100	94.88	9.54
Preventive Maintenance	478	1459	32	100	85.77	14.13
Light Rehabilitation	141	0	35	100	70.30	16.88
Medium Rehabilitation	71	0	11	83	47.48	16.86
Heavy Rehabilitation	67	0	7	100	73.40	28.86

Table C14. Distress Score by Treatment Category for Preventive Maintenance, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	702	0	60	100	95.84	8.40
Preventive Maintenance	478	1459	37	100	86.92	13.19
Light Rehabilitation	141	0	37	100	84.67	15.53
Medium Rehabilitation	71	0	13	100	77.82	19.19
Heavy Rehabilitation	67	0	15	100	85.31	18.35

Table C15. Ride Score by Treatment Category for Preventive Maintenance, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	702	0	2	4.9	3.45	0.59
Preventive Maintenance	478	1459	2	4.8	3.44	0.63
Light Rehabilitation	141	0	2	4.2	2.31	0.30
Medium Rehabilitation	71	0	1.5	3.4	1.96	0.34
Heavy Rehabilitation	67	0	0.9	4.7	3.42	1.11

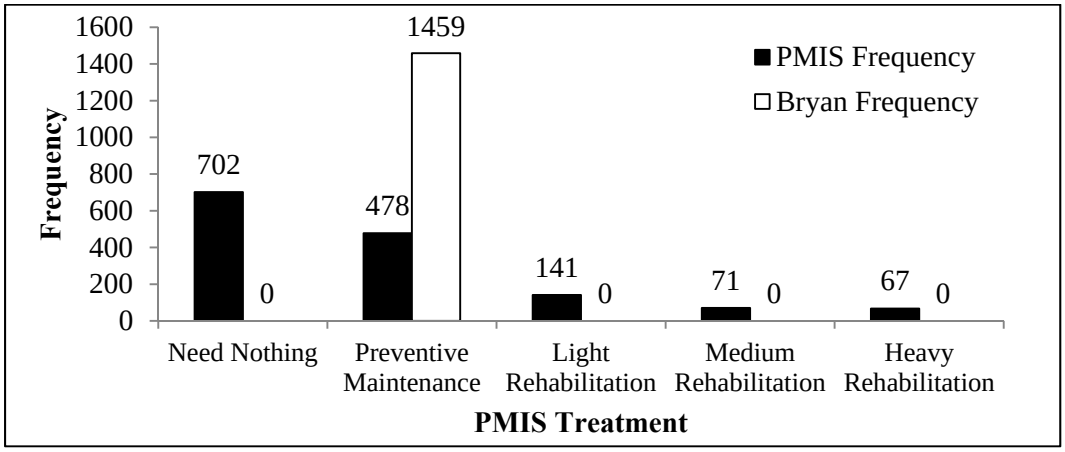

Figure C5. Frequency for Preventive Maintenance Treatments (Bryan District, 2007–2009).

PMIS Score for Light Rehabilitation Treatments Applied in Bryan District, 2007–2009

Table C16. Condition Score by Treatment Category for Light Rehabilitation, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	16	0	55	100	94.81	14.23
Preventive Maintenance	6	0	51	90	79.17	16.02
Light Rehabilitation	2	33	56	90	73.00	24.04
Medium Rehabilitation	2	0	37	76	56.50	27.58
Heavy Rehabilitation	7	0	61	90	72.71	11.37

Table C17. Distress Score by Treatment Category for Light Rehabilitation, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	16	0	55	100	94.81	14.23
Preventive Maintenance	6	0	51	90	79.17	16.02
Light Rehabilitation	2	33	56	90	73.00	24.04
Medium Rehabilitation	2	0	37	90	63.50	37.48
Heavy Rehabilitation	7	0	61	90	72.71	11.37

Table C18. Ride Score by Treatment Category for Light Rehabilitation, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	16	0	2.5	4.6	3.14	0.62
Preventive Maintenance	6	0	2.5	2.9	2.72	0.13
Light Rehabilitation	2	33	2.3	4.5	3.40	1.56
Medium Rehabilitation	2	0	1.9	2.5	2.20	0.42
Heavy Rehabilitation	7	0	2.3	4.9	3.49	1.18

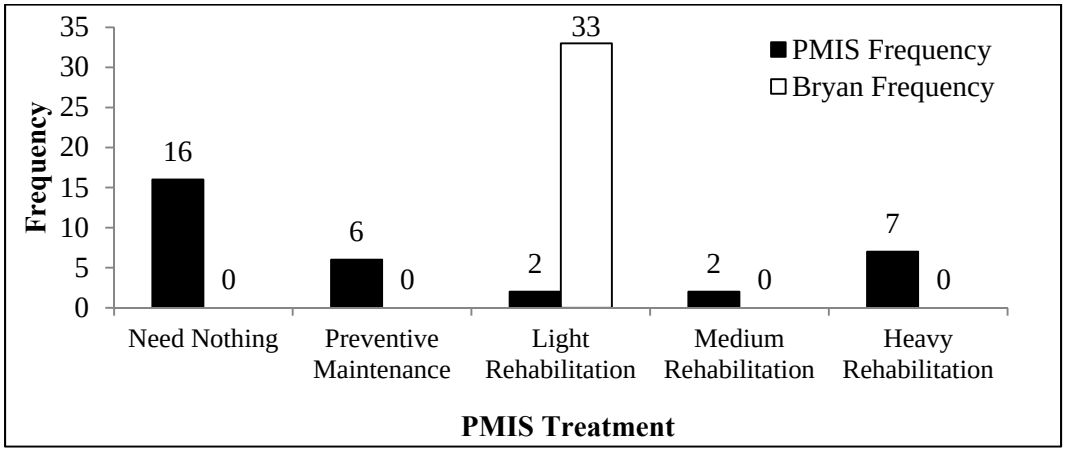

Figure C6. Frequency for Light Rehabilitation Treatments (Bryan District, 2007–2009).

PMIS Score for Medium Rehabilitation Treatments Applied in Bryan District, 2007–2009

Table C19. Condition Score by Treatment Category for Medium Rehabilitation, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	44	0	37	100	93.20	14.97
Preventive Maintenance	28	0	19	97	61.68	23.51
Light Rehabilitation	28	0	21	99	47.36	16.35
Medium Rehabilitation	28	171	9	98	35.07	18.07
Heavy Rehabilitation	43	0	10	100	64.81	29.71

Table C20. Distress Score by Treatment Category for Medium Rehabilitation, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	44	0	37	100	95.00	14.35
Preventive Maintenance	28	0	22	99	63.32	23.51
Light Rehabilitation	28	0	22	100	64.18	20.45
Medium Rehabilitation	28	171	16	100	58.96	24.48
Heavy Rehabilitation	43	0	18	100	69.42	24.81

Table C21. Ride Score by Treatment Category for Medium Rehabilitation, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	44	0	2.5	4.7	3.32	0.57
Preventive Maintenance	28	0	2.5	4.7	2.90	0.51
Light Rehabilitation	28	0	2	2.4	2.16	0.16
Medium Rehabilitation	28	171	1.6	3.9	2.07	0.47
Heavy Rehabilitation	43	0	1.7	4.8	3.49	1.07

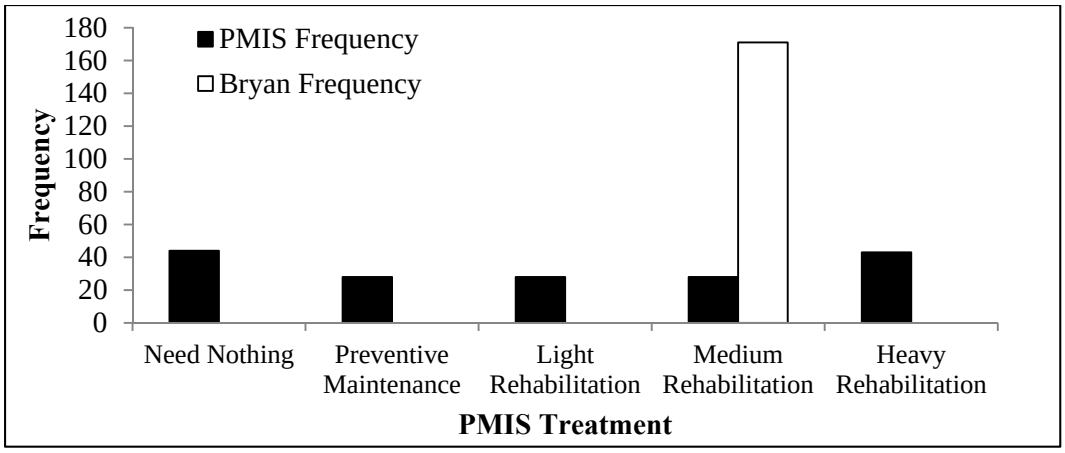

Figure C7. Frequency for Medium Rehabilitation Treatments (Bryan District, 2007–2009).

PMIS Score for Heavy Rehabilitation Treatments Applied in Bryan District, 2007–2009

Table C22. Condition Score by Treatment Category for Heavy Rehabilitation, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	39	0	13	100	89.95	17.89
Preventive Maintenance	46	0	18	98	72.09	19.11
Light Rehabilitation	31	0	10	91	50.42	18.94
Medium Rehabilitation	34	0	13	98	48.24	23.37
Heavy Rehabilitation	17	167	7	100	56.82	38.89

Table C23. Distress Score by Treatment Category for Heavy Rehabilitation, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	39	0	14	100	94.26	16.00
Preventive Maintenance	46	0	27	98	74.30	18.77
Light Rehabilitation	31	0	22	100	63.23	18.89
Medium Rehabilitation	34	0	17	100	72.41	24.84
Heavy Rehabilitation	17	167	21	100	70.65	30.99

Table C24. Ride Score by Treatment Category for Heavy Rehabilitation, Bryan District, 2007–2009.

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	39	0	2.1	4.4	3.43	0.63
Preventive Maintenance	46	0	2.1	4.9	3.28	0.66
Light Rehabilitation	31	0	1.3	2.7	2.16	0.24
Medium Rehabilitation	34	0	1.5	3.1	1.96	0.44
Heavy Rehabilitation	17	167	1.1	4.5	2.99	1.34

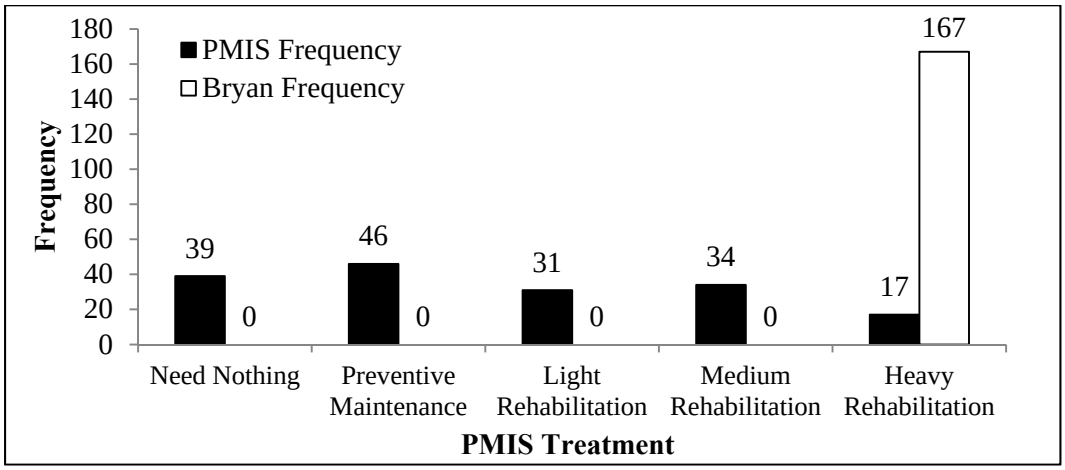

Figure C8. Frequency for Heavy Rehabilitation Treatments (Bryan District, 2007–2009).

PMIS Condition Score by Treatment Category for Bryan District (All Pavements, 2007–2009)

Table C25.1 Condition Score versus Treatment Category (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	801	0	-	-	-	-
Preventive Maintenance	558	1459	7	100	86.23	18.14
Light Rehabilitation	202	33	37	100	83.64	18.61
Medium Rehabilitation	135	171	9	100	63.88	29.36
Heavy Rehabilitation	134	167	7	100	65.83	27.48

Total number of sections analyzed: 1830

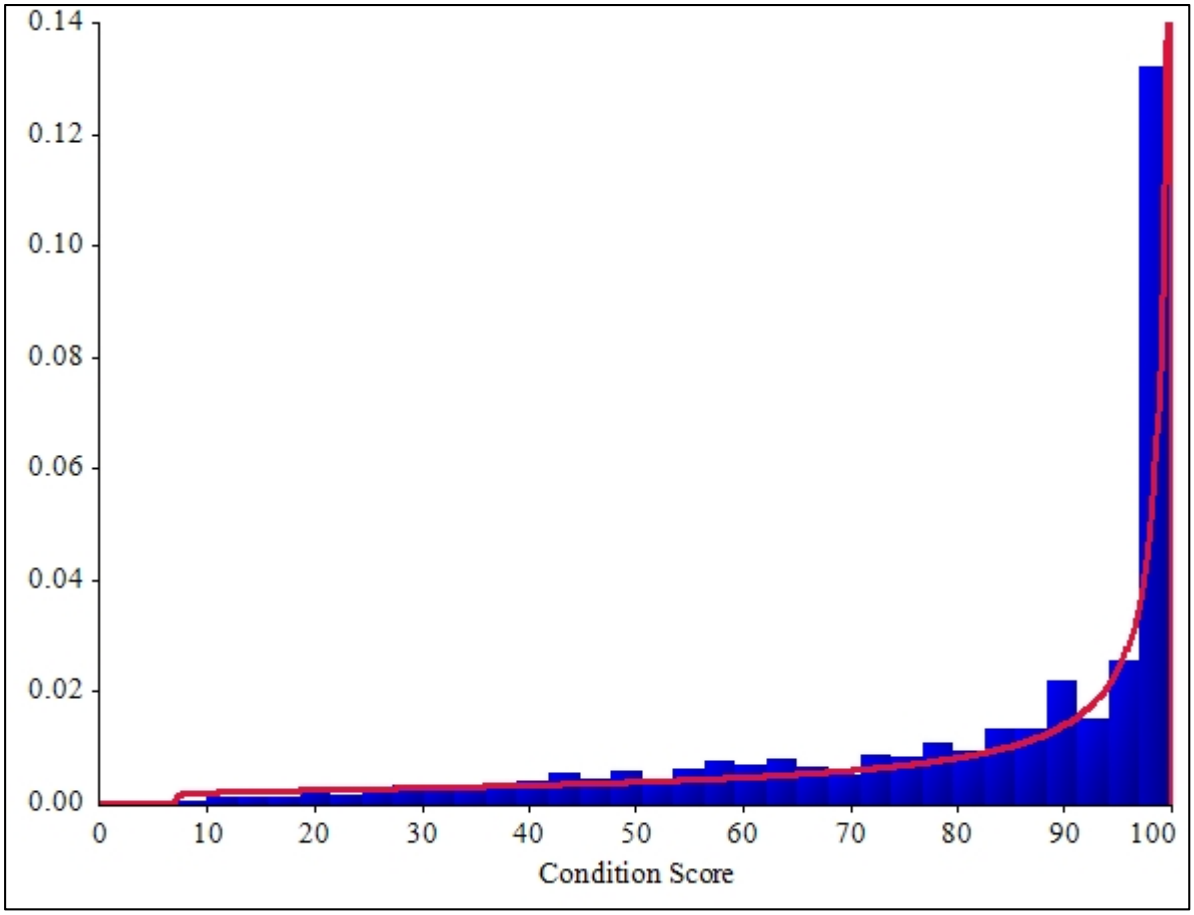

Figure C25.1. Histogram for Condition Score for Treatments Applied in Bryan District (All Pavements, 2007–2009).

Table C25.2. Condition Score for Treatments Applied in Bryan District (All Pavements, 2007–2009).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	7.0	78.0	95.0	100.0	100.0
Light Rehabilitation	37.0	69.0	90.0	100.0	100.0
Medium Rehabilitation	9.0	40.0	58.0	99.0	100.0
Heavy Rehabilitation	7.0	43.0	66.0	90.5	100.0

Total number of sections analyzed: 1,830

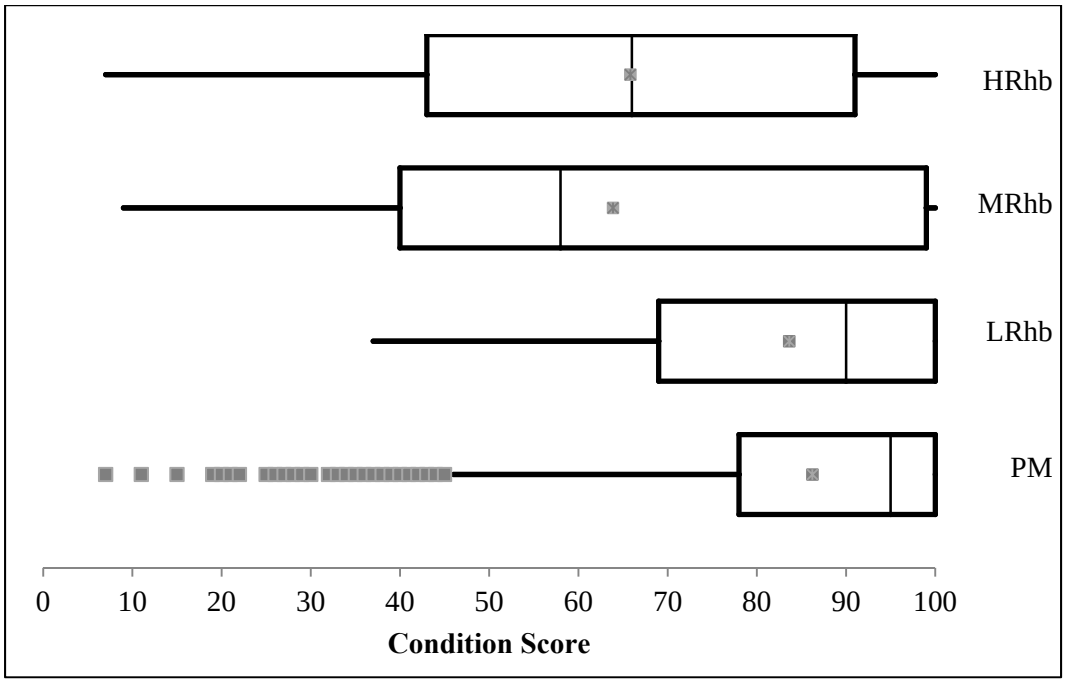

Figure C25.2. Box Plots for Condition Score for Treatments Applied in Bryan District, 2007–2009.

Table C26.1 Distress Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	801	0	-	-	-	-
Preventive Maintenance	558	1459	13	100	90.48	13.31
Light Rehabilitation	202	33	37	100	84.06	18.59
Medium Rehabilitation	135	171	16	100	72.43	25.34
Heavy Rehabilitation	134	167	14	100	76.15	23.43

Total number of sections analyzed: 1,830

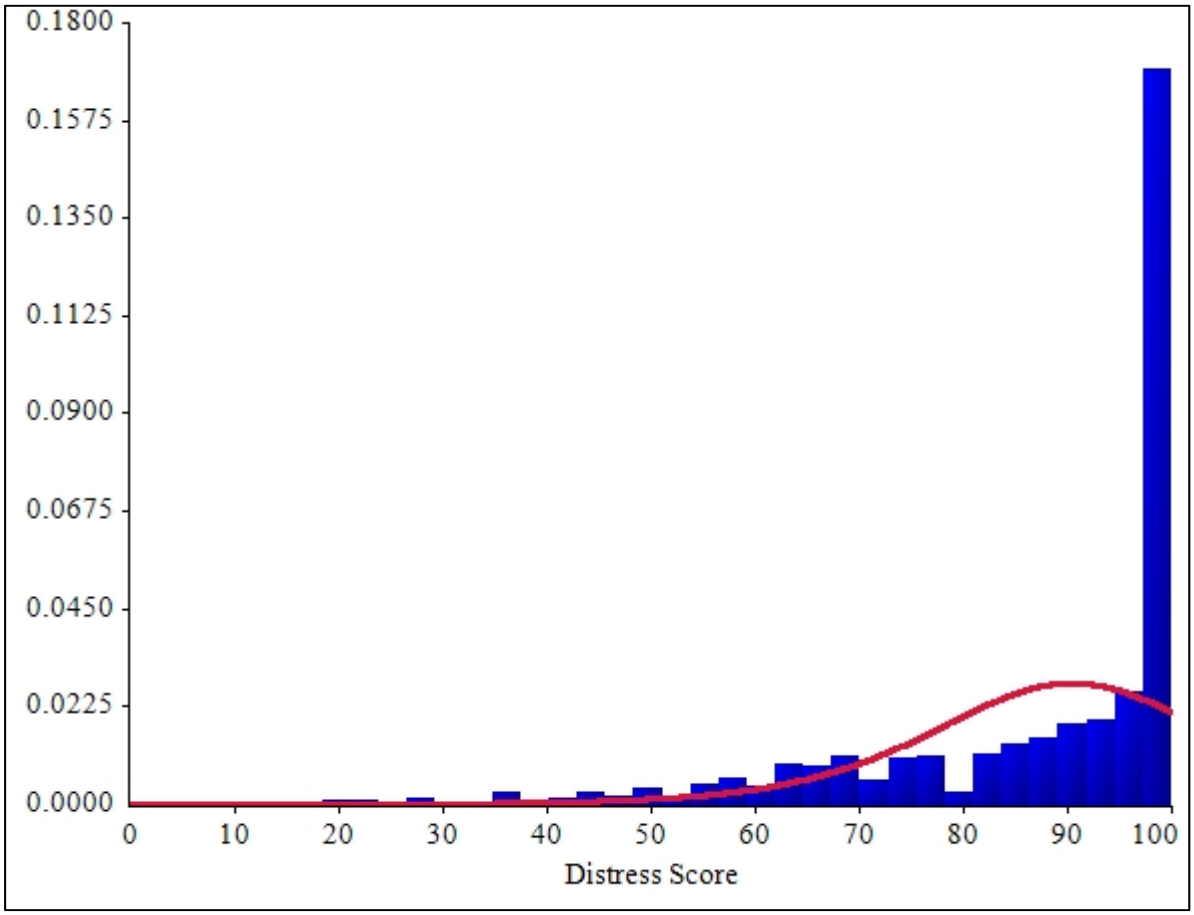

Figure C26.1. Histogram for Distress Score for Treatments Applied in Bryan District (All Pavements, 2007–2009).

Table C26.2. Distress Score for Treatments Applied in Bryan, 2007–2009, All Pavements.

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	13.0	85.0	97.0	100.0	100.0
Light Rehabilitation	37.0	69.0	90.0	100.0	100.0
Medium Rehabilitation	16.0	51.0	72.0	100.0	100.0
Heavy Rehabilitation	14.0	60.0	82.0	99.0	100.0

Total number of sections analyzed: 1,830

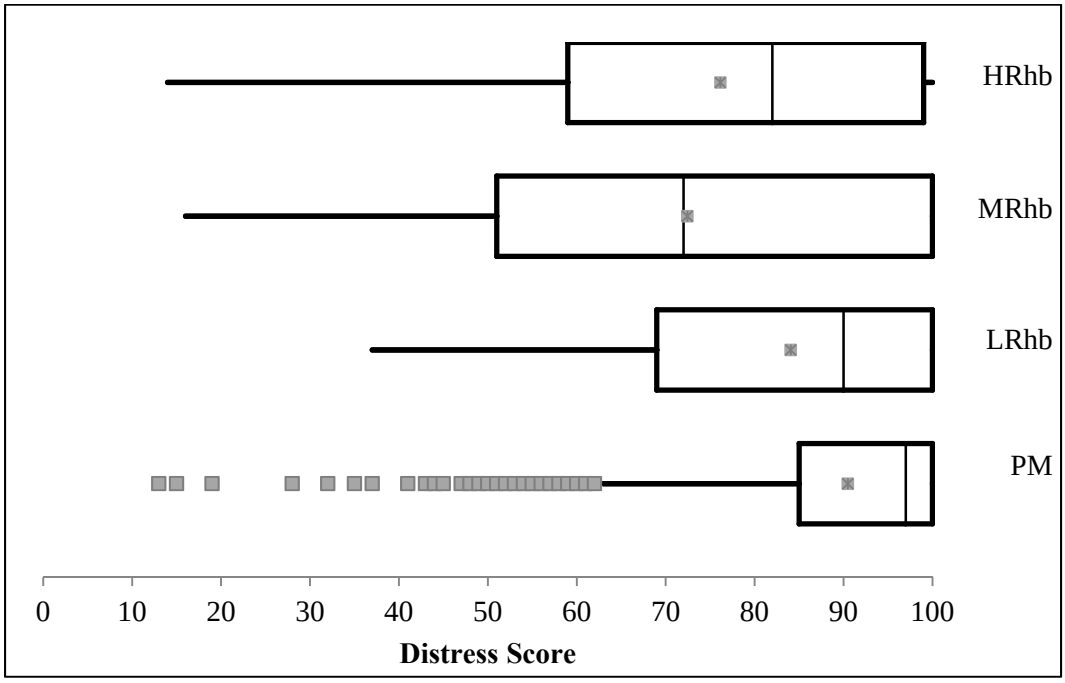

Figure C26.2. Box Plots for Condition Score for Treatments Applied in Bryan (All Pavements, 2007–2009).

Table C27.1. Ride Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	801	0	-	-	-	-
Preventive Maintenance	558	1459	0.9	4.9	3.26	0.75
Light Rehabilitation	202	33	1.9	4.9	3.10	0.80
Medium Rehabilitation	135	171	1.6	4.8	2.90	0.88
Heavy Rehabilitation	134	167	1.1	4.9	2.81	0.90

Total number of sections analyzed: 1,830

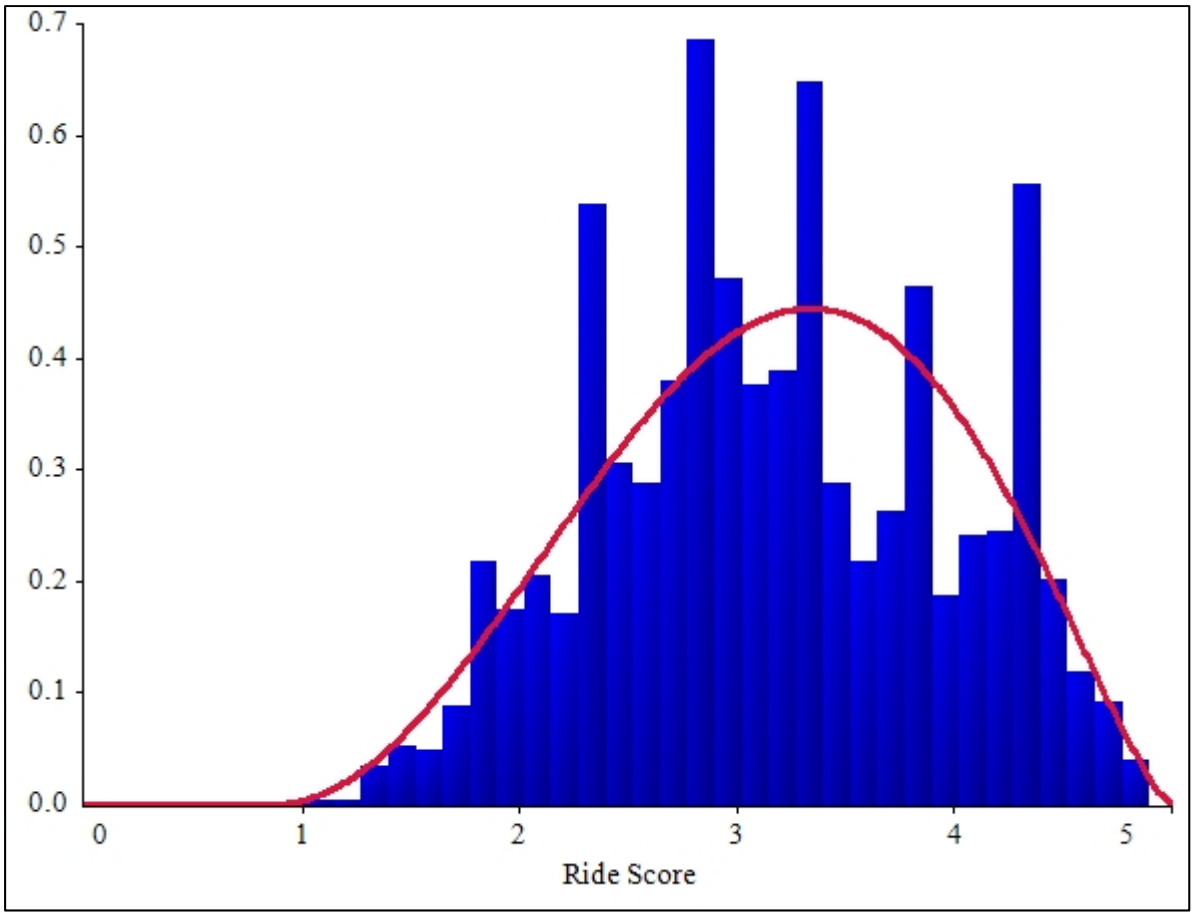

Figure C27.1. Histogram for Ride Score for Treatments Applied in Bryan District (All Pavements, 2007–2009).

Table C27.2. Ride Score for Treatments Applied in Bryan District (All Pavements, 2007–2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	0.9	2.7	3.2	3.9	4.9
Light Rehabilitation	1.9	2.6	2.8	3.2	4.9
Medium Rehabilitation	1.6	2.2	2.7	3.4	4.8
Heavy Rehabilitation	1.1	2.1	2.7	3.5	4.9

Total number of sections analyzed: 1,830

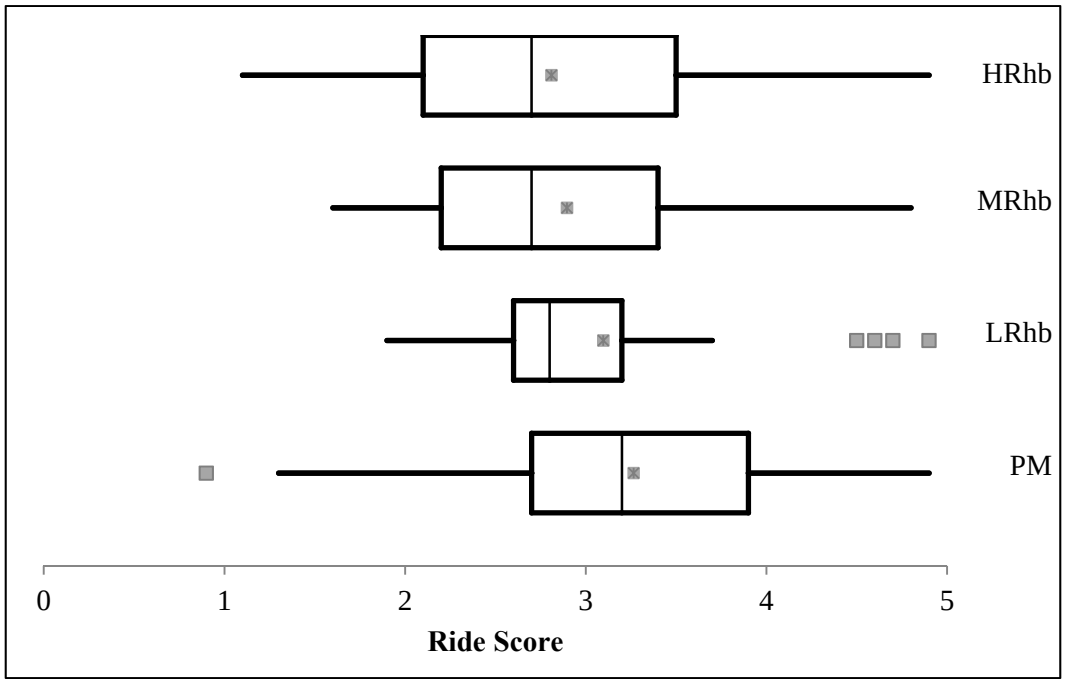

Figure C27.2. Box Plots for Ride Score for Treatments Applied in Bryan District (All Pavements, 2007–2009).

Table C28.1. Condition Score versus Treatment Category (All Pavements, 2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	210	0	-	-	-	-
Preventive Maintenance	283	538	7	100	86.45	18.16
Light Rehabilitation	66	0	-	-	-	-
Medium Rehabilitation	49	41	21	99	56.59	23.10
Heavy Rehabilitation	44	73	7	100	56.11	30.71

Total number of sections analyzed: 652

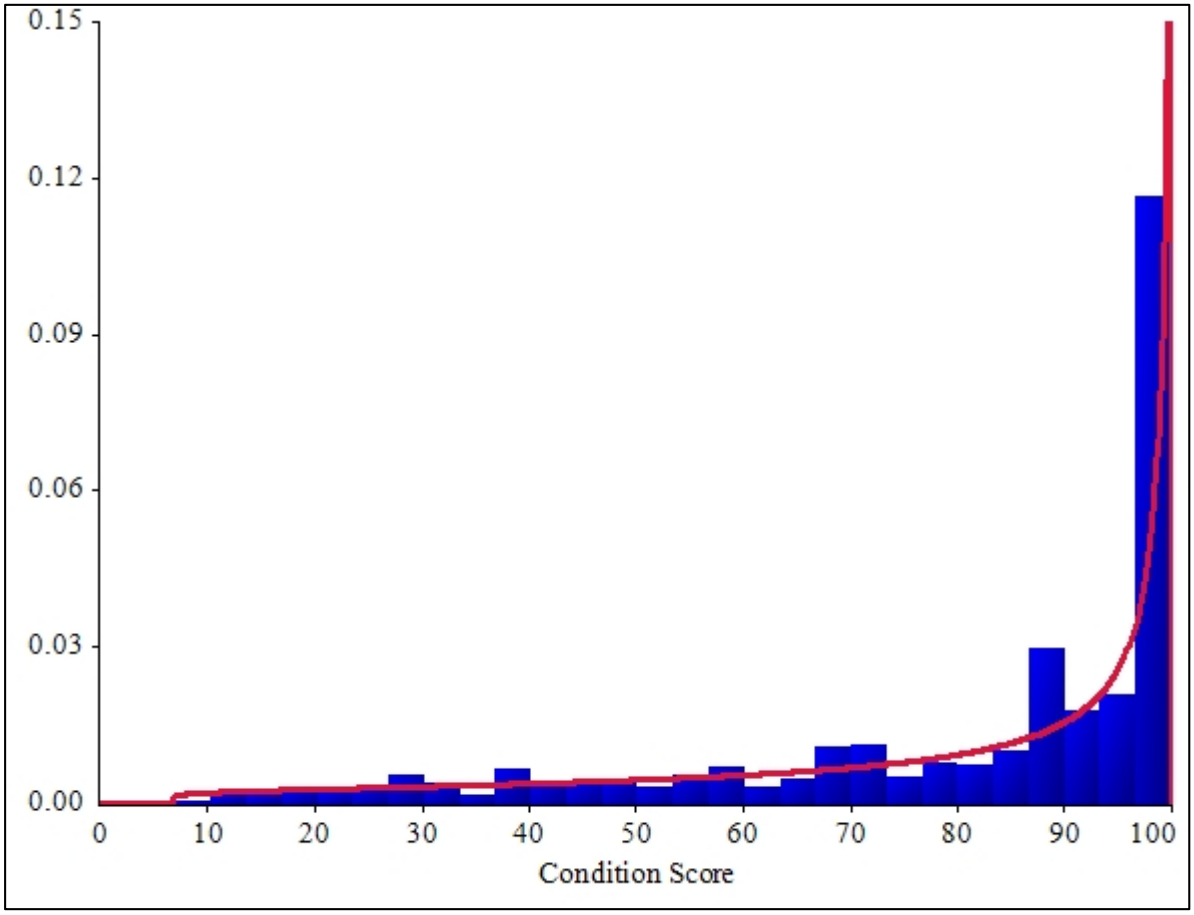

Figure C28.1. Histogram for Condition Score for Treatments Applied in Bryan District (All Pavements, 2009).

PMIS Condition Score by Treatment Category for Bryan District (All Pavements, 2009)

Table C28.2. Condition Score for Treatments Applied in Bryan District (All Pavements, 2009).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	7.0	82.0	94.0	99.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	21.0	40.0	51.0	68.0	99.0
Heavy Rehabilitation	7.0	30.0	51.0	87.0	100.0

Total number of sections analyzed: 652

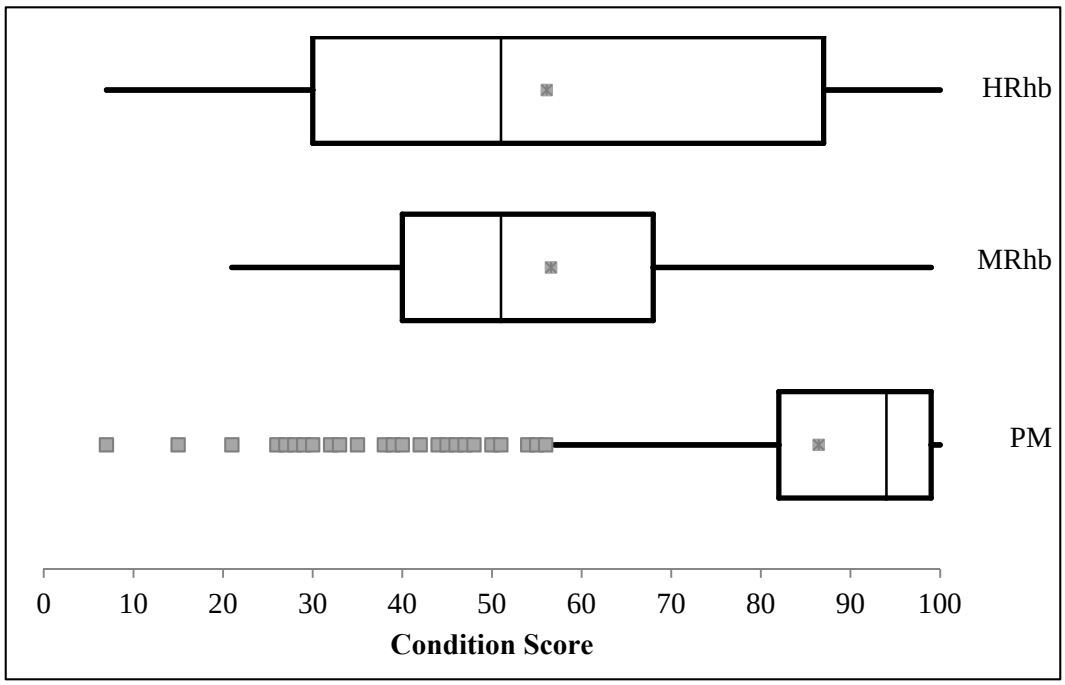

Figure C28.2. Box Plots for Condition Score for Treatments Applied in Bryan District, 2009.

PMIS Distress Score by Treatment Category for Bryan District (All Pavements, 2009)

Table C29.1 Distress Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	210	0	-	-	-	-
Preventive Maintenance	283	538	15	100	90.33	12.93
Light Rehabilitation	66	0	-	-	-	-
Medium Rehabilitation	49	41	43	99	74.20	17.98
Heavy Rehabilitation	44	73	14	100	69.60	24.93

Total number of sections analyzed: 652

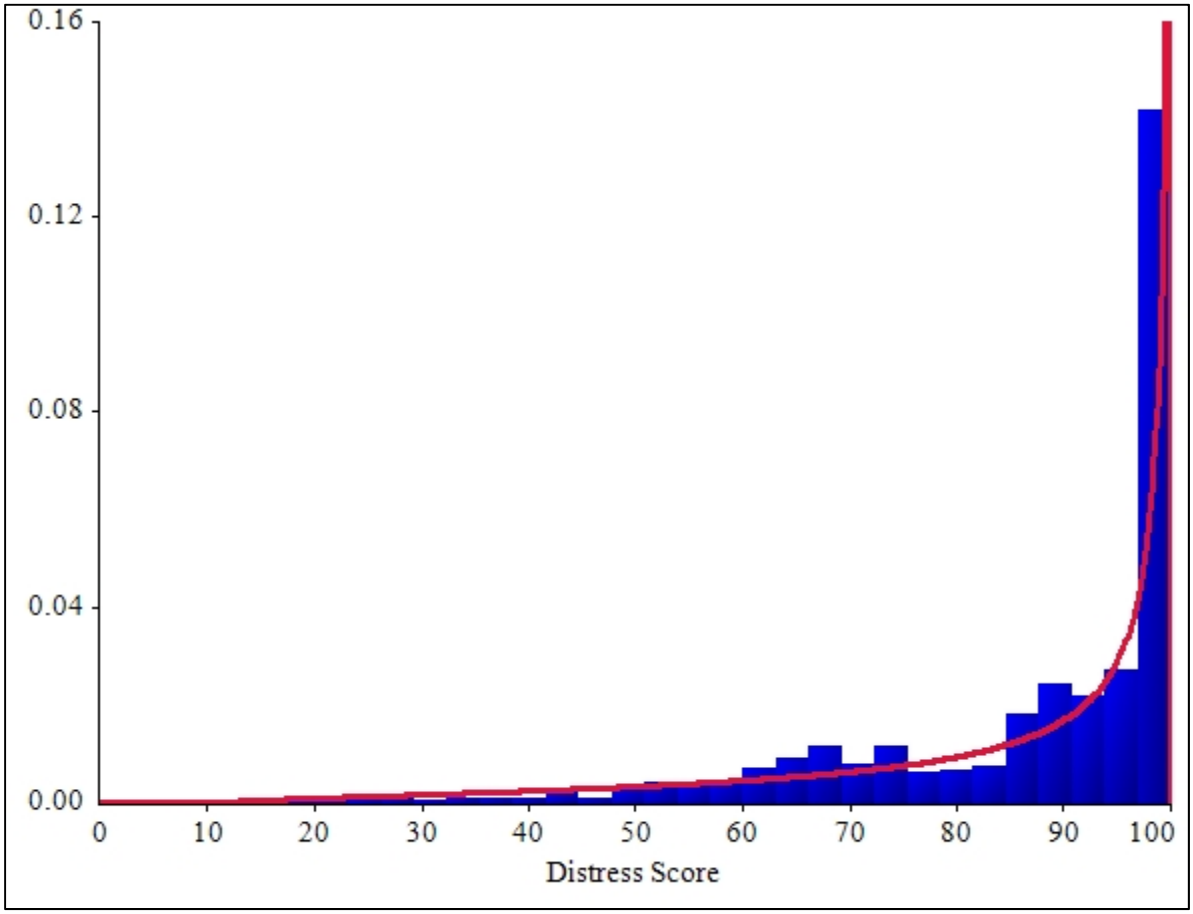

Figure C29.1. Histogram for Distress Score for Treatments Applied in Bryan District (All Pavements, 2009).

PMIS Distress Score by Treatment Category for Bryan District (All Pavements, 2009)

Table C29.2. Distress Score for Treatments Applied in Bryan (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	15.0	87.0	96.0	99.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	43.0	61.0	74.0	90.0	99.0
Heavy Rehabilitation	14.0	56.0	70.0	94.0	100.0

Total number of sections analyzed: 652

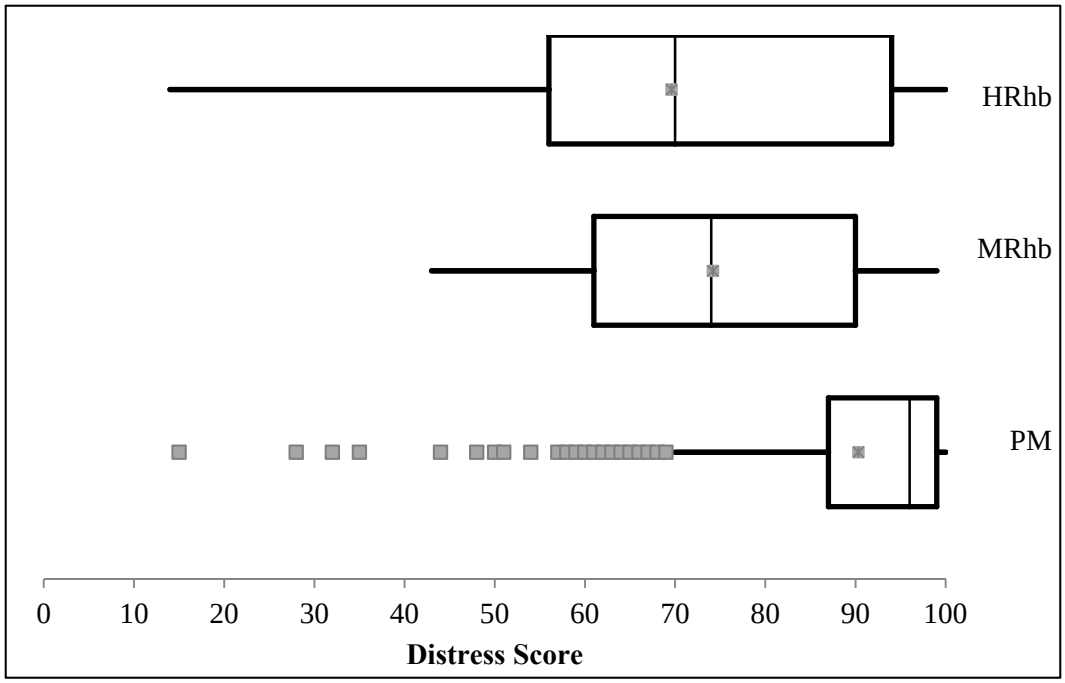

Figure C29.2. Box Plots for Distress Score for Treatments Applied in Bryan (All Pavements, 2009).

Table C30.1. Ride Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	210	0	0	0	-	-
Preventive Maintenance	283	538	0.9	4.8	3.32	0.72
Light Rehabilitation	66	0	0	0	-	-
Medium Rehabilitation	49	41	1.6	3.9	2.28	0.50
Heavy Rehabilitation	44	73	1.1	4.9	2.62	1.08

Total number of sections analyzed: 652

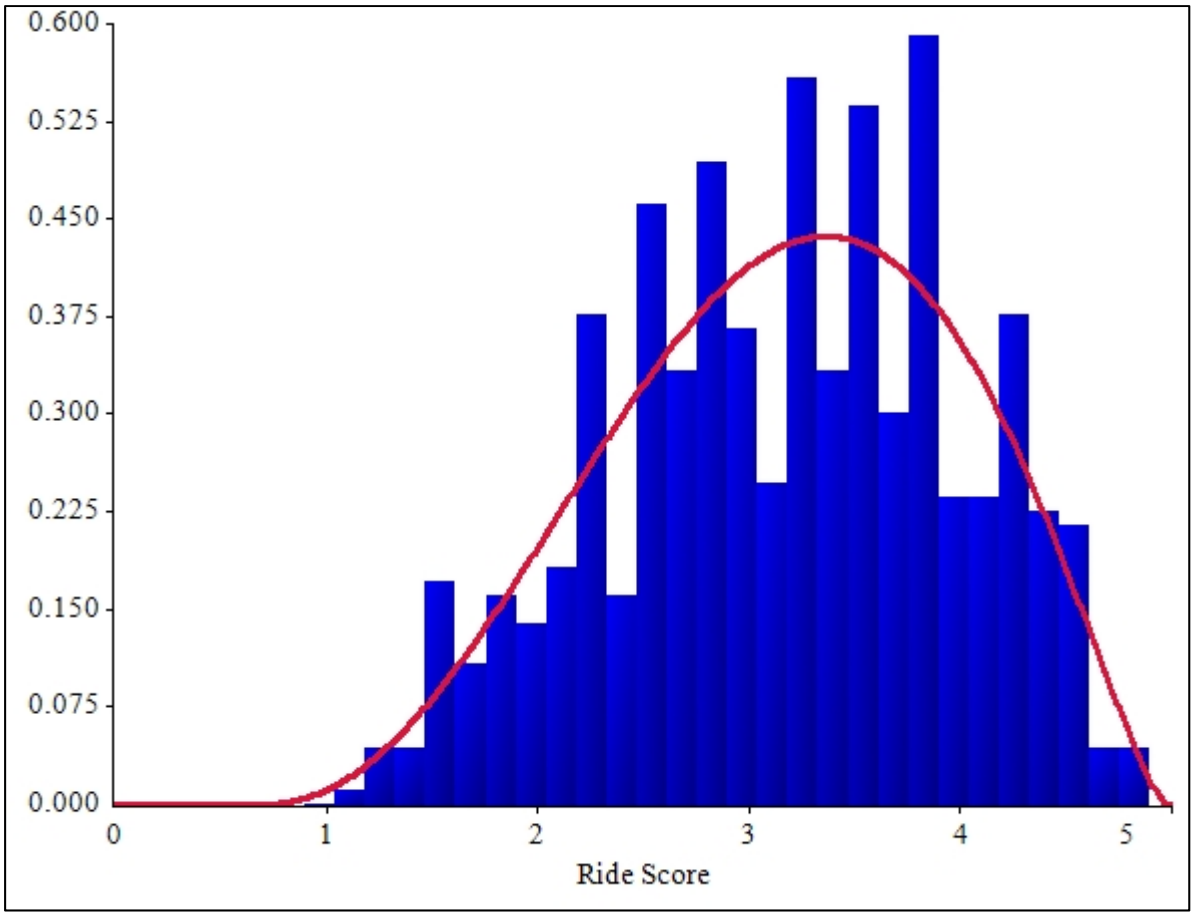

Figure C30.1. Histogram for Ride Score for Treatments Applied in Bryan District (All Pavements, 2009).

PMIS Ride Score by Treatment Category for Bryan District (All Pavements, 2009)

Table C30.2. Ride Score for Treatments Applied in Bryan District (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	0.9	2.8	3.4	3.9	4.8
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	1.6	2.0	2.2	2.7	3.9
Heavy Rehabilitation	1.1	1.8	2.2	3.4	4.9

Total number of sections analyzed: 652

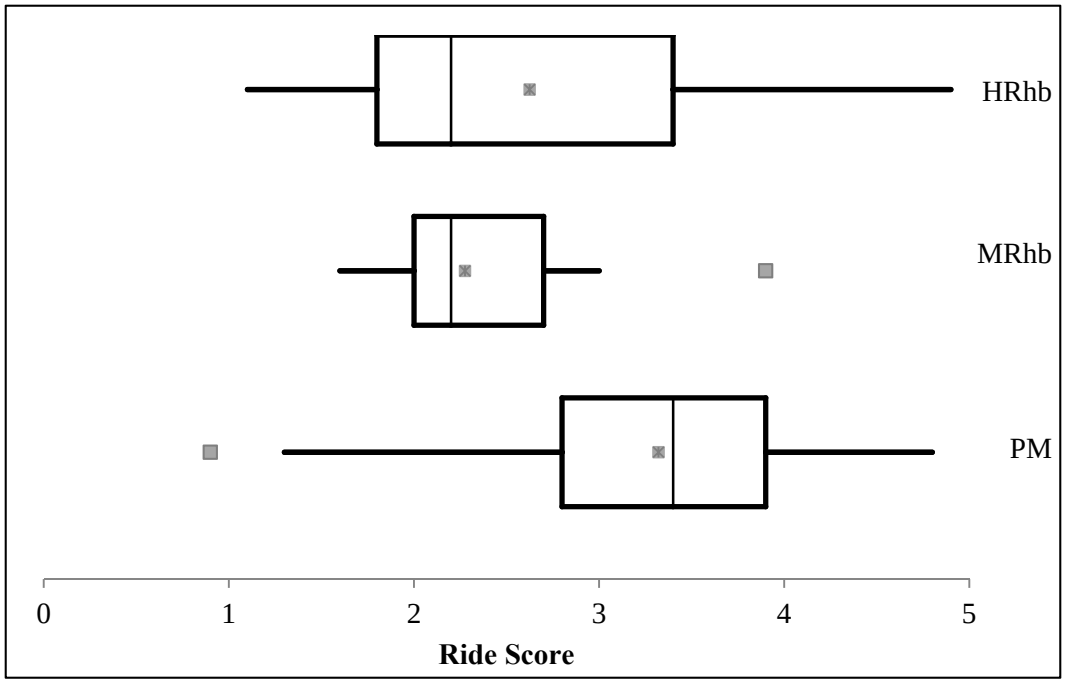

Figure C30.2. Box Plots for Ride Score for Treatments Applied in Bryan District (All Pavements, 2009).

Table C31.1. Condition Score versus Treatment Category (All Pavements, 2008).

Treatment Category	PMIS Frequency	Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	329	0	-	-	-	-
Preventive Maintenance	87	374	25	100	90.77	14.67
Light Rehabilitation	34	33	37	100	83.64	18.61
Medium Rehabilitation	22	76	14	100	74.59	27.19
Heavy Rehabilitation	53	42	19	100	78.81	23.67

Total number of sections analyzed: 525

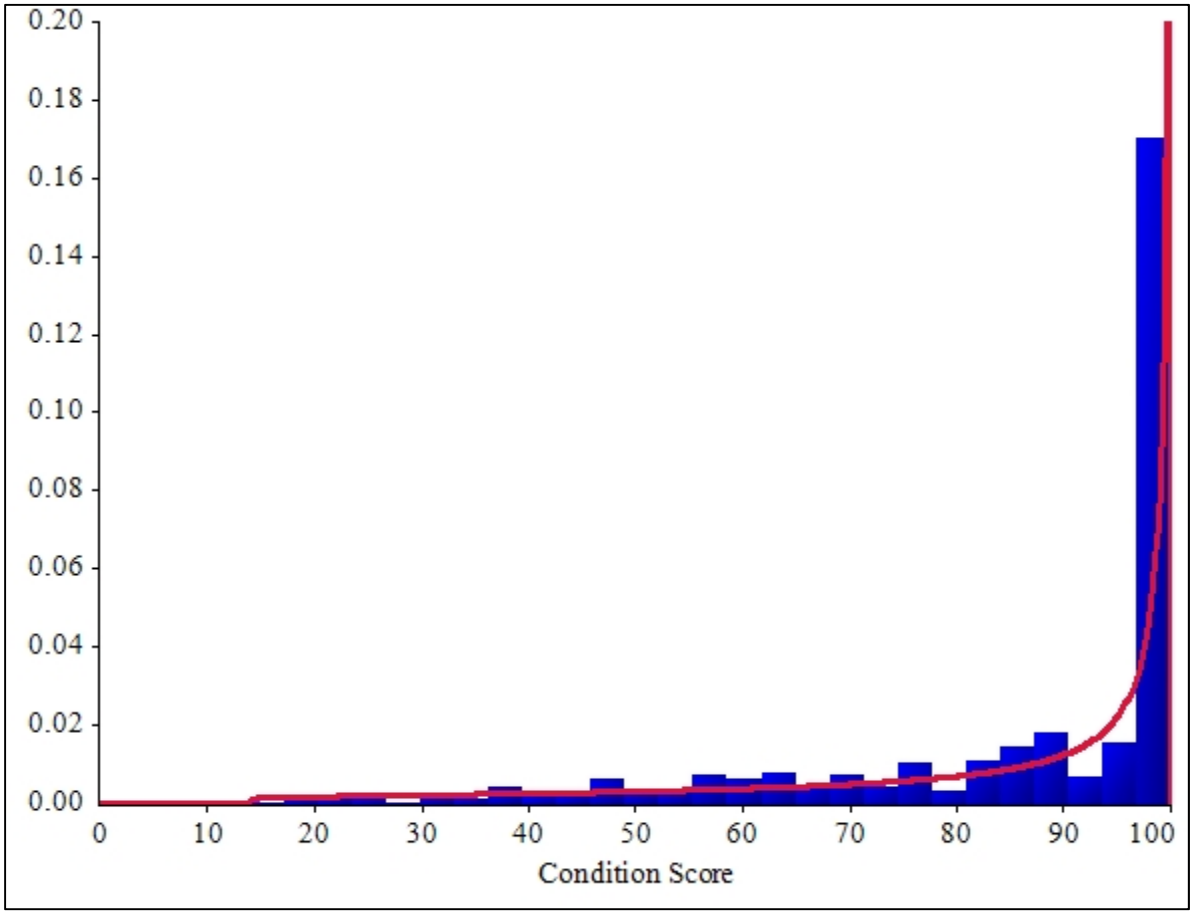

Figure C31.1. Histogram for Condition Score for Treatments Applied in Bryan District (All Pavements, 2008).

Table C31.2. Condition Score for Treatments Applied in Bryan District (All Pavements, 2008).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	25.0	86.0	99.0	100.0	100.0
Light Rehabilitation	37.0	69.0	90.0	100.0	100.0
Medium Rehabilitation	14.0	53.0	86.0	100.0	100.0
Heavy Rehabilitation	19.0	64.0	90.0	98.0	100.0

Total number of sections analyzed: 525

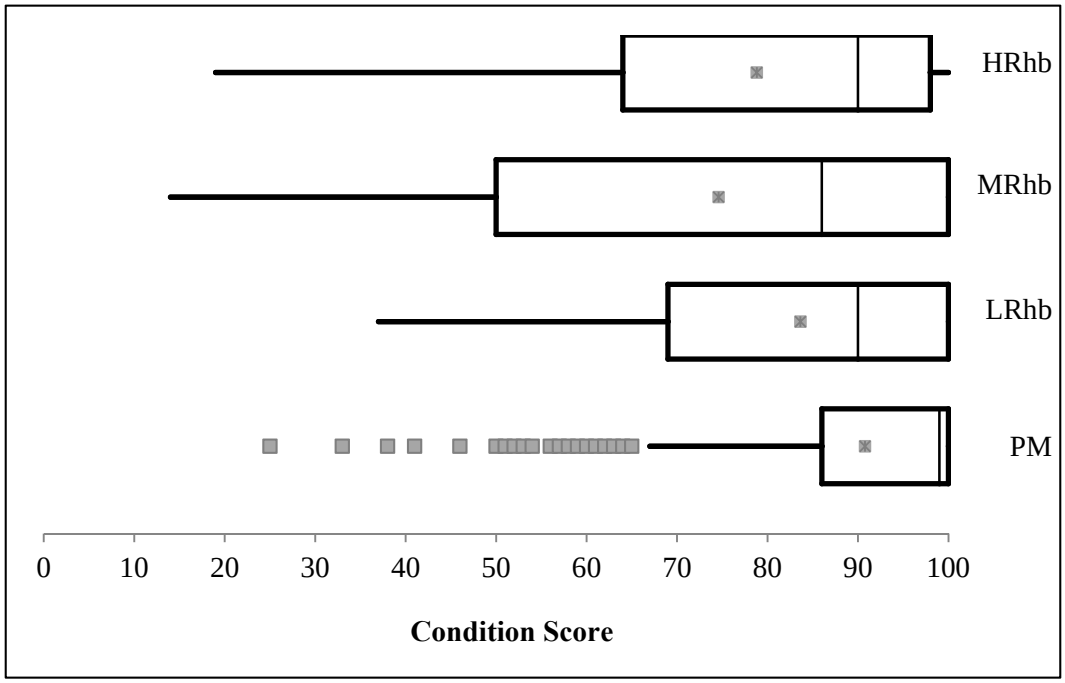

Figure C31.2. Box Plots for Condition Score for Treatments Applied in Bryan District, 2008.

Table C32.1. Distress Score versus Treatment Category (All Pavement Types, 2008).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	329	0	-	-	-	-
Preventive Maintenance	87	374	51	100	94.06	10.69
Light Rehabilitation	34	33	37	100	84.06	18.59
Medium Rehabilitation	22	76	22	100	76.16	25.30
Heavy Rehabilitation	53	42	19	100	85.24	23.23

Total number of sections analyzed: 525

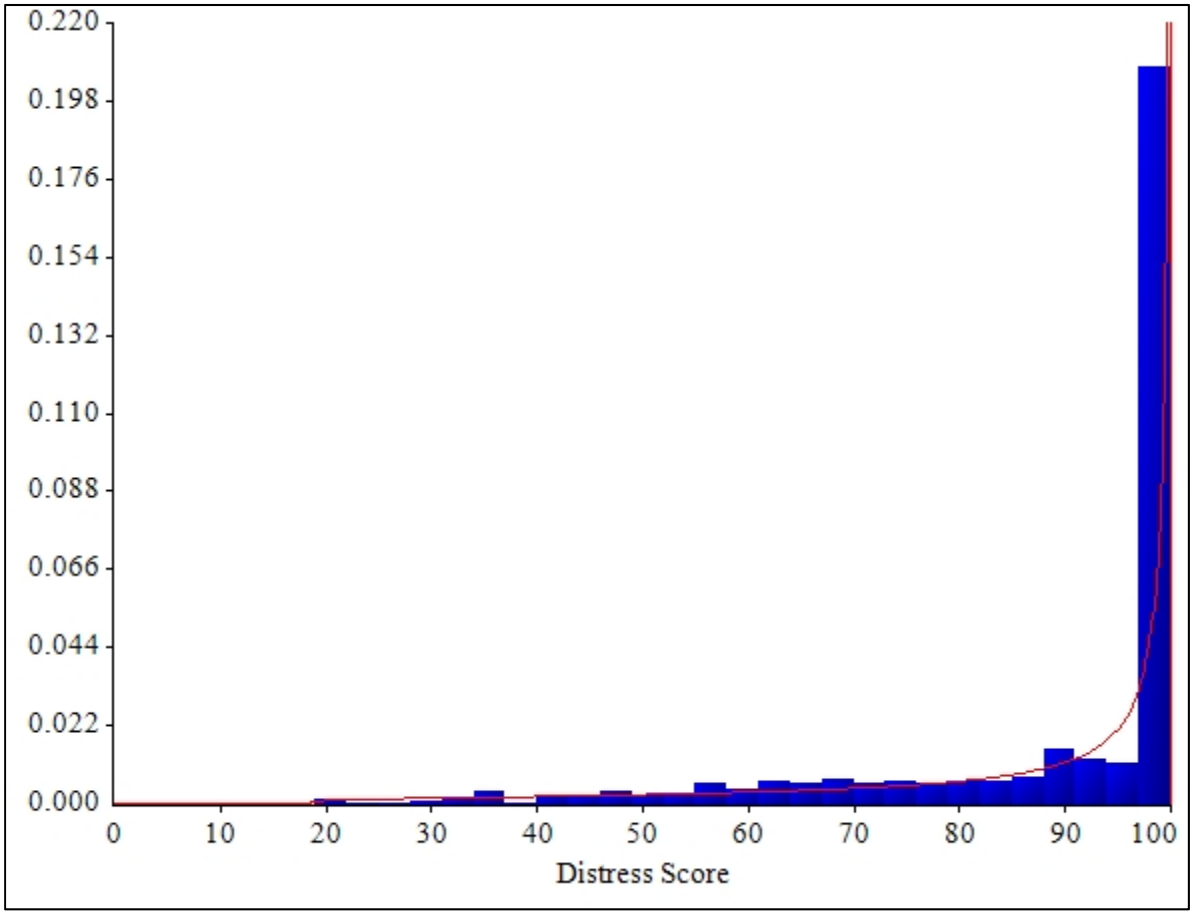

Figure C32.1. Histogram for Distress Score for Treatments Applied in Bryan District (All Pavements, 2008).

PMIS Distress Score by Treatment Category for Bryan District (All Pavements, 2008)

Table C32.2. Distress Score for Treatments Applied in Bryan (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	51.0	94.0	100.0	100.0	100.0
Light Rehabilitation	37.0	69.0	90.0	100.0	100.0
Medium Rehabilitation	22.0	56.0	86.0	100.0	100.0
Heavy Rehabilitation	19.0	79.0	98.5	100.0	100.0

Total number of sections analyzed: 525

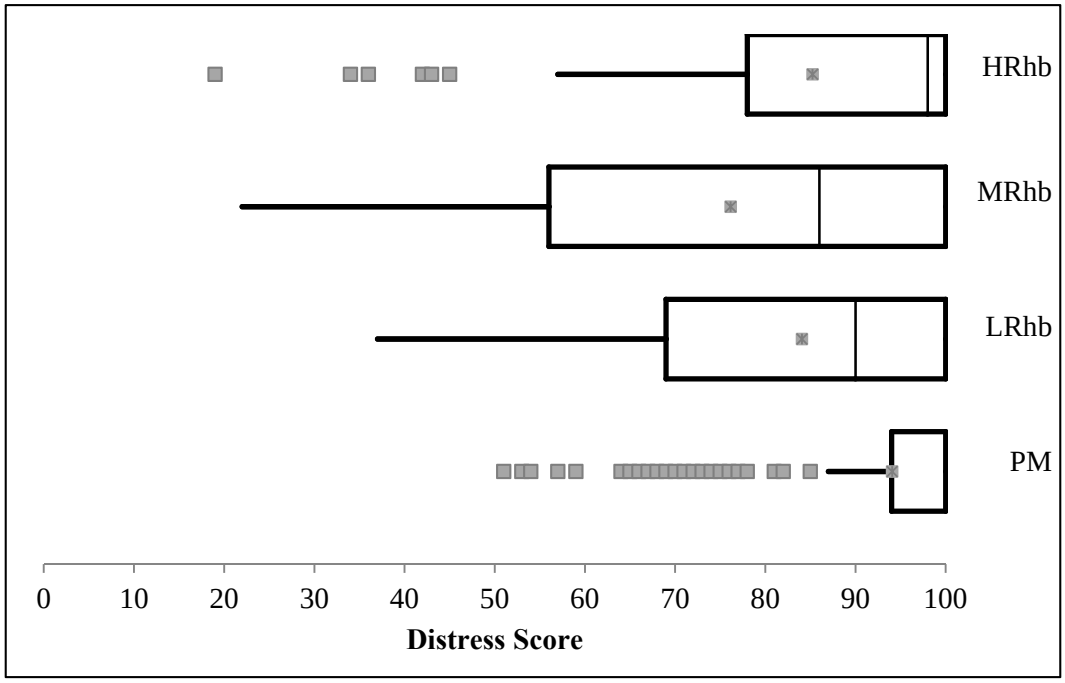

Figure C32.2. Box Plots for Distress Score for Treatments Applied in Bryan (All Pavements, 2008).

Table C33.1. Ride Score versus Treatment Category (All Pavement Types, 2008).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	329	0	-	-	-	-
Preventive Maintenance	87	374	1.3	4.9	3.20	0.64
Light Rehabilitation	34	33	1.9	4.9	3.10	0.80
Medium Rehabilitation	22	76	1.8	4.8	3.54	0.85
Heavy Rehabilitation	53	42	2	4.4	3.21	0.65

Total number of sections analyzed: 525

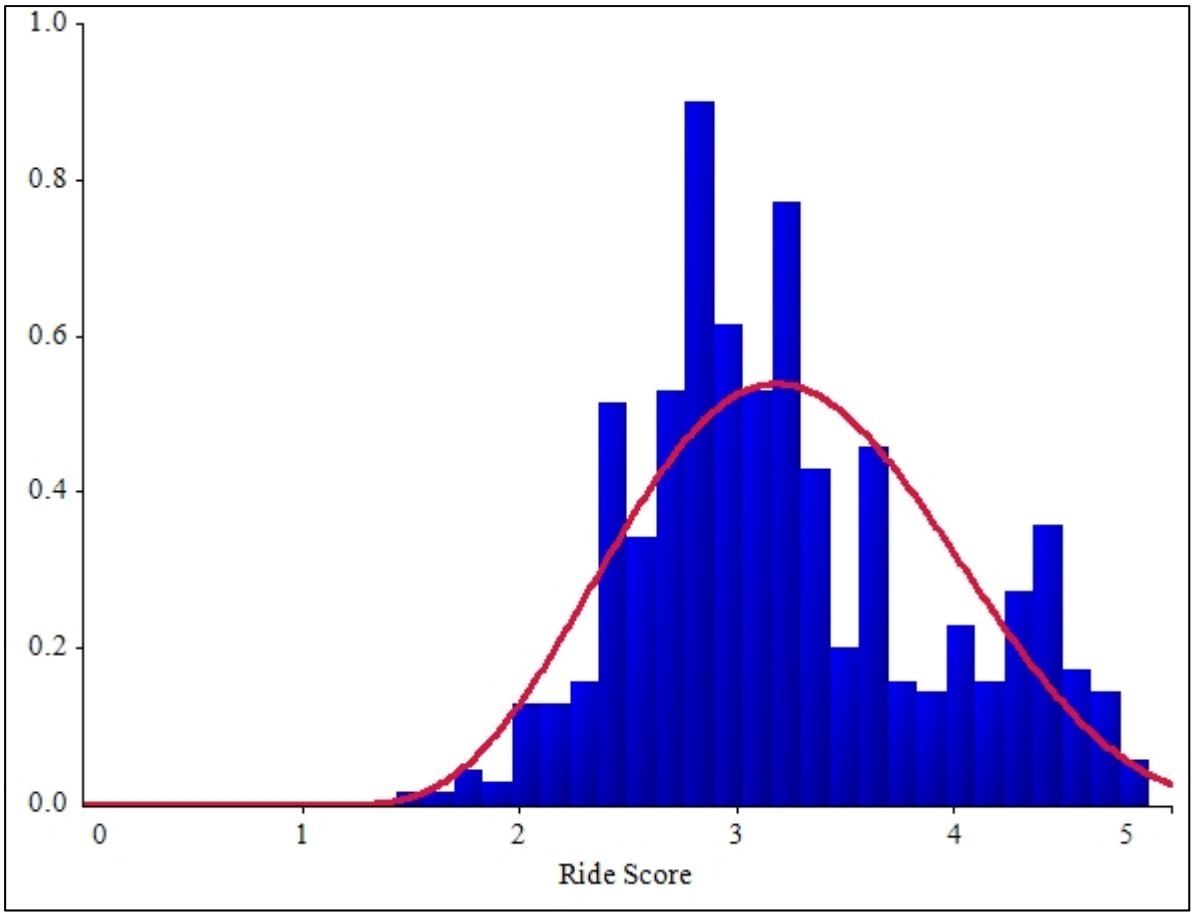

Figure C33.1. Histogram for Ride Score for Treatments Applied in Bryan District (All Pavements, 2008).

Table C33.2. Ride Score for Treatments Applied in Bryan District (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.3	2.8	3.1	3.6	4.9
Light Rehabilitation	1.9	2.6	2.8	3.2	4.9
Medium Rehabilitation	1.8	2.8	3.5	4.3	4.8
Heavy Rehabilitation	2.0	2.8	3.0	3.7	4.4

Total number of sections analyzed: 525

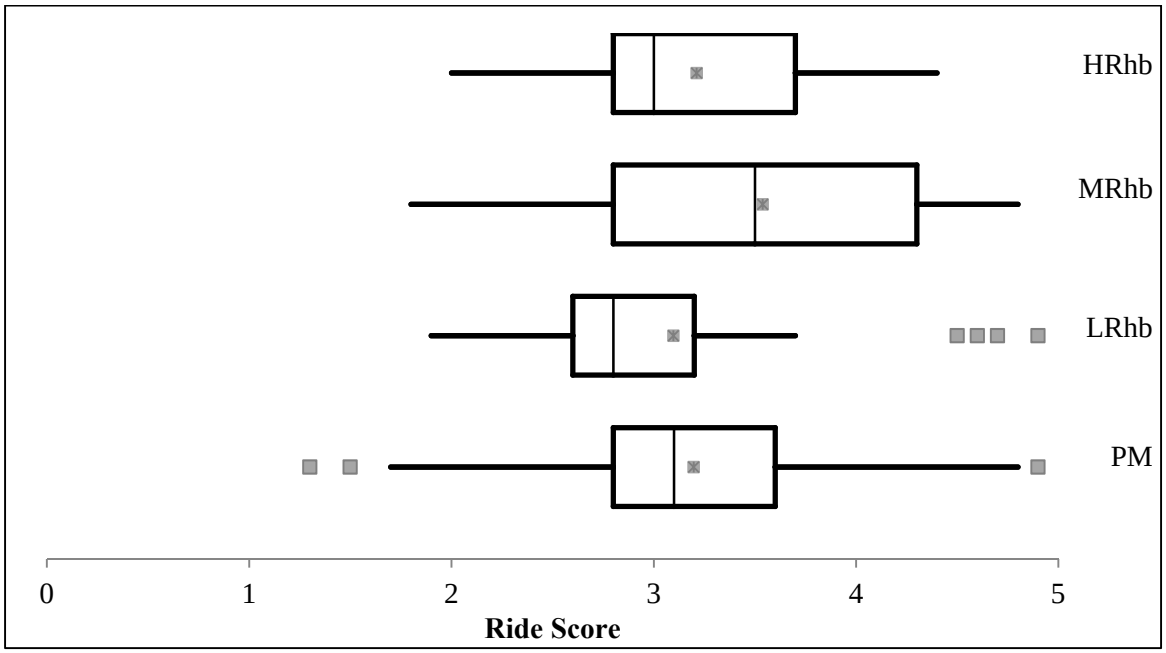

Figure C33.2. Box Plots for Ride Score for Treatments Applied in Bryan District (All Pavements, 2008).

Table C34.1. Condition Score versus Treatment Category (All Pavements, 2007).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	262	0	-	-	-	-
Preventive Maintenance	188	547	11	100	82.90	19.55
Light Rehabilitation	102	0	-	-	-	-
Medium Rehabilitation	64	54	9	100	54.33	31.91
Heavy Rehabilitation	37	52	25	100	68.98	19.79

Total number of sections analyzed: 653

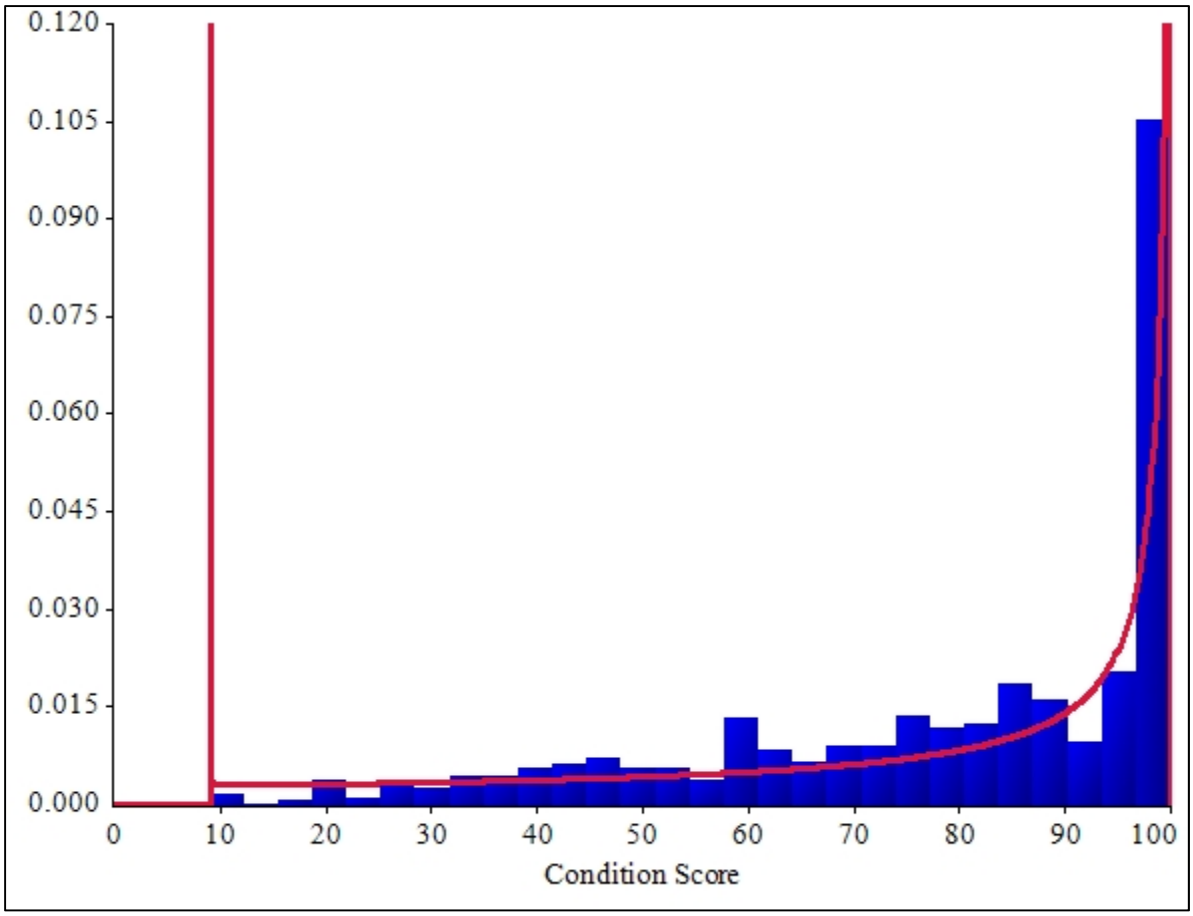

Figure C34.1. Histogram for Condition Score for Treatments Applied in Bryan District (All Pavements, 2007).

PMIS Condition Score by Treatment Category for Bryan District (All Pavements, 2007)

Table C34.2. Condition Score for Treatments Applied in Bryan District (All Pavements, 2007).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	11.0	72.0	90.0	100.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	9.0	28.0	41.5	90.0	100.0
Heavy Rehabilitation	25.0	53.8	69.5	85.5	100.0

Total number of sections analyzed: 653

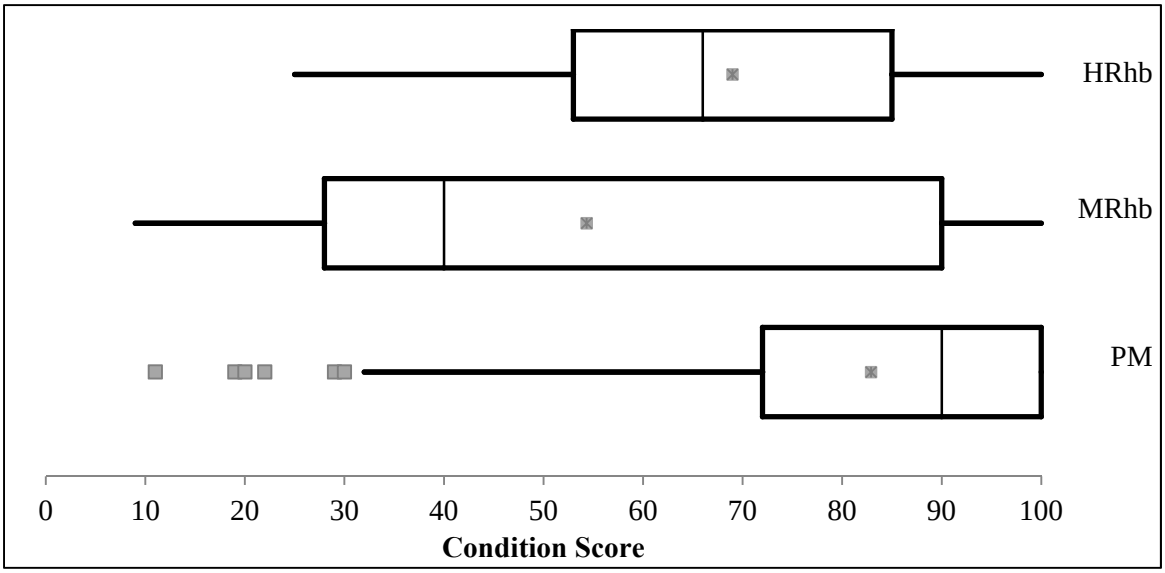

Figure C34.2. Box Plots for Condition Score for Treatments Applied in Bryan District, 2007.

Table C35.1. Distress Score versus Treatment Category (All Pavement Types, 2007).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	262	0	-	-	-	-
Preventive Maintenance	188	547	13	100	88.18	14.72
Light Rehabilitation	102	0	-	-	-	-
Medium Rehabilitation	64	54	16	100	65.85	29.06
Heavy Rehabilitation	37	52	25	100	78.00	18.51

Total number of sections analyzed: 653

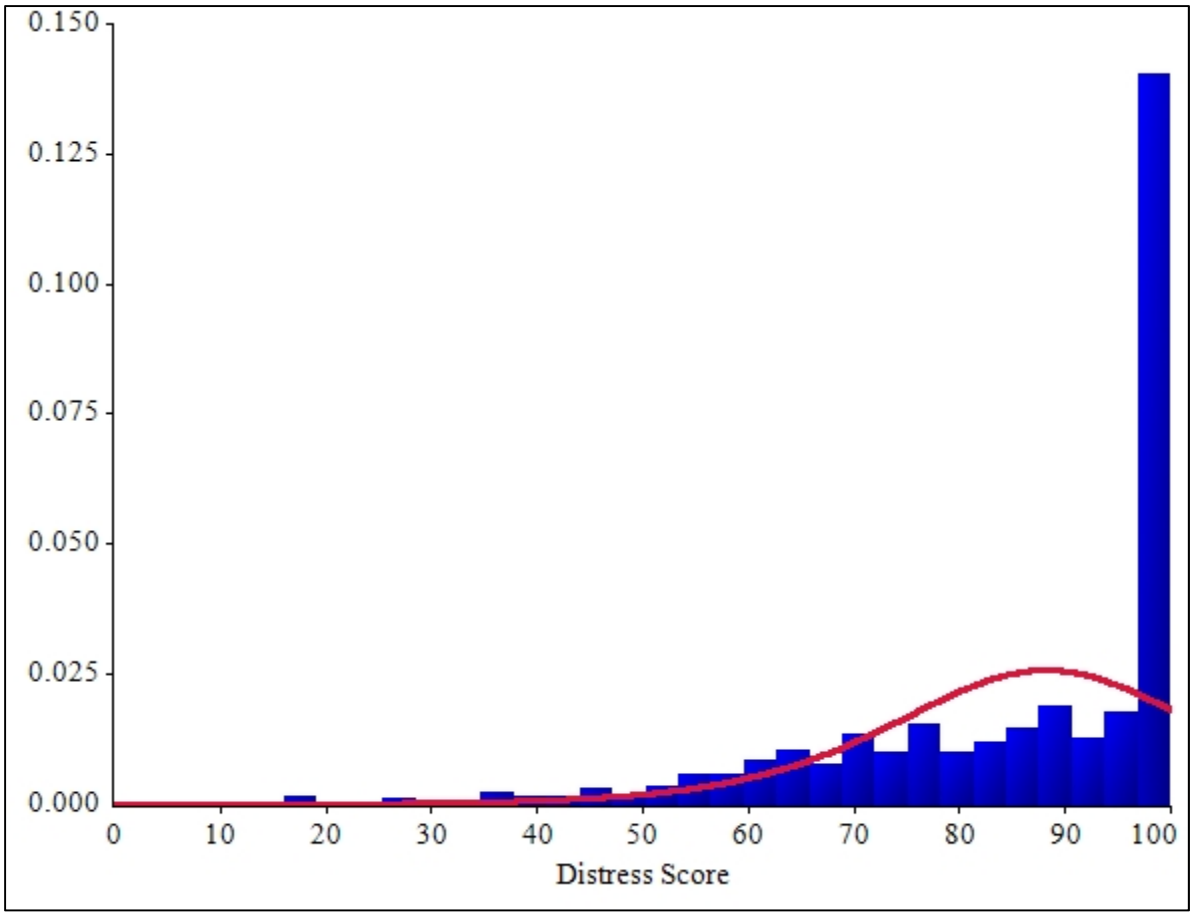

Figure C35.1. Histogram for Distress Score for Treatments Applied in Bryan District (All Pavements, 2007).

Table C35.2. Distress Score for Treatments Applied in Bryan (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	13.0	78.5	94.0	100.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	16.0	42.8	60.0	100.0	100.0
Heavy Rehabilitation	25.0	62.8	82.0	94.5	100.0

Total number of sections analyzed: 653

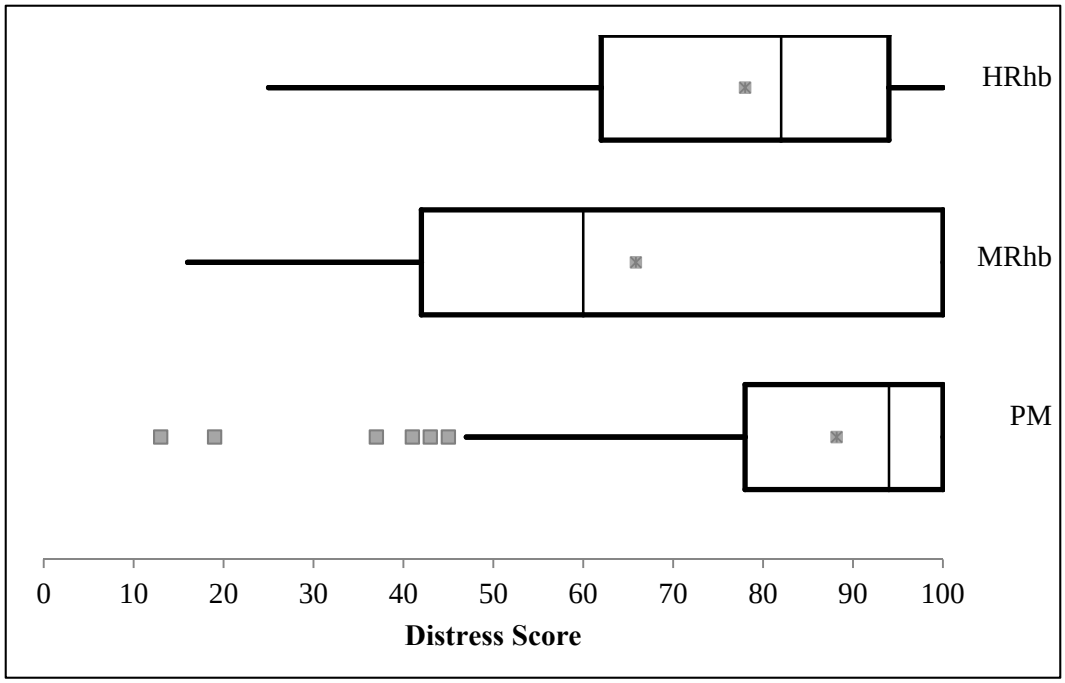

Figure C35.2. Box Plots for Distress Score for Treatments Applied in Bryan (All Pavements, 2007).

Table C36.1. Ride Score versus Treatment Category (All Pavement Types, 2007).

Treatment Category	PMIS Frequency	Bryan Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	262	0	-	-	-	-
Preventive Maintenance	188	547	1.5	4.8	3.26	0.85
Light Rehabilitation	102	0	-	-	-	-
Medium Rehabilitation	64	54	1.7	3.4	2.46	0.47
Heavy Rehabilitation	37	52	1.5	4.1	2.75	0.69

Total number of sections analyzed: 653

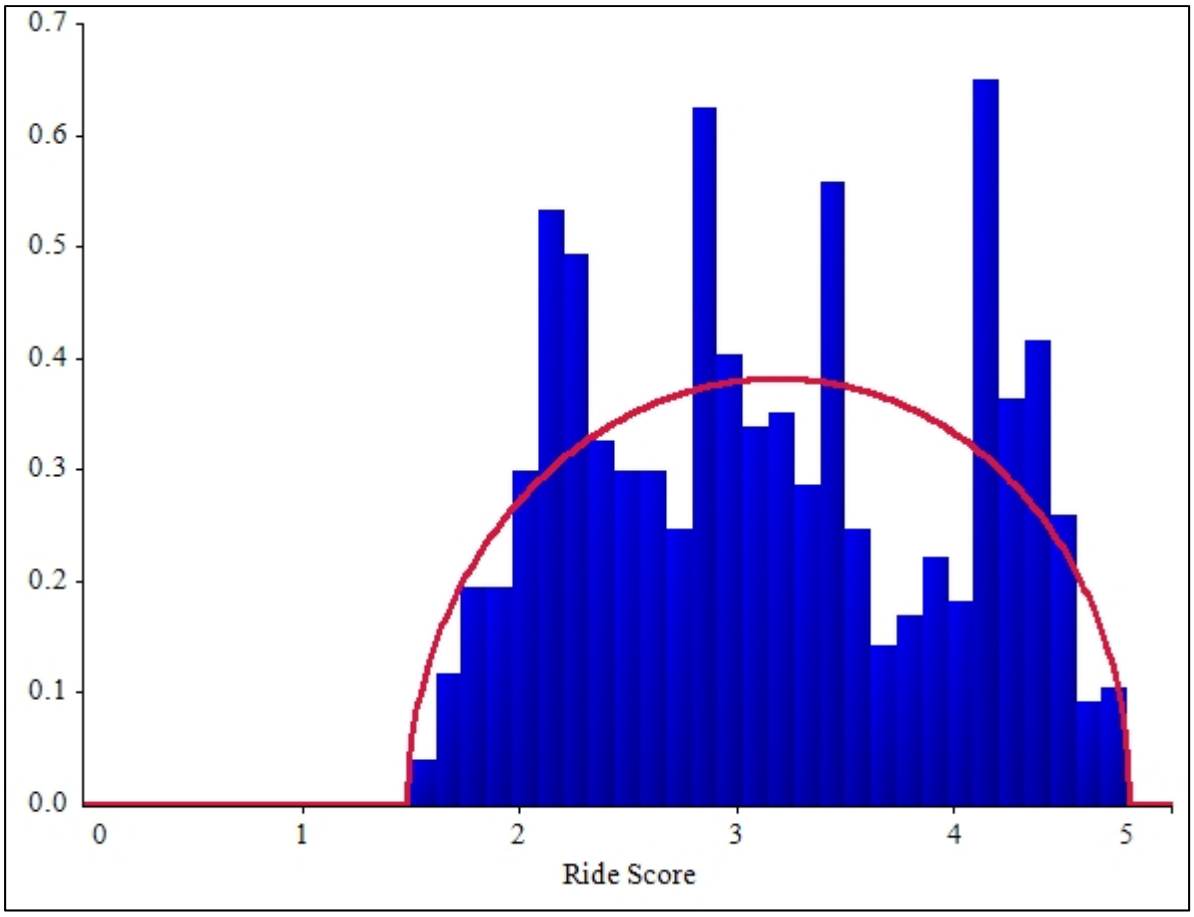

Figure C36.1. Histogram for Ride Score for Treatments Applied in Bryan District (All Pavements, 2007).

PMIS Ride Score by Treatment Category for Bryan District (All Pavements, 2007)

Table C36.2. Ride Score for Treatments Applied in Bryan District (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.5	2.5	3.2	4.1	4.8
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	1.7	2.0	2.5	2.9	3.4
Heavy Rehabilitation	1.5	2.2	2.7	3.3	4.1

Total number of sections analyzed: 653

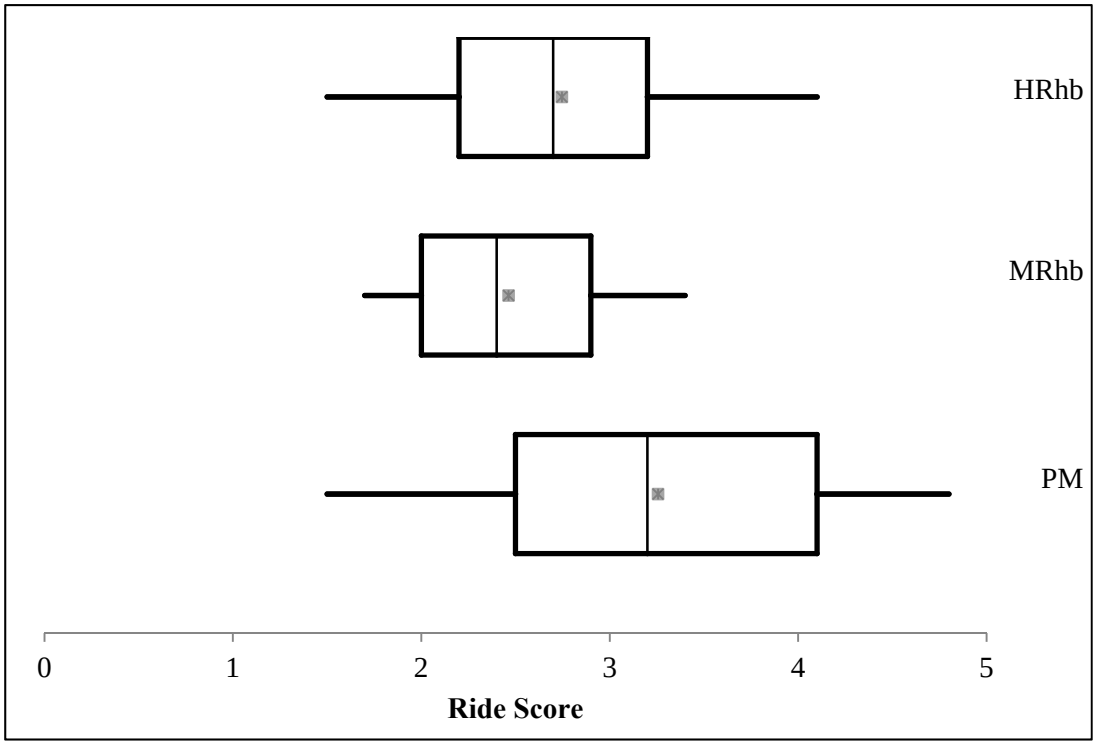

Figure C36.2. Box Plots for Ride Score for Treatments Applied in Bryan District (All Pavements, 2007).

APPENDIX C COMPARISON OF PMIS SCORES FOR TREATMENTS APPLIED IN THE DISTRICT WITH PMIS TREATMENT RECOMMENDATIONS 2007–2009

DALLAS DISTRICT

PMIS Score for Treatments Applied in Dallas District (All Pavement Types, 2007–2009)

Table C1. Condition Scores by Treatment Category, Dallas District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	799	0	6	100	96.74	9.79
Preventive Maintenance	885	1716	26	100	90.76	13.03
Light Rehabilitation	221	267	16	100	72.04	18.97
Medium Rehabilitation	326	294	1	92	49.03	23.13
Heavy Rehabilitation	125	79	1	86	29.78	17.77

Table C2. Distress Scores by Treatment Category, Dallas District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	799	0	7	100	98.51	7.29
Preventive Maintenance	885	1716	33	100	92.65	11.98
Light Rehabilitation	221	267	27	100	86.35	16.92
Medium Rehabilitation	326	294	1	100	74.32	29.18
Heavy Rehabilitation	125	79	5	100	62.22	30.02

Table C3. Ride Scores by Treatment Category, Dallas District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	799	0	2.5	4.7	3.52	0.50
Preventive Maintenance	885	1716	1.9	4.8	3.29	0.52
Light Rehabilitation	221	267	2	3.9	2.50	0.46
Medium Rehabilitation	326	294	1	4.6	2.54	0.62
Heavy Rehabilitation	125	79	0.5	4.1	2.30	0.67

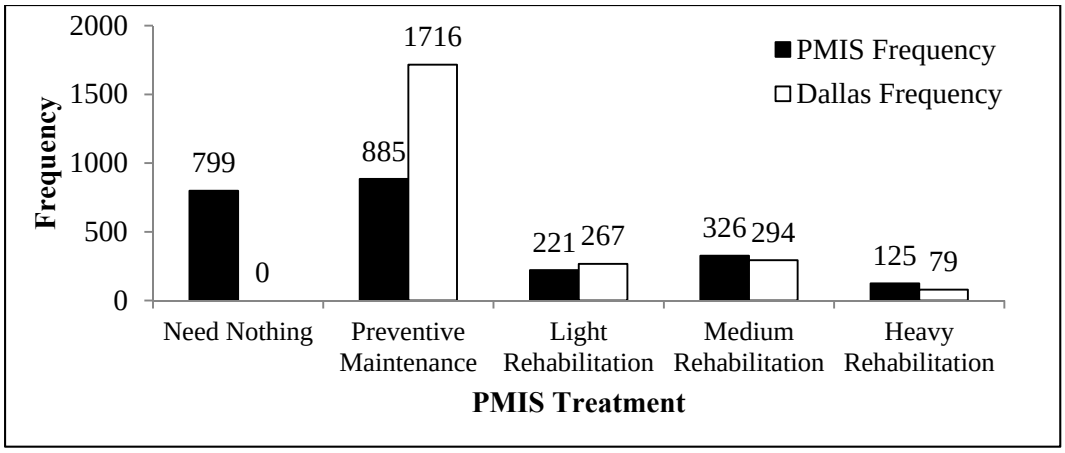

Figure C1. Frequency by PMIS Treatment for Dallas District, All Pavements (2007–2009).

PMIS Score for Treatments Applied in Dallas District (Asphalt Pavement Types, 2007–2009)

Table C4. Condition Scores by Treatment Category, Dallas District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	678	0	52	100	97.68	7.02
Preventive Maintenance	881	1670	36	100	90.86	12.86
Light Rehabilitation	180	93	16	100	69.19	16.79
Medium Rehabilitation	238	219	2	92	50.74	20.71
Heavy Rehabilitation	65	60	1	53	26.82	15.01

Table C5. Distress Scores by Treatment Category, Dallas District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	678	0	64	100	99.13	3.91
Preventive Maintenance	881	1670	37	100	92.70	11.84
Light Rehabilitation	180	93	27	100	85.45	16.77
Medium Rehabilitation	238	219	6	100	75.42	26.79
Heavy Rehabilitation	65	60	11	100	77.94	24.20

Table C6. Ride Scores by Treatment Category, Dallas District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	678	0	2.5	4.7	3.55	0.51
Preventive Maintenance	881	1670	1.9	4.8	3.30	0.52
Light Rehabilitation	180	93	2	3.5	2.33	0.25
Medium Rehabilitation	238	219	1.5	4.6	2.57	0.64
Heavy Rehabilitation	65	60	0.5	2.7	1.82	0.46

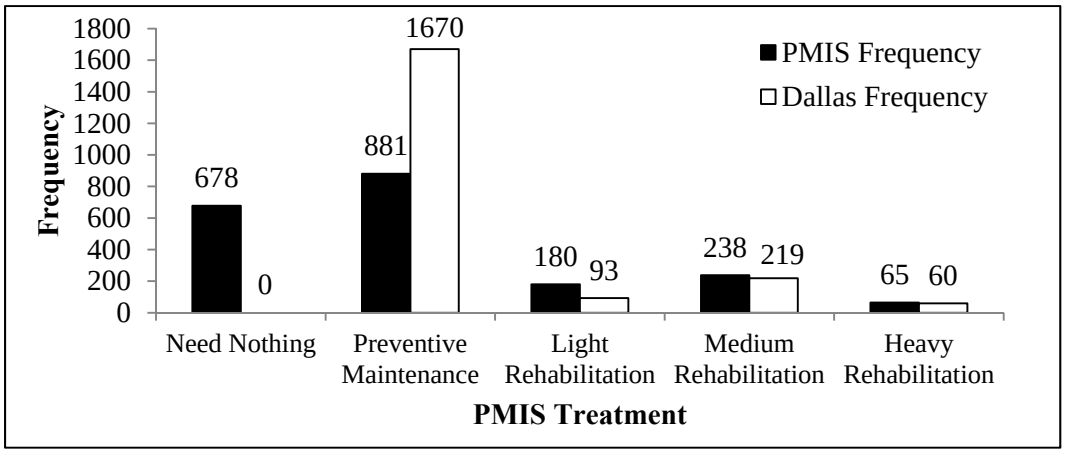

Figure C2. Frequency by PMIS Treatment for Dallas District (Asphalt Pavements, 2007–2009).

PMIS Score for Treatments Applied in Dallas District (CRCP Pavement Types, 2007–2009)

Table C7.Condition Scores by Treatment Category, Dallas District (CRCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	49	0	65	100	93.51	10.48
Preventive Maintenance	0	0	-	-	-	-
Light Rehabilitation	8	62	64	91	78.13	11.47
Medium Rehabilitation	22	44	37	84	58.82	14.41
Heavy Rehabilitation	32	5	3	56	28.31	16.56

Table C8. Distress Scores by Treatment Category, Dallas District (CRCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	49	0	69	100	96.86	7.81
Preventive Maintenance	0	0	-	-	-	-
Light Rehabilitation	8	62	65	92	80.00	10.74
Medium Rehabilitation	22	44	37	100	79.68	22.15
Heavy Rehabilitation	32	5	5	100	41.09	26.45

Table C9. Ride Scores by Treatment Category, Dallas District (CRCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	49	0	2.6	4	3.44	0.36
Preventive Maintenance	0	0	-	-	-	-
Light Rehabilitation	8	62	3	3.7	3.30	0.24
Medium Rehabilitation	22	44	2.1	3.8	2.93	0.50
Heavy Rehabilitation	32	5	2.2	4.1	2.85	0.51

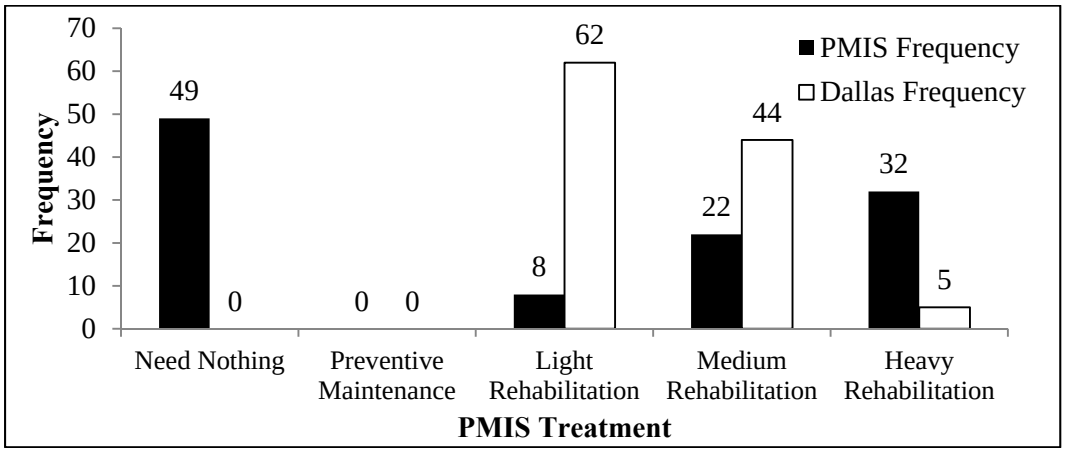

Figure C3. Frequency by PMIS Treatment for Dallas District (CRCP Pavements, 2007–2009).

PMIS Score for Treatments Applied in Dallas District (JCP Pavement Types, 2007–2009)

Table C10. Condition Scores by Treatment Category, Dallas District (JCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	72	0	6	100	90.04	21.71
Preventive Maintenance	4	46	26	90	68.75	28.95
Light Rehabilitation	33	112	23	100	86.09	24.69
Medium Rehabilitation	66	31	1	84	39.61	30.18
Heavy Rehabilitation	28	14	8	86	38.32	22.42

Table C11. Distress Scores by Treatment Category, Dallas District (JCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	72	0	7	100	93.85	19.58
Preventive Maintenance	4	46	33	100	82.00	32.71
Light Rehabilitation	33	112	39	100	92.79	17.65
Medium Rehabilitation	66	31	1	100	68.59	37.87
Heavy Rehabilitation	28	14	11	86	49.86	25.78

Table C12. Ride Scores by Treatment Category, Dallas District (JCP Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	72	0	2.6	3.8	3.28	0.31
Preventive Maintenance	4	46	2.8	3	2.88	0.10
Light Rehabilitation	33	112	2.5	3.9	3.24	0.44
Medium Rehabilitation	66	31	1	2.9	2.31	0.48
Heavy Rehabilitation	28	14	2	3.4	2.81	0.29

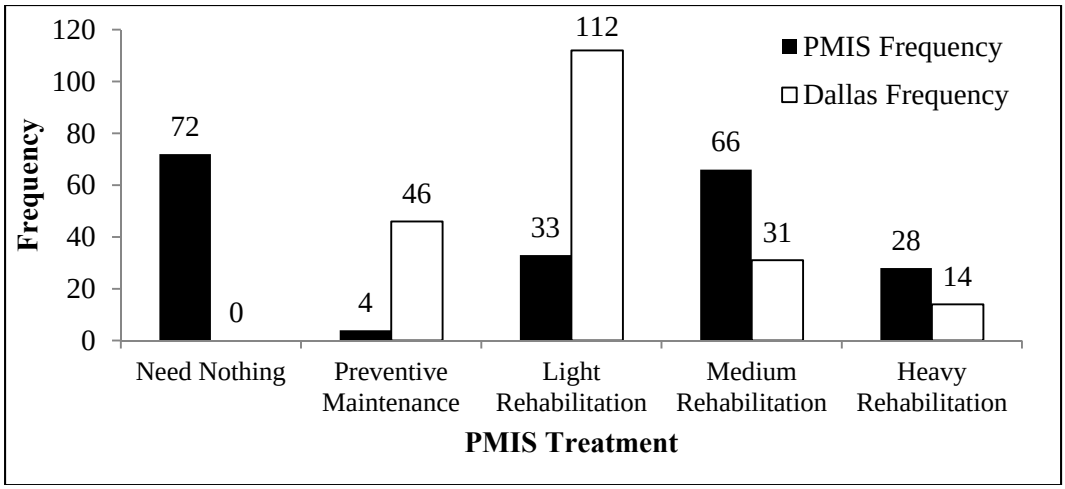

Figure C4. Frequency by PMIS Treatment for Dallas District (JCP Pavements, 2007–2009).

PMIS Score for Preventive Maintenance Treatments Applied in Dallas District, 2007–2009

Table C13.Condition Score by Treatment Category for Preventive Maintenance, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	626	0	52	100	97.62	7.23
Preventive Maintenance	706	1716	37	100	90.77	13.06
Light Rehabilitation	161	0	16	100	73.19	17.34
Medium Rehabilitation	182	0	2	92	51.12	20.38
Heavy Rehabilitation	41	0	1	53	25.46	15.29

Table C14. Distress Score by Treatment Category for Preventive Maintenance, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	626	0	64	100	99.15	3.90
Preventive Maintenance	706	1716	37	100	92.75	11.95
Light Rehabilitation	161	0	27	100	88.65	16.28
Medium Rehabilitation	182	0	6	100	78.82	25.30
Heavy Rehabilitation	41	0	14	100	78.10	24.99

Table C15. Ride Score by Treatment Category for Preventive Maintenance, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	626	0	2.5	4.7	3.54	0.51
Preventive Maintenance	706	1716	2.5	4.8	3.27	0.51
Light Rehabilitation	161	0	2	3.9	2.46	0.44
Medium Rehabilitation	182	0	1.5	4.2	2.49	0.58
Heavy Rehabilitation	41	0	0.5	3	1.75	0.52

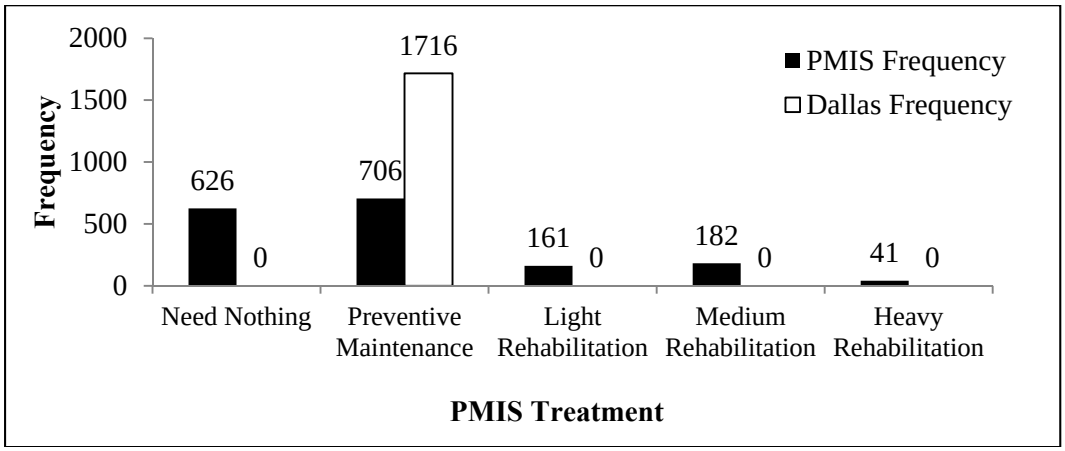

Figure C5. Frequency by Preventive Maintenance Treatments (Dallas District, 2007–2009).

PMIS Score for Light Rehabilitation Treatments Applied in Dallas District, 2007–2009

Table C16. Condition Score by Treatment Category for Light Rehabilitation, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	115	0	6	100	91.30	18.48
Preventive Maintenance	28	0	26	100	89.07	16.35
Light Rehabilitation	14	267	25	100	68.71	24.21
Medium Rehabilitation	59	0	1	84	51.73	27.03
Heavy Rehabilitation	51	0	6	86	35.43	19.53

Table C17. Distress Score by Treatment Category for Light Rehabilitation, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	115	0	7	100	94.62	16.36
Preventive Maintenance	28	0	33	100	92.82	15.28
Light Rehabilitation	14	267	39	100	82.21	20.80
Medium Rehabilitation	59	0	1	100	81.34	32.74
Heavy Rehabilitation	51	0	11	100	54.18	25.57

Table C18. Ride Score by Treatment Category for Light Rehabilitation, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	115	0	2.6	4.7	3.40	0.42
Preventive Maintenance	28	0	2.5	3.6	3.08	0.28
Light Rehabilitation	14	267	2.5	3.4	2.91	0.32
Medium Rehabilitation	59	0	1.1	3.4	2.48	0.38
Heavy Rehabilitation	51	0	1.6	4.1	2.66	0.46

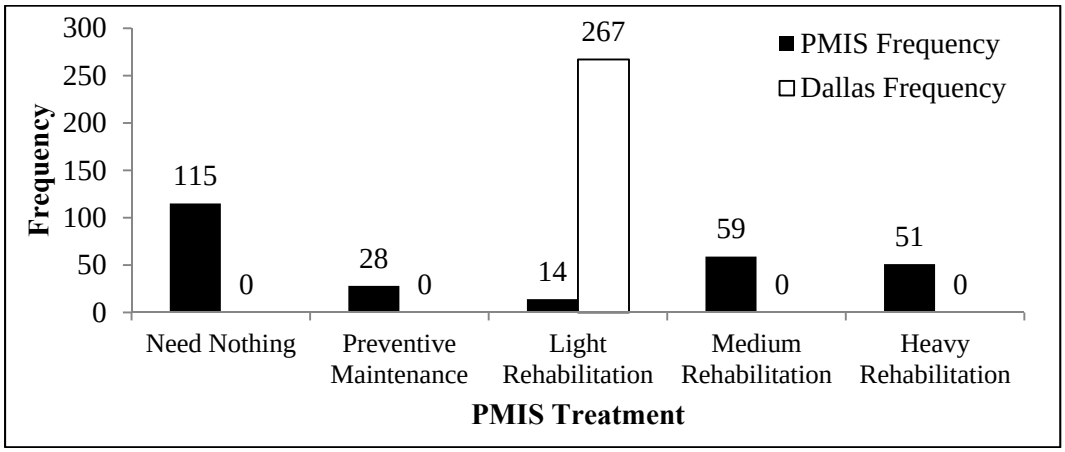

Figure C6. Frequency by Light Rehabilitation Treatments (Dallas District, 2007–2009).

PMIS Score for Medium Rehabilitation Treatments Applied in Dallas District, 2007–2009

Table C19. Condition Score by Treatment Category for Medium Rehabilitation, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	43	0	84	100	97.88	3.82
Preventive Maintenance	134	0	36	100	92.08	11.89
Light Rehabilitation	43	0	22	100	67.09	21.91
Medium Rehabilitation	51	294	1	92	40.04	27.80
Heavy Rehabilitation	23	0	3	56	24.65	16.00

Table C20. Distress Score by Treatment Category for Medium Rehabilitation, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	43	0	88	100	99.16	2.10
Preventive Maintenance	134	0	38	100	93.11	11.17
Light Rehabilitation	43	0	34	100	78.14	20.65
Medium Rehabilitation	51	294	1	100	60.69	30.51
Heavy Rehabilitation	23	0	5	100	46.87	33.88

Table C21. Ride Score by Treatment Category for Medium Rehabilitation, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	43	0	2.5	4.6	3.64	0.54
Preventive Maintenance	134	0	1.9	4.6	3.45	0.61
Light Rehabilitation	43	0	2	3.7	2.44	0.45
Medium Rehabilitation	51	294	1	4.2	2.41	0.76
Heavy Rehabilitation	23	0	1.2	3.8	2.55	0.76

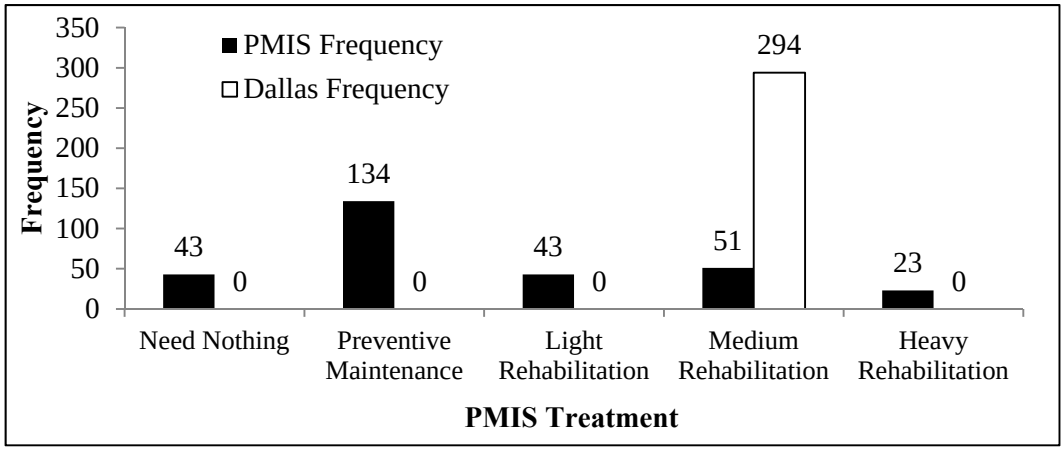

Figure C7. Frequency by Medium Rehabilitation Treatments (Dallas District, 2007–2009).

PMIS Score for Heavy Rehabilitation Treatments Applied in Dallas District 2007–2009

Table C22. Condition Score by Treatment Category for Heavy Rehabilitation, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	15	0	84	100	98.33	4.22
Preventive Maintenance	17	0	60	100	82.65	12.20
Light Rehabilitation	3	0	90	100	96.67	5.77
Medium Rehabilitation	34	0	8	73	46.65	19.22
Heavy Rehabilitation	10	79	5	46	30.40	15.28

Table C23. Distress Score by Treatment Category for Heavy Rehabilitation, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	15	0	97	100	99.73	0.80
Preventive Maintenance	17	0	60	100	84.59	11.35
Light Rehabilitation	3	0	100	100	100.00	0.00
Medium Rehabilitation	34	0	9	100	58.53	26.10
Heavy Rehabilitation	10	79	11	96	73.40	31.37

Table C24. Ride Score by Treatment Category for Heavy Rehabilitation, Dallas District, 2007–2009.

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	15	0	2.9	3.9	3.51	0.27
Preventive Maintenance	17	0	3	4.1	3.39	0.34
Light Rehabilitation	3	0	3	3.5	3.33	0.29
Medium Rehabilitation	34	0	2.5	4.6	3.14	0.63
Heavy Rehabilitation	10	79	1.7	2.4	2.18	0.23

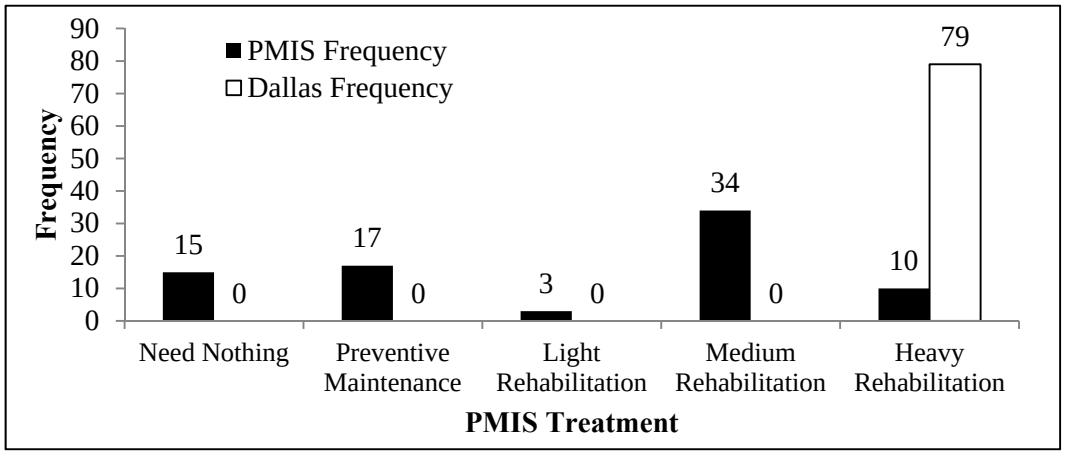

Figure C8. Frequency by Heavy Rehabilitation Treatments (Dallas District, 2007–2009).

PMIS Condition Score by Treatment Category for Dallas District (All Pavements, 2007–2009)

Table C25.1 Condition Score versus Treatment Category (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	799	0	-	-	-	-
Preventive Maintenance	885	1716	1	100	85.85	21.38
Light Rehabilitation	221	267	1	100	70.47	31.16
Medium Rehabilitation	326	294	1	100	74.97	30.29
Heavy Rehabilitation	125	79	5	100	64.05	28.94

Total number of sections analyzed: 2,356

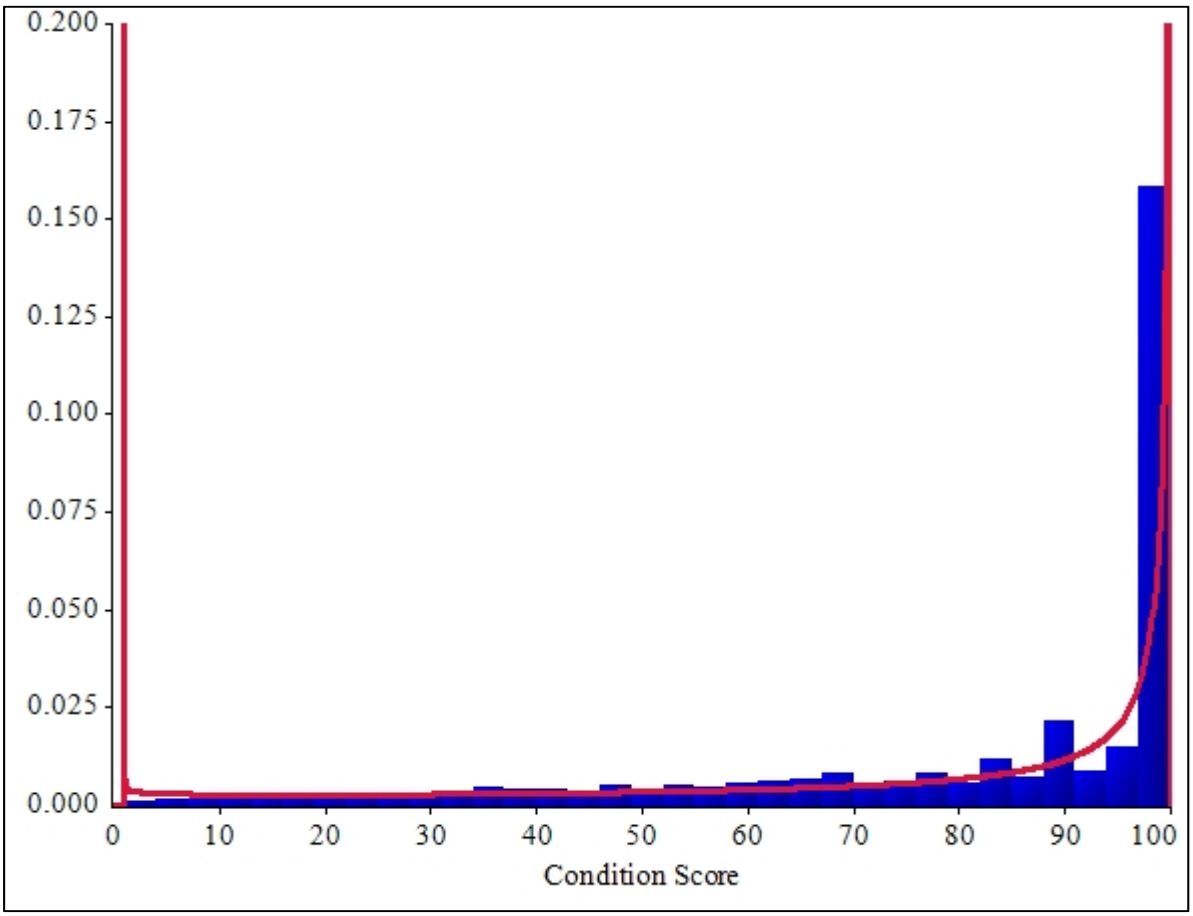

Figure C25.1. Histogram for Condition Score for Treatments Applied in Dallas District (All Pavements, 2007–2009).

PMIS Condition Score by Treatment Category for Dallas District (All Pavements, 2007–2009)

Table C25.2. Condition Score for Treatments Applied in Dallas District (All Pavements, 2007–2009.

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.0	78.0	99.0	100.0	100.0
Light Rehabilitation	1.0	48.0	84.0	100.0	100.0
Medium Rehabilitation	1.0	58.0	90.0	99.0	100.0
Heavy Rehabilitation	5.0	43.5	66.0	93.5	100.0

Total number of sections analyzed: 2356

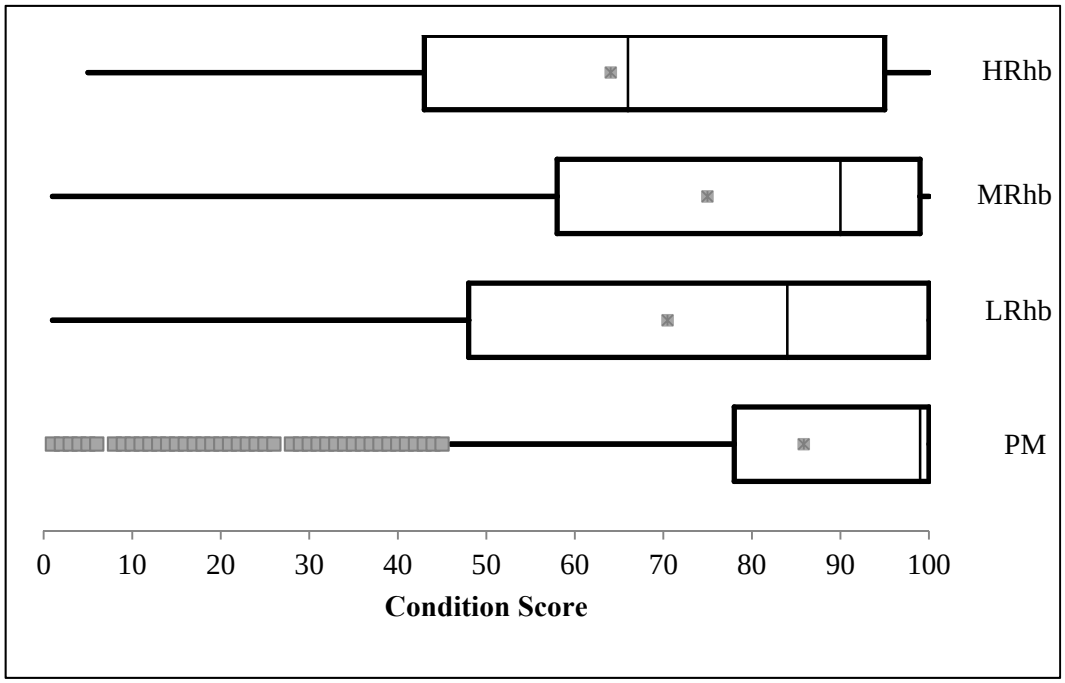

Figure C25.2. Box Plots for Condition Score for Treatments Applied in Dallas District, 2007–2009.

PMIS Distress Score by Treatment Category for Dallas District (All Pavements, 2007–2009)

Table C26.1. Distress Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	799	0	-	-	-	-
Preventive Maintenance	885	1716	6	100	92.87	14.56
Light Rehabilitation	221	267	1	100	83.12	27.29
Medium Rehabilitation	326	294	1	100	82.56	25.32
Heavy Rehabilitation	125	79	9	100	75.42	26.62

Total number of sections analyzed: 2,356

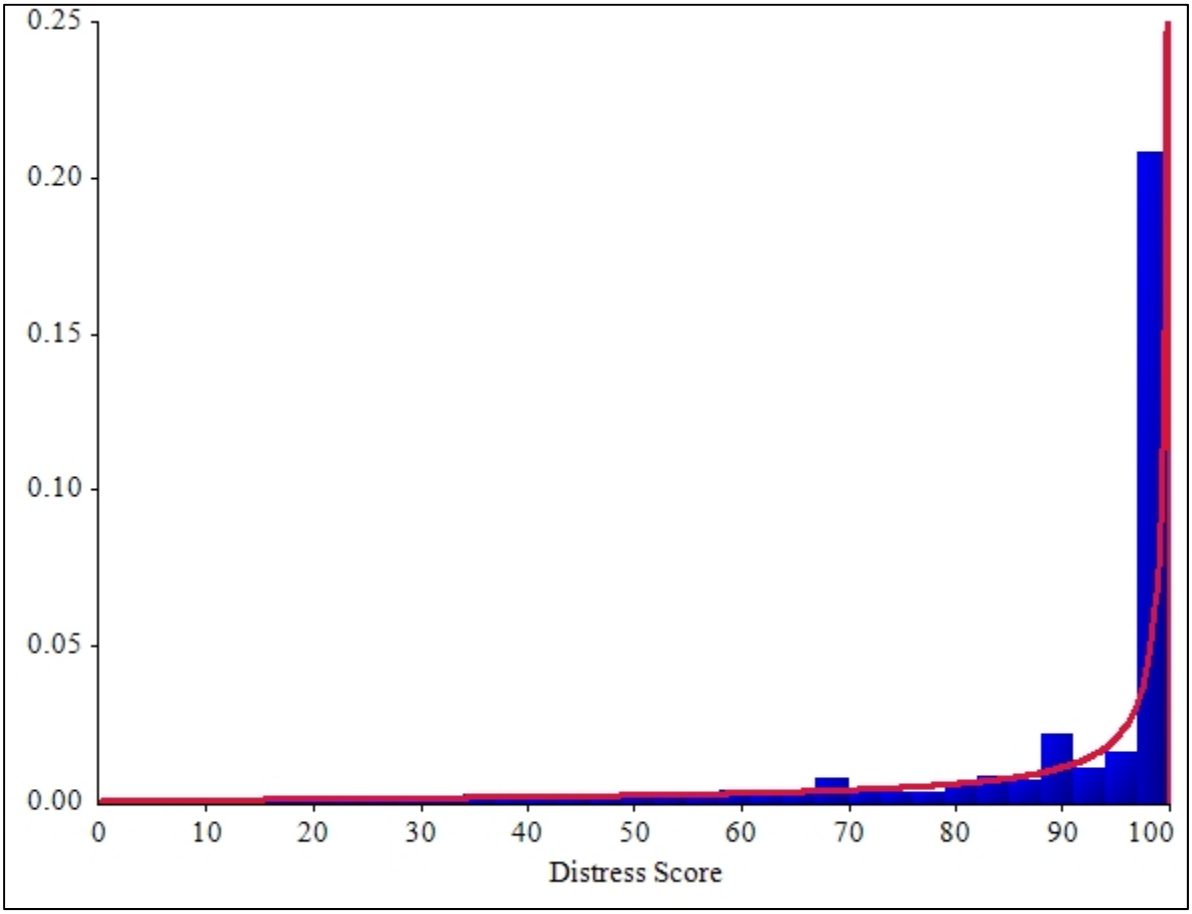

Figure C26.1. Histogram for Distress Score for Treatments Applied in Dallas District (All Pavements, 2007–2009).

PMIS Distress Score by Treatment Category for Dallas District (All Pavements, 2007–2009)

Table C26.2. Distress Score for Treatments Applied in Dallas (All Pavements, 2007–2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	6.0	92.0	100.0	100.0	100.0
Light Rehabilitation	1.0	72.0	100.0	100.0	100.0
Medium Rehabilitation	1.0	73.3	94.0	100.0	100.0
Heavy Rehabilitation	9.0	62.5	84.0	98.0	100.0

Total number of sections analyzed: 2,356

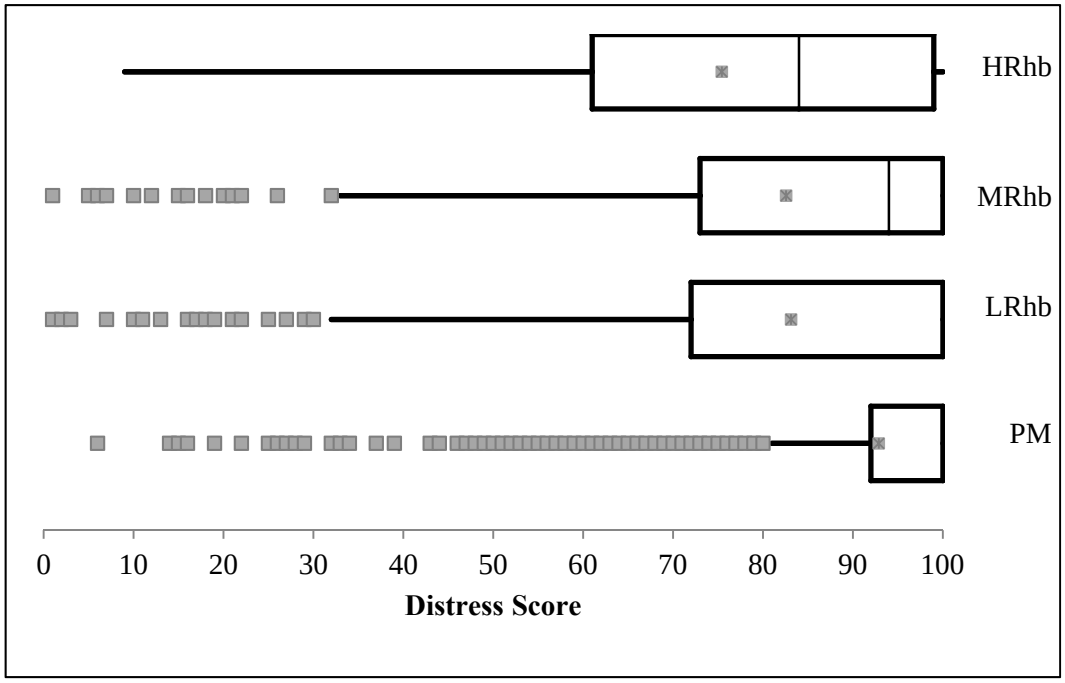

Figure C26.2. Box Plots for Distress Score for Treatments Applied in Dallas (All Pavements, 2007–2009).

PMIS Ride Score by Treatment Category for Dallas District (All Pavements, 2007–2009)

Table C27.1. Ride Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	799	0	-	-	-	-
Preventive Maintenance	885	1716	0.5	4.8	3.17	0.68
Light Rehabilitation	221	267	1.1	4.7	2.99	0.56
Medium Rehabilitation	326	294	1	4.6	3.08	0.80
Heavy Rehabilitation	125	79	1.7	4.6	3.15	0.61

Total number of sections analyzed: 2,356

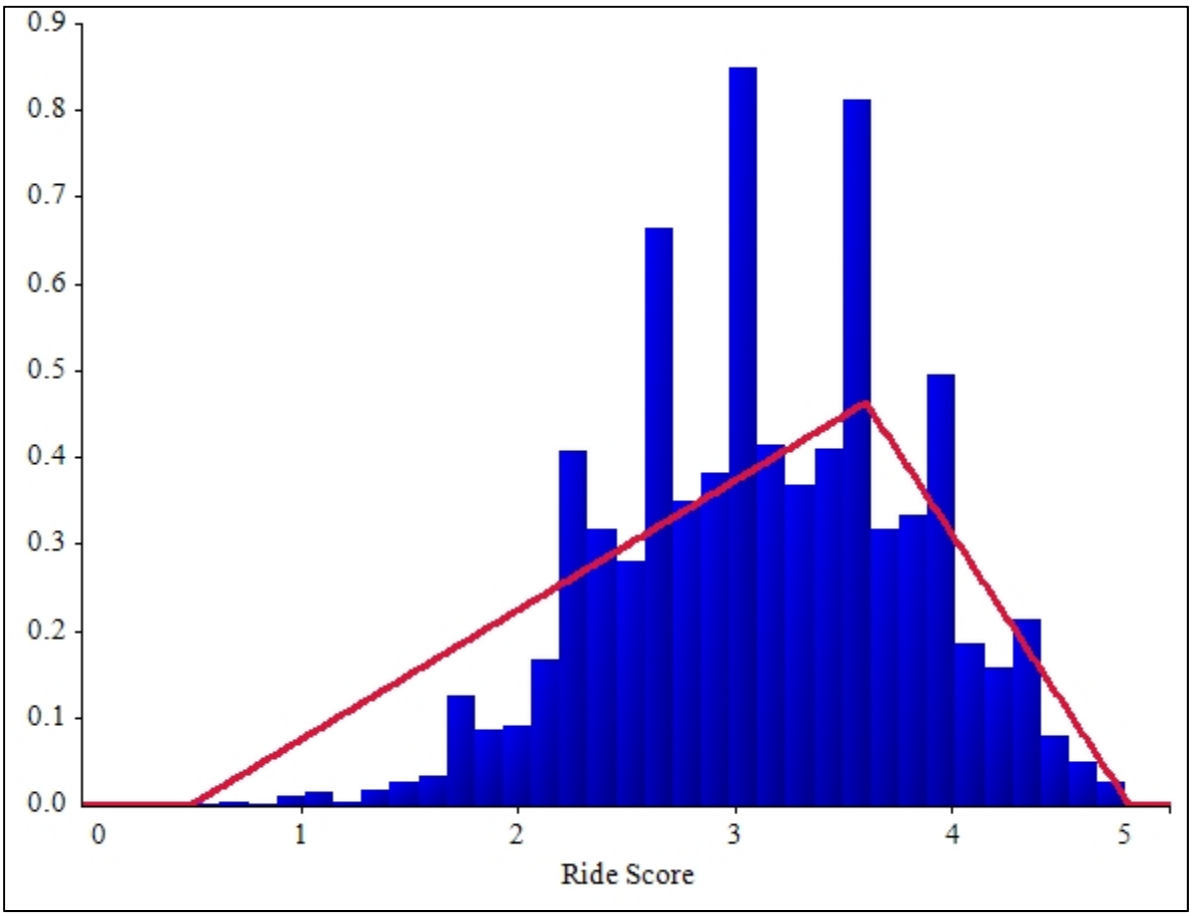

Figure C27.1. Histogram for Distress Score for Treatments Applied in Dallas District (All Pavements, 2007–2009).

PMIS Ride Score by Treatment Category for Dallas District (All Pavements, 2007–2009)

Table C27.2. Ride Score for Treatments Applied in Dallas District (All Pavements, 2007–2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	0.5	2.7	3.2	3.7	4.8
Light Rehabilitation	1.1	2.6	3.0	3.4	4.7
Medium Rehabilitation	1.0	2.5	3.1	3.8	4.6
Heavy Rehabilitation	1.7	2.7	3.1	3.6	4.6

Total number of sections analyzed: 2,356

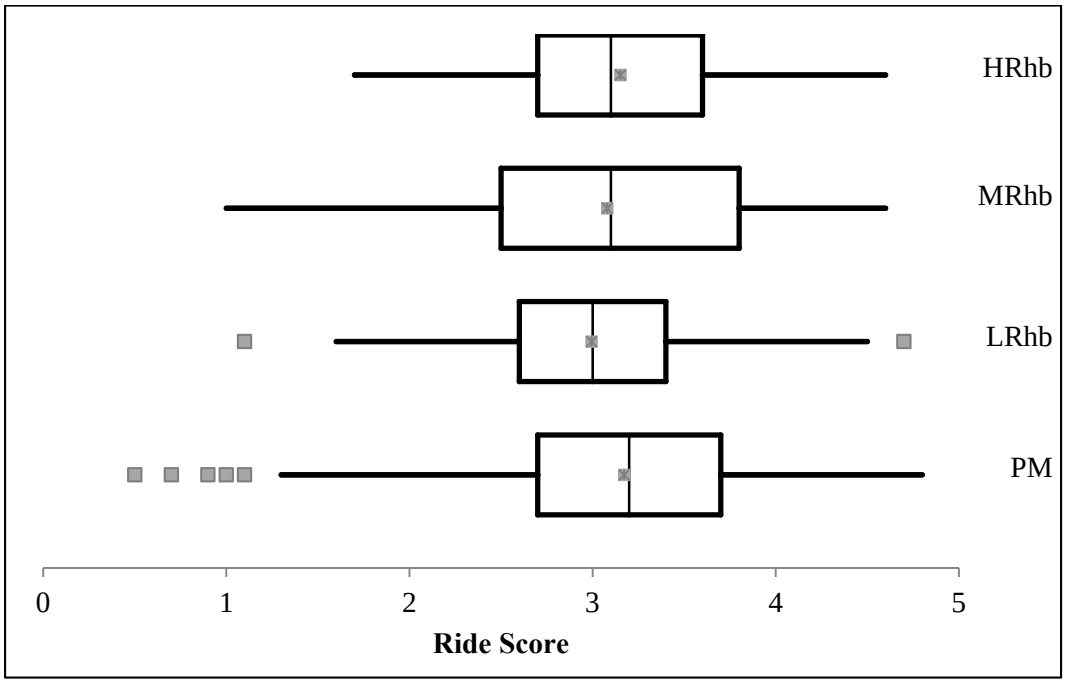

Figure C27.2. Box Plots for Ride Score for Treatments Applied in Dallas District (All Pavements, 2007–2009).

PMIS Condition Score by Treatment Category for Dallas District (All Pavements, 2009)

Table C28.1. Condition Score versus Treatment Category (All Pavements 2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	231	0	-	-	-	-
Preventive Maintenance	309	629	1	100	84.68	22.22
Light Rehabilitation	72	12	19	91	49.00	21.38
Medium Rehabilitation	119	106	1	100	61.29	33.99
Heavy Rehabilitation	46	30	9	89	54.50	19.19

Total number of sections analyzed: 777

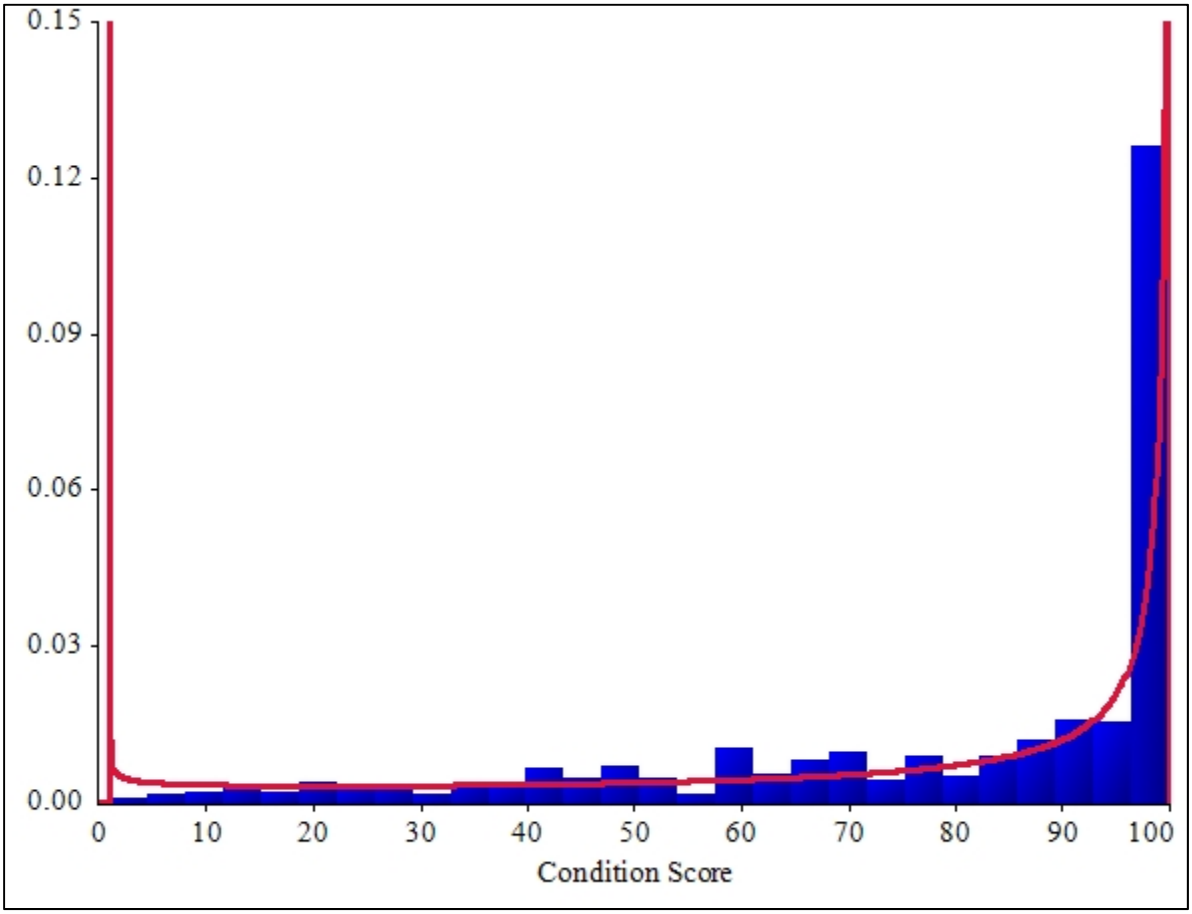

Figure C28.1. Histogram for Condition Score for Treatments Applied in Dallas District (All Pavements, 2009).

PMIS Condition Score by Treatment Category for Dallas District (All Pavements, 2009)

Table C28.2. Condition Score for Treatments Applied in Dallas District (All Pavements, 2009).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.0	76.0	98.0	100.0	100.0
Light Rehabilitation	19.0	28.8	46.5	63.5	91.0
Medium Rehabilitation	1.0	29.3	69.0	92.8	100.0
Heavy Rehabilitation	9.0	45.0	58.0	70.5	89.0

Total number of sections analyzed: 777

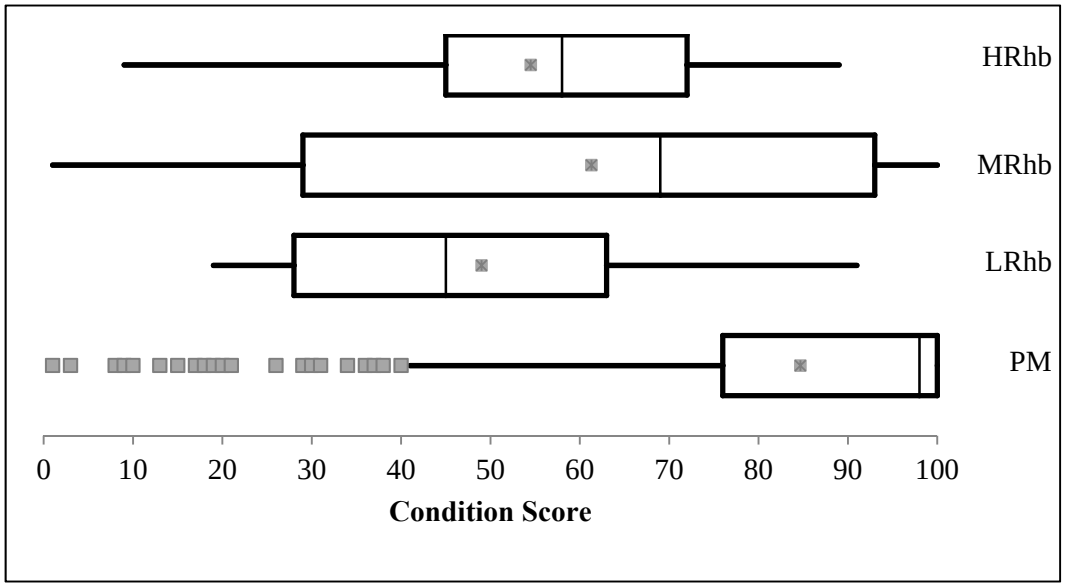

Figure C28.2. Box Plots for Condition Score for Treatments Applied in Dallas District, 2009.

PMIS Distress Score by Treatment Category for Dallas District (All Pavements, 2009)

Table C29.1. Distress Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	231	0	-	-	-	-
Preventive Maintenance	309	629	16	100	94.41	11.70
Light Rehabilitation	72	12	44	100	81.25	20.11
Medium Rehabilitation	119	106	1	100	74.26	28.47
Heavy Rehabilitation	46	30	18	100	81.47	14.00

Total number of sections analyzed: 777

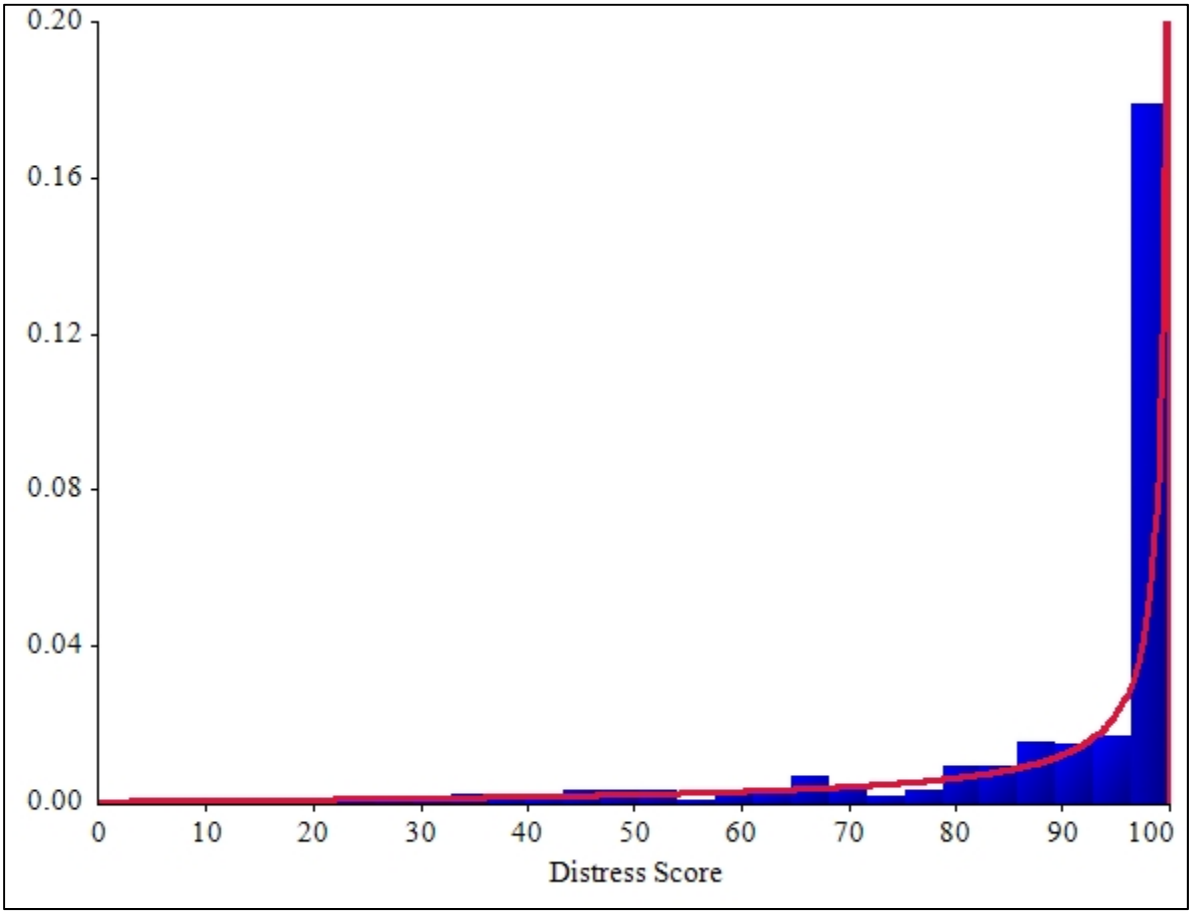

Figure C29.1. Histogram for Distress Score for Treatments Applied in Dallas District (All Pavements, 2009).

PMIS Distress Score by Treatment Category for Dallas District (All Pavements, 2009)

Table C29.2. Distress Score for Treatments Applied in Dallas (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	16.0	95.0	100.0	100.0	100.0
Light Rehabilitation	44.0	65.8	89.5	97.5	100.0
Medium Rehabilitation	1.0	49.3	89.0	98.0	100.0
Heavy Rehabilitation	18.0	79.3	83.0	86.8	100.0

Total number of sections analyzed: 777

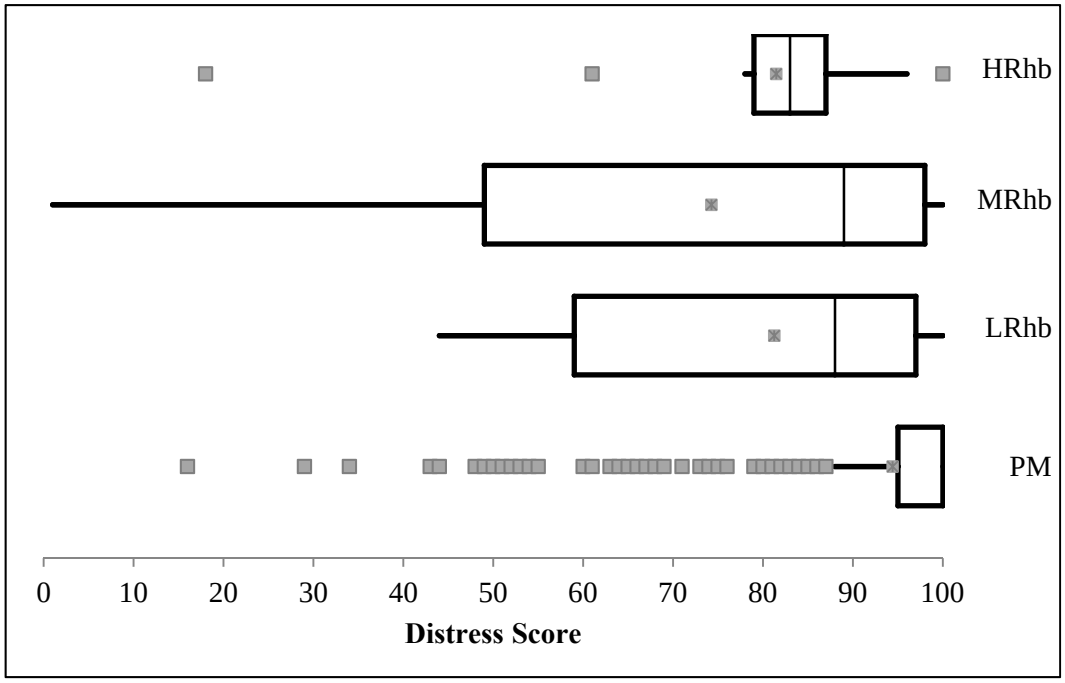

Figure C29.2. Box Plots for Distress Score for Treatments Applied in Dallas (All Pavements, 2009).

PMIS Ride Score by Treatment Category for Dallas District (All Pavements, 2009)

Table C30.1. Ride Score versus Treatment Category (All Pavement Types, 2009).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	231	0	-	-	-	-
Preventive Maintenance	309	629	0.5	4.8	3.09	0.66
Light Rehabilitation	72	12	2.2	3.4	2.50	0.33
Medium Rehabilitation	119	106	1	3.4	2.39	0.55
Heavy Rehabilitation	46	30	1.7	3.3	2.62	0.39

Total number of sections analyzed: 777

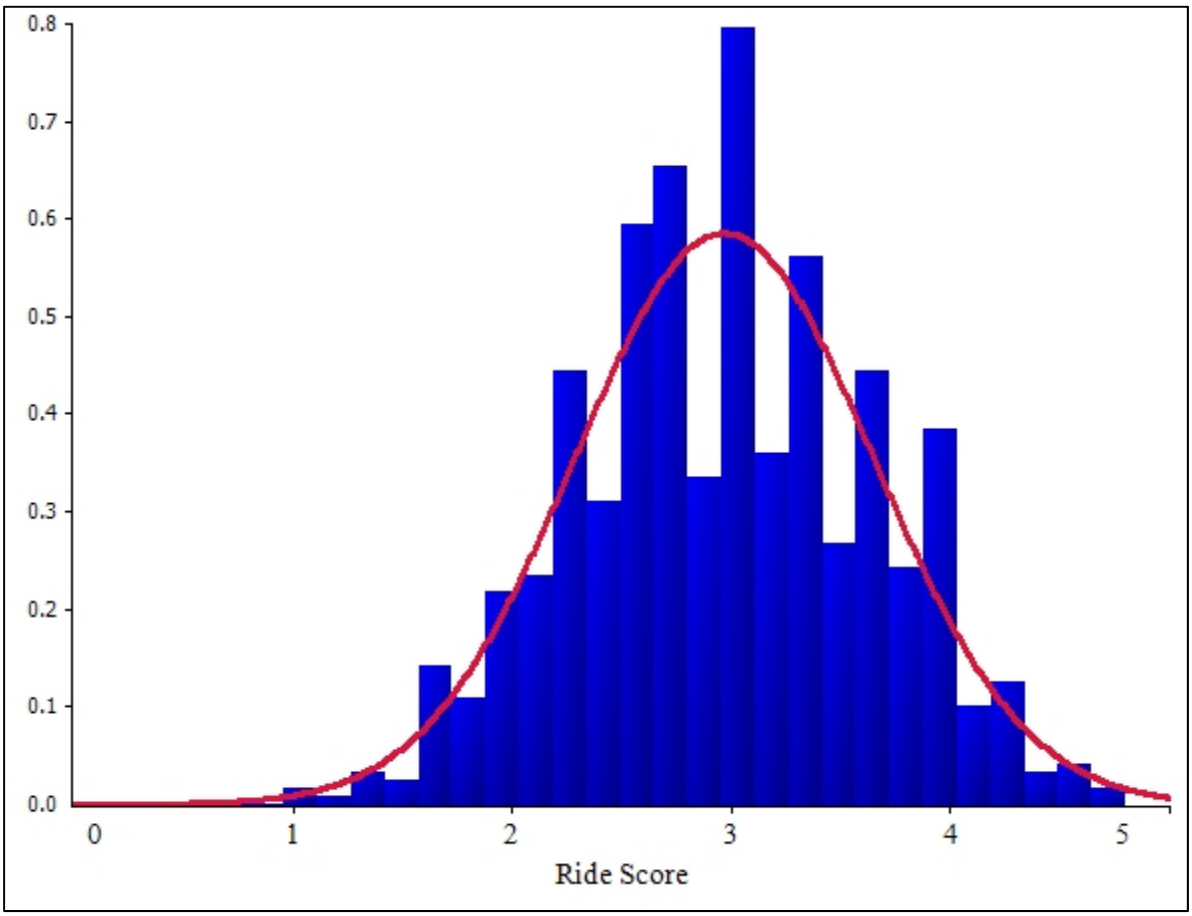

Figure C30.1. Histogram for Ride Score for Treatments Applied in Dallas District (All Pavements, 2009).

PMIS Ride Score by Treatment Category for Dallas District (All Pavements, 2009)

Table C30.2. Ride Score for Treatments Applied in Dallas District (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	0.5	2.7	3.1	3.6	4.8
Light Rehabilitation	2.2	2.3	2.4	2.6	3.4
Medium Rehabilitation	1.0	2.0	2.4	2.8	3.4
Heavy Rehabilitation	1.7	2.4	2.6	2.9	3.3

Total number of sections analyzed: 777

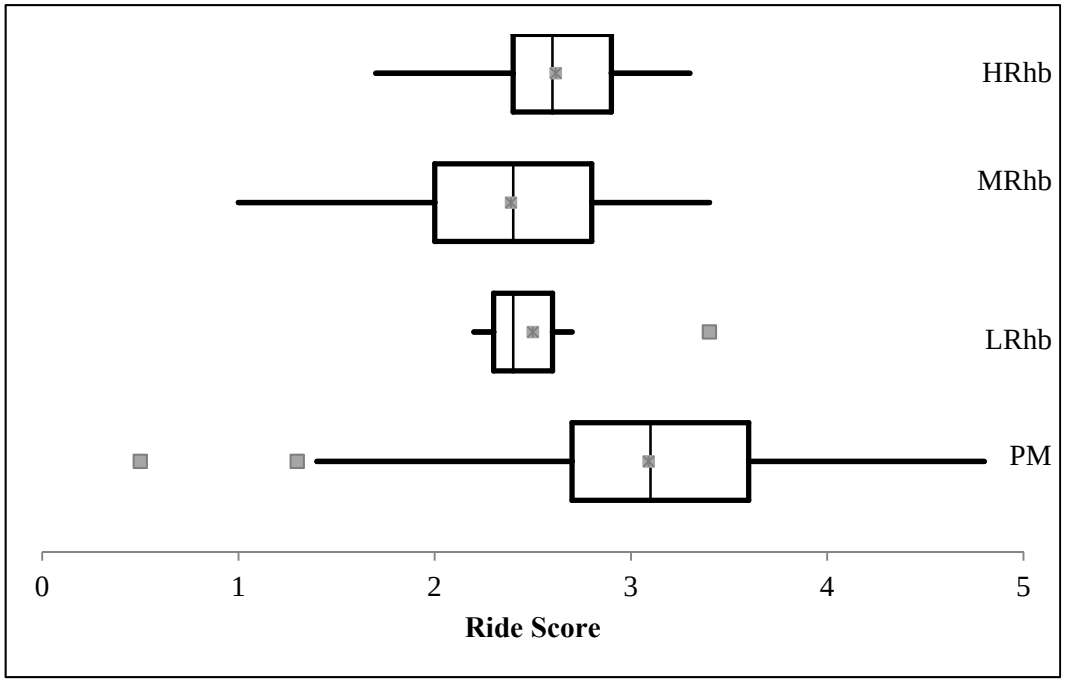

Figure C30.2. Box Plots for Ride Score for Treatments Applied in Dallas District (All Pavements, 2009).

PMIS Condition Score by Treatment Category for Dallas District (All Pavements, 2008)

Table C31.1 Condition Score versus Treatment Category (All Pavements, 2008).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	242	0	-	-	-	-
Preventive Maintenance	276	574	4	100	85.89	20.61
Light Rehabilitation	81	33	1	100	80.97	27.05
Medium Rehabilitation	70	75	25	100	84.80	21.02
Heavy Rehabilitation	13	0	-	-	-	-

Total number of sections analyzed: 682

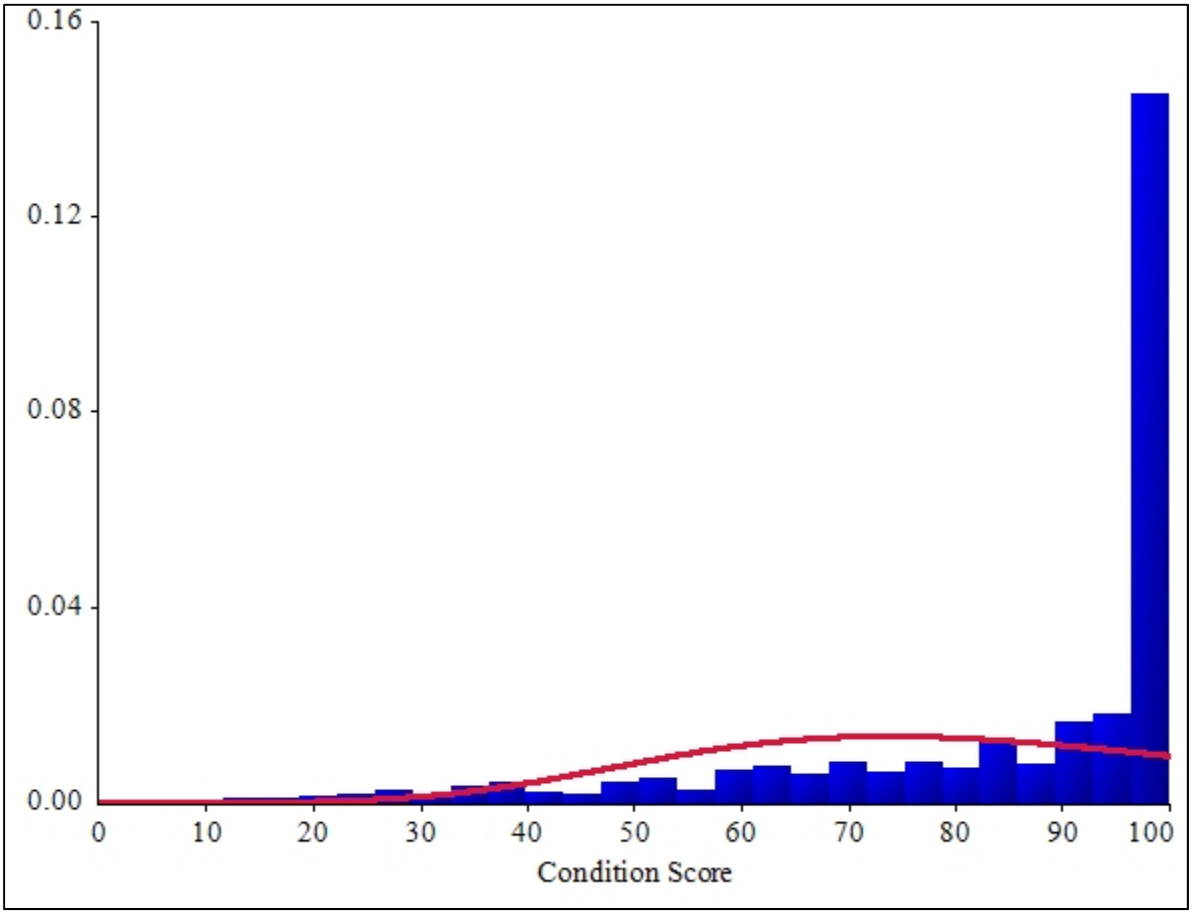

Figure C31.1. Histogram for Condition Score for Treatments Applied in Dallas District (All Pavements, 2008).

PMIS Condition Score by Treatment Category for Dallas District (All Pavements, 2008)

Table C31.2. Condition Score for Treatments Applied in Dallas District (All Pavements, 2008).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	4.0	77.3	99.0	100.0	100.0
Light Rehabilitation	1.0	78.0	93.0	100.0	100.0
Medium Rehabilitation	25.0	75.0	95.0	99.5	100.0
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 682

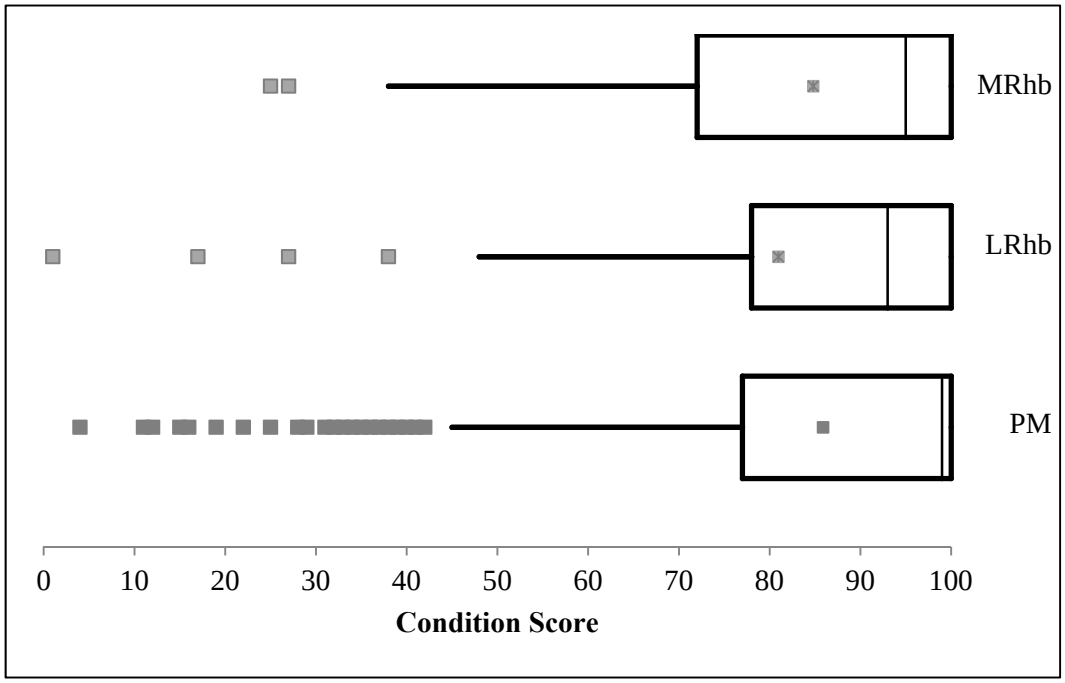

Figure C31.2. Box Plots for Condition Score for Treatments Applied in Dallas District, 2008.

PMIS Distress Score by Treatment Category for Dallas District (All Pavements, 2008)

Table C32.1. Distress Score versus Treatment Category (All Pavement Types, 2008).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	242	0	-	-	-	-
Preventive Maintenance	276	574	14	100	91.03	16.03
Light Rehabilitation	81	33	2	100	92.36	23.20
Medium Rehabilitation	70	75	64	100	93.80	10.23
Heavy Rehabilitation	13	0	-	-	-	-

Total number of sections analyzed: 682

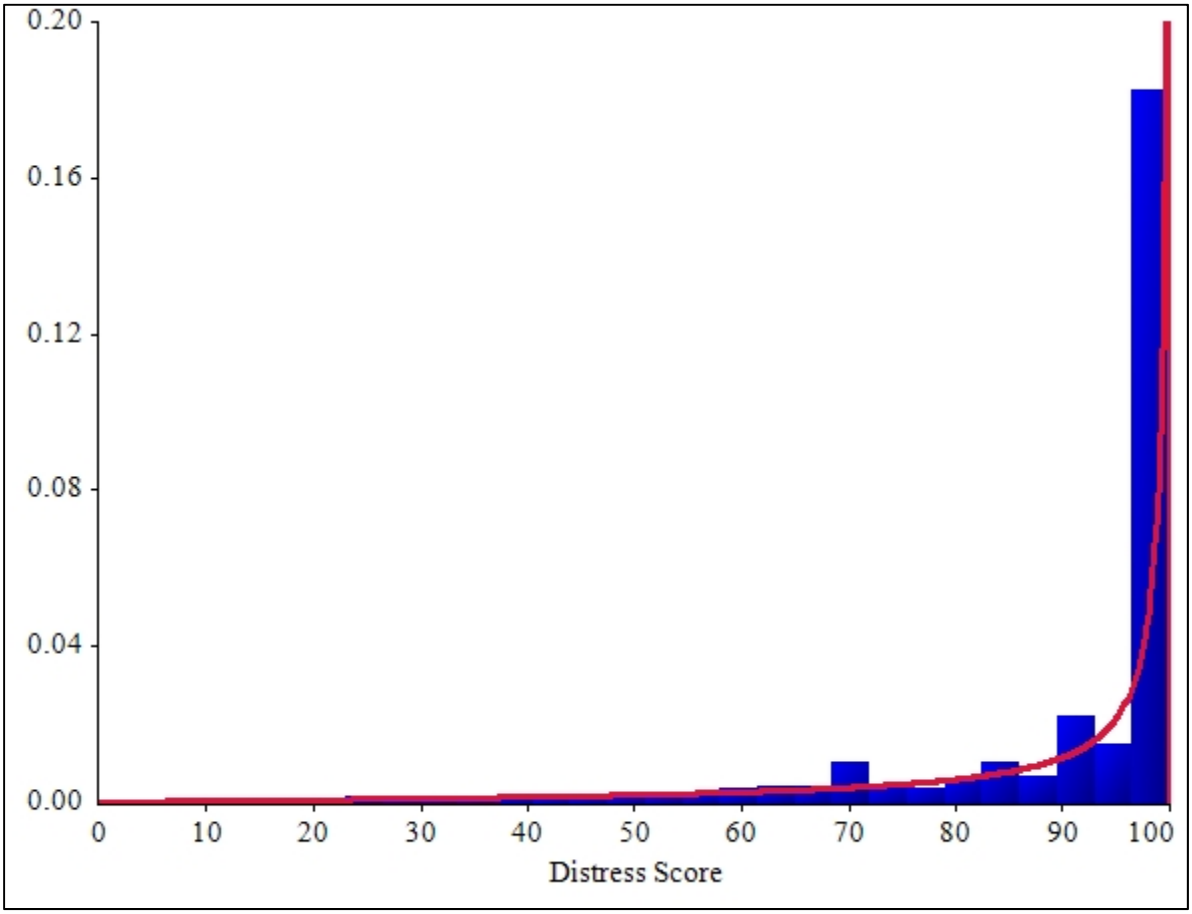

Figure C32.1. Histogram for Distress Score for Treatments Applied in Dallas District (All Pavements, 2008).

PMIS Distress Score by Treatment Category for Dallas District (All Pavements, 2008)

Table C32.2. Distress Score for Treatments Applied in Dallas (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	14.0	90.0	100.0	100.0	100.0
Light Rehabilitation	2.0	100.0	100.0	100.0	100.0
Medium Rehabilitation	64.0	91.0	99.0	100.0	100.0
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 682

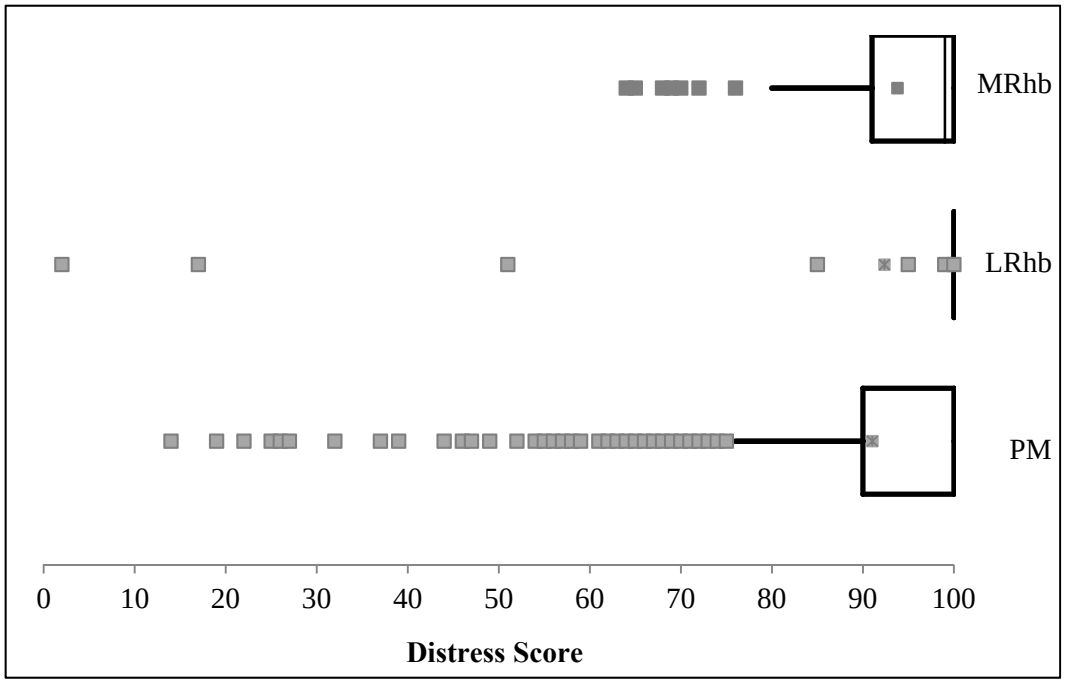

Figure C32.2. Box Plots for Distress Score for Treatments Applied in Dallas (All Pavements, 2008).

PMIS Ride Score by Treatment Category for Dallas District (All Pavements, 2008)

Table C33.1. Ride Score versus Treatment Category (All Pavement Types, 2008).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	242	0	-	-	-	-
Preventive Maintenance	276	574	0.9	4.8	3.18	0.73
Light Rehabilitation	81	33	2.1	4.7	3.22	0.70
Medium Rehabilitation	70	75	1.5	4.1	3.02	0.56
Heavy Rehabilitation	13	0	-	-	-	-

Total number of sections analyzed: 682

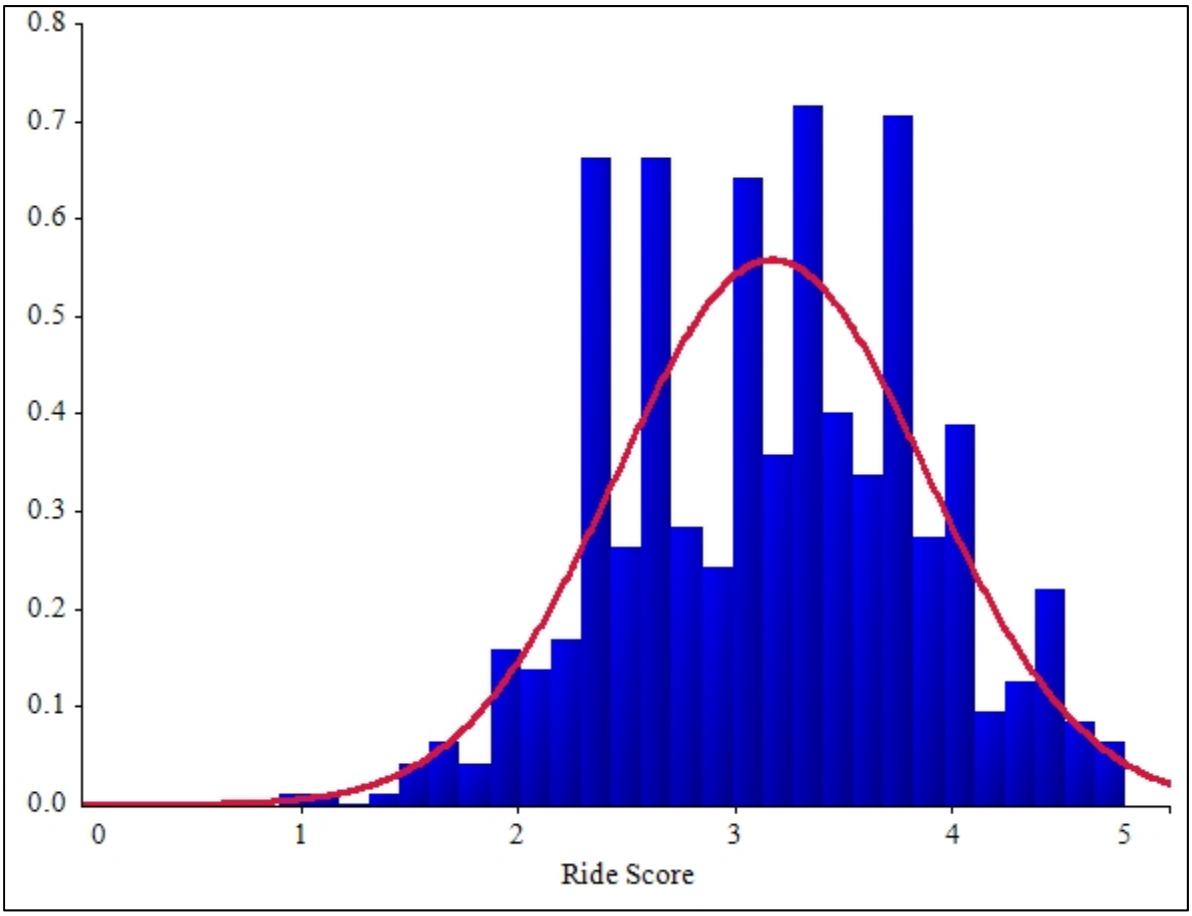

Figure C33.1. Histogram for Ride Score for Treatments Applied in Dallas District (All Pavements, 2008).

PMIS Ride Score by Treatment Category for Dallas District (All Pavements, 2008)

Table C33.2. Ride Score for Treatments Applied in Dallas District (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	0.9	2.6	3.2	3.7	4.8
Light Rehabilitation	2.1	2.8	3.2	3.4	4.7
Medium Rehabilitation	1.5	2.6	3.1	3.4	4.1
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 682

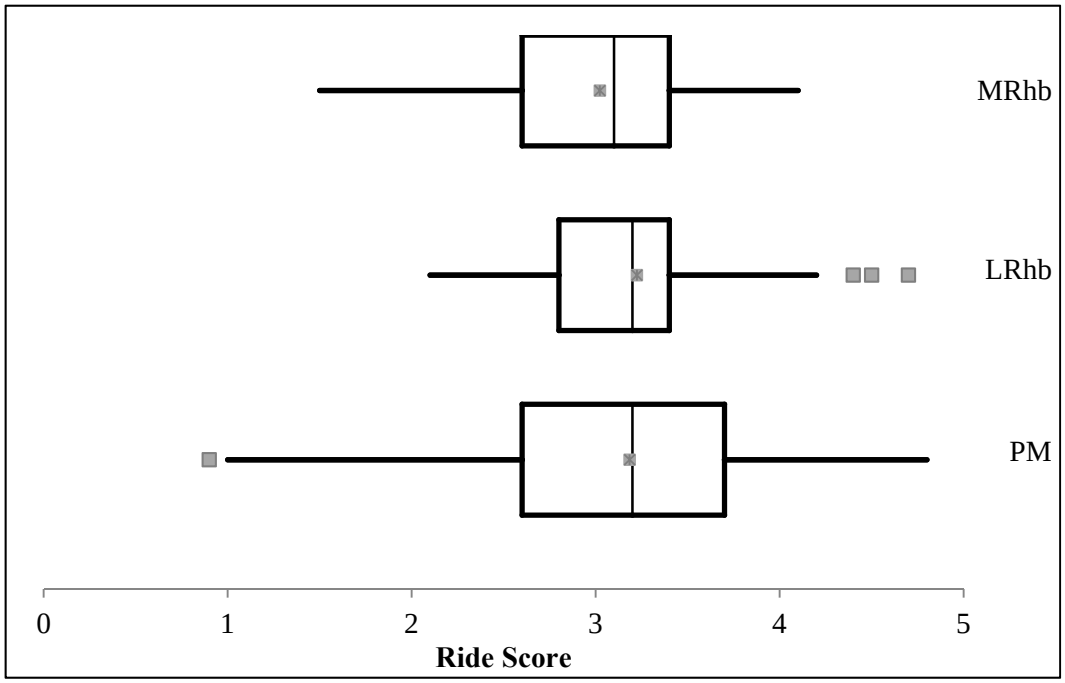

Figure C33.2. Box Plots for Ride Score for Treatments Applied in Dallas District (All Pavements, 2008).

PMIS Condition Score by Treatment Category for Dallas District (All Pavements, 2007)

Table C34.1. Condition Score versus Treatment Category (All Pavements 2007).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	326	0	-	-	-	-
Preventive Maintenance	300	513	2	100	87.26	21.14
Light Rehabilitation	68	222	1	100	70.07	31.59
Medium Rehabilitation	137	113	3	100	81.28	27.25
Heavy Rehabilitation	66	49	5	100	69.90	32.35

Total number of sections analyzed: 897

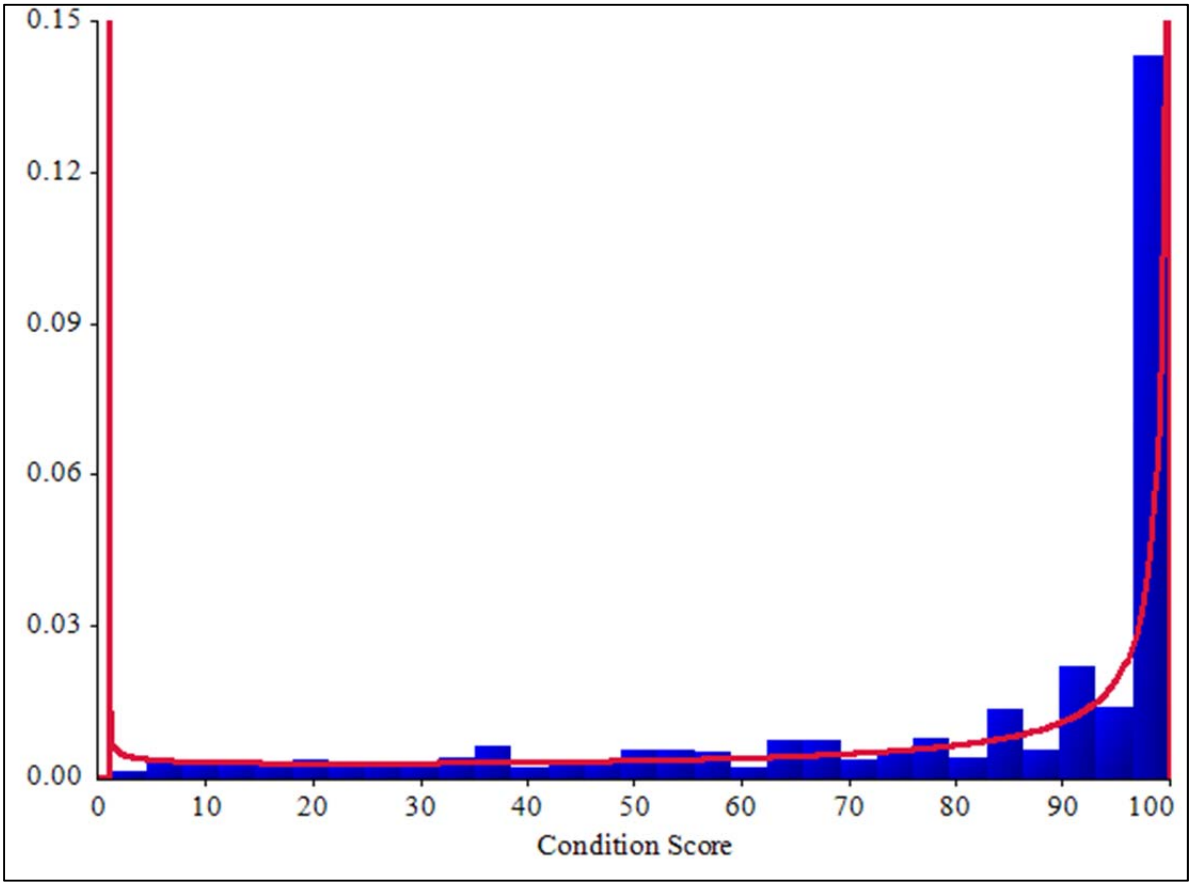

Figure C34.1. Histogram for Condition Score for Treatments Applied in Dallas District (All Pavements, 2007).

PMIS Condition Score by Treatment Category for Dallas District (All Pavements, 2007)

Table C34.2. Condition Score for Treatments Applied in Dallas District (All Pavements, 2007).

Treatment Category	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	2.0	83.0	100.0	100.0	100.0
Light Rehabilitation	1.0	47.3	83.0	100.0	100.0
Medium Rehabilitation	3.0	73.0	93.0	100.0	100.0
Heavy Rehabilitation	5.0	43.0	84.0	100.0	100.0

Total number of sections analyzed: 897

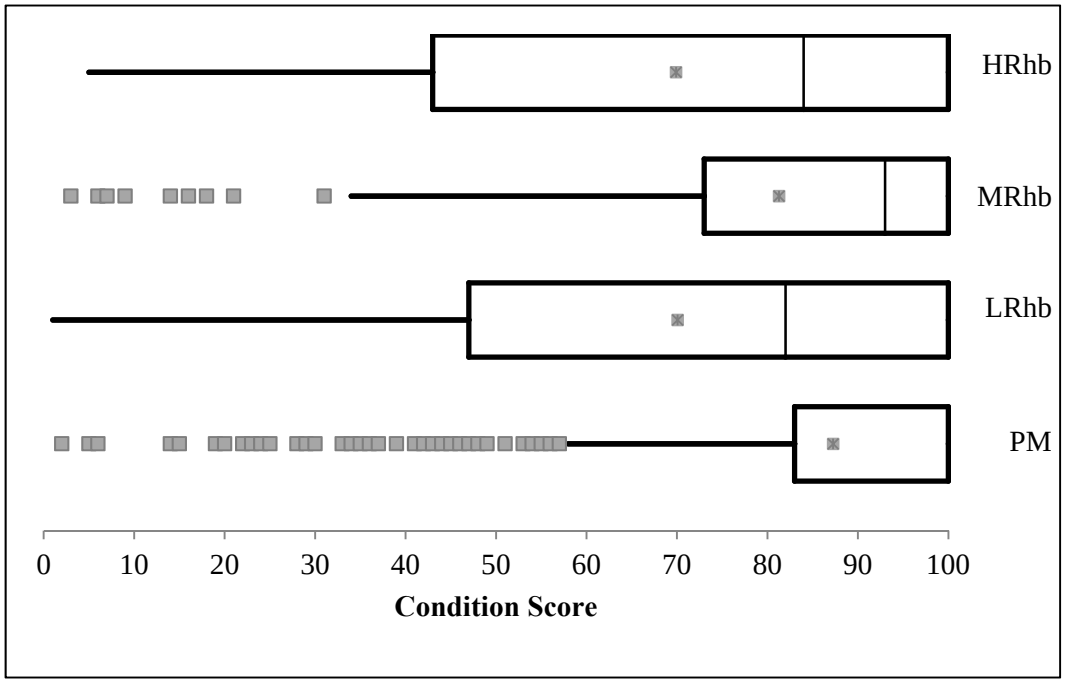

Figure C34.2. Box Plots for Condition Score for Treatments Applied in Dallas District, 2007.

PMIS Distress Score by Treatment Category for Dallas District (All Pavements, 2007)

Table C35.1. Distress Score versus Treatment Category (All Pavement Types, 2007).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	326	0	-	-	-	-
Preventive Maintenance	300	513	6	100	93.05	15.75
Light Rehabilitation	68	222	1	100	81.85	27.99
Medium Rehabilitation	137	113	5	100	82.89	26.42
Heavy Rehabilitation	66	49	9	100	71.71	31.56

Total number of sections analyzed: 897

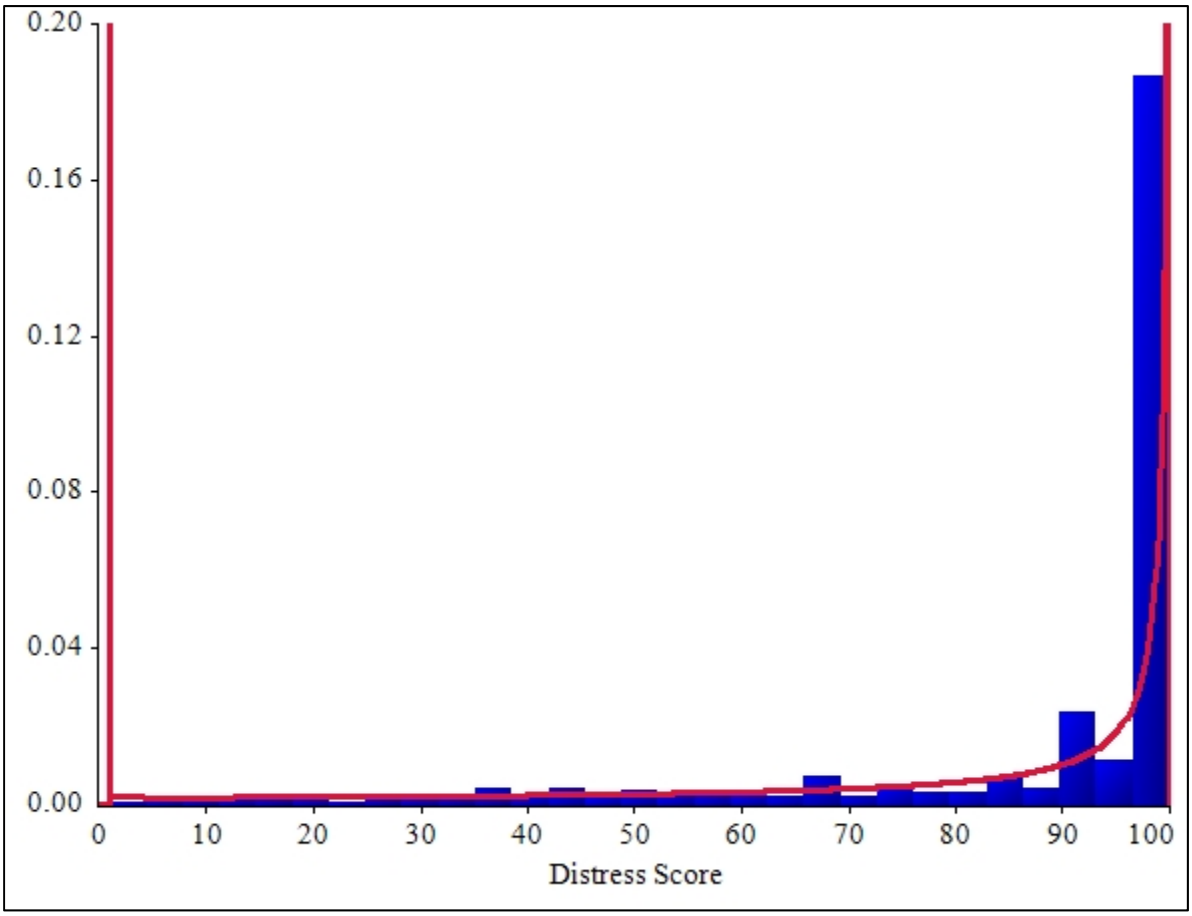

Figure C35.1. Histogram for Distress Score for Treatments Applied in Dallas District (All Pavements, 2007).

PMIS Distress Score by Treatment Category for Dallas District (All Pavements, 2007)

Table C35.2. Distress Score for Treatments Applied in Dallas (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	6.0	94.0	100.0	100.0	100.0
Light Rehabilitation	1.0	69.0	100.0	100.0	100.0
Medium Rehabilitation	5.0	84.0	94.0	100.0	100.0
Heavy Rehabilitation	9.0	44.0	87.0	100.0	100.0

Total number of sections analyzed: 897

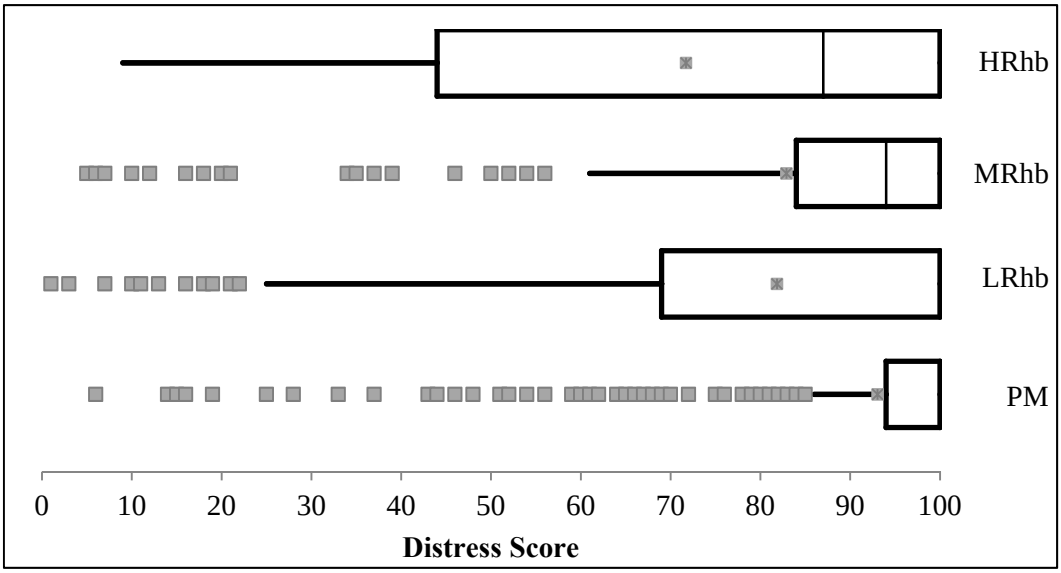

Figure C35.2. Box Plots for Distress Score for Treatments Applied in Dallas (All Pavements, 2007).

PMIS Ride Score by Treatment Category for Dallas District (All Pavements, 2007)

Table C36.1. Ride Score versus Treatment Category (All Pavement Types, 2007).

Treatment Category	PMIS Frequency	Dallas Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	326	0	-	-	-	-
Preventive Maintenance	300	513	0.7	4.6	3.26	0.63
Light Rehabilitation	68	222	1.1	4.1	2.99	0.53
Medium Rehabilitation	137	113	2.5	4.6	3.77	0.52
Heavy Rehabilitation	66	49	2.3	4.6	3.48	0.47

Total number of sections analyzed: 897

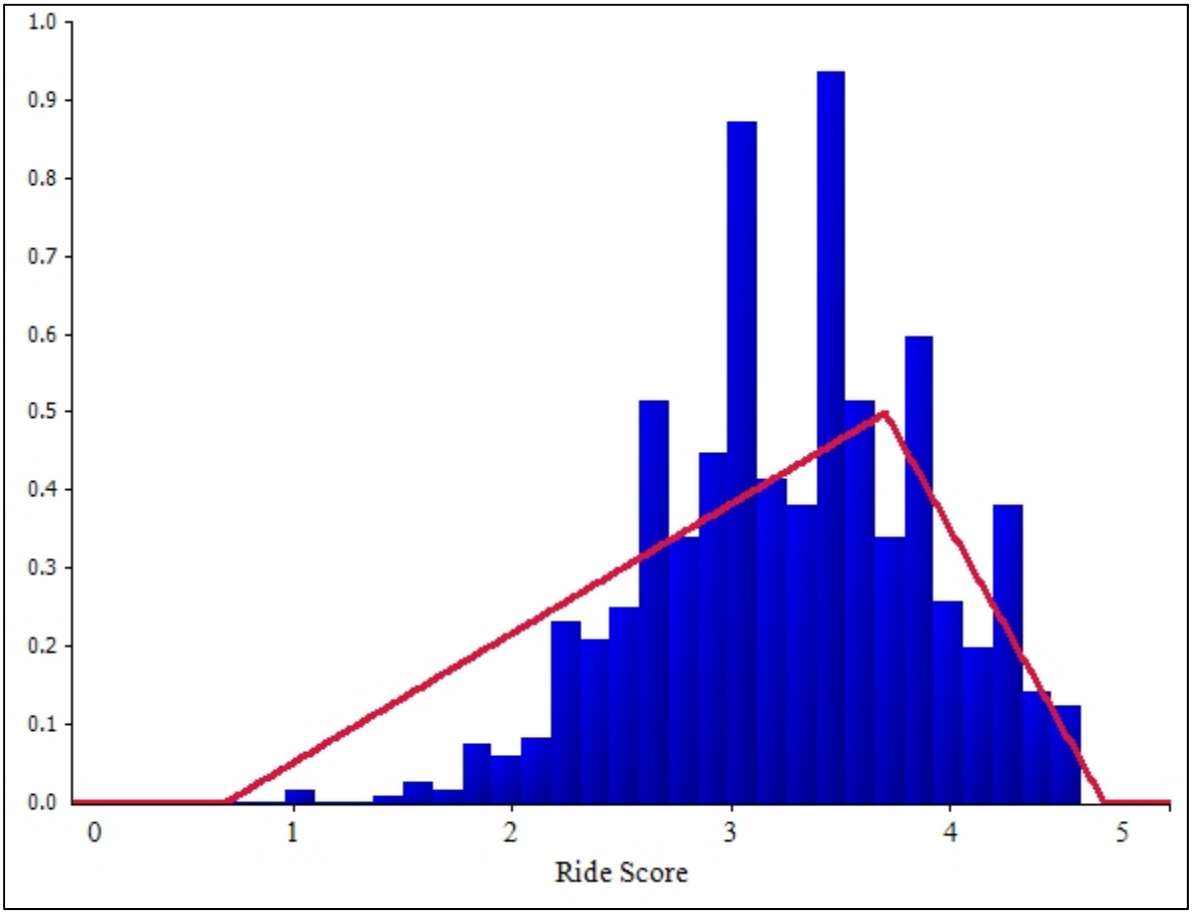

Figure C36.1. Histogram for Ride Score for Treatments Applied in Dallas District (All Pavements, 2007).

PMIS Ride Score by Treatment Category for Dallas District (All Pavements, 2007)

Table C36.2. Ride Score for Treatments Applied in Dallas District (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	0.7	2.9	3.3	3.7	4.6
Light Rehabilitation	1.1	2.6	3.0	3.4	4.1
Medium Rehabilitation	2.5	3.4	3.9	4.2	4.6
Heavy Rehabilitation	2.3	3.1	3.5	3.7	4.6

Total number of sections analyzed: 897

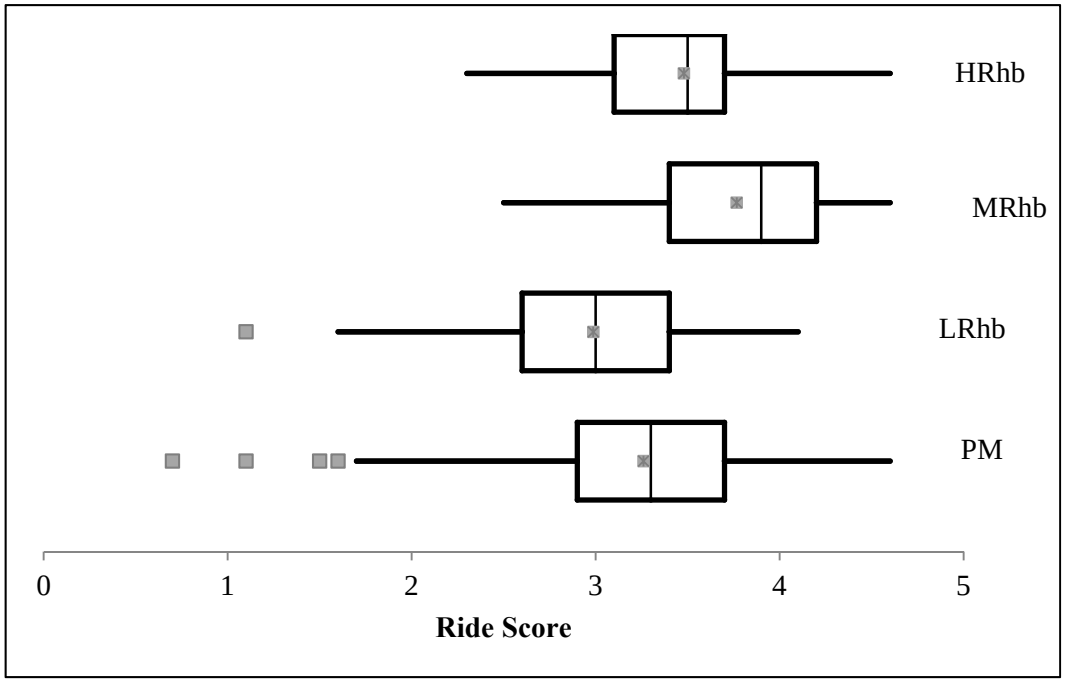

Figure C36.2. Box Plots for Ride Score for Treatments Applied in Dallas District (All Pavements, 2007).

APPENDIX C
COMPARISON OF PMIS SCORES FOR TREATMENTS APPLIED IN THE DISTRICT WITH PMIS TREATMENT RECOMMENDATIONS 2007–2009

EL PASO DISTRICT

Table C1. Condition Scores by Treatment Category, El Paso District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	102	0	59	100	97.1	7.43
Preventive Maintenance	88	287	37	100	76.1	16.47
Light Rehabilitation	16	0	55	100	89.9	13.96
Medium Rehabilitation	50	0	27	84	59.2	13.84
Heavy Rehabilitation	31	0	10	53	31.5	13.12

Table C2. Distress Scores by Treatment Category, El Paso District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	102	0	59	100	97.4	7.19
Preventive Maintenance	88	287	37	100	76.7	16.62
Light Rehabilitation	16	0	56	100	93.8	13.68
Medium Rehabilitation	50	0	38	100	80.0	15.66
Heavy Rehabilitation	31	0	44	100	78.2	19.71

Table C3. Ride Scores by Treatment Category, El Paso District (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	102	0	2.5	4.3	3.6	0.47
Preventive Maintenance	88	287	2.5	4.4	3.5	0.45
Light Rehabilitation	16	0	2	2.4	2.2	0.16
Medium Rehabilitation	50	0	1.5	3.4	2.3	0.57
Heavy Rehabilitation	31	0	0.6	2.4	1.5	0.52

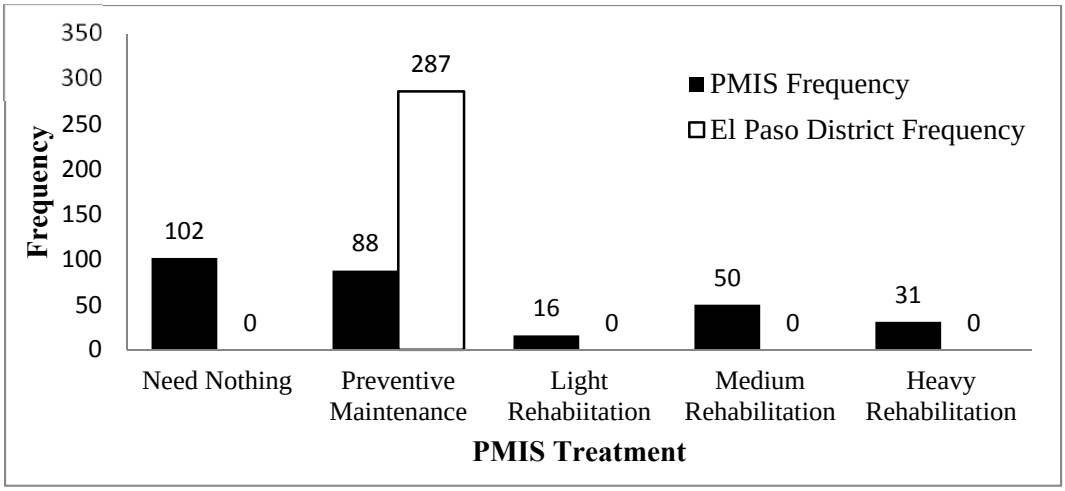

Figure C1. Frequency by PMIS Treatment for El Paso District, All Pavements (2007–2009).

PMIS Score for Treatments Applied in El Paso District (Asphalt Pavements, 2007–2009)

Table C4. Condition Scores by Treatment Category, El Paso District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	80	0	59	100	96.6	7.97
Preventive Maintenance	88	265	37	100	76.1	16.47
Light Rehabilitation	16	0	55	100	89.9	13.96
Medium Rehabilitation	50	0	27	84	59.2	13.84
Heavy Rehabilitation	31	0	10	53	31.5	13.12

Table C5. Distress Scores by Treatment Category, El Paso District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	80	0	59	100	96.6	7.98
Preventive Maintenance	88	265	37	100	76.7	16.62
Light Rehabilitation	16	0	56	100	93.8	13.68
Medium Rehabilitation	50	0	38	100	80.0	15.66
Heavy Rehabilitation	31	0	44	100	78.2	19.71

Table C6. Ride Scores by Treatment Category, El Paso District (Asphalt Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	80	0	2.5	4.3	3.5	0.46
Preventive Maintenance	88	265	2.5	4.4	3.5	0.45
Light Rehabilitation	16	0	2	2.4	2.2	0.16
Medium Rehabilitation	50	0	1.5	3.4	2.3	0.57
Heavy Rehabilitation	31	0	0.6	2.4	1.5	0.52

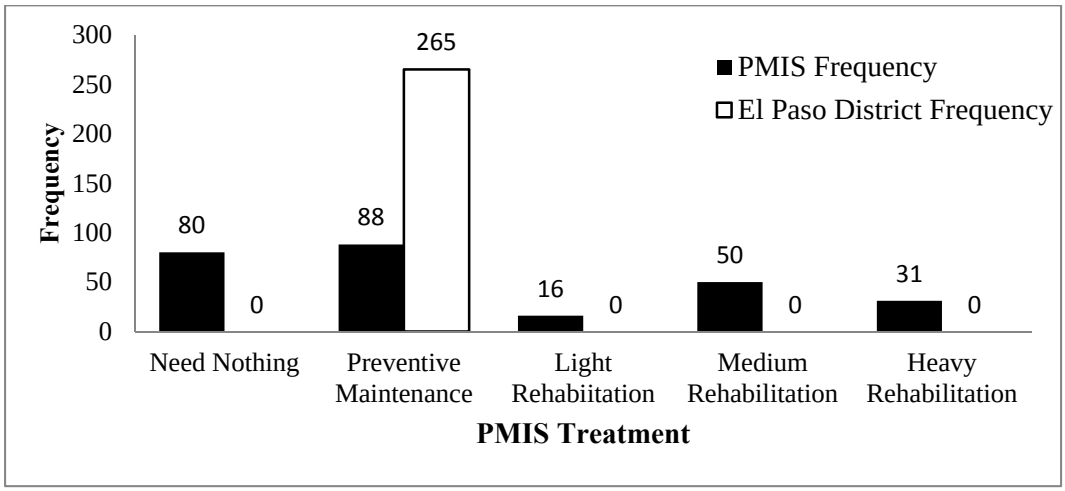

Figure C2. Frequency by PMIS Treatment for El Paso District, Asphalt Pavements (2007–2009).

PMIS Score for Treatments Applied in El Paso District (Concrete Pavements, 2007–2009)

Table C7. Condition Scores by Treatment Category, El Paso District (Concrete Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	22	0	78	100	99.0	4.69
Preventive Maintenance	0	22	0	0	-	-
Light Rehabilitation	0	0	0	0	-	-
Medium Rehabilitation	0	0	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

Table C8. Distress Scores by Treatment Category, El Paso District (Concrete Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	22	0	100	100	100.0	0
Preventive Maintenance	0	22	0	-	-	-
Light Rehabilitation	0	0	0	-	-	-
Medium Rehabilitation	0	0	0	-	-	-
Heavy Rehabilitation	0	0	0	-	-	-

Table C9. Ride Scores by Treatment Category, El Paso District (Concrete Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	22	0	2.8	4.3	3.9	0.35
Preventive Maintenance	0	22	0	0	-	-
Light Rehabilitation	0	0	0	0	-	-
Medium Rehabilitation	0	0	0	0	-	-
Heavy Rehabilitation	0	0	0	0	-	-

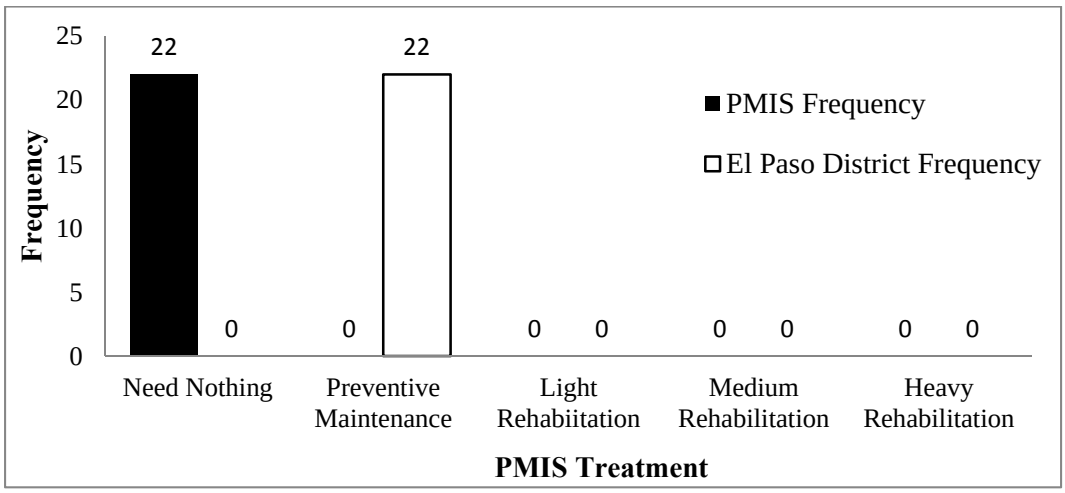

Figure C3. Frequency by PMIS Treatment for El Paso District, Concrete Pavements (2007–2009).

PMIS Score for Overlay Treatments Applied in El Paso District, 2007–2009

Table C10. Condition Score by Treatment Category for Overlay Treatments, El Paso District, 2007–2009.

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	58	0	59	100	96.2	8.22
Preventive Maintenance	40	128	37	97	73.1	16.63
Light Rehabilitation	0	0	0	0	0	0
Medium Rehabilitation	22	0	43	77	60.3	9.35
Heavy Rehabilitation	8	0	21	53	36.0	22.19

Table C11. Distress Score by Treatment Category for Overlay Treatments, El Paso District, 2007–2009.

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	58	0	59	100	96.2	8.22
Preventive Maintenance	40	128	37	97	74.5	17.17
Light Rehabilitation	0	0	0	0	0	0
Medium Rehabilitation	22	0	48	100	80.5	11.43
Heavy Rehabilitation	8	0	55	100	86.8	15.26

Table C12. Ride Score by Treatment Category for Overlay Treatments, El Paso District, 2007–2009.

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	58	0	2.6	4.3	3.7	0.34
Preventive Maintenance	40	128	2.8	4.2	3.5	0.36
Light Rehabilitation	0	0	0	0	0	0
Medium Rehabilitation	22	0	2.5	3.4	2.8	0.27
Heavy Rehabilitation	8	0	1.9	2.4	2.2	0.17

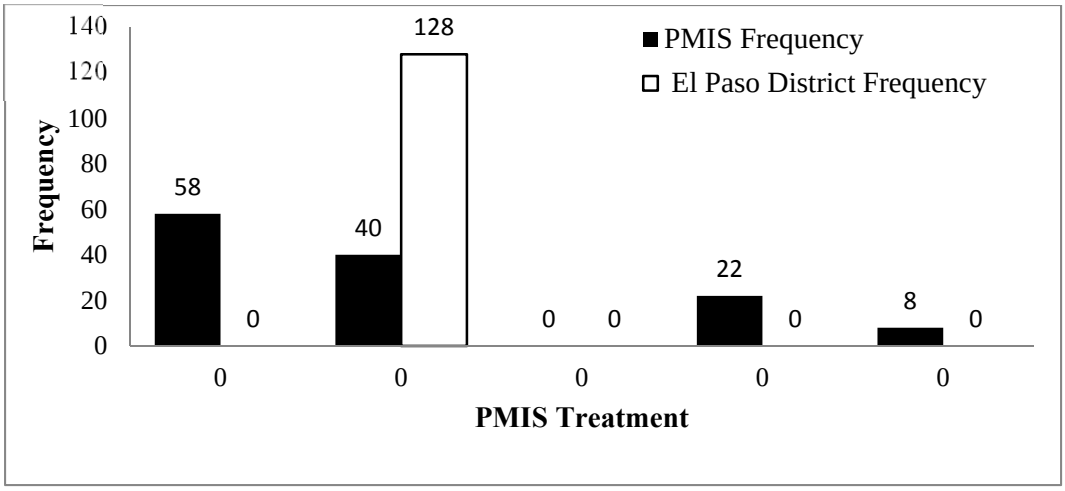

Figure C4. Frequency by Overlay Treatment (El Paso District, 2007–2009).

PMIS Score for Seal Coat Treatments Applied in El Paso District, 2007–2009

Table C13.Condition Score by Treatment Category for Seal Coat Treatments, El Paso District, 2007–2009.

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	26	-	68	100	98.0	6.79
Preventive Maintenance	48	139	52	100	78.6	16.08
Light Rehabilitation	16	-	55	100	89.9	14.00
Medium Rehabilitation	26	-	27	84	58.2	16.64
Heavy Rehabilitation	23	-	10	52	29.9	13.90

Table C14. Distress Score by Treatment Category for Seal Coat Treatments, El Paso District, 2007–2009.

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	26	-	68	100	98.1	6.68
Preventive Maintenance	48	139	52	100	78.6	16.09
Light Rehabilitation	16	-	56	100	93.8	13.68
Medium Rehabilitation	26	-	38	100	79.5	18.48
Heavy Rehabilitation	23	-	44	100	75.2	20.49

Table C15. Ride Score by Treatment Category for Seal Coat Treatments, El Paso District, 2007–2009.

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	26	-	2.5	3.7	3.0	0.37
Preventive Maintenance	48	139	2.5	4.4	3.4	0.51
Light Rehabilitation	16	-	2.0	2.4	2.2	0.16
Medium Rehabilitation	26	-	1.5	2.8	1.8	0.30
Heavy Rehabilitation	23	-	0.6	2.0	1.2	0.34

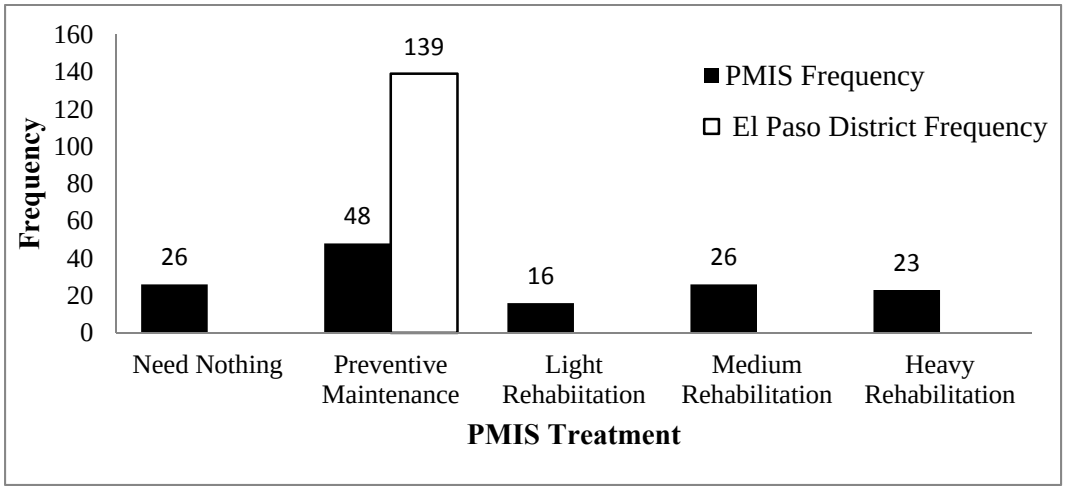

Figure C5. Frequency by Seal Coat Treatment (El Paso District, 2007–2009).

PMIS Score for Two C.S.T. Treatments Applied in El Paso District, 2007–2009

Table C16. Condition Score by Treatment Category for Two C.S.T. Treatments, El Paso District, 2007–2009.

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	18	-	78	100	98.7	5.18
Preventive Maintenance	0	20	0	0	-	-
Light Rehabilitation	0	-	0	0	-	-
Medium Rehabilitation	2	-	43	77	60.0	24.04
Heavy Rehabilitation	0	-	0	0	-	-

Table C17. Distress Score by Treatment Category for Two C.S.T. Treatments, El Paso District, 2007–2009.

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	18	-	100	100	100.0	0.00
Preventive Maintenance	0	20	0	0	-	-
Light Rehabilitation	0	-	0	0	-	-
Medium Rehabilitation	2	-	61	99	80.0	26.87
Heavy Rehabilitation	0	-	0	0	-	-

Table C18. Ride Score by Treatment Category for Two C.S.T. Treatments, El Paso District, 2007–2009.

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	18	-	2.8	4.3	3.9	0.37
Preventive Maintenance	0	20	0	0	-	-
Light Rehabilitation	0	-	0	0	-	-
Medium Rehabilitation	2	-	2.7	2.8	2.8	0.07
Heavy Rehabilitation	0	-	0	0	-	-

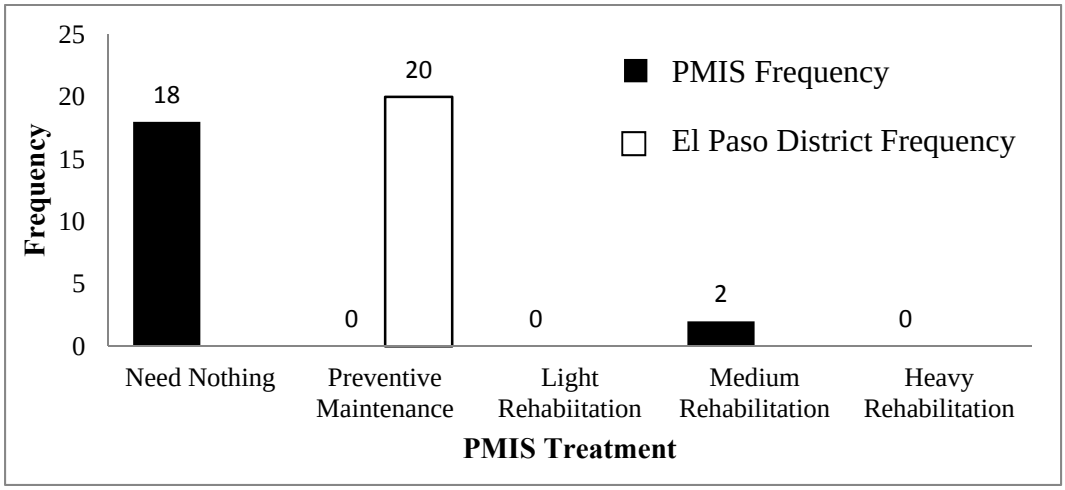

Figure C6. Frequency by Two C.S.T. Treatment (El Paso District, 2007–2009).

PMIS Condition Score by Treatment Category for El Paso District (All Pavements, 2007–2009)

Table C19.1. Condition Score by PMIS Treatment Category (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	127	0	-	-	-	-
Preventive Maintenance	58	257	1	100	86.15	20.93
Light Rehabilitation	24	0	-	-	-	-
Medium Rehabilitation	30	0	-	-	-	-
Heavy Rehabilitation	18	0	-	-	-	-

Total number of sections analyzed: 257

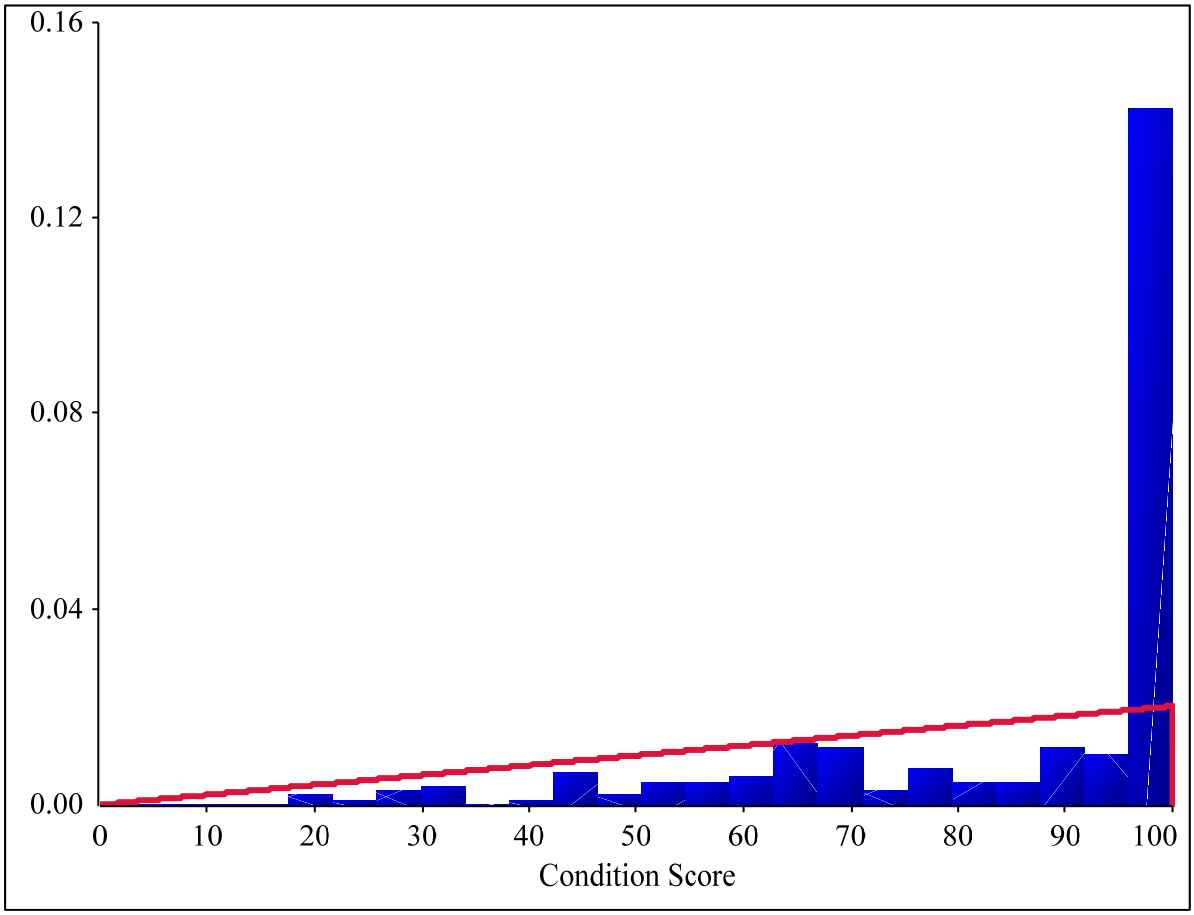

Figure C19.1. Histogram for Condition Score for Treatments Applied in El Paso District (All Pavements, 2007–2009).

PMIS Condition Score by Treatment Category for El Paso District (All Pavements, 2007–2009)

Table C19.2. Condition Score for Treatments Applied in El Paso (All Pavements, 2007–2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.0	75.0	99.0	100.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 257

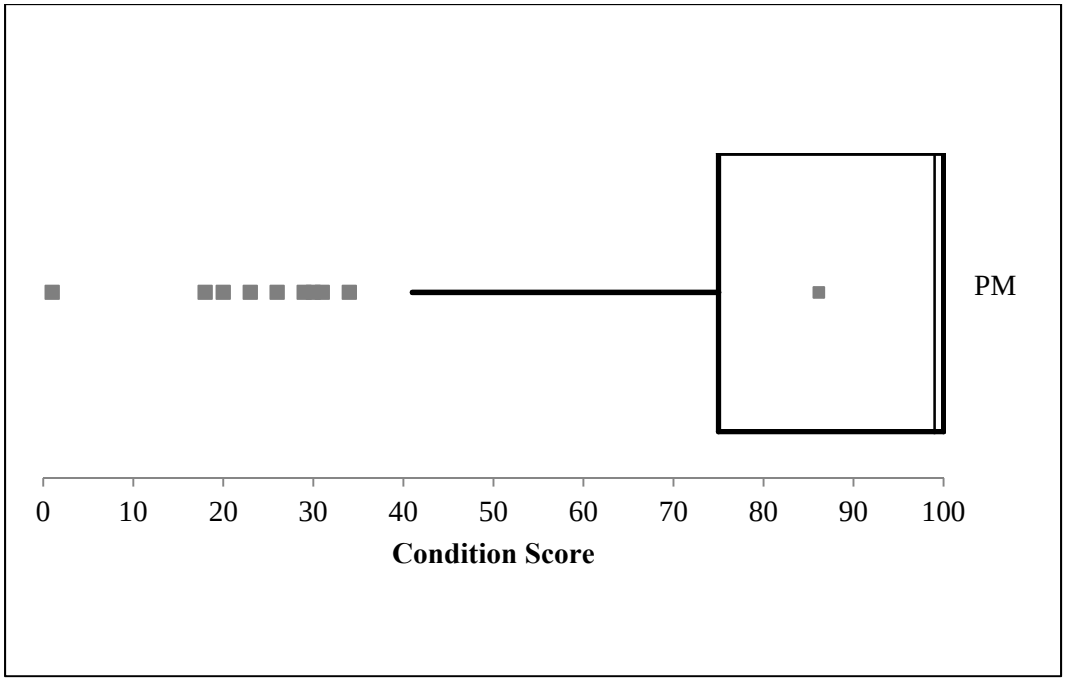

Figure C19.2. Box Plots for Condition Score for Treatments Applied in El Paso (All Pavements, 2007–2009).

PMIS Distress Score by Treatment Category for El Paso District (All Pavements, 2007–2009)

Table C20.1. Distress Score by PMIS Treatment Category (All Pavements, 2007–2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	127	0	-	-	-	-
Preventive Maintenance	58	257	42	100	92.88	12.76
Light Rehabilitation	24	0	-	-	-	-
Medium Rehabilitation	30	0	-	-	-	-
Heavy Rehabilitation	18	0	-	-	-	-

Total number of sections analyzed: 257

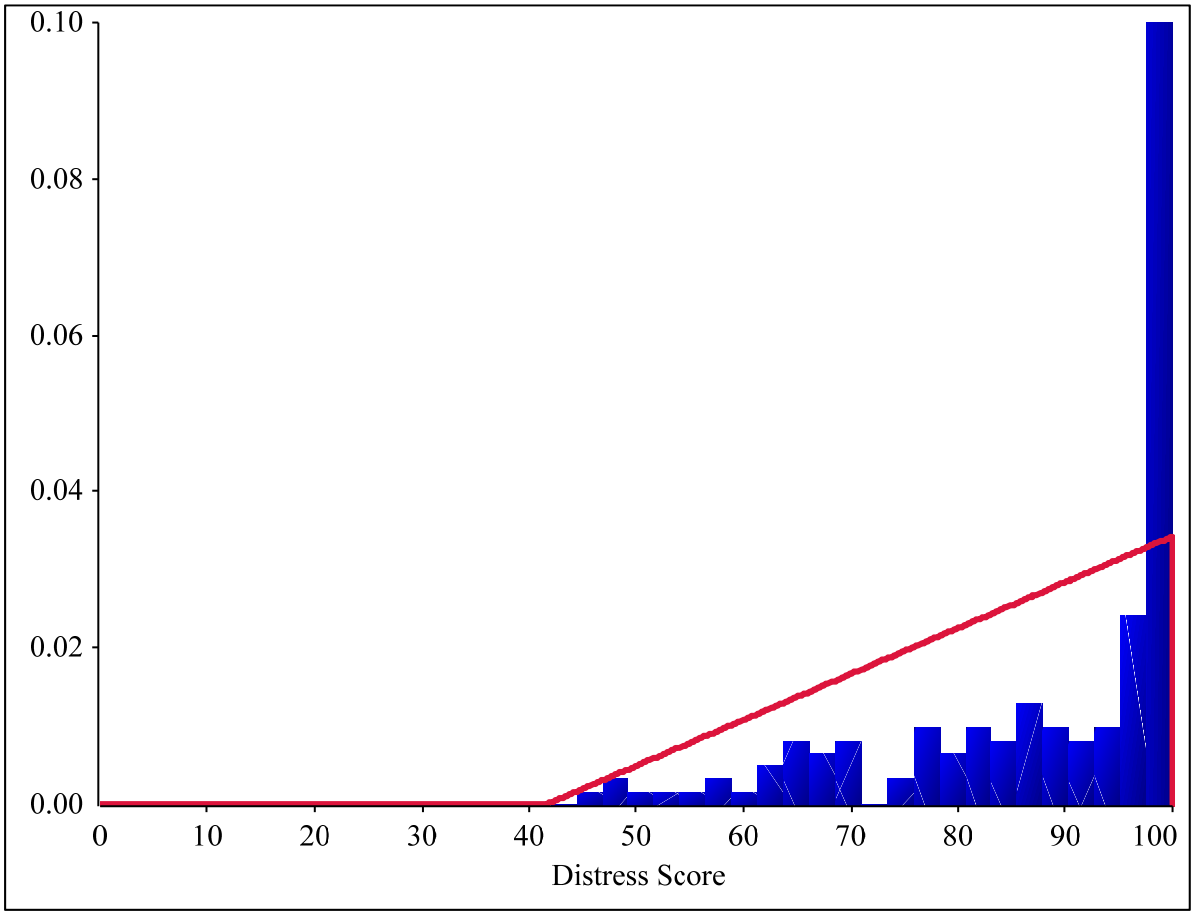

Figure C20.1. Histogram for Distress Score for Treatments Applied in El Paso District (All Pavements, 2007–2009).

PMIS Distress Score by Treatment Category for El Paso District (All Pavements, 2007–2009)

Table C20.2. Distress Score for Treatments Applied in El Paso, (All Pavements, 2007–2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	42.0	91.0	100.0	100.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 257

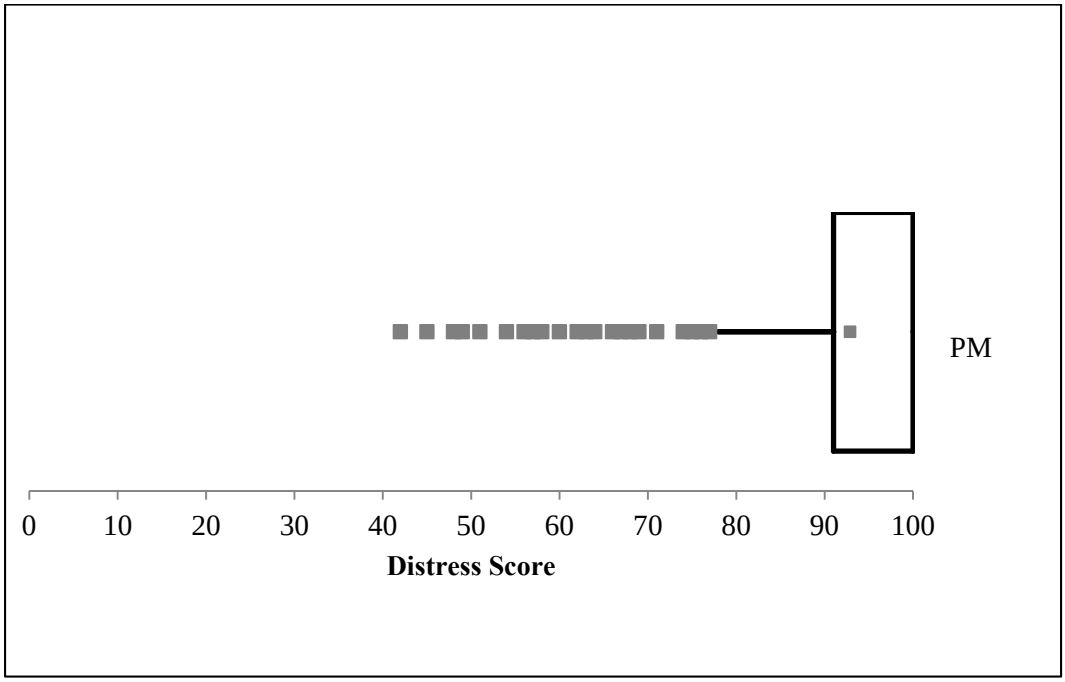

Figure C20.2. Box Plots for Distress Score for Treatments Applied in El Paso (All Pavements, 2007–2009).

PMIS Ride Score by Treatment Category for El Paso District (All Pavements, 2007–2009)

Table C21.1. Ride Score by PMIS Treatment Category, All Pavements, 2007–2009.

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	127	0	-	-	-	-
Preventive Maintenance	58	257	0.3	4.9	3.15	0.94
Light Rehabilitation	24	0	-	-	-	-
Medium Rehabilitation	30	0	-	-	-	-
Heavy Rehabilitation	18	0	-	-	-	-

Total number of sections analyzed: 257

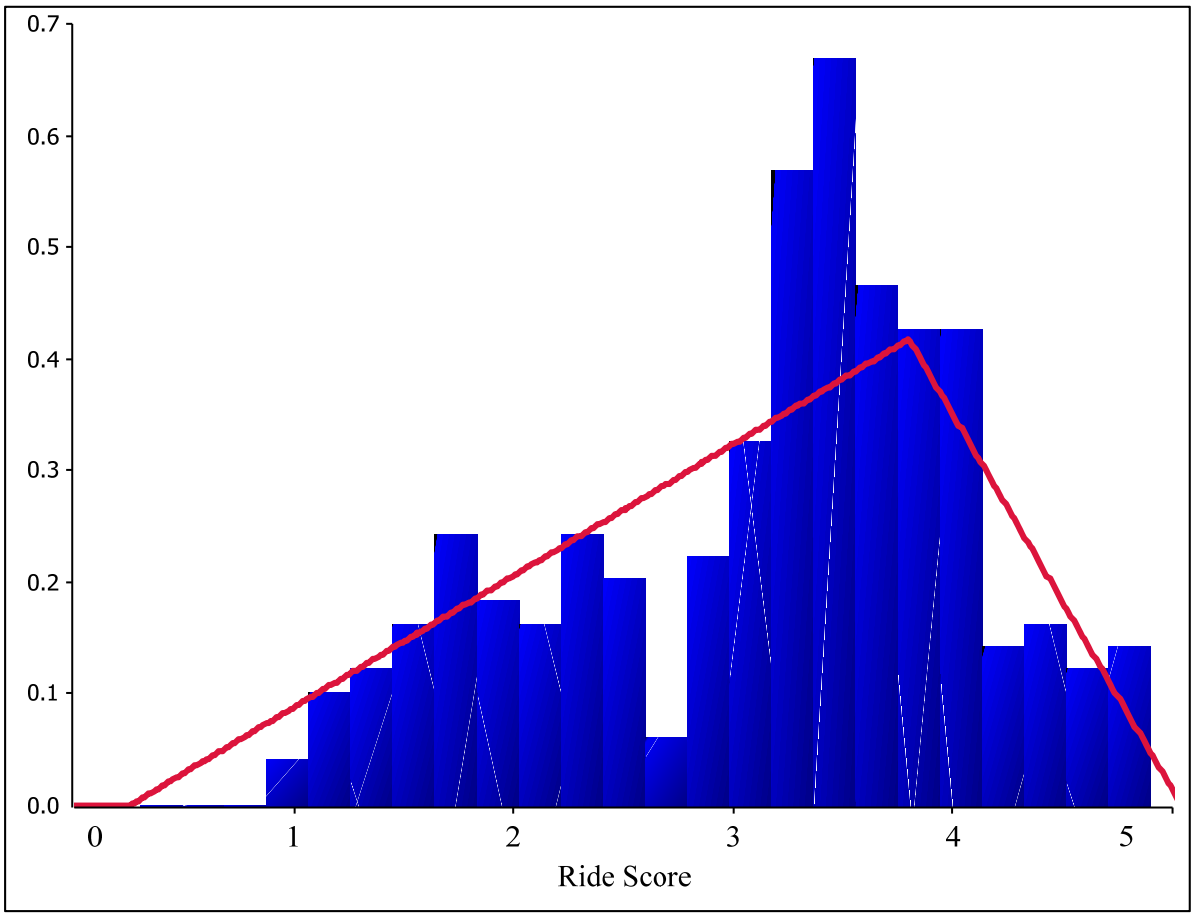

Figure C21.1. Histogram for Ride Score for Treatments Applied in El Paso District (All Pavements, 2007–2009).

PMIS Ride Score by Treatment Category for El Paso District (All Pavements, 2007–2009)

Table C21.2. Ride Score for Treatments Applied in El Paso (All Pavements, 2007–2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	0.3	2.5	3.3	3.8	4.9
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 257

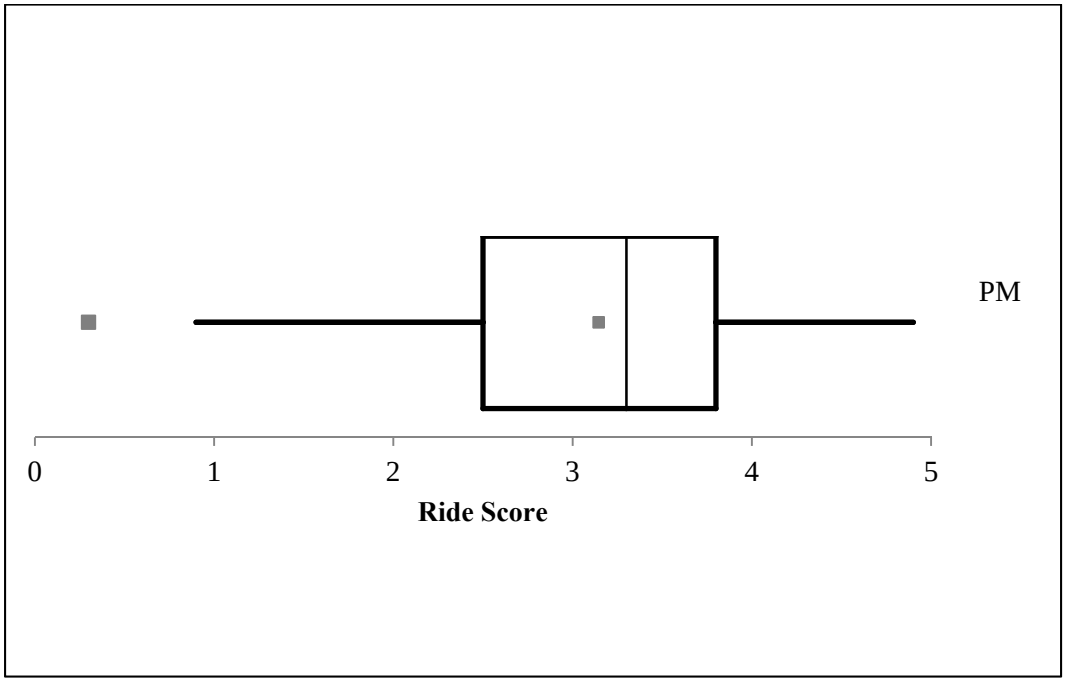

Figure C21.2. Box Plots for Ride Score for Treatments Applied in El Paso (All Pavements, 2007–2009).

PMIS Condition Score by Treatment Category for El Paso District (All Pavements, 2009)

Table C22.1. Condition Score by PMIS Treatment Category (All Pavements, 2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	32	0	-	-	-	-
Preventive Maintenance	6	40	45	100	93.80	12.84
Light Rehabilitation	1	0	-	-	-	-
Medium Rehabilitation	0	0	-	-	-	-
Heavy Rehabilitation	1	0	-	-	-	-

Total number of sections analyzed: 40

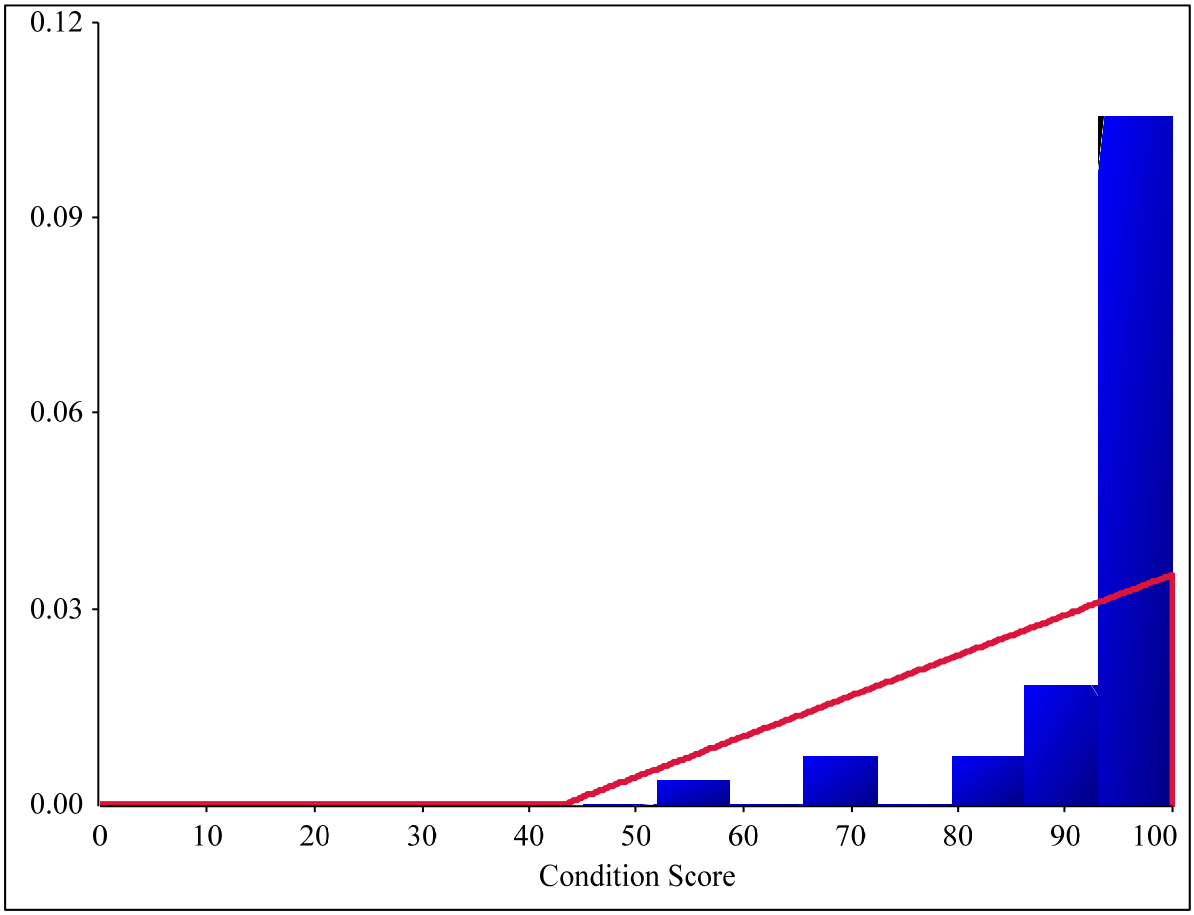

Figure C22.1. Histogram for Condition Score for Treatments Applied in El Paso District (All Pavements, 2009).

PMIS Condition Score by Treatment Category for El Paso District (All Pavements, 2009)

Table C22.2. Condition Score for Treatments Applied in El Paso (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	45.0	91.5	100.0	100.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 40

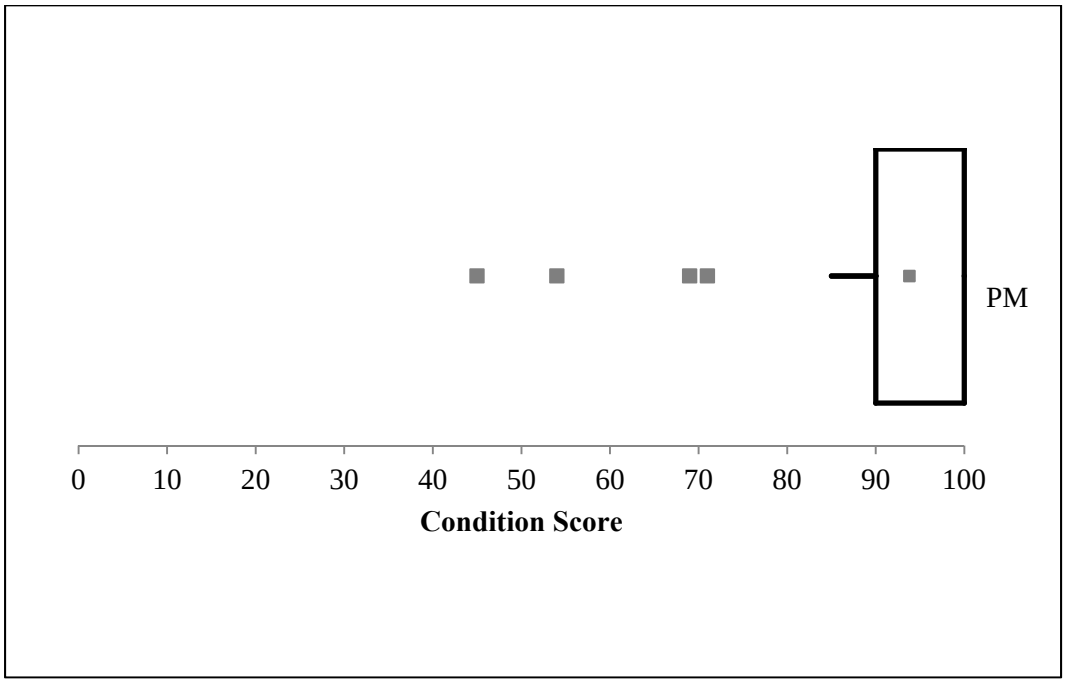

Figure C22.2. Box Plots for Condition Score for Treatments Applied in El Paso (All Pavements, 2009).

PMIS Distress Score by Treatment Category for El Paso District (All Pavements, 2009)

Table C23.1. Distress Score by PMIS Treatment Category (All Pavements, 2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	32	0	-	-	-	-
Preventive Maintenance	6	40	45	100	93.80	12.84
Light Rehabilitation	1	0	-	-	-	-
Medium Rehabilitation	0	0	-	-	-	-
Heavy Rehabilitation	1	0	-	-	-	-

Total number of sections analyzed: 40

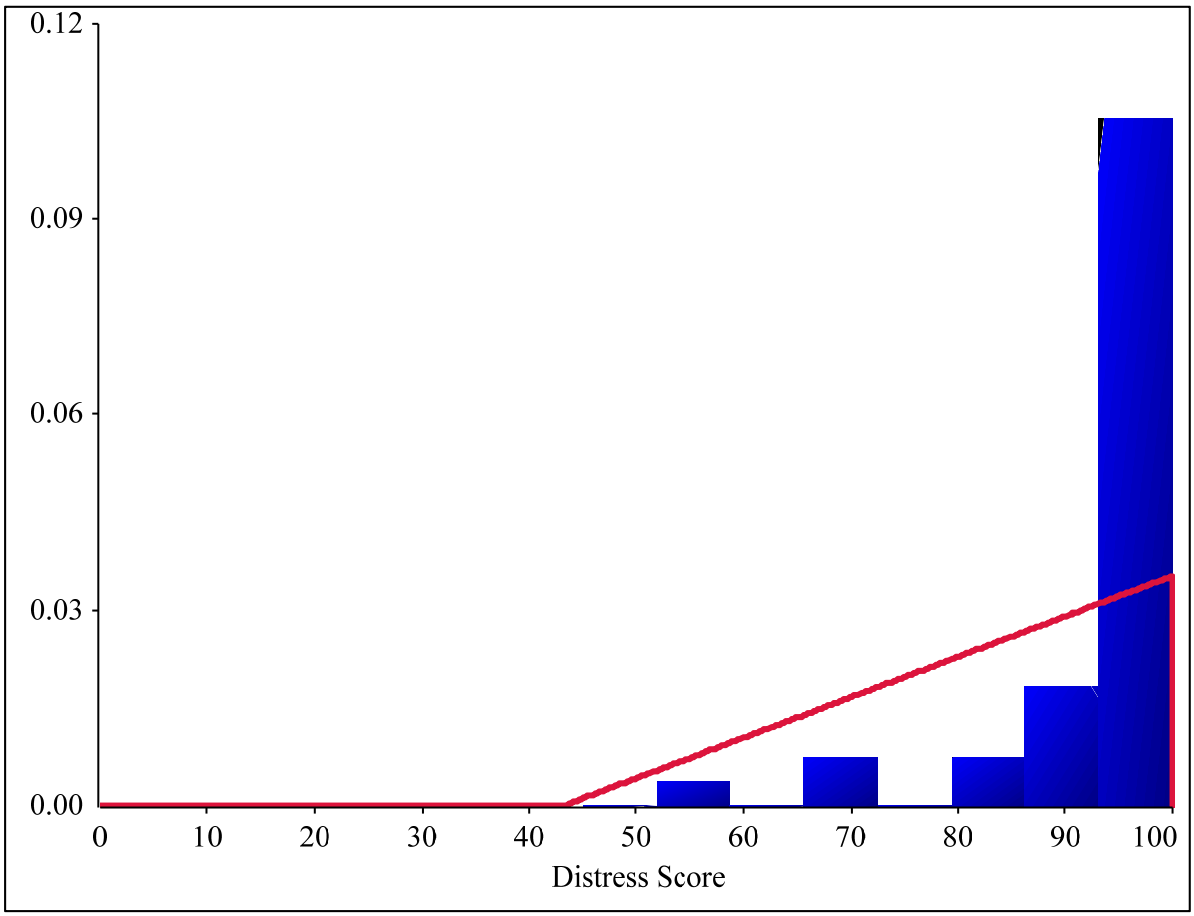

Figure C23.1. Histogram for Distress Score for Treatments Applied in El Paso District (All Pavements, 2009).

PMIS Distress Score by Treatment Category for El Paso District (All Pavements, 2009)

Table C23.2. Distress Score for Treatments Applied in El Paso (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	45.0	91.5	100.0	100.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 40

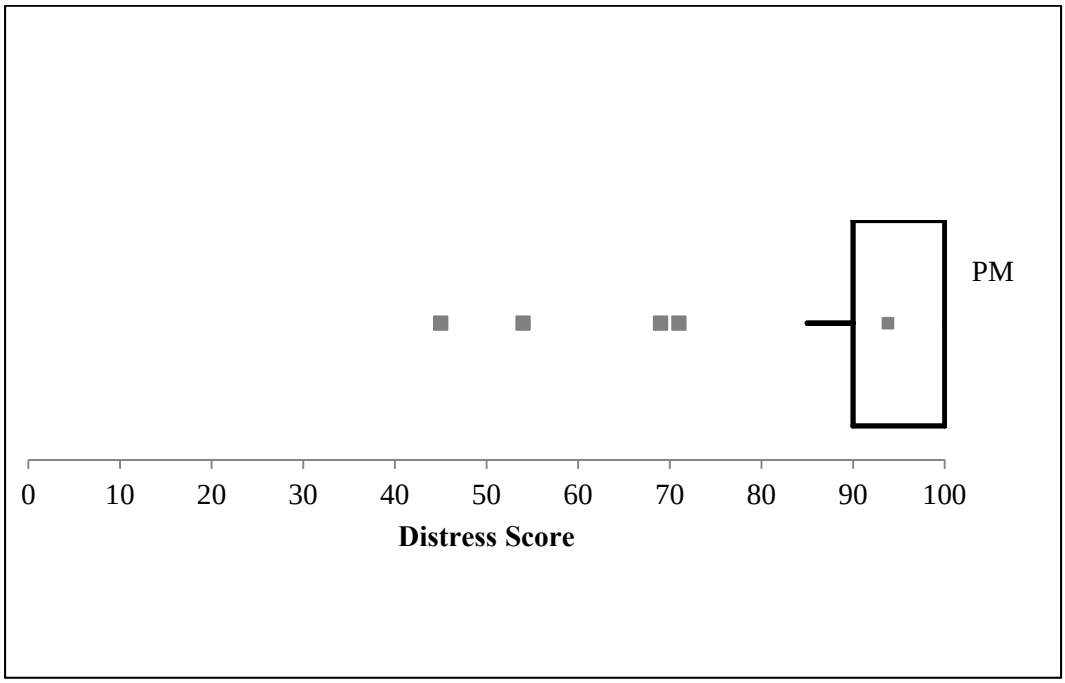

Figure C23.2. Box Plots for Distress Score for Treatments Applied in El Paso (All Pavements, 2009).

PMIS Ride Score by Treatment Category for El Paso District (All Pavements, 2009)

Table C24.1. Ride Score by PMIS Treatment Category (All Pavements, 2009).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	32	0	-	-	-	-
Preventive Maintenance	6	40	3.4	4.9	4.13	0.48
Light Rehabilitation	1	0	-	-	-	-
Medium Rehabilitation	0	0	-	-	-	-
Heavy Rehabilitation	1	0	-	-	-	-

Total number of sections analyzed: 40

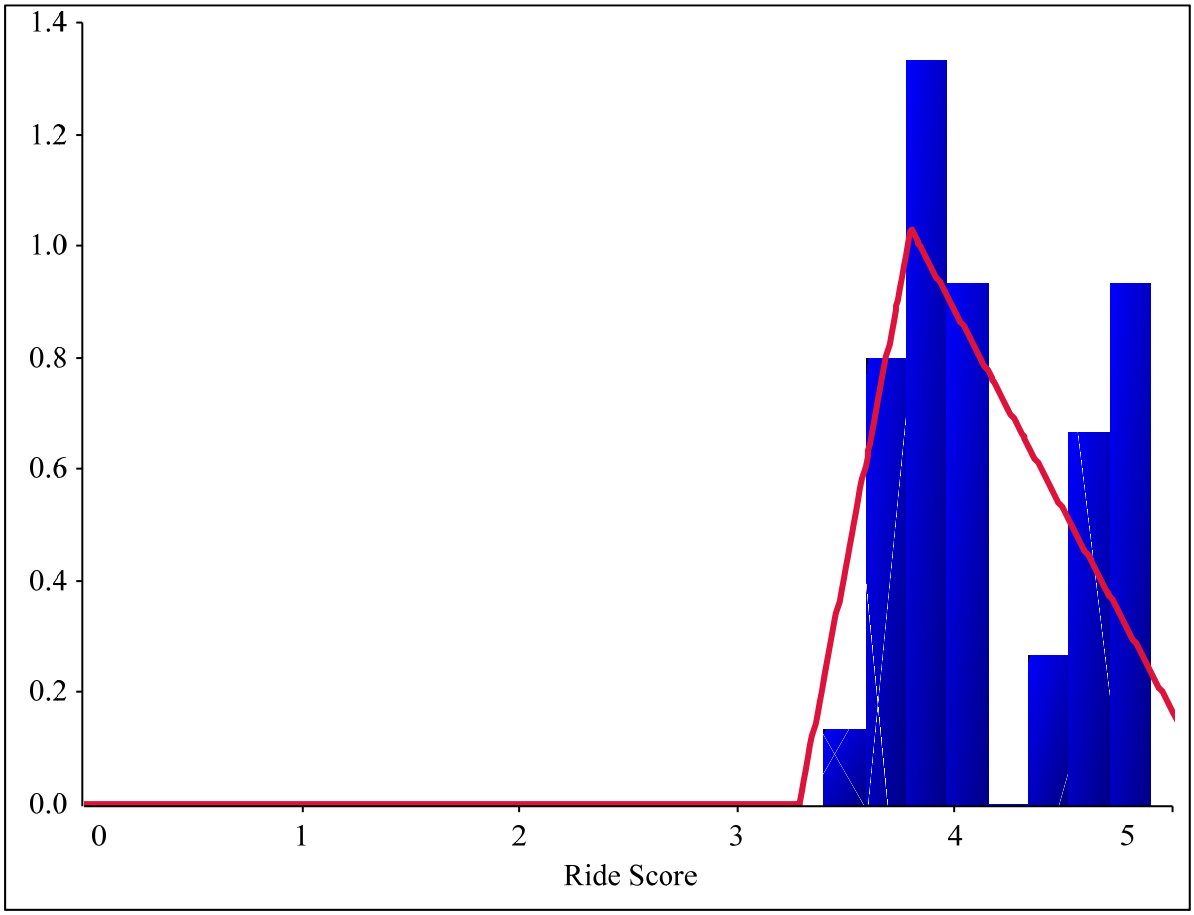

Figure C24.1. Histogram for Ride Score for Treatments Applied in El Paso District (All Pavements, 2009).

PMIS Ride Score by Treatment Category for El Paso District (All Pavements, 2009)

Table C24.2. Ride Score for Treatments Applied in El Paso (All Pavements, 2009).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	3.4	3.8	4.0	4.7	4.9
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 40

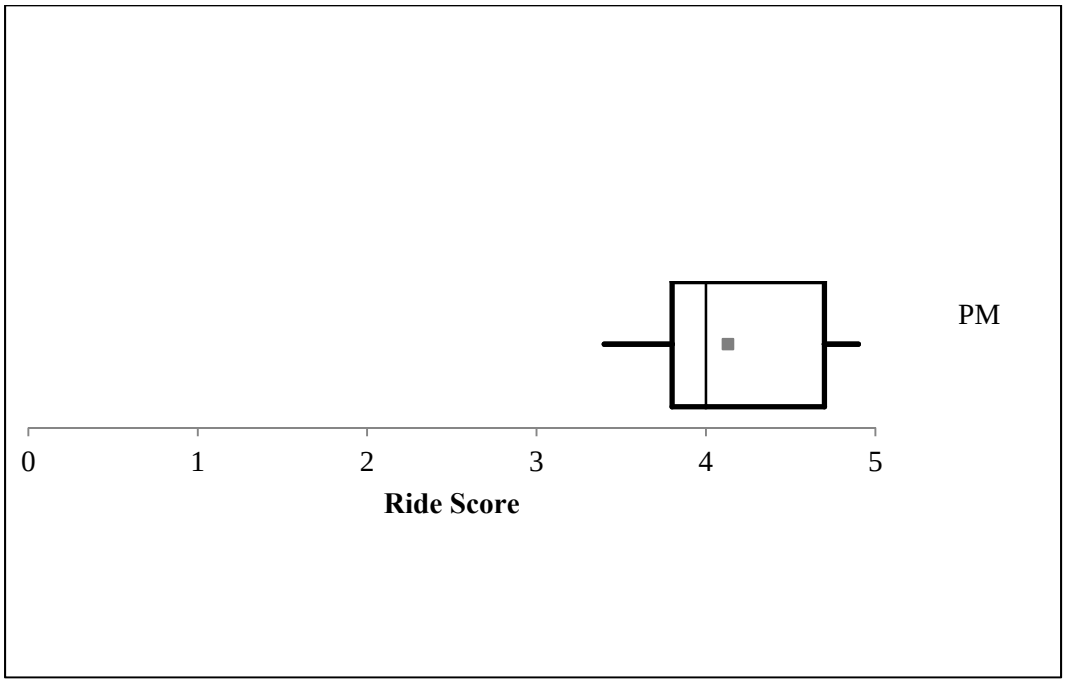

Figure C24.2. Box Plots for Ride Score for Treatments Applied in El Paso (All Pavements, 2009).

PMIS Condition Score by Treatment Category for El Paso District (All Pavements, 2008)

Table C25.1. Condition Score by PMIS Treatment Category (All Pavements, 2008).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	21	0	-	-	-	-
Preventive Maintenance	21	93	1	100	71.65	25.70
Light Rehabilitation	15	0	-	-	-	-
Medium Rehabilitation	21	0	-	-	-	-
Heavy Rehabilitation	15	0	-	-	-	-

Total number of sections analyzed: 93

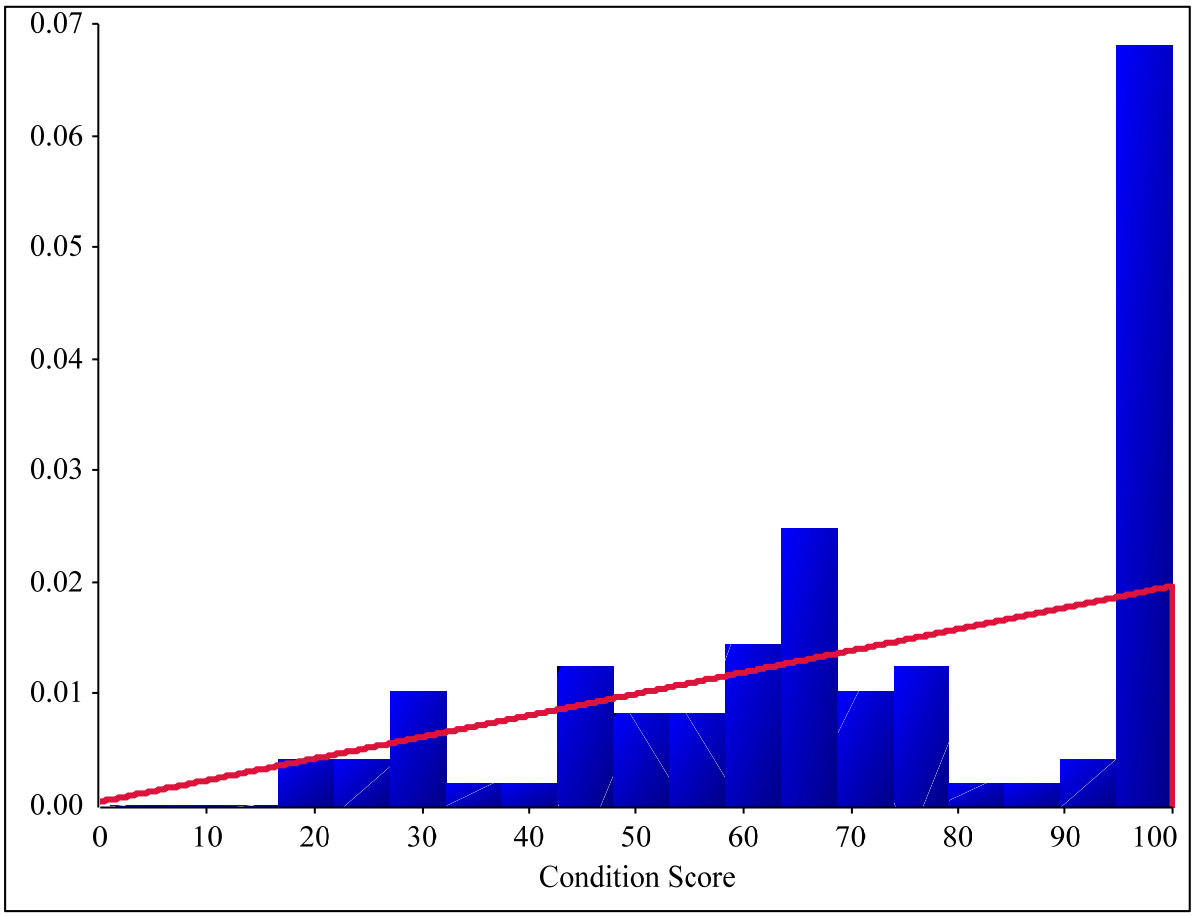

Figure C25.1. Histogram for Condition Score for Treatments Applied in El Paso District (All Pavements, 2008).

PMIS Condition Score by Treatment Category for El Paso District (All Pavements, 2008)

Table C25.2. Condition Score for Treatments Applied in El Paso (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.0	56.0	70.0	99.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 93

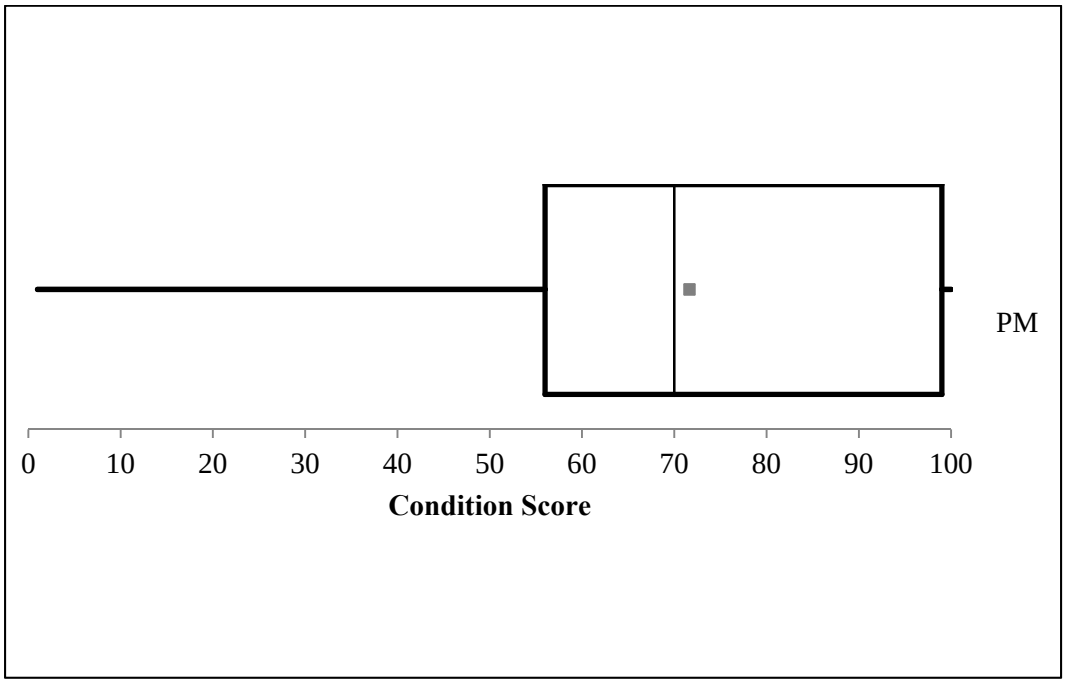

Figure C25.2. Box Plots for Condition Score for Treatments Applied in El Paso (All Pavements, 2008).

PMIS Distress Score by Treatment Category for El Paso District (All Pavements, 2008)

Table C26.1. Distress Score by PMIS Treatment Category (All Pavements, 2008).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	21	0	-	-	-	-
Preventive Maintenance	21	93	42	100	84.78	15.72
Light Rehabilitation	15	0	-	-	-	-
Medium Rehabilitation	21	0	-	-	-	-
Heavy Rehabilitation	15	0	-	-	-	-

Total number of sections analyzed: 93

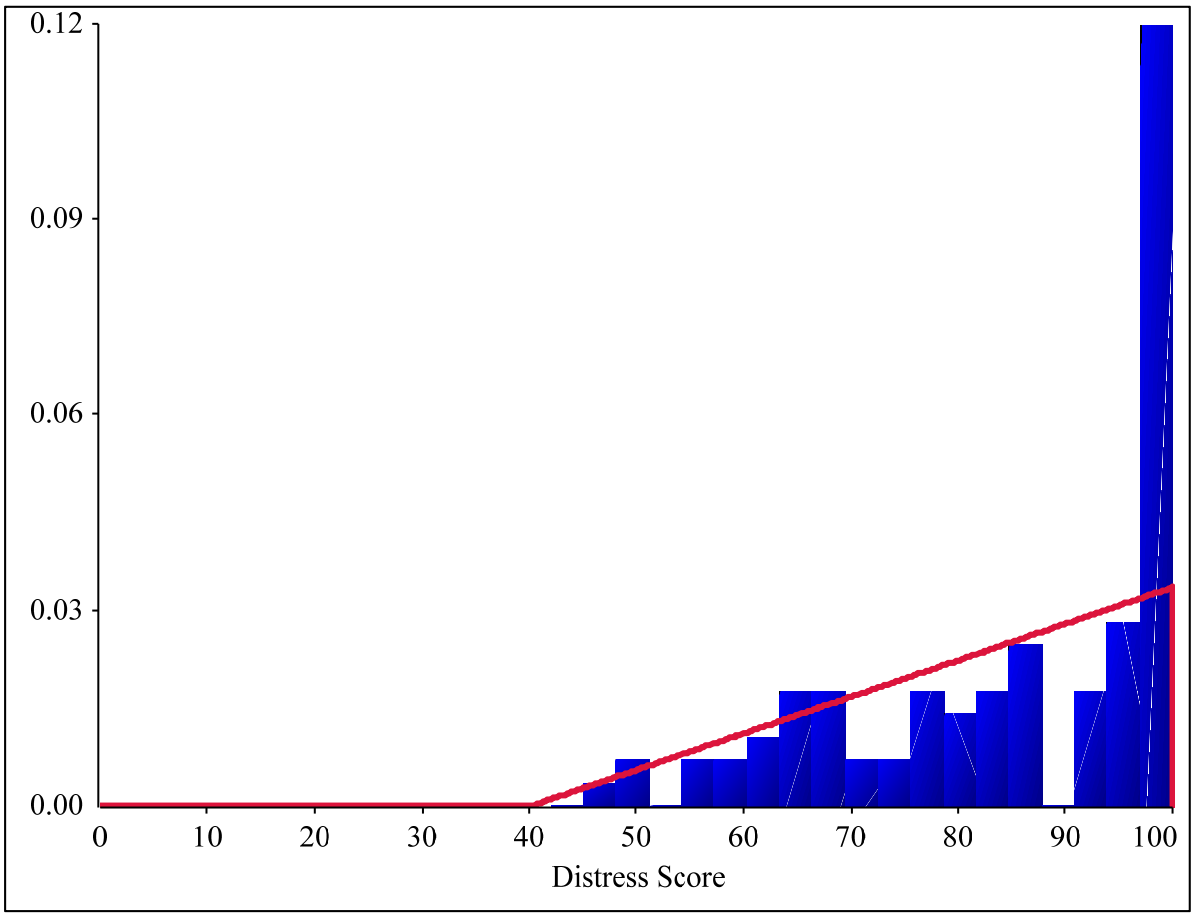

Figure C26.1. Histogram for Distress Score for Treatments Applied in El Paso District (All Pavements, 2008).

PMIS Distress Score by Treatment Category for El Paso District (All Pavements, 2008)

Table C26.2. Distress Score for Treatments Applied in El Paso (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	42.0	74.0	91.0	99.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 93

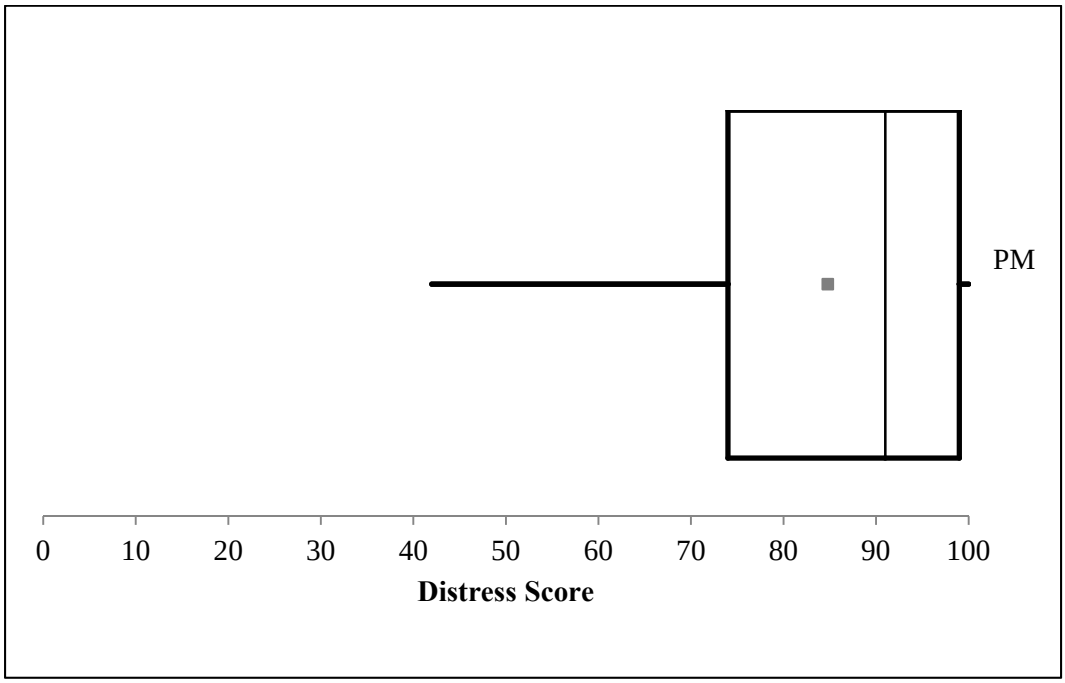

Figure C26.2. Box Plots for Distress Score for Treatments Applied in El Paso (All Pavements, 2008).

PMIS Ride Score by Treatment Category for El Paso District (All Pavements, 2008)

Table C27.1. Ride Score by PMIS Treatment Category (All Pavements, 2008).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	-	-	-	-	-	-
Preventive Maintenance	21	93	0.3	3.9	2.42	0.84
Light Rehabilitation	-	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-	-

Total number of sections analyzed: 93

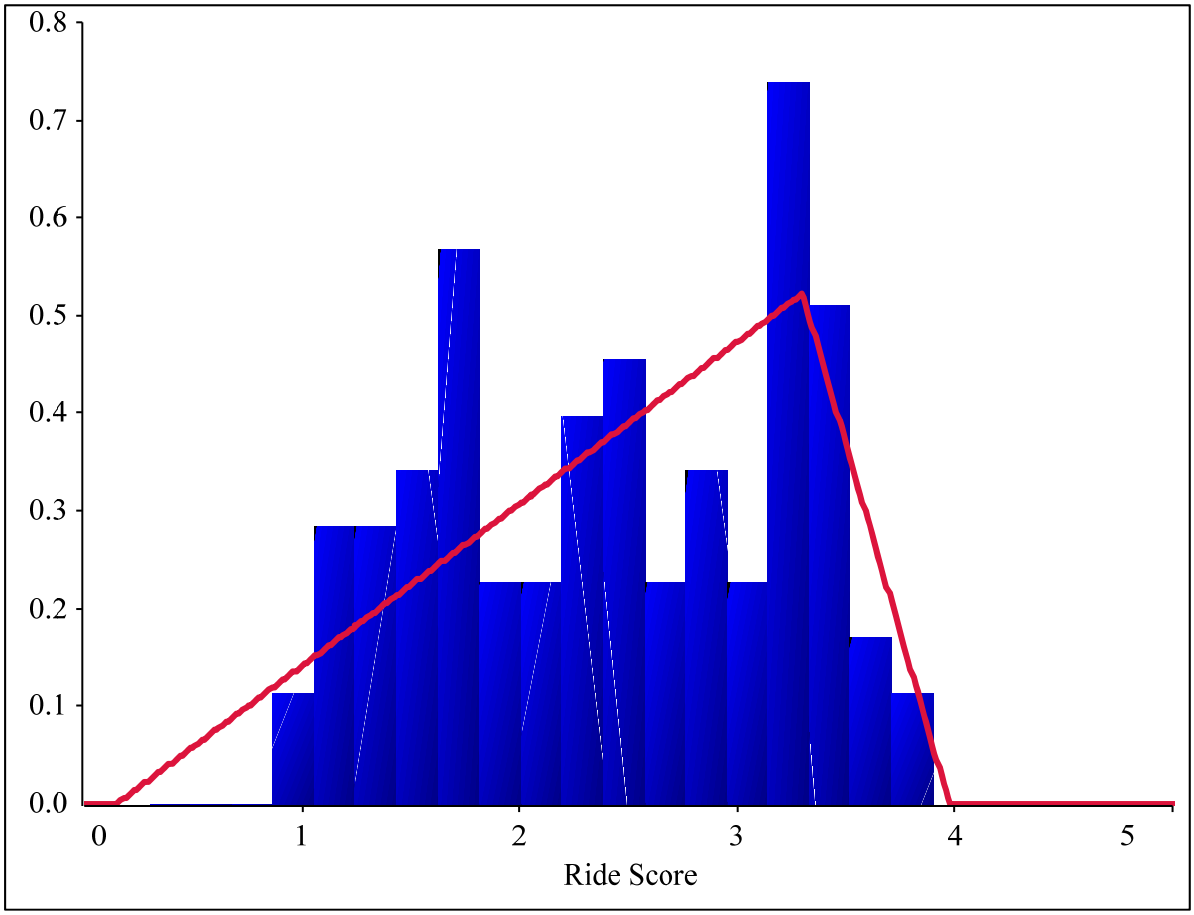

Figure C27.1. Histogram for Ride Score for Treatments Applied in El Paso District, (All Pavements, 2008).

PMIS Ride Score by Treatment Category for El Paso District (All Pavements, 2008)

Table C27.2. Ride Score for Treatments Applied in El Paso (All Pavements, 2008).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	0.3	1.7	2.4	3.3	3.9
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 93

Figure C27.2. Box Plots for Ride Score for Treatments Applied in El Paso (All Pavements, 2008).

PMIS Condition Score by Treatment Category for El Paso District (All Pavements, 2007)

Table C28.1. Condition Score by PMIS Treatment Category (All Pavements, 2007).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	74	0	-	-	-	-
Preventive Maintenance	31	124	52	100	94.56	10.76
Light Rehabilitation	8	0	-	-	-	-
Medium Rehabilitation	9	0	-	-	-	-
Heavy Rehabilitation	2	0	-	-	-	-

Total number of sections analyzed: 124

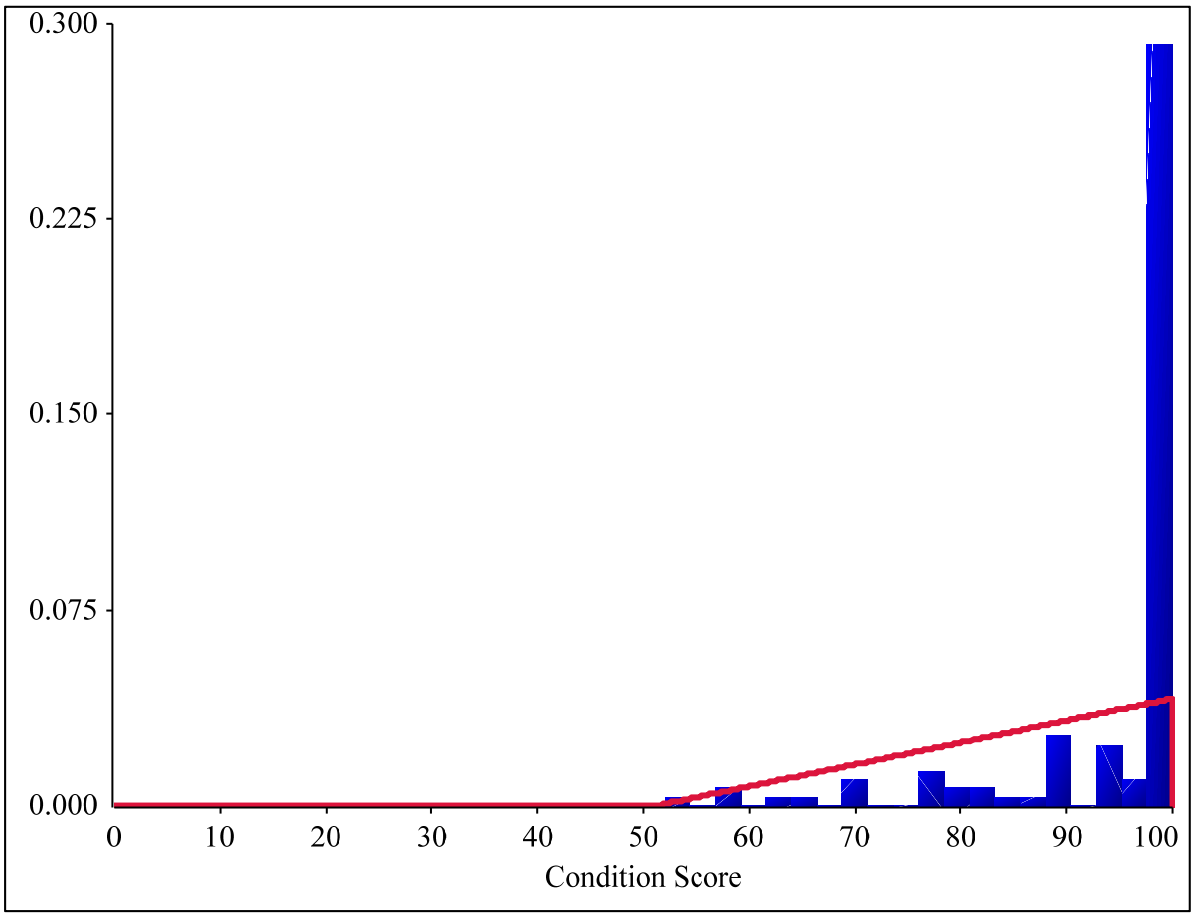

Figure C28.1. Histogram for Condition Score for Treatments Applied in El Paso District (All Pavements, 2007).

PMIS Condition Score by Treatment Category for El Paso District (All Pavements, 2007)

Table C28.2. Condition Score for Treatments Applied in El Paso (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	52.0	95.0	100.0	100.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 124

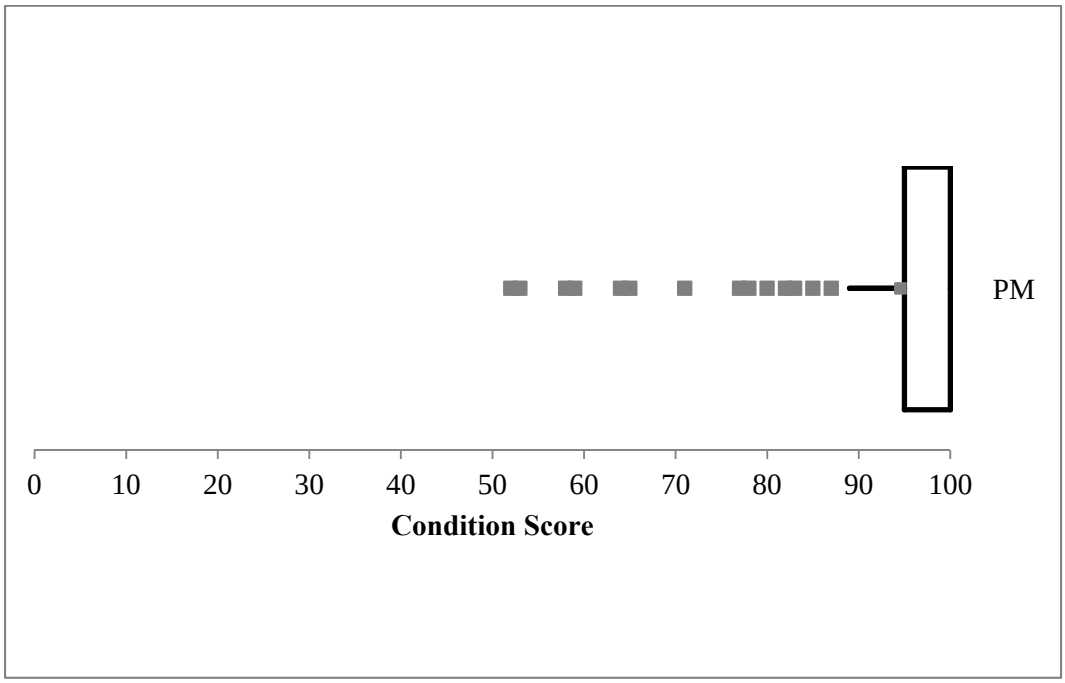

Figure C28.2. Box Plots for Condition Score for Treatments Applied in El Paso (All Pavements, 2007).

PMIS Distress Score by Treatment Category for El Paso District (All Pavements, 2007)

Table C29.1. Distress Score by PMIS Treatment Category (All Pavements, 2007).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	74	0	-	-	-	-
Preventive Maintenance	31	124	77	100	98.65	4.28
Light Rehabilitation	8	0	-	-	-	-
Medium Rehabilitation	9	0	-	-	-	-
Heavy Rehabilitation	2	0	-	-	-	-

Total number of sections analyzed: 124

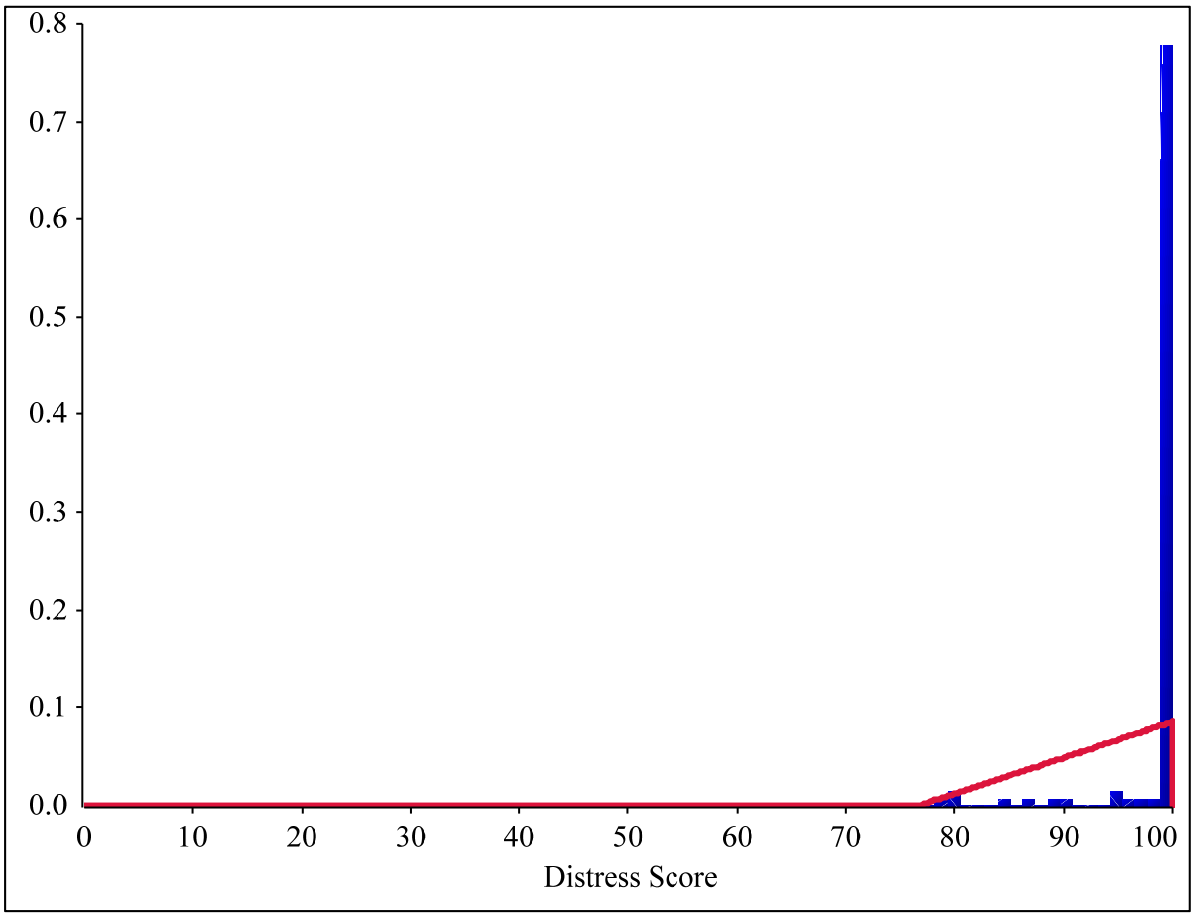

Figure C29.1. Histogram for Distress Score for Treatments Applied in El Paso District (All Pavements, 2007).

PMIS Distress Score by Treatment Category for El Paso District (All Pavements, 2007)

Table C29.2. Condition Score for Treatments Applied in El Paso (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	77.0	100.0	100.0	100.0	100.0
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 124

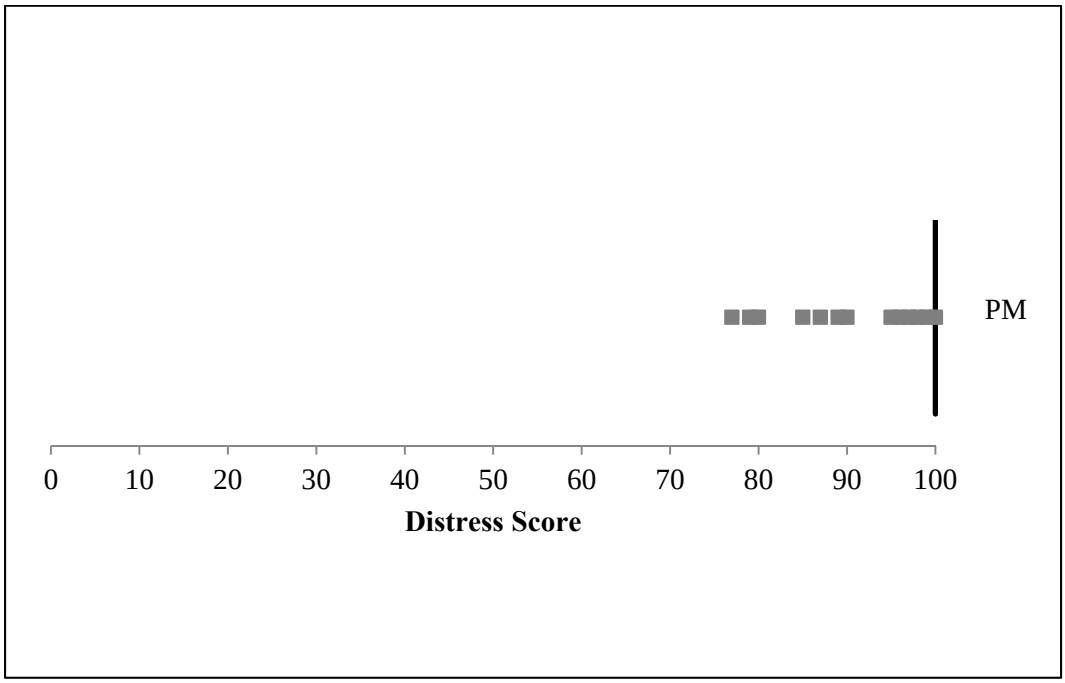

Figure C29.2. Box Plots for Distress Score for Treatments Applied in El Paso (All Pavements, 2007).

PMIS Ride Score by Treatment Category for El Paso District (All Pavements, 2007)

Table C30.1. Ride Score by PMIS Treatment Category (All Pavements, 2007).

Treatment Category	PMIS Frequency	El Paso Frequency	Minimum	Maximum	Mean	STDV
Need Nothing	74	0	-	-	-	-
Preventive Maintenance	31	124	1.4	4.6	3.37	0.70
Light Rehabilitation	8	0	-	-	-	-
Medium Rehabilitation	9	0	-	-	-	-
Heavy Rehabilitation	2	0	-	-	-	-

Total number of sections analyzed: 124

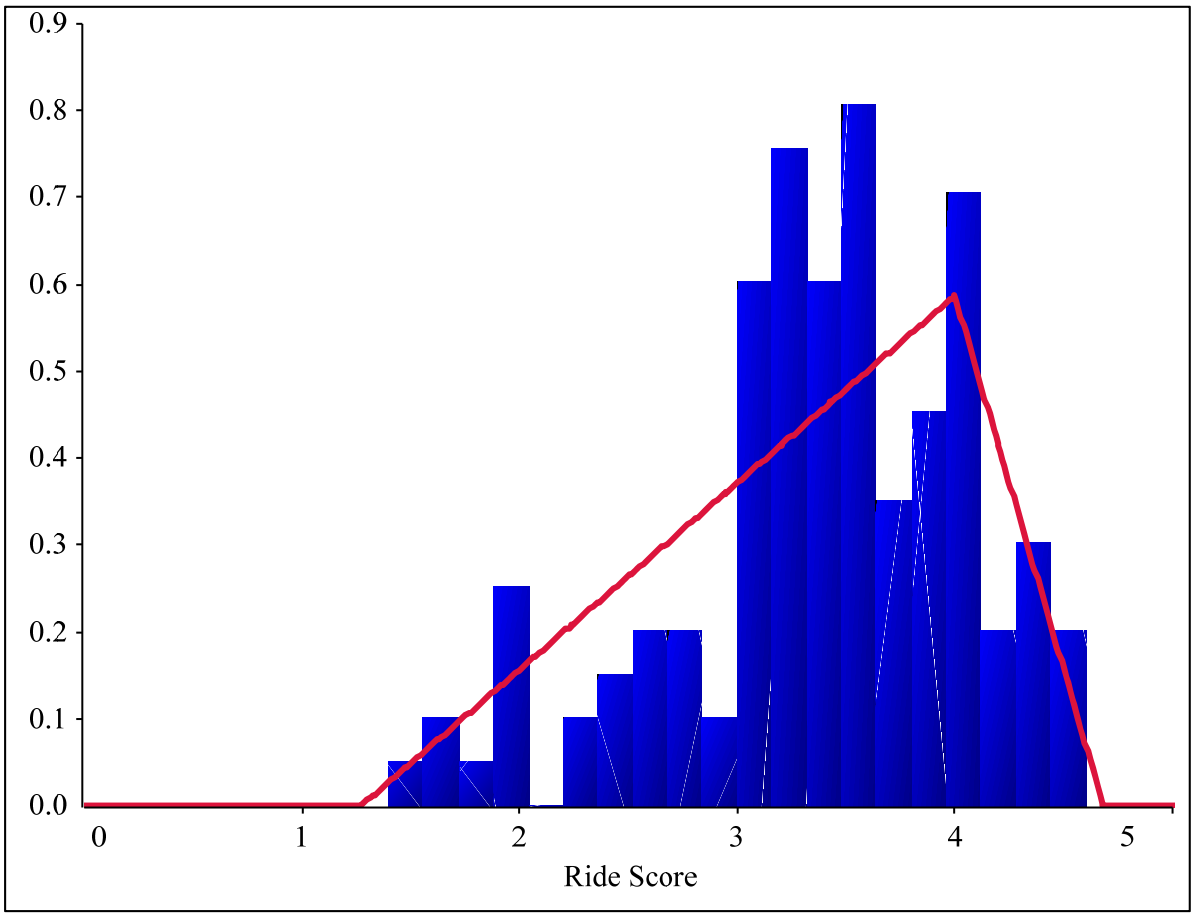

Figure C30.1. Histogram for Ride Score for Treatments Applied in El Paso District (All Pavements, 2007).

Table C30.2. Ride Score for Treatments Applied in El Paso (All Pavements, 2007).

Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum
Need Nothing	-	-	-	-	-
Preventive Maintenance	1.4	3.1	3.4	3.8	4.6
Light Rehabilitation	-	-	-	-	-
Medium Rehabilitation	-	-	-	-	-
Heavy Rehabilitation	-	-	-	-	-

Total number of sections analyzed: 124

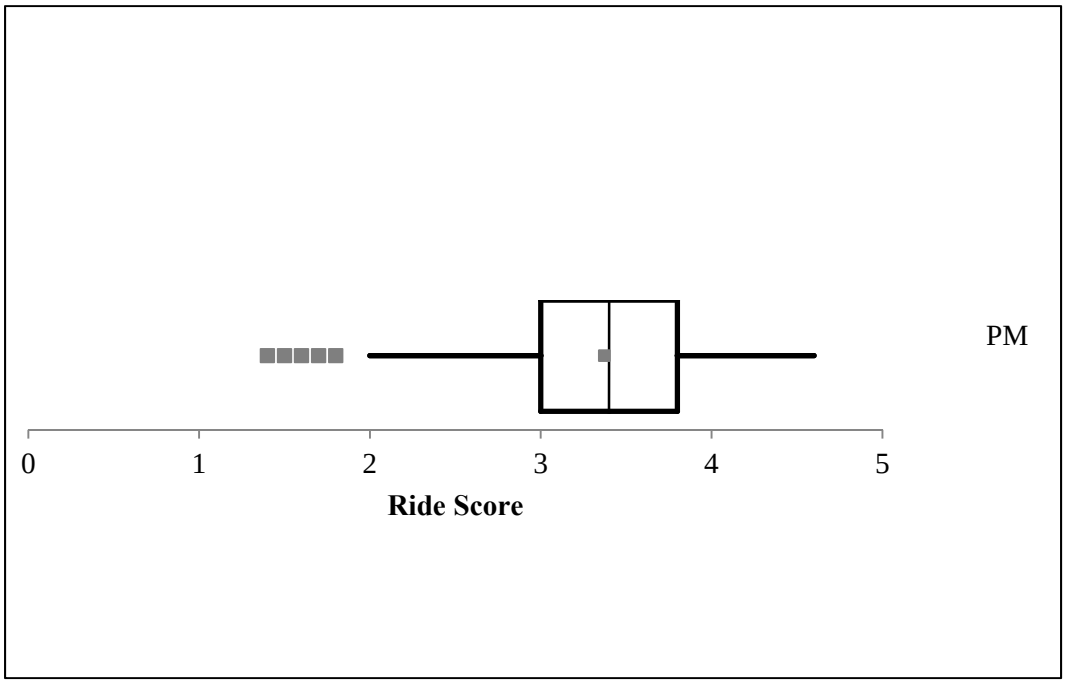

Figure C30.2. Box Plots for Ride Score for Treatments Applied in El Paso (All Pavements, 2007).