



FIGURE 6. LONGITUDINAL CRACKING

NAME OF DISTRESS: **Corner Cracking**

DESCRIPTION: A crack or break which intersects both the transverse and longitudinal joint.

EXPLANATION: The formation of a corner crack may result from loads imposed on a slab that has insufficient support. This can be caused by the presence of free water and loss of subgrade material that has been pumped out from beneath the slab at the transverse or longitudinal joint. Even though a hairline corner crack may not affect the serviceability of the pavement, it indicates a loss of support that may have been caused by pumping. As the severity of the corner crack increases and permits the intrusion of water, the loss of support may progress to the adjacent slab and significantly reduce serviceability.

SEVERITY OF DISTRESS:

Light - Visible cracks less than $\frac{1}{8}$ " (3.18 mm) wide that show no evidence of faulting, loss of aggregate interlock or the intrusion of debris.

Moderate - Cracks $\frac{1}{8}$ " (3.18 mm) to $\frac{1}{4}$ " (6.35 mm) wide that exhibit little or no faulting or evidence of intrusion of debris.

Severe - Cracks greater than $\frac{1}{4}$ " (6.35 mm) that show loss of aggregate interlock, obvious intrusion of water and debris. Faulting and spalling may also occur.

MEASUREMENT AND COMPUTATION OF DISTRESS:

Corner cracks are measured and coded by the number of cracks for the rated section.

Any or all of the severity levels may be coded.

The information below describes the information contained in the output of the permanent file.

Line 1 of the output represents the total number of corner cracks in rated section for each severity level.

Line 2 of the output represents the number of corner cracks per mile of net length in rated section for each severity level.

Line 3 of the output is the negative deduct value of rated section based on corner cracks per mile of net length for each severity level.

Light distress - 0.25 per crack

Moderate distress - 0.31 per crack

Severe distress - 0.40 per crack

NOTES:

- 1) When moderate or severe cracks have been sealed, they must be rated as light severity level. Only when there is partial loss of the sealant can crack be rated according to actual width.
- 2) Joints at replaced slabs will not be recorded as cracks.



FIGURE 7. CORNER CRACKING

NAME OF DISTRESS: **Shattered Slab**

DESCRIPTION: Shattered slab is cracking or breaking up of the slab into four or more pieces.

EXPLANATION: If a slab contains one longitudinal and one transverse crack that divide the slab into four or more pieces, the slab will not be counted as a longitudinal and transverse crack but simply as a shattered slab. A section of pavement that has deteriorated to this extent may be an indicator of other detrimental types of distress such as loss of subgrade support. Eventually loose pieces will develop which may "rock" and disintegrate or pop out creating a potentially dangerous hazard to the motorist.

SEVERITY OF DISTRESS:

Moderate - The shattered slab is broken into pieces with some interlock remaining (cracks less than ¼" or 6.35 mm) and repair is needed.

Severe - The shattered slab is broken into pieces that are acting independently (cracks greater than ¼" or 6.35 mm) and the slab or a portion thereof needs to be replaced.

MEASUREMENT AND COMPUTATION OF DISTRESS:

Shattered slabs are measured and coded in units of one for each shattered slab.

Both severity levels may be coded.

The information below describes the information contained in the output of the permanent file.

Line 1 of the output represents the total number of shattered slabs in rated section for each severity level.

Line 2 of the output represents the number of shattered slabs per mile of net length in rated section for each severity level.

Line 3 of the output is the negative deduct value of rated section based on shattered slabs per mile of net length for each severity level.

Moderate distress - 1.15 per shattered slab

Severe distress - 1.50 per shattered slab



FIGURE 8. SHATTERED SLAB

NAME OF DISTRESS: **Faulting**

DESCRIPTION: Differential vertical displacement of abutting slabs at joints or cracks creating a "step" deformation in the pavement surface.

EXPLANATION: Faulting per section does not decrease the structural adequacy of the pavement though it may severely reduce the riding quality. Faulting may be an observable forecaster of severe pavement damage because it usually relates to a void under the pavement or to movement of the subgrade.

SEVERITY OF DISTRESS:

Fault measurements are utilized to compute a Fault Index (FI), which represents the average faulting for the rated section in thirty-seconds of an inch.

MEASUREMENT AND COMPUTATION OF DISTRESS:

Faulting data is normally collected using a laser profiler during the collection of the Ride Rating data. Average faulting values for each rated section are calculated according to AASHTO R 36-04 using a utility that considers the following:

- Length of section
- Longitudinal Profile data from laser profiler
- Average Slab Length

Any areas on bridges or structures are excluded from the longitudinal profile data so that faulting values only represent sections of rigid pavement.

The FI is calculated by multiplying the average fault measurement by 32. (0.250 in. X 32 = 8 FI)

Occasionally, usually only on very short pavement sections, the rater determines that automated ride and faulting values are not reliable for a rated section. In this case the section is made a No Ride (type 6), and faulting values are obtained through manual methods.

When manual faulting is required, five consecutive joints are measured and the values are summed. The FI is then obtained by multiplying the values by 6.4.

Fault Index = 1.0 Deduct point per 1/32" (1.26mm).

The information below describes the information contained in the output of the permanent file.

Line 1 of the output represents the FI.

Line 3 of the output represents the negative deduct value which is equal to the FI.

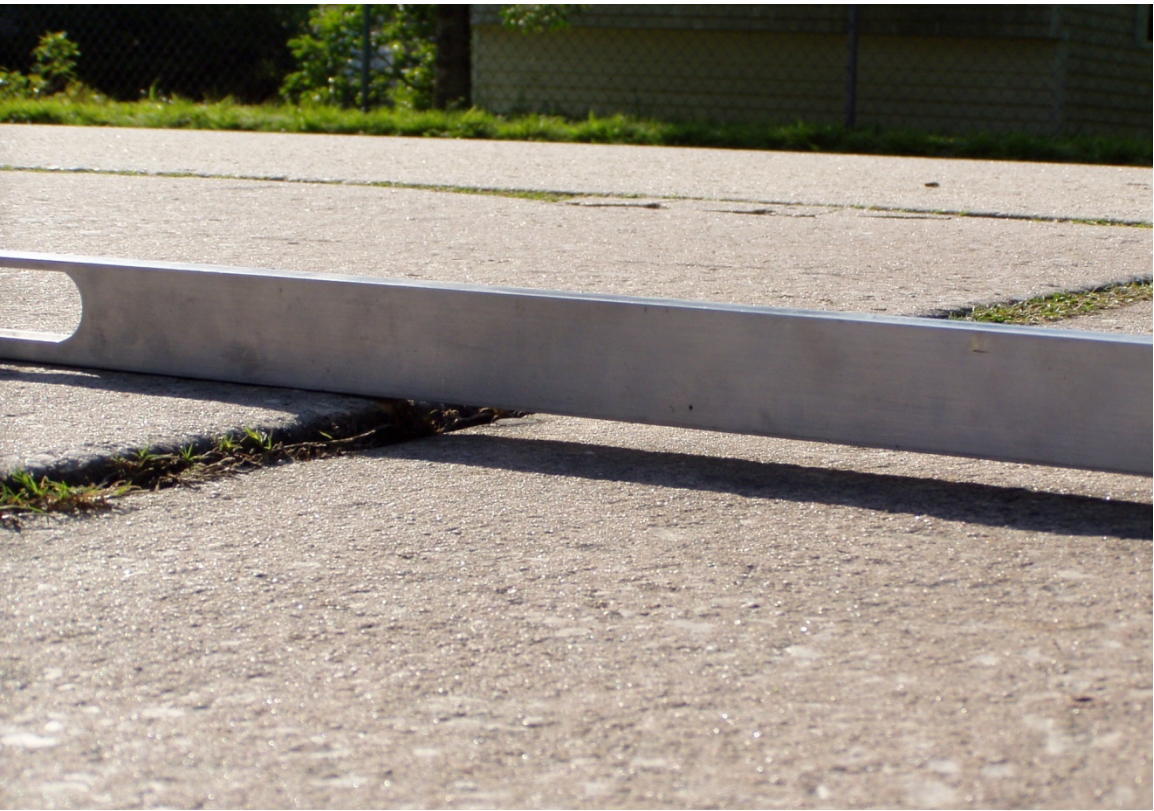


FIGURE 9. FAULTING

NAME OF DISTRESS: **Pumping**

DESCRIPTION: The ejection of water and subgrade materials along or through transverse or longitudinal joints, cracks or pavement edges. Pumping is characterized by vertical slab movement under passing loads. This vertical movement results in the ejection of water trapped below the slab through joints or cracks. As the water is ejected, it carries with it particles of small gravel, sand, clay or silt, resulting in progressively less pavement support.

EXPLANATION: Pumping has been observed in early construction of PCC pavement, especially where untreated bases and/or subgrades were utilized in areas of poor drainage. In more recent construction, where typically the subgrade is stabilized and a treated base course is used under the pavement, pumping has been reduced. However, when it does occur, it is a serious type of distress and the negative values are significant. Pumping occurs through any and all joints and cracks and along pavement edges. Free water must be present for pumping to occur.

SEVERITY OF DISTRESS:

Silt and clay slurries pumped onto the pavement surface may result in the pavement becoming slippery, but the most serious consequence is that as pumping continues, the slab receives progressively less support, and eventually cracking and faulting develop.

Light - Visible deposits of material or light stains at the pavement shoulder or shoulder settlement at transverse joint.

Moderate - Visible deposits of material or moderate stains at the pavement shoulder with slight faulting (1/8" or 3.18 mm - 1/4" or 6.35 mm) of the pavement slabs or settlement of the shoulder at transverse joint.

Severe - Visible deposits of material or heavy stains at the pavement shoulder with moderate to severe faulting (greater than 1/4" or 6.35 mm) of the pavement slabs or settlement of the shoulder at transverse joint.

MEASUREMENT AND COMPUTATION OF DISTRESS:

Pumping is measured in terms of both severity and percent within the rated section.

Only the predominate of the three severity levels is to be coded.

The percent of pumping within the rated section is divided into four categories indicated by the following code numbers:

1% - 25%	Code - 1
26% - 50%	Code - 2
51% - 75%	Code - 3
76% - 100%	Code - 4

Use one of the codes above in the column for the appropriate severity level. For example, if there is 15% light pumping in the rated section use code 3 in the column for Light severity level pumping.

The information below describes the information contained in the output of the permanent file.

Line 1 of the output identifies the severity level of pumping. The following designations will be represented depending upon the severity level indicated on the coding sheet.

- If severity level is:
 - Light, then "LT" is indicated.
 - Moderate, then "MD" is indicated.
 - Severe, then "SV" is indicated.

Line 2 of the output identifies the percent of pumping by the code indicated in the table below.

Line 3 of the output is the negative deduct value for the specified severity level and percent within the rated section as indicated in the table below.

SEVERITY	PERCENT	CODE	NEGATIVE DEDUCT VALUE
Light	1% - 25%	1	2
	26% - 50%	2	3
	51% - 75%	3	4
	76% - 100%	4	5
Moderate	1% - 25%	1	4
	26% - 50%	2	6
	51% - 75%	3	8
	76% - 100%	4	10
Severe	1% - 25%	1	6
	26% - 50%	2	9
	51% - 75%	3	12
	76% - 100%	4	15



FIGURE 10. PUMPING

NAME OF DISTRESS: **Joint Condition**

DESCRIPTION: The ability of a joint sealant to maintain cohesion and remain bonded to the edges of the slabs for protection of the joints and prevention of water infiltrating the pavement's supporting foundation.

EXPLANATION: For a jointed pavement to maintain its serviceability, the joints must be sealed against the intrusion of water and incompressible materials. If soil or rocks accumulate in the joints between the concrete slabs, the slabs will be prevented from expanding and may buckle, shatter or spall.

SEVERITY OF DISTRESS:

Partially sealed - The joint sealant has deteriorated to the extent that adhesion or cohesion has failed and water is infiltrating the joint.

Not sealed - The joint sealant is either non-existent or has deteriorated to the extent that both water and incompressible materials are infiltrating the joint.

MEASUREMENT AND COMPUTATION OF DISTRESS:

Joint Condition is measured in terms of the most representative severity within the rated section.

The following codes are used to indicate the representative severity level of Joint Condition defect.

Partially Sealed - Code 1
Not Sealed - Code 2

The information below describes the information contained in the output of the permanent file.

Line 1 of the output identifies the severity level of the joint condition.

If Partially Sealed - "PS" is indicated.
If Not Sealed - "NS" is indicated.

Line 3 of the output is the negative deduct value for the specified severity within the rated section.

Partially Sealed - 5
Not Sealed - 10



FIGURE 11. JOINT CONDITION

TABLE 3

NUMERICAL DEDUCT VALUES FOR RIGID PAVEMENT DISTRESSES

TYPE OF DISTRESS	SEVERITY	NUMERIC VALUE
Surface Deterioration	Moderate	0.003 per square foot (0.032 per square meter)
	Severe	0.006 per square foot (0.065 per square meter)
Spalling	Moderate	0.01 per linear foot (0.033 per linear meter)
	Severe	0.02 per linear foot (0.066 per linear meter)
Patching	Fair	0.018 per square yard (0.022 per square meter)
	Poor	0.045 per square yard (0.054 per square meter)
Transverse Cracking	Light	0.30 per crack
	Moderate	0.38 per crack
	Severe	0.50 per crack
Longitudinal Cracking	Light	0.15 per crack
	Moderate	0.19 per crack
	Severe	0.25 per crack
Corner Cracking	Light	0.25 per crack
	Moderate	0.31 per crack
	Severe	0.40 per crack
Shattered Slab	Moderate	1.15 per shattered slab
	Severe	1.50 per shattered slab

TYPE OF DISTRESS	SEVERITY	NUMERIC VALUE
Faulting		1.0 per 1/32 inch (1.26 per mm) faulting
Pumping	Light	1% - 25% -- 2
		26% - 50% --- 3
		51% - 75% --- 4
		76% - 100% --- 5
	Moderate	1% - 25% --- 4
		26% - 50% --- 6
		51% - 75% --- 8
		76% - 100% --- 10
	Severe	1% - 25% --- 6
		26% - 50% --- 9
		51% - 75% --- 12
		76% - 100% --- 15
Joint Condition	Partially Sealed	5
	Not Sealed	10

IV. Rigid Pavement Condition Survey Field Workbook

The Rigid Pavement Condition Survey Field Workbook is used by the rater in the field to record cracking data and any comments as well as any changes in mileposts or pavement type. Profiler data (Ride Number and Faulting) is not input on this form since it is imported directly into the database. The information on pages 42 through 45 describes each data column on the Rigid Pavement Condition Survey Field Workbook.

FIELD RATING FORM FOR RIGID PAVEMENT CONDITION SURVEY

COLUMN TITLE	DESCRIPTION
MO	<u>Month</u> in which survey was performed.
YR	<u>Year</u> in which survey was performed.
CO	<u>County</u> number (see page 43)
SEC	State Roadway County <u>Section</u> Number
SUB	State Roadway County <u>Subsection</u> Number
SR	<u>State Road Number</u> Example: 0008; 0369
US	<u>US Road Number</u> Example: 0027; 0301
SYS	<u>System</u> code <div style="display: flex; justify-content: space-around;"> 1 - Primary 2 - Secondary </div> <div style="display: flex; justify-content: space-around;"> 3 - Toll 4 - Interstate </div> <div style="display: flex; justify-content: space-around;"> 5 - Turnpike </div>
RDWY	<u>Roadway</u> direction (see page 4)
TYPE	Pavement <u>Type</u> (see pages 5 to 7)
BMP	<u>Beginning Milepost</u> of the rated section.
EMP	<u>Ending Milepost</u> of the rated section.
SP	The uniform <u>speed</u> at which the vehicle travels over the rated section. Speeds are coded as follows: <div style="display: flex; justify-content: space-around;"> 3 - 30 mph 4 - 40 mph </div> <div style="display: flex; justify-content: space-around;"> 5 - 50 mph 6 - 60 mph </div>
LN	Number of through <u>Travel Lanes</u> (see page 7)
RL	<u>Rated Lane</u> (see page 8)

Continued on page 44

COUNTY NAME AND CODE NUMBER – ARRANGED BY DISTRICT

DISTRICT 1		DISTRICT 2		DISTRICT 3		DISTRICT 4		DISTRICT 5		DISTRICT 6		DISTRICT 7	
Charlotte	01	Alachua	26	Bay	46	Broward	86	Lake	11	Dade	87	Citrus	02
Collier	03	Baker	27	Calhoun	47	Indian River	88	Sumter	18	Monroe	90	Hernando	08
Desoto	04	Bradford	28	Escambia	48	Martin	89	Marion	36			Hillsborough	10
Glades	05	Columbia	29	Franklin	49	Palm Beach	93	Brevard	70			Pasco	14
Hardee	06	Dixie	30	Gadsden	50	St. Lucie	94	Flagler	73			Pinellas	15
Hendry	07	Gilchrist	31	Gulf	51			Orange	75				
Highlands	09	Hamilton	32	Holmes	52			Seminole	77				
Lee	12	Lafayette	33	Jackson	53			Volusia	79				
Manatee	13	Levy	34	Jefferson	54			Osceola	92				
Polk	16	Madison	35	Leon	55								
Sarasota	17	Suwannee	37	Liberty	56								
Okeechobee	91	Taylor	38	Okaloosa	57								
		Union	39	Santa Rosa	58								
		Clay	71	Wakulla	59								
		Duval	72	Walton	60								
		Nassau	74	Washington	61								
		Putnam	76										
		St. Johns	78										

FIELD RATING FORM FOR RIGID PAVEMENT CONDITION SURVEY (Continued)

COLUMN TITLE	DESCRIPTION		
AUTOMATED *	NET L		<u>Net Length</u> of Rated Section
	IRI		<u>International Roughness Index</u> (inches/mile)
	RN		<u>Ride Number</u>
	FAULT		<u>Faulting</u> (inches)
	JOINTS		<u>Number of Joints</u> rated section
TRANSVERSE CRACKING (see page 22)	Light	-	Total Number of Cracks
	Moderate	-	Total Number of Cracks
	Severe	-	Total Number of Cracks
LONGITUDINAL CRACKING (see page 25)	Light	-	Total Number of Cracks
	Moderate	-	Total Number of Cracks
	Severe	-	Total Number of Cracks
SPALLING (see page 17)	Moderate	-	Total Linear Feet
	Severe	-	Total Linear Feet
CORNER CRACKING (see page 28)	Light	-	Total Number of Cracks
	Moderate	-	Total Number of Cracks
	Severe	-	Total Number of Cracks
PATCHING (see page 19)	Fair	-	Total Square Yards
	Poor	-	Total Square Yards
SHATTERED SLABS (see page 31)	Moderate	-	Total Number of Shattered Slabs
	Severe	-	Total Number of Shattered Slabs
SURFACE DETERIORATION (see page 15)	Moderate	-	Total Square Feet
	Severe	-	Total Square Feet
PUMPING (see page 35)	Light	-	Percent of Stained Area
	Moderate	-	Percent of Stained Area
	Severe	-	Percent of Stained Area
	Note: Code only one (predominate severity level only)		
JOINT CONDITION (see page 38)	Not Sealed	-	Code 1
	Partially Sealed	-	Code 2
SLAB ESTIMATES -	LENGTH	-	Approximate slab length in feet (used in Faulting calculation)
	NUMBER *	-	Calculated number of slabs (used in Faulting calculation)
	% CRACKED *	-	Percent of slabs that have at least one crack (used for HPMS)

* Manual data entry is not needed for these fields since information is either imported directly from profiler data, or calculated from other inputs.

FIELD RATING FORM FOR RIGID PAVEMENT CONDITION SURVEY (Continued)

COLUMN TITLE	DESCRIPTION
REMARKS	Use standardized remarks (Table 2, page 8) to denote specific conditions that exist within rated section
RATER	Rater 1 - Code letter for primary rater
	Rater 2 - Code letter for secondary rater if present
MULTIPLE CRACKS	Number of slabs with more than one crack (used in % of cracked slabs calculation)
FIN	Provide <u>Financial Project Number</u> for new construction or rehabilitation projects greater than 1 mile in length
COMMENTS	Record information specific to the section that will assist raters in future surveys. See page 9.

APPENDIX A
Computer Use
for
Rigid Pavement
Condition Survey Data

RIGID PAVEMENT CONDITION SURVEY

AREA FLAT FILE

Field data file is 'D5580954.RIGIDxx.AREACOMB'

Note: **xx** = Year of Survey

y = Area Number

Data is coded in accordance with the following layout:

LINE NUMBER 1

COLUMN	DESCRIPTION	LENGTH
1	LINE NUMBER	1
2	DISTRICT	1
3-4	COUNTY	2
5-7	SECTION	3
8-10	SUBSECTION	3
11	ROADWAY	1
12-16	BEGINNING MILEPOST	5
17-18	MONTH	2
19-20	YEAR	2
21	BLANK	1
22	UNIT	1
23	SYSTEM	1
24-27	STATE ROAD NUMBER	4
28-31	US ROAD NUMBER	4
32-36	ENDING MILEPOST	5
37-41	NET LENGTH	5
42	SPEED	1
43-45	BLANK	3
46-48	IRI AVERAGE (AVERAGE OF LEFT AND RIGHT WHEEL PATHS)	3
49-52	RN AVERAGE (AVERAGE OF LEFT AND RIGHT WHEEL PATHS)	4
53	BLANK	1
54-55	TRAVEL LANES	2
56-77	REMARKS	23
78	TYPE	1
79-81	IRI LEFT WHEEL PATH	3
82-84	IRI RIGHT WHEEL PATH	3
85-88	RN LEFT WHEEL PATH	4
89-92	RN RIGHT WHEEL PATH	4
93-133	FIN	11

**RIGID PAVEMENT CONDITION SURVEY
AREA FLAT FILE**

Field data file is **D5580954.RIGIDxx.AREACOMB'**

Note: **xx** = Year of Survey
y = Area Number

Data is coded in accordance with the following layout:

LINE NUMBER 2

COLUMN	DESCRIPTION	LENGTH
1	LINE NUMBER	1
2	DISTRICT	1
3-4	COUNTY	2
5-7	SECTION	3
8-10	SUBSECTION	3
11	ROADWAY	1
12-16	BEGINNING MILEPOST	5
17-20	SURFACE DETERIORATION A) MODERATE	4
21-24	B) SEVERE	4
25-28	SPALLING A) MODERATE	4
29-32	B) SEVERE	4
33-36	PATCHING A) FAIR	4
37-40	B) POOR	4
41-44	TRANSVERSE CRACKING A) LIGHT	4
45-48	B) MODERATE	4
49-52	C) SEVERE	4
53-56	LONGITUDINAL CRACKING A) LIGHT	4
57-60	B) MODERATE	4
61-64	C) SEVERE	4
65-68	CORNER CRACKING A) LIGHT	4
69-72	B) MODERATE	4
73-76	C) SEVERE	4

COLUMN	DESCRIPTION	LENGTH
77-80	SHATTERED SLAB A) MODERATE	4
81-84	B) SEVERE	4
85-89	FAULT MEASUREMENTS	5
90	PUMPING A) LIGHT	1
91	B) MODERATE	1
92	C) SEVERE	1
93	JOINT CONDITION	1
94	VERIFICATION	1
95-96	RATED LANE	2
97	BLANK	1
98-99	RATER1	2
100	BLANK	1
101-102	RATER2	2
103	BLANK	1
104-105	SLAB LENGTH	2
106	BLANK	1
107-110	NUMBER OF SLABS	4
110-111	BLANK	2
112-115	NUMBER OF JOINTS	4
116	BLANK	1
117-121	PERCENT OF CRACKED SLABS	5
122-125	NUMBER OF SLABS WITH MORE THAN ONE CRACK	4
126	BLANK	1
127-196	LONG COMMENTS	70

**RIGID PAVEMENT CONDITION SURVEY
PERMANENT FLAT FILE**

The permanent data file is **D5580954.RIGIDxx.DATA** and has the following layout:

Note: xx = Year of Survey

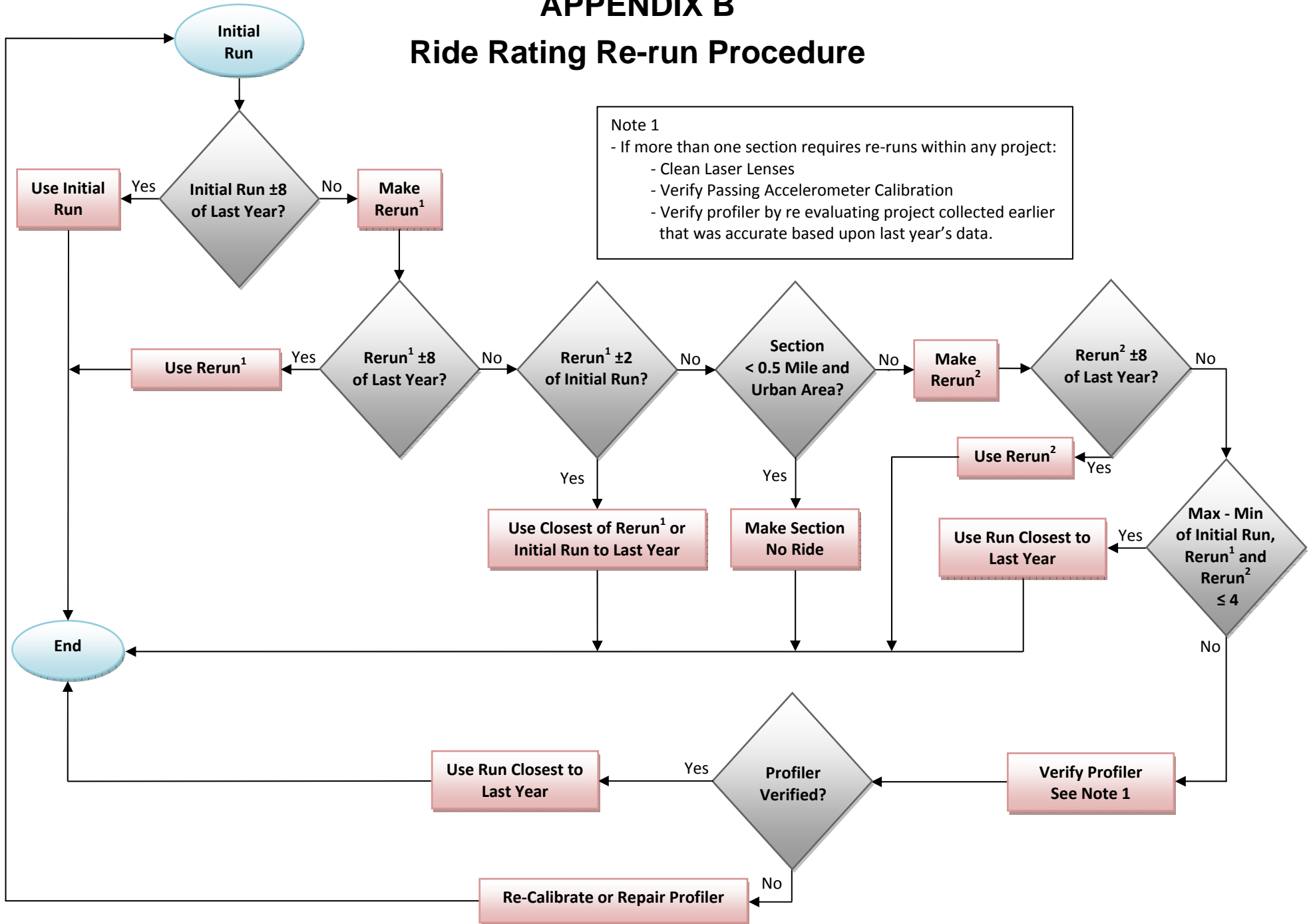
COLUMN	DESCRIPTION	LENGTH
1	DISTRICT	1
2-3	COUNTY	2
4-6	SECTION	3
7-9	SUBSECTION	3
10-13	STATE ROAD NUMBER	4
14-18	BEGINNING MILEPOST	5
19-22	SURFACE DETERIORATION (LINE 1 OF OUTPUT)	4
23-26	A) MODERATE (SQ. FT. / SECTION)	4
	B) SEVERE (SQ. FT. / SECTION)	4
27-30	SPALLING (LINE 1 OF OUTPUT)	4
31-34	A) MODERATE (LIN FT. / SECTION)	4
	B) SEVERE (LIN FT. / SECTION)	4
35-38	TRANSVERSE CRACKING (LINE 1 OF OUTPUT)	4
39-42	A) LIGHT (NO. / SECTION)	4
43-46	B) MODERATE (NO. / SECTION)	4
	C) SEVERE (NO. / SECTION)	4
47-50	LONGITUDINAL CRACKING (LINE 1 OF OUTPUT)	4
51-54	A) LIGHT (NO. / SECTION)	4
55-58	B) MODERATE (NO. / SECTION)	4
	C) SEVERE (NO. / SECTION)	4
59-62	CORNER CRACKING (LINE 1 OF OUTPUT)	4
63-66	A) LIGHT (NO. / SECTION)	4
67-70	B) MODERATE (NO. / SECTION)	4
	C) SEVERE (NO. / SECTION)	4
71-74	SHATTERED SLAB (LINE 1 OF OUTPUT)	4
75-78	A) MODERATE (NO. / SECTION)	4
	B) SEVERE (NO. / SECTION)	4
79-81	FAULT INDEX (SAME AS NEGATIVE DEDUCT VALUE) (LINE 1 OF OUTPUT)	3
82-83	JOINT CONDITION (LISTED AS NS, PS) (LINE 1 OF OUTPUT)	2
84-85	PUMPING (LISTED AS LT, MD, SV) (LINE 1 OF OUTPUT)	2

COLUMN	DESCRIPTION	LENGTH
86-89	PATCHING (LINE 1 OF OUTPUT) A) FAIR (SQ. YDS / SECTION)	4
90-93	B) POOR (SQ. YDS / SECTION)	4
94-96	DEFECT RATING	3
97-99	RIDE RATING	3
100-102	BASIC RATING (N/A)	3
103-105	INTERNATIONAL ROUGHNESS INDEX AVERAGE	3
106-107	MONTH	2
108-109	YEAR	2
110-113	US ROAD NUMBER	4
114-118	ENDING MILEPOST	5
119-122	SURFACE DETERIORATION (LINE 3 OF OUTPUT) A) MODERATE (SQ. FT / MILE)	4
123-126	B) SEVERE (SQ. FT. / MILE)	4
127-130	SPALLING (LINE 3 OF OUTPUT) A) MODERATE (LIN FT. / MILE)	4
131-134	B) SEVERE (LIN FT. / MILE)	4
135-138	TRANSVERSE CRACKING (LINE 2 OF OUTPUT) A) LIGHT (NO. / MILE)	4
139-142	B) MODERATE (NO. / MILE)	4
143-146	C) SEVERE (NO. / MILE)	4
147-150	LONGITUDINAL CRACKING (LINE 2 OF OUTPUT) A) LIGHT (NO. / MILE)	4
151-154	B) MODERATE (NO. / MILE)	4
155-158	C) SEVERE (NO. / MILE)	4
159-162	CORNER CRACKING (LINE 2 OF OUTPUT) A) LIGHT (NO. / MILE)	4
163-166	B) MODERATE (NO. / MILE)	4
167-170	C) SEVERE (NO. / MILE)	4
171-174	SHATTERED SLAB (LINE 2 OF OUTPUT) A) MODERATE (NO. / MILE)	4
175-178	B) SEVERE (NO. / MILE)	4
179	PUMPING (CODE VALUE) (LINE 2 OF OUTPUT) A) LIGHT	1
180	B) MODERATE	1
181	C) SEVERE	1

COLUMN	DESCRIPTION	LENGTH
182-185	PATCHING (LINE 2 OF OUTPUT) A) FAIR (SQ. YDS / MILE)	4
186-189	B) POOR (SQ. YDS / MILE)	4
190-191	NUMBER OF LANES	2
192	VERIFICATION CODE	1
193-214	REMARKS	22
215-218	RIDE NUMBER AVERAGE	4
219-222	ROADWAY (LT., RT., COM1, COM4)	4
223-226	SYSTEM (PRI., INT., TOLL, TRPK)	4
227-232	NET LENGTH	6
233-236	SURFACE DETERIORATION (LINE 3 OF OUTPUT) A) MODERATE (NEGATIVE DEDUCT VALUE)	4
237-240	B) SEVERE (NEGATIVE DEDUCT VALUE)	4
241-244	SPALLING (LINE 3 OF OUTPUT) A) MODERATE (NEGATIVE DEDUCT VALUE)	4
245-248	B) SEVERE (NEGATIVE DEDUCT VALUE)	4
249-252	TRANSVERSE CRACKING (LINE 3 OF OUTPUT) A) LIGHT (NEGATIVE DEDUCT VALUE)	4
253-256	B) MODERATE (NEGATIVE DEDUCT VALUE)	4
257-260	C) SEVERE (NEGATIVE DEDUCT VALUE)	4
261-264	LONGITUDINAL CRACKING (LINE 3 OF OUTPUT) A) LIGHT (NEGATIVE DEDUCT VALUE)	4
265-268	B) MODERATE (NEGATIVE DEDUCT VALUE)	4
269-272	C) SEVERE (NEGATIVE DEDUCT VALUE)	4
273-276	CORNER CRACKING (LINE 3 OF OUTPUT) A) LIGHT (NEGATIVE DEDUCT VALUE)	4
277-280	B) MODERATE (NEGATIVE DEDUCT VALUE)	4
281-284	C) SEVERE (NEGATIVE DEDUCT VALUE)	4
285-288	SHATTERED SLAB (LINE 3 OF OUTPUT) A) MODERATE (NEGATIVE DEDUCT VALUE)	4
289-292	B) SEVERE (NEGATIVE DEDUCT VALUE)	4

COLUMN	DESCRIPTION	LENGTH
293-295	FAULTING (NEGATIVE DEDUCT VALUE) (LINE 3 OF OUTPUT)	3
296-298	JOINT CONDITION (NEGATIVE DEDUCT VALUE) (LINE 3 OF OUTPUT)	3
299-301	PUMPING (NEGATIVE DEDUCT VALUE) (LINE 3 OF OUTPUT)	3
302-305	PATCHING (LINE 3 OF OUTPUT) A) FAIR (NEGATIVE DEDUCT VALUE)	4
306-309	B) POOR (NEGATIVE DEDUCT VALUE)	4
310-313	FAULTING (AVERAGE FAULT VALUE IN INCHES CALCULATED FROM PROFILER DATA)	4
314	BLANK	1
315	SPEED	1
316	BLANK	1
317	UNIT	1
318	TYPE	1
319-320	RATED LANE	2
321	BLANK	1
322-323	RATER	2
324	BLANK	1
325-326	RATER2	2
327	BLANK	1
328-329	SLAB LENGTH	2
330	BLANK	1
331-334	NUMBER OF SLABS	4
335	BLANK	1
336-339	NUMBER OF JOINTS	4
340	BLANK	1
341-344	PERCENT OF CRACKED SLABS	4
345	BLANK	1
346-349	NUMBER OF SLABS WITH MORE THAN ONE CRACK	4
350	BLANK	1
351-420	LONG COMMENTS	70

APPENDIX B Ride Rating Re-run Procedure



Note 1

- If more than one section requires re-runs within any project:
- Clean Laser Lenses
- Verify Passing Accelerometer Calibration
- Verify profiler by re evaluating project collected earlier that was accurate based upon last year's data.

APPENDIX C

Profiler Calibration Instructions

Calibration Check On Profiler: The following calibration checks are required on the Profiler.

- Step 1: Prior to calibration assure unit (vehicle and equipment) is warmed up (between 15 to 30 minutes).
- Step 2: Check tire pressure and adjust to recommended pressure if necessary.
- Step 3: Run electronic straightedge calibration to ensure sensors' alignment accuracy every thirty days, when replacing sensor or when data is suspect. This must be accomplished in conjunction with steps 4 and 5.
- Step 4: Run plate calibration every thirty days, when replacing sensor or when data is suspect to ensure sensors are reading distance to pavement surface correctly. This must be done in conjunction with steps 3 and 5.
- Step 5: Run section calibration to ensure accurate calculation of IRI and RN every thirty days, when replacing sensor or when data is suspect. This must be accomplished in conjunction with steps 3 and 4.
- Step 6: Run distance measuring instrument (DMI) calibration every thirty days and/or when tires are replaced. This is done independently from other calibrations.
- Step 7: Accelerometer calibration must be done each time the Profiler is turned on and after the system has warmed up for at least 15 minutes. The vehicle must be on a level section of pavement. Anyone who is going to be in vehicle while testing must be in vehicle while the accelerometer calibration is performed. After calibration is done the new accelerometer values must be accepted.