# APPENDIX B: RESPONSES TO THE STATE DOT SURVEY

The comments provided by the respondents are provided at the end of the appendix.

State	State	Anonymity	Q2. Inertial	Profilers Ow	ned by DOT	Q3. Re	ference Profi	lers Owned	by DOT	Q4. Inertial
Number		Desired?	Permanently	Portable	Lightweight	Dipstick	ARRB	SurPRO	WP	Profiler
ramber		Desired.	Fixed	Tortubic	LigiteWeight	Dipotiek	WP (9.5")	Sui No	SSI	Utilization
			Tixeu				W1 (5.5 )		331	Othization
1	Alabama	No	1	0	0	1	0	1	0	(d)
2		Yes	2	0	1	0	0	0	0	(c)
3		Yes	1	0	1	0	0	0	0	(a), (c)
4		Yes	1	2	2	0	0	0	0	(a), (b), (c), (d)
5	California	No	12	0	0	0	0	0	0	(c), (d)
6	Colorado	No	1	0	0	0	0	1	0	(c), (d)
7	Connecticut	No	2	0	0	1	0	0	0	(a), (b), (c)
8		Yes	0	0	1	0	0	0	0	(d)
9	Florida	No	10	0	0	0	0	1	0	(a), (b), (c), (e) - See Comment
10		Yes	8	0	1	0	0	1	0	(c)
11	Illinois	No	0	11	1	1	0	1	0	(d), (e)-See Comment
12	Iowa	No	1	3	1	0	0	0	0	(a), (b), (d)
13	Kansas	No	1	0	0	0	0	0	0	(a), (b)
14		Yes	0	3	0	0	0	1	0	(a), (b), (c)
15	Louisiana	No	1	1	1	0	1	0	0	(d), (e)-See Comment
16	Maine	No	1	1	0	0	0	0	0	(a), (b), (c)
17	Maryland	No	4	0	0	0	0	1	0	(a), (b), (d)
18		Yes	1	2	0	0	1	1	0	(a), (b), (d)
19	Michigan	No	1	1	1	1	0	1	0	(c), (d)
20	Minnesota	No	5	0	1	1	1	1	0	(a), (b), (d)
21	Mississippi	No	2	0	0	0	0	1	0	(c), (d)
22	Missouri	No	3	0	2	1	0	1	0	(a), (b), (d)
23		Yes	2	5	0	0	0	1	0	(a), (b), (c)
24	Nevada	No	1	3	0	0	0	1	1	(a), (b), (d)
25	New Hampshire	No	2	0	0	0	0	0	0	(a), (b), (c)
26	New Jersey	No	1	2	0	0	0	3	0	(a), (c)
27	New Mexico	No	3	1	0	0	0	1	0	(d)
28	New York	No	1	0	0	0	0	2	0	(c), (d)
29	North Carolina	No	4	0	0	0	0	0	0	(a), (b), (c), (d)
30	North Dakota	No	1	1	0	0	0	0	0	(a), (c)
31	Ohio	No	3	2	0	1	0	0	0	(a), (b), (c), (d), (e)-See Comment
32		Yes	0	0	1	0	0	0	0	(d)
33	Oregon	No	1	0	0	0	0	1	0	(a), (b), (c), (d)
34	Pennsylvania	No	3	0	4	0	0	1	0	(a), (d)
35		Yes	1	0	0	0	0	1	0	(c), (e)
36		Yes	1	2	1	0	0	1	0	(a), (b), (c)
37		Yes	5	0	0	0	0	1	0	(c)
38	Texas	No	6	0	0	0	0	1	0	(b), (d), (e)-See Comment
39		Yes	1	0	0	0	0	0	0	(b), (c)
40		Yes	1	0	0	1	0	0	0	(a), (c)
41		Yes	3	0	0	0	0	0	0	(c)
42	Washington	No	2	0	0	0	0	1	0	(a), (b), (c)
43		Yes	1	0	0	0	0	0	0	(c), (d)
44	Wisconsin	No	3	0	1	0	0	1	0	(a), (b), (d)

State	Q5. Use		Q6. Use of IR	I	Q7. Hi	ghway	Q8. Equ	ipment for Data	Collection	Q9.	Q10.
Number	IRI?	Asphalt	Concrete	Bridge	Sys	tem	Asphalt	Concrete	Bridge Decks	Policy	Data
				Deck	Asphalt	Concrete					Collection
1	Yes	Yes	Yes	No	98	2	HS	HS	IRI Not Used	(a)	(b)
2	Yes	Yes	No	No	100	0	HS & LS	IRI Not Used	IRI Not Used	(b)	(a)
3	Yes	Yes	No	No	95	5	HS	IRI Not Used	IRI Not Used	(a)	(a)
4	No	N/A	No	No	97	3	IRI Not Used	IRI Not Used	IRI Not Used	N/A	N/A
5	Yes	Yes	Yes	No	74	26	HS	HS	IRI Not Used	(a)	(b)
6	Yes	Yes	Yes	No	90	10	HS	HS	IRI Not Used	(a)	(b)
7	Yes	Yes	No	No	99.4	0.6	HS	IRI Not Used	IRI Not Used	(a)	(a)
8	Yes	Yes	Yes	No	65	5	HS & LS	HS & LS	IRI Not Used	(c)	(b)
9	No	N/A	N/A	N/A	97	3	N/A	N/A	N/A	N/A	N/A
10	Yes, HRI	Yes	Yes	Yes	95	5	HS	HS	LS	(a)	(a)
11	No	N/A	N/A	N/A	93.5	6.5	N/A	N/A	N/A	N/A	N/A
12	Yes	Yes	YES	No	80	20	HS & LS	HS & LS	IRI Not Used	(a)	(b)
13	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	Yes	Yes	Yes	No	95	5	HS	HS	IRI Not Used	(a)	(a)
15	Yes	Yes	Yes	Yes	90	10	HS & LS	HS & LS	HS	(a)	(b)
16	Yes	Yes	No	No	100	0	HS	IRI Not Used	IRI Not Used	(a)	(a)
17	Yes	Yes	Yes	No	98	2	HS & LS	HS & LS	IRI Not Used	(a)	(b)
18	Yes	Yes	No	No	98	2	HS	IRI Not Used	IRI Not Used	(a)	(b)
19	Yes	Yes	Yes	Yes	80	20	HS & LS	HS & LS	HS & LS	(a)	(a)
20	Yes	Yes	Yes	No	84	16	HS & LS	HS & LS	IRI Not Used	(a)	(b)
21	Yes	Yes	No	No	96	4	HS	IRI Not Used	IRI Not Used	(a)	(b)
22	Yes	Yes	Yes	No	93	7	HS & LS	HS & LS	IRI Not Used	(a)	(b)
23	Yes	Yes	No	No	96	4	HS	IRI Not Used	IRI Not Used	(a)	(a)
24	Yes	Yes	Yes	No	95	5	HS & LS	HS & LS	IRI Not Used	(a)	(b)
25	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
26	Yes	Yes	Yes	No	96	4	HS	HS	IRI Not Used	(a)	(a)
27	Yes	Yes	Yes	No	97	3	HS	HS	IRI Not Used	(a)	(b)
28	Yes	Yes	Yes	No	90	10	HS & LS	HS & LS	IRI Not Used	(a)	(b)
29	Yes	Yes	Yes	No	90	10	HS	HS	IRI Not Used	(b)	(a), (b)
30	Yes	Yes	Yes	Yes	85	15	HS	HS	HS	(a)	(a)
31	Yes	Yes	Yes	Yes	96	4	HS & LS	HS & LS	HS & LS	(b)	(b)
32	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
33	Yes	Yes	No	No	95	5	HS	IRI Not Used	IRI Not Used	(a)	(b)
34	Yes	Yes	Yes	Yes	96.5	3.5	LS	LS	LS	(a)	(b)
35	Yes	Yes	No	Yes	99.9	0.1	HS	IRI Not Used	HS	(c)	(a)
36	Yes	Yes	Yes	No	83	17	HS & LS	HS & LS	IRI Not Used	(c)	(a)
37	Yes, HRI	Yes	No	No	95	5	HS	IRI Not Used	IRI Not Used	(a)	(a)
38	Yes	Yes	Yes	No	91	9	HS & LS	HS & LS	IRI Not Used	(a)	(b)
39	Yes	Yes	Yes	Yes	94	6	HS	HS	HS	(c)	(a), (b)
40	Yes	Yes	No	Yes	99	1	HS	IRI Not Used	HS & LS	(a)	(a)
41	Yes	Yes	Yes	No	95	5	HS	HS	IRI Not Used	(b)	(a)
42	Yes	Yes	No	No	54	13	HS	IRI Not Used	IRI Not Used	(b)	(a)
43	Yes	Yes	Yes	No	71	3	HS & LS	HS & LS	IRI Not Used	(a)	(b)
44	Yes	Yes	Yes	No	75	25	HS & LS	HS & LS	IRI Not Used	(a)	(b)

State Q11. Q12. Q13.  Number Profiler Certification Certification	Q14.	Q15.
Number Profiler Cartification Cartification		
Trumber Certification Certification	Future	Surface Types and IRI
Certification Agency Contractor	Plans	
1 (b), (c), (d) (f) (h)	(a)	DAC (IRI <70, 70 to 120, >120), OAC (IRI <70)
2 (b) (c) (a)	(a)	DGAC, IRI < 70
3 (a) (a) (a)	(a)	N/A
4 N/A N/A N/A	N/A	N/A
5 (b), (c), (d) (b) (d)	(a)	DGAC (No specific IRI)
6 (b), (c), (d) (c) (e)	(a)	DAC (70 to 120)
7 (a) (a) (a)	(b)	N/A
8 (a) (a) (b)	(a)	N/A
9 N/A N/A N/A	N/A	N/A
10 (e)-See Comment (c) (a)	(c)	DAC, IRI < 70, LTC, IRI 70 to 120
11 N/A N/A N/A	N/A	N/A
12 (b), (c), (d), See Comment (j) (1)-See Comment	(a)	BFC (IRI>120)
13 N/A N/A N/A	N/A	N/A
14 (b), (c) (c) (a)	(a)	DAC (IRI < 70, IRI > 120), TTC (IRI<70), DGC (IRI<70)
15 (b), (c), (d) (c) (e)	(a)	DGC & TTC (Smooth & Medium Smooth), OAC, LTC
16 (c) (a) (a)	(a)	N/A
17 (b), (c), (d) (c) (e)	(a)	DAC (70 to 120)
18 (b), (d) (g) (i)	(a)	DAC (IRI 70 to 120 and > 120)
19 (b), (c), (d) (b) (d)	(a)	DAC (IRI 70 to 120)
20 (b), (c), (d) (b) (d)	(a)	DAC (IRI 70 to 120), TTC (70 to 120)
21 (b), (d) (c) (e)	(a)	IRI < 70
22 (b), (c), (d) (b) (d)	(a)	TTC (70 to 120)
23 (a) (a)-See Comment (a)	(b)	N/A
24 (b) (c) (e)	(a)	DAC (IRI < 70 in/mi)
25 N/A N/A N/A	N/A	N/A
26 (b), (c), (d) (b) (a)	(a)	DAC (IRI<70, 70 to 120, > 120)
27 (b), (c), (d) (c) (e)	N/A	DAC (IRI < 70, 70 to 120)
28 (b) (a) (d)	(b)	DAC (IRI 70 to 120)
29 (a) (b) (d)	(a)	DAC (IRI <70 and >120)
30 (b) (d) (a)	(a)	DAC (IRI 70 to 120), TTC (70 to 120)
31 (b), (c), (d) (j)-See Comment (I)-See Comment	(a)	DAC(IRI<70), TTC (IRI > 120), DGC (IRI 70 to 120), LGC (IRI 70 to 120), DAC <70)
32 N/A N/A N/A	N/A	N/A
33 (b), (c), (d) (c) (e)	(a)	DAC (IRI < 70, 70 - 120)
34 (b) (b) (d)	(a)	DAC (70 to 120), TTC (<70, > 120), LTC (>120), DGC (<70, > 120)
35 (a) (a) (a)	(b)	N/A
36 (a) (d) (a)	(a)	DAC (IRI 70 to 120), TTC (70 to 120)
37 (e) (c) (a)	(a)	DAC 70 to 100
38 (b), (d) (f) (h)	(a)	DAC & TTC (Smooth and Medium Smooth), OAC, , LTC
39 (b) (c) (e)-See Comment	(c)	N/A
40 (a) (a)	(a)	N/A
41 (a) (a) (a)	(a)	N/A
42 (b) (b) (a)	(a)	DAC, IRI 70 to 120 and > 120
43 (b), (c), (d) (a) (b)	(b), (c)	N/A
44 (b), (d) (c) (e)	(a)	DAC (IRI <70, 70 to 120 in/mi)

Q16.	Q17.	Q18.	Q19.	Q20.	Q21.	Q22.	Q23.
Height Sensor	Section	Reference	Method	Written	Fee	Documen-	Operator
_		Device	Wethou	Policy	ree	tation	Certification
Туре	Length	Device		Policy		tation	Certification
Not Specified	(b)	(b)	(d)	(a)	(b)	(b)	(b), (d)
DAC (SS)	(c)	(b)	(c)	(c)	(a)	(a)	(a)
DAC, OAC, SMA (SS), All PCC (NS)	(a)	(a)	(a)	(c)	(a)	(a)	(a)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DAC, OAC, SMA (NS), All PCC (LL)	(b)	(b)	(d)	(a)	(b)-\$1000	(b), (c), (d)	(b), (d)
DAC, SMA (SS or LL), All PCC (LL)	(c)	(b)	(d)	(a)	(b)-\$500	(c), (d)	(b), (d)
All Surfaces (LL)	(a)	(a)	(a)	(c)	(a)	(a)	(a)
All Surfaces (SS)	(a)	(a)	(a)	(c)	(a)	(a)	(a)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DAC, OAC (LL), CTT (LL)	(b)	(b)	(d)	(a)	(a)	(a)	(b)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DAC (SS or LS), OAC, SMA (LL), All PCC (LL)	(b)	(g)	(d)	(a)	(d)	(c)	(a), (d)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Not Specified'	(b)	(b)	(b)	(a)	(a)	(a)	(b)
Not Specified	(b)	(d)	(e)	(a)	(d)	(b), (c)	(a), (c)
DAC, OAC, SMA (LL)	(a)	(a)	(a)	(c)	(a)	(a)	(a)
All Surfaces (LL)	(b)	(h), See Comment	(d)	(a)	(d)	(e), See Comments	(b), (d)
DAC, OAC (SS)	(b)	(b)	(d)	(a)	(d)	(c)	(a), (c)
Not Specified	(b)	(b)	(e)	(a)	(d)	(b), (c), (d)	(b)
Not Specified	(b)	(b)	(d)	(a)	(d)	(b), (c), (d)	(a), (d)
Not Specified	(b)	(b)	(b)	(a)	(d)	(c)	(b), (d)
Not Specified	(b)	(b)	(d)	(a)	(d)	(c)	(b), (d)
DAC (WS)	(a)	(a)	(a)	(c)	(a)	(a)	(a)
DAC, OAC (SS, WS, LL), TTC, DGC (LL)	(c)	(c)	(b)	(a)	(d)	(e)-See Comment	(b), (d)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Surfaces (SS)	(b)	(b)	(e)	(c)	(a)	(a)	(b)
DAC, OAC, BFC, LTC, DGC (SS or WS)	(c)	(b), (g), (h) See Comment	(d)	(a)	(b)-\$500	(b), (c)	(b), (d), (e) See Comment
Not Specified	(c)	(b)	(d)	(a)	(d)	(c)	(a), (d)
Not Specified	(b)	(b)	(b)	(c)	(d)	(c)	(a), (c)
DAC, SMA (LL), LTC, DGC (LL)	(b)	(b)	(e)	(c)	(a)	(a)	(a)
DAC, SMA (SS, WS, LL), All concrete (LL)	(d), See Comment	(g)	(e)	(a)	(d)	(c), (d)	(a), (d)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Not Specified	(b)	(b)	(d)	(a)	(d)	(c)	(b), (d)
Not Specified	(b)	(b)	(d)	(a)	(b)-\$400-See Comment	(b), (d)	(a), (d)
Not Specified	(a)	(a)	(a)	(c)	(a)	(a)	(a)
All Surfaces (LL)	(b)	(b)	(d)	(c)	(a)	(a)	(a)
DAC (LL)	(c)	(b)	(b)	(a)	(a)	(a)	(a)
Not Specified	(b)	(b)	(e)	(a)	(b)-\$400	(b), (d)	(b), (d)
Not Specified	(b)	(b)	(d)	(a)	(a)	(b)	(a), (d)
DAC, OAC (SS), DGC (SS)	(a)	(a)	(a)	(c)	(a)	(a)	(a)
All Surfaces (SS)	(a)	(a)	(a)	(c)	(a)	(a)	(a)
DAC (LL)	(c)	(b)	(b)	(c)	(a)	(a)	(a)
Not Specified	(a)	(a)	(a)	(a)	(a)	(a)	(b), (d)
Not Specified	Other-500 ft		(d)	(a)	(d)		(b), (d)
иот эћесшеа	υιπει-500 π	(b)	(a)	(d)	(a)	(c), (d)	(D), (a)

State	Q24.	Q25.	Q26.	Q27.	Q28.	Q29.
Number	Written	Operator	Validity	Documen-	Fee	Reciprocity
	Procedure	Procedures		Station		Profiler
1	(a)	(b), (d), (f)	(c)		(d)	(c)
2	(c)	(a)	(a)	(a)	(a)	(a)
3	(c)	(a)	(a)	(a)	(a)	(a)
4	N/A	N/A	N/A	N/A	N/A	N/A
5	(a)	(d), (f)	(b)	(b), (c), (d)	(d), \$500/operator	(c)
6	(c)	(d), (f)	(c)	(c), (d)	(c)	(c)
7	(c)	(a)	(a)	(a)	(a)	(a)
8	(c)	(a)	(a)	(a)	(b)	N/A
9	N/A	N/A	N/A	N/A	N/A	N/A
10	(a)	(b), (f)	(d), See Comment	(a)	(a)	(a)
11	N/A	N/A	N/A	N/A	N/A	N/A
12	(a)	(b), (d)	(d), 5 Years	(b), (d)	(d), \$250/operator	(b), See Commen
13	N/A	N/A	N/A	N/A	N/A	N/A
14	(a)	(f)	(b)	(a)	(b)	(a)
15	(c)	(a)	(a)	(a)	(b)	(c)
16	(c)	(a)	(a)	(a)	(a)	(c)
17	(a)	(b), (d), (f)	(c)	(f), Card Provided	(d)	(c)
18	(c)	(a)	(a)	(a)	(b)	(c)
19	(a)	(f)	(c)	(a), (f) See Comment	(a)	(c)
20	(a)	(c), (e), (f)	(c)	(d)	(c)	(c)
21	(a)	(d), (f)	(c)	(b)	(c)	(c)
22	(a)	(b), (d), (f)	(d), 5 Years	(b), (c)	(d), \$250/operator	(b)
23	(c)	(a)	(a)	(a)	(b)	(a)
24	(a)	(b), (d), (f)	(d) See Comment	(f)-See Comment	(b)	(c)
25	N/A	N/A	N/A	N/A	N/A	N/A
26	(c)	(b), (d), (f)	(c)	(a)	(a)	(a)
27	(a)	(b), (f)	(c)	(f) See Comment	(d), \$100, See Comment	(c)
28	(a)	(f)	(b)	(b)	(c)	(c)
29	(c)	(a)	(a)	(b)	(b)	(c)
30	(c)	(a)	(a)	(a)	(a)	(a)
31	(a)	(b), (f)	(b)	(b), (e)	(c)	(b)
32	N/A	N/A	N/A	N/A	N/A	N/A
33	(a)	(f)	(b)	(b)	(c)	(c)
34	(a)	(f)	(c)	(d), (f) - ID Card No Photo	(d), See Comment	(c)
35	(c)	(a)	(a)	(a)	(a)	(a)
36	(c)	(a)	(a)	(a)	(b)	(a)
37	(c)	(a)	(a)	(a)	(a)	(a)
38	(a)	(d), (f)	(c)	(c)	(d), \$400	(c)
39	(a)	(d), (f)	(d), 5 Years	(d)	(d), \$150	(c)
40	(c)	(a)	(a)	(a)	(a)	(a)
41	(c)	(a)	(a)	(a)	(a)	(a)
42	(c)	(a)	(a)	(a)	(a)	(a)
43	(a)	(b), (d)	(d), 4 Years	(b), (d), (f) - ID Card No Photo	(c)	(c)
44	(c)	(b), (c), (d), (e)	(c)	(b)	(c)	(c)

State	Q30.	Q31.	Q32.	Q33.	Q34.
Number	Reciprocity	Checks	Checks	QA	Discrepancy
	Operator	DOT	Contractor	Procedures	
1	(d)	(a), (b), (c)	(b), (c), (g) Comment	(d)	(c)
2	(a)	(b), (c)	(a)	(a)	(a), See Comment
3	(a)	(a), (b), (c)	(a)	(a)	(a)
4	N/A	N/A	N/A	N/A	N/A
5	(d)	(a), (b), (c)	(b), (c), (d), (e), (f)	(c)	(b)
6	(d)	(a), (b), (c)	(b), (c), (d)	(e), See Comment	(b)
7	(a)	(b), (c)	(a)	(a)	(a)
8	N/A	(a), (b), (c)	d), (e), (f), (g) See Commen	(d)	(d), See Comment
9	N/A	N/A	N/A	N/A	N/A
10	(a)	(a), (c)	(a)	(a)	(a)
11	N/A	N/A	N/A	N/A	N/A
12	(d)	(b), (c), (d) See Comment	(b), (c), (e)	(b)	(c)
13	N/A	N/A	N/A	N/A	N/A
14	(a)	(a), (b), (c)	(a)	(a)	(a)
15	(b)	(a), (b), (c)	(b), (d), (e), (f)	(d)	(b)
16	(a)	(a), (b), (c)	(a)	(a)	(a)
17	(d)	(a), (b)	(b), (c), (g) Comment	(e), See Comment	(c)
18	(b)	(a), (b), (c)	(b)	(c)	(c)
19	(d)	(a), (b), (c), (d) See Comment	(b), (d), (e), (f)	(a)	(a)
20	(d)	(a), (b), (c)	(b), (c)	(e), See Comment	(d), See Comment
21	(d)	(a), (b), (c)	(b), (c), (d)	(e), See Comment	(b)
22	(d)	(a), (b), (c)	(b), (c)	(b)	(c), See Comment
23	(a)	(a), (b), (c)	(a)	(a)	(a), See Comment
24	(c)	(a), (b), (c), (d) - See Comment	(b), (c) (d), (e), (f)	(b)	(c)
25	N/A	N/A	N/A	N/A	N/A
26	(a)	(a), (b), (c)	(a)	(a)	(a)
27	(d)	(a), (b), (c)	(b), (c), (d), (e), (f)	(d)	(d)-See Comment
28	(d)	(a), (b), (c)	(b), (c), (d), (e), (f)	(d)	(d), See Comment
29	(d)	(a), (b)	(b), (c)	(d), See Comment	(d), See Comment
30	(a)	(a), (b), (c)	(a)	(a)	(a)
31	(e)-See Comment	(a), (b), (c)	(b), (c), (g) See Comment	(d)	(b), See Comment
32	N/A	N/A	N/A	N/A	N/A
33	(d)	(a), (b), (c)	(b), (c), (d), (e), (f)	(d), See Comment	(b), See Comment
34	(d)	(b), (c), (d) See Comment	(b), (c), (d), (e), (f)	(c)	(d), See Comment
35	(a)	(a), (b), (c)	(a)	(a)	(a)
36	(a)	(a), (b), (c)	(a)	(a)	(a)
37	(a)	(a), (b), (c)	(a)	(a)	(a)
38	(d)	(a), (c)	(b), (c)	(e), See Comment	(d), See Comment
39	(d)	(a), (b), (c), (d) See Comment	(b), (c)	(e), See Comment	(c)
40	(a)	(a), (b)	(a)	(a)	(a)
41	(a)	(a), (b), (c), (d) See Comment	(a)	(a)	(a), See Comment
42	(a)	(a), (b), (c)	(a)	(a)	(a)
43	(d)	(a), (b), (c)	(c)	(c)	(c)
44	(d)	(a), (b), (c)	(b), (c)	(e), See Comment	(c)

State	Q36.	Data	Q37.	Q38.	Q39.	Q40.
Number	Colle	ction	Certification	Agency	Vendor	Future
	State Network	HPMS		Certification	Certification	Plans
1	(b)	(b)	(b)	N/A	(g)	(a)
2	(b)	(b)	(b)	N/A	(d)	(a)
3	(a)	(a)	(a)	(a)	(a)	(c)
4	(a)	(a)	(b), (c), (d), (e)	(a)	(a)	(b)
5	(b)	(b)	(b), (d), (e)	N/A	(c)	(a)
6	(b)	(b)	(a)	N/A	(b)	(e)
7	(a)	(a)	(a)	(a)	(a)	(b)
8	(b)	(b)	(a)	N/A	(b)	(e)
9	(a)	(a)	(a)	(a)	(a)	(b)
10	(b)	(b)	(a)	N/A	(b)	(e)
11	(b)	(b)	(b), (d), (e)	N/A	(k)-See Comment	(f)-See Comment
12	(a), (b)	(a), (b)	(b), (c)	(a), (j) - See comment	(b)-See Comment	(a)
13	(a)	(a)	(a)	(a)	(a)	(c)
14	(a)	(a)	(c), (d)	(g)	(a)	(a)
15	(b)	(b)	(b), (c), (d), (e)	N/A	(b), See Comment	(e)
16	(a)	(a)	(d)	(a)	(a)	(c)
17	(a)	(a)	(a)	(j), See Comment	(a)	(c)
18	(a)	(a)	(c), (d), (e)	(g)	(a)	(a)
19	(b)	(b)	(b), (d), (e)	N/A	(c)	(a)
20	(a)	(a)	(b), (c), (d), (e)	(b)	(a)	(a)
21	(b)	(b)	(b)	N/A	(d)	(a)
22	(a)	(a)	(b), (d), (e)	(h)	(a)	(a)
23	(a)	(a)	(a)	(a)	(a)	(b)
24	(a)	(a)	(a)	(a)	(a)	(c)
25	(a)	(a)	(b), (c), (d), (e)	(a)	(a)	(c)
26	(a)	(b)	(c)	(b)	(k) - See Comment	(a), (d)
27	(b)	(b)	(a), See Comment	N/A	(b)	(d), See Comment
28	(b)	(b)	(b), (c), (d), (e)	(a)	(b), See Comment	(c), (e)
29	(a), (b)	(a)	(c)	(b)	(b)	(d)
30	(a)	N/A	(c), (d)	(d)	(d)	(a)
31	(a)	(a)	(b), (c), (d), (e)	(a), (j)	(a)	(c)
32	(b)	(b)	(b), (c), (d), (e)	N/A	(k), See Comment	(e)
33	(a), (b)	(a), (b)	(b), (c), (d), (e)	(c)	(d)	(a)
34	(a), (b)	(b)	(a)	(a)	(b)	(c), (d)
35	(a), (b)	(b)	(b)	N/A	(b)-See Comment	(e)
36	(a)	(a)	(a)	(a)	(a)	(c)
37	(b)	(b)	(a)	N/A	(b)	(e)
38	(b)	(a)	(a) (b), (e)	(f)	(g)	(e) (a)
39						
40	(b)	(a)	(b), (c), (d), (e)	(c)	(b)	(e)
	(a), (b)	(b)	(a)	(a)	(a)	(c), (e)
41	(b)	(b)	(a)	N/A	(b)	(e)
42	(a)	(a)	(c)	(b)	(a)	(a)
43	(b) (a)	(b) (a)	(b)	N/A (c)	(b) (a)	(e) (a)

			1		
State	Q41.	Q42.	Q43.	Q44.	Q45.
Number	Surface	Height	Length	Reference	Procedure
	Types	Sensor		Device	
1	DAC (IRI < 70, 70 to 120, > 120 in/mi), OAC (IRI < 70 in/mi)	Not Specified	(a)	(b)	(d)
2	DGA < 70 in/mi	SSL	(b)	(b)	(c)
3	N/A	SSL	(d)	(a)	(a)
4	N/A	SSL	(d)	(a)	(a)
5	DAC (IRI Not Specified)	LL	(a)	(b)	(d)
6	N/A	Not Specified	(d)	(a)	(a)
7	N/A	LL	(d)	(a)	(a)
8	N/A	SSL	(d)	(a)	(a)
9	N/A	SSL	(d)	(a)	(a)
10	N/A	LL	(d)	(a)	(a)
11	N/A	Not Specified	(d)	(a)	(a)
12	DAC, TTC, LTC (IRI Not Specified)	SS or LL (AC) LL (Others)	(e), 500 m	(g)	(a)
13	N/A	WS	(d)	(a)	(a)
14	DAC (IRI<70, >120 in/mi), TTC and DGC (IRI<70 in/mi)	Not Specified	(a)	(b)	(b)
15	Asphalt, Composite, TTC (IRI 70 to 120, > 120 in/mi)	SSL	(a)	(g)	(a)
16	N/A	LL	(d)	(a)	(a)
17	N/A	LL	(d)	(a)	(a)
18	DAC (IRI 70 to 120, > 120 in/mi)	SSL	(a)	(b)	(d)
19	DAC (IRI 70 to 120 in/mi)	LL	(a)	(b)	(e)
20	DAC and TTC (IRI 70 to 120 in/mi)	Not Specified	(a)	(b)	(d)
21	DAC (IRI < 70 in/mi)	LL	(a)	(b)	(e)
22	DAC (IRI < 70 and > 120 in/mi)	LL	(a)	(b)	(b)
23	N/A	WA	(d)	(b)	(a)
24	N/A	SSL	(d)	(a)	(a)
25	N/A	SSL	(d)	(a)	(a)
26	DAC (IRI<70, 70 to 120, > 120 in/mi)	SSL	(a)	(b)	(e)
27	N/A	Not Specified	(d)	(a)	(a)
28	N/A	Not specified	(d)	(a)	(a)
29	DAC (IRI < 70 and > 120 in/mi)	SS & LS	(a)	(b)	(b)
30	DAC and TTC (IRI 70 to 120) in/mi)	LL	(a)	(b)	(d)
31	N/A	SS/WS/LL (all AC), LL (PCC)	(e), 0.2 to 0.3 miles	(a)	(a)
32	N/A	Not Specified	(d)	(a)	(a)
33	DAC (IRI < 70 and 70 to 120 in/mi)	LL	(a)	(b)	(d)
34	N/A	Not Specified	N/A	(a)	(a)
35	N/A	Not Specified	(d)	(b)-See Comment	(a)
36	N/A	LL	(d)	(a)	(a)
37	N/A	Not Specified	(d)	(a)	(a)
38	DAC and TTC (Smooth & Medium Smooth), OAC, LTC	Not Specified	(a)	(b)	(e)
39	DAC (Not specified)	Not Specified	(a)	(b)	(b)
40	N/A	SSL or LL	(d)	(a)	(a)
41	N/A	LL	(d)	(a)	(a)
42	DAC (IRI 70 to 120, > 120 in/mi)	LL	(b)	(b)	(b)
43	N/A	Not Specified	(d)	(a)	(a)
44	DAC (IRI 70 to 120 in/mi)	SSL	(a)	(b)	(b)

State	Q46.	Q47.	Q48.	Q49.	Q50.	Q51.	Q52.	Q 53.	Q54
Number	Fee	Docum-	Operator	Certification	Validity	Docum-	Fee	Reciprocity	Reciprocity
		entation	Certified?	Procedure		entation		Profiler	Operator
1	(a)	(a)	(d)	(b), (f)	(c)	Not Sure	(c)	(d)	(d)
2	(b)	(b)	(c)	(a)	(a)	(a)	(a)	(d)	(b)
3	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
4	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
5	(c), \$1000	(c), (d), (e)	(d)	(d), (f)	(b)	(b), (c), (d)	(c), \$500	(d)	(d)
6	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(b)	(b)
7	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
8	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(b)	(b)
9	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
10	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(b)	(b)
11	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(b)	(b)
12	(b)	(a)	(c)	(a)	(a)	(a)	(a)	(d)	(b)
13	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
14	(a)	(a)	(b)	(f)	(b)	N/A	(a)	(a)	(a)
15	(b)	(a)	(c)	(a)	(a)	(a)	(a)	(d)	(b)
16	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
17	(a)	(a)	(b)	(b), (d), (f)	(d), See Comment	(f)	N/A	(a)	(a)
18	(a)	(a)	(a)	(a)	(a)	N/A	(a)	(a)	(a)
19	(b)	(d), (e)	(c)	(a)	(a)	(a)	(a)	(d)	(b)
20	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
21	(b)	(b)	(c)	(a)	(a)	(a)	(a)	(d)	(b)
22	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(b)
23	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
24	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
25	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
26	(a)	(a)	(b), (c)	(b), (d), (f)	(c)	N/A	N/A	(c)	(b)
27	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(b)	(b)
28	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(b)	(b)
29	(b)	(a)	(a), (c)	(a)	(a)	(a)	(a)	(b)	(b)
30	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
31	(a)	(a)	(a)	(f), See Comment	(a)	(a)	(a)	(a)	(a)
32	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(c)	(b)
33	(b)	(d)	(a), (c)	(a)	(a)	(a)	(a)	(d)	(b)
34	(a)	(a)	(a), (c)	(a)	(a)	(a)	(a)	(b)	(b)
35	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(b)	(b)
36	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
37	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(b)	(b)
38	(c), Yes	(c), (e)	(b), (c)	(f), See Comment	(a)	(a)	(a)	(d)	(b)
39	(a)	(a)	(a) (c)	(a)	(a)	(a)	(a)	(b)	(b)
40	(a)	(a)	(a), (c)	(a)	(a)	(a)	(a)	(b)	(b)
41	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(b)	(b)
42	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
43	(a)	(a)	(c)	(a)	(a)	(a)	(a)	(b)	(b)
44	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)

State	Q55.	Q56.	Q57.	Q58.	Q59.
Number	Vendor	DOT	Vendor	DOT	Items Covered
	Quality	Procedure	Procedure	Quality	in the DQP
	Plan			Plan	
1	(a)	N/A	(a)	(a)	(b), (g)
2	(a)	N/A	(a)	(b)	(a)
3	N/A	(b), (d) See Comment	N/A	(a)	(b), (c), (e), (f), (g)
4	N/A	(c)	N/A	(b)	(a)
5	(a)	N/A	(b)	(b)	(a)
6	(a)	N/A	(a)	(a)	(c), (d), (e), (f), (g)
7	N/A	(d), Comment	N/A	(b)	(a)
8	(a)	N/A	(a)	(b)	(a)
9	N/A	(a), (b)	N/A	(b)	(a)
10	(a)	N/A	(c)	(c)	N/A
11	(a)	N/A	(a), (b)	(b)	(a)
12	(a)	(b), (d)-See Comment	(a)	(a)	(d), (e), (f), (g)
13	N/A	(b)	N/A	(c)	N/A
14	N/A	(a), (b)	N/A	(a)	(b), (c), (d), (e), (f)
15	(a)	N/A	(a), (b)	(a)	(b), (c), (e), (f)
16	N/A	(c)	N/A	(b)	(a)
17	N/A	(d), See Comment	N/A	(a)	(b), (c), (d)(, (e), (f), (g)
18	N/A	(a)	N/A	(b)	(a)
19	(a)	N/A	(a), (b)	(c)	N/A
20	N/A	(d)-See Comment	N/A	(b)	(a)
21	(a)	N/A	(a), (b)	(b)	(a)
22	N/A	(a), (b)	N/A	(c)	N/A
23	N/A	(b)	N/A	(b)	(a)
24	N/A	(a), (b)	N/A	(b)	(a)
25	N/A	(a)	N/A	(a)	(b), (c), (d), (e), (f)
26	(b)	(b)	(c), (d) See Comment	(b)	(a)
27	(a)	N/A	(a), (b)	(a)	(e), (f), (g)
28	(c)	N/A	(a), (b)	(c)	N/A
29	(a)	(c)	(b)	(a)	(b), (c)
30	N/A	(a)	N/A	(c)	N/A
31	N/A	(a), (b)	N/A	(b)	(a)
32	(a)	N/A	(a)	(b)	(a)
33	(a)	(b)	(a), (b)	(b)	(a)
34	(a)	(a), (b)	(a)	(b)	(a)
35	(b) See Comment	N/A	(a)	(a)	(d), (e), (g)
36	N/A	(d), See Comment	N/A	(c)	N/A
37	(a)	N/A	(a), (b)	(b)	(a)
38	(a)	(a)	(a)	(a)	(b), (d)
39	(a)	(a), (b)	(a), (b)	(b)	(a)
40	(a)	(a)	(a)	(b)	(a)
41	(a)	N/A	(a)	(a)	(d), (e)
42	N/A	(a)	N/A	(b)	(a)
43	(a)	N/A	(a), (b)	(c)	N/A
44	N/A	(b)	N/A	(b)	(a)

# COMMENTS PROVIDED FOR SURVEY

#### State 1

- Q 35. Operators and Equipment certified by NCAT not by DOT.
- Q 20. Written Procedure Profiler and Operator: Available on the web.
- Q 38. Profiler used to verify control sites, does not collect network level data.
- Q 58. DQM Plan available on the web.

#### State 2

- Q 34. If agency collected data is questionable, rerun at contractor's request.
- Q 58. DQM Under development

#### State 3

Q 11. Profiler checked on a known surface frequently for accuracy.

#### State 4

Q 43. Validation site used. Two routes near central office have been used at least two times per year for fifteen years

#### State 5

- Q 20: Written Procedure Profiler and Operator: Available on the web.
- Q 24: Written Procedure Profiler and Operator: Available on the web.
- Q 35. SurPRO owned by university.

#### State 6

Q 33. 25% of the projects are verified.

#### State 7

- Q 11. In the process of purchasing a reference profiler.
- Q 23. We will have in house personnel certified as indicated in the QA/QC plan.
- Q 38. Both vans run through our control site.
- Q 49. This year operators will be attending a training class on site with the new profiler.
- Q 56. Verify vans by running vans over selected control sites.
- Q 59. In process of drafting a DQP.
- Q 60. Before start of data collection year preventive maintenance is done on vans by the vendor. Control/verification sections are run to validate the profiler.

## State 8

- Q 7. Asphalt 65%, Concrete is 5%, and the remaining 30% are chip seals over soil cement
- Q 9. Spec decided during design phase.
- Q 11. Requires acceptance based on passing manufacturers calibration before each job.
- Q 32. Contractor provides printout of calibration checks.
- Q 34. Department works with contractor to isolate the problem.

#### State 9

- Q 9. DOT has implemented a developmental IRI specification for AC pavements > 55 mph on several pilot projects. This specification will be implemented statewide once sufficient pilot projects are completed in each district. Ultimately the IRI specification will be applied to concrete pavements.
- Q 10. A dedicated on-site consultant collects construction acceptance data. DOT assists when necessary. Q 31. See Table 1.

http://www.fdot.gov/materials/administration/resources/library/publications/fstm/methods/fm5-549.pdf

- Q 35: Currently, DOT uses a single spot laser, but is investigating the use of a line laser for concrete pavements (DOT diamond grinds all new concrete pavements). DOT will likely require a line laser on all pavements in the future
- Q 48. DOT will require certification of operators that collect network level data when certification is implemented.

Q 60. Data is compared with historical data while the rater is still in the field. Reruns are performed if the data is outside of expected tolerances/trends

#### State 10

- O 5: Use HRI.
- Q 20. Written Procedure Profiler and Operator: Available on the web.
- Q 24. Written Procedure Profiler and Operator: Available on the web.
- Q 26. We certify our new operators. We have a quarterly verification

#### State 11

- Q 4. Research projects.
- Q 14. Reworking verification program to align with R 56.
- Q 35. DOT currently has its own procedure for certifying profilers that collect PI. As we transition to using IRI, the program will be changed to more closely follow R 56.
- Q 40. Consider creating a program.
- Q 43. Contractor runs their own program and sends us the results.
- Q 51. Contractor certifies their employees.
- Q 61. Vendor is required to check data and retest if errors are found. The vendor runs a verification site monthly, calibrate daily, and complete a verification site before collecting every year.

# State 12

- Q 24. Profiler Operator Certification: Available on the web.
- Q 29. Approved test strips.
- Q 31. Additional checks, laser calibration and accelerometer calibration.
- O 35. Network level and HPMS. Contractor collects half and DOT collects the other half.
- Q 49. Network data collected by contractor, certifies own personnel.

#### State 13

Q 38. We can certify against an in-service location in our state. Typically we rely on the manufacturer's annual equipment checks for certification/validation.

# State 14

- Q 13. Contractor data is not used for acceptance. They can collect for their own purpose if wanted.
- Q 20. We have a loosely documented process but it is not published.
- Q 22. University would certify any contractor equipment, SHA would have no part of that process.
- O 24. We have a loosely documented process but it is not published.

# State 15

- O 4. Research and technical assistance.
- Q 22. A certification report is provided.
- Q 39. Network: We verify all equipment against calibration site before vendor collects data.
- Q 48. Operator: All operator collect data on our calibration sites before they can collect data.
- Q 60. Contractor: Excel Documents on DOTD Pavement Management Server showing all monthly calibration runs and weekly verification runs along for every vehicle collecting.

## State 16

O 14. Have no plan.

## State 17

- O 22. List maintained
- Q 27. Card provided.
- Q 32. Responsibility of contractor
- Q 33. Agency collects sample projects, frequency based on contractor history and data reasonableness.
- Q 38. Equipment is calibrated annually and verified monthly on a 13 mile circuit.

- Q 10. DOT employees may also collect data using contractor provided equipment. Contractor drives, DOT employee operates profiler.
- Q 27. We certify DOT employees and consultants. Letter provided, as well as list without photos on web. No fee.
- Q 31. Often run a validation site.
- Q 33. DOT Employees or hired consultants do the runs using contractor provided equipment. Contractor drives and DOT employee operates the profiler.

- Q 4. IP certification and research test sections.
- Q 26. 3 years unless major changes to ProVAL.
- Q 33. QA one project per contractor per year plus entire project whenever requested by inspector/project engineer.
- Q 34. Both IPs are decertified until it can be determined which one collecting erroneous data,

#### State 21

- Q 33. Agency collects around 5-10% of projects in a given calendar year.
- Q 35. Network profiler runs the certification site that has SurPRO measurements. Validation sites are established with DOT Profiler 2 per district.
- Q 41. Data collected before and during data collection.

#### State 22

- Q 28. Agency does not charge a fee but technical college presenting training does.
- Q 29. Case by case basis until contractor has a chance certify at the DOT track.
- Q 33. DOT Checks 10% of project length.
- Q 34. SurPRO used as the arbiter. The section of the project in question is run with it and whichever result it is closer to (DOT or contractor is determined to be correct.

#### State 23

- Q 12. Has an annual verification of the DOT owned profilers with the SurPRO but have not implemented an official certification.
- Q 14. We are currently developing a plan to verify agency owned profilers.
- Q 34. If a contractor's QC or information differs significantly, agency data, equipment and procedures are reevaluated. Additional measurements may be gathered. A root cause analysis may be performed
- Q 20. Method: Available on the web.
- Q 35. The contractor may use a profiler but DOTs profiler is used for acceptance.
- Q 40. DOT is developing verification procedure following R 56.
- Q 43. Annual verification. Weekly collection season 5 mile.
- Q 58. Developing a DQM plan.

#### State 24

- Q 22. A card indicating details of the profiler are provided.
- Q 22. A card indicating the operator is certified is provided.
- Q 26. The operator is required to take the practical exam every year. Once the operator attends a class and passes a written exam, this portion is valid for 5 years.
- Q 31. Accelerometer.
- Q 32. Accelerometer.
- Q 13. Have to submit proof of certification that is acceptable by the Department.
- Q 59. We have written data collection procedures to ensure the above conditions are met; however, we do not have a written QM plan.

- Q 20. Written procedure profiler certification under preparation and will be available soon.
- Q 24. Written procedure profiler certification under preparation and will be available soon.
- Q 25. Should complete a training course such as NHI 131100.
- Q 35. HPMS profiler not required to be certified, it is handled by another unit. Contractor has informed that profiler is NCAT certified. HPMS line laser. Contractor performs operational checks according to their data collection quality control plan.

- Q 39. Contractor has informed that their equipment has been certified at NCAT.
- Q 49: Should complete a training course such as NHI 131100.
- Q 56. Perform daily block and bounce checks.
- Q 60. IRI of high speed profiler compared to IRI from reference profiler based on COV of multiple runs for repeatability and accuracy (similar to P49).

- Q 18. The IRI baseline is determined using a hybrid procedure. The IRI from the SurPRO and the IRI from three of the DOT owned profilers are averaged to establish the baseline IRI of the test sections.
- Q 28. The technician Training and Certification Program (TTCP) is a joint agency and an industry program. TTCP charges a fee of \$100.
- Q 37. Vendor provides self-calibration files every year prior to data collection.
- Q 40. DOT is planning to certify the contractor owned equipment and require the contractor's profiler operators to pass the TTCP operator certification program before data collection.
- O 58. Document is not finalized.

#### State 28

- Q 20. Current documentation is being revised. Online resources is not up to date.
- Q 22. Plan to include the use of Site Manager to ensure operator and equipment have been certified.
- Q 24. Plan to include the use of Site Manager to ensure operator and equipment have been certified.
- Q 25. Operators are expected to demonstrate basic inertial profiler operating procedures and data analysis.
- Q 29. Would consider but not done as a rule.
- Q 30. Would consider but not done as a rule.
- Q 34. Investigation required.
- Q 35. Materials division does not own a profiler. The DOT profiler is owned by Pavement Management section.

They use a control site and contractor collects data on this site before collecting network level data.

## State 29

- Q 23. Looking to establish an operator certification later this year
- Q 25. Still determining which method is most effective. Would love to hear what other states are doing
- Q 27. Starting with just the letter.
- Q 29. Not at this time, it is up for consideration.
- Q 33. In office review of contractors raw data, plus agency will collect data on entire project should there be an issue with results.
- Q 34. Have not dealt with this yet.

## State 30

Q 9. All concrete has smoothness specification. HMA highways with lower highway classification do not receive an IRI specification. These highways use a straightedge for acceptance.

- Q 4. Research; to aid maintenance forces in rideability corrections; sulfate heave and frost heave monitoring.
- Q 10. Sometimes contractor hires a consultant or sub to do the work.
- Q 12. First option is most correct but we use all of our profilers to establish continuous IRI reference values on our certification course so they go through same criteria as those certified. We also do many checks on known surfaces throughout the season.
- Q 17: sections are consecutive and over 0.2 or over 0.3 in length, we may use only portions utilizing continuous base length method in ProVAL.
- Q 20. Document available on web. Need to update.
- O 24. Incorporated into supplements and proposal note.
- Q 25. Must be familiar with our specifications and demonstrate ProVAL proficiency.
- Q 29. We are willing to do some sort of reciprocity. We would allow provisionally then run against them a time or two, this is really a discretionary call on our part.
- Q 30. Perhaps, depends on circumstances.
- Q 32. The last 3 boxes are at the discretion of project staff. They can require to see them but don't have to.

- Q 33. We are very similar to the last bullet. We are not currently staffed to do frequent and robust smoothness OARs.
- Q 34. This rarely occurs. We handle them by thorough investigations.
- Q 35. We have not yet moved to use of reference devices for certification for 2 reasons. (1) Availability and robustness of such devices to work on all surfaces and are easily maintained and used, 2) we have not yet updated our certification procedures to get the actual profile correct. All of the private devices currently certified are from the same vendor.
- Q 38. We continually monitor current data against historic data as a means to find problems. We also do weekly bounce checks; operators are trained to monitor in vehicle system diagnostics to find equipment problems early.
- Q 40. We will likely develop more robust procedures for our network profilers to show more confidence in data.
- Q 43. Same as earlier question 0.2 to 0.3 with continuous base length method applied in ProVAL using likely a 400-500 ft base length.
- Q 45. We don't really certify but do a series of ongoing checks.
- Q 49. In-house training and they must demonstrate competence.
- Q 56. On board equipment diagnostics as well as rigorous comparisons to historic data for trending to ensure we have quality data.
- Q 58. Under development.
- Q 59. Monitor on board equipment diagnostics.
- Q 60. We would like to share the details of how we compare current network data to historic. It is robust and has proven effective in finding erroneous data. One example is finding data collected during rain.
- Q 61. Highly trained, cooperative, and engaged staff is necessary to collect high quality data.

- Q 35. Contractor certifies profiler at NCAT.
- O 48. Contractor conducts own certification of operators.
- Q 58. No DQM. We do have a procedure that we follow. The data collection contractor does have a written Data Quality Management procedure as stipulated in our contract. Many of the requirements overlap between the contractor and DOT regarding data checks. The contractor performs all of the equipment checks and DOT can request their logs as needed.
- Q 59. The contractor is required to have a written QM plan that covers the checks above. The data checks listed are also done by DOT personnel. (b), (c), (d), (e), (f), (g).

#### State 33

- Q 20. Available on the web.
- O 24. Available on the web
- Q 33. QA is performed both randomly and if issue is flagged. All profilers are subject to some annual QA verification.
- Q 34. Discrepancies are resolved by recertification, and could include third party testing.
- Q 35. Network some parts by contractor others by DOT.
- Q 60. Extensive data checks are made to ensure data is complete. Use time series data checks to determine when data needs further checks and investigation.
- Q 61. We will likely be adding operator certification for network level profiling in the future.

- Q 20. Document available on the web.
- Q 24. Document available on the web.
- Q 25. Operator must demonstrate working knowledge operating equipment and following procedures with little or no assistance.
- Q 27. ID card (no photo).
- Q 31. IRI verification is completed weekly (on an in-service road).
- Q 34. Further investigation is required.
- Q 35. Vendor collects network level data in two cycles, half of the network each year. HPMS reported annually by vendor. State collects interstate and Turnpike IRI every year.
- Q 37. IRI verification performed weekly (agency) or monthly (contractor) on in-service road.
- Q 39. Profiler is not certified, IRI is verified monthly. In addition it is assumed the contractor performs operational checks.

Q 57. Operational checks are required however we do not require documentation.

#### State 35

- Q 4. To verify accuracy of contractor collected data for use in pavement management system
- Q 9. SHA has the option
- Q 35. State does not have a requirement to certify profilers. However, they attend the certification site in adjacent state.
- Q 39. Certification at a facility not subject to traffic in another state at the discretion of contractor. We used a facility not subjected traffic at beginning of current contract to verify the accuracy of contractor collected IRI on urban environment
- Q 43. Discretion of the contractor. For verification in an urban area the section length was 0.1 mile through signalized intersection
- Q 44. At the beginning of the current contract, we used SurPRO at an urbanized signalized intersection to verify Contractor's IRI data in urban environment.
- Q 55. Agency has a quality management plan the contractor must follow
- Q 60. The profile equipment on a vehicle the Materials section owns to determine pay factors for paving contractors is used on control sites for pavement condition surveys to verify the accuracy of the contractor collected IRI data

#### State 36

- Q 9. DOT utilizes a Special Provision for pavement smoothness and selects the projects.
- Q 11. Do not require, but certify annually.
- Q 38. Beginning of the year vendor checks equipment and runs a section both ways. A 2 mile validation section near the office is run once a week.

#### State 37

- O 5. Uses HRI.
- Q 11. Profiler certification, twice a year spring and fall
- Q 58. DQ Plan: Under development.

# State 38

- Q 4. Forensic studies.
- Q 20. Document is available on the web.
- Q 33. 10% of the projects are verified. The total length of the project is evaluated.
- Q 34. Referee testing is done by central office and results are final.
- Q 49. In house training every year and practical evaluation of data collection.
- Q 57. Verifications are done on a weekly basis.
- Q 60. Check historical data.

#### State 39

- Q 9. We are working on a new Specification and Policy for IRI.
- Q 33. Procedures not yet developed.
- Q 34. Follow dispute resolution requirements.
- Q 35. Transitioning to IRI. Procedures for certification of contractor owned equipment is being developed.
- Q 60. Cross check contractor collected data with our own.

# State 40

Q 35. Contractor collects data in early summer. Paved projects in summer are collected by the DOT at the end of the year.

- Q 4. Collect data on final paved surface of maintenance overlays and mill and fill operations.
- Q 11. Department conducts weekly and monthly verification of profilers.
- Q 31. DOT uses a 0.5 mile ground truth site to verify data quality.
- Q 33. Contractors can collect data but DOT data is used for final acceptance.
- Q 34. If contractor produces data that is different than DOT, DOT will review and possible retest/reverify DOT results.

- Q 37. Data from about 14 control sites compared to data from DOT owned equipment to see if they are within limits allowed by the contract before vendor starts network level data collection each year. Typically 1 mile long sections are used.
- Q 41. Control site data is checked with surfaces that include HMA, surface treatment, JCP, and CRCP.

Q 7. 33% chip seal surface, 54% asphalt surface (a small percentage of these are over concrete), and 13% concrete.

#### State 43

- Q 12. At present we have waved the requirement as a site to conduct R-56 is unavailable.
- Q 13. At present we have waved the requirement as a site to conduct R-56 is unavailable.
- Q 27. ID without photo is supplied.
- Q 29. Working on to allow this.

#### State 44

Q 33. We try to verify all contractors each year, some on a portion of the project, others on the whole project. We also try to do verification testing multiple times for those contractors that have more work than others.