

NATIONAL HIGHWAY SYSTEM LENGTH - 2006 MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL

TABLE HM-47
SHEET 1 OF 4

OCTOBER 2007

STATE	INTERNATIONAL ROUGHNESS INDEX (IRI) 1/																			
	INTERSTATE SYSTEM									OTHER									TOTAL REPORTED	
	NOT REPORTED 2/	< 60	60-94	95-119	120-144	145-170	171-194	195-220	> 220	NOT REPORTED 2/	< 60	60-94	95-119	120-144	145-170	171-194	195-220	> 220		
Alabama	-	371	120	25	11	-	12	-	5	544	-	574	1,289	143	37	15	7	2	6	2,073
Alaska	-	33	212	356	248	73	59	6	26	1,013	172	60	199	152	106	70	100	21	109	817
Arizona	-	619	324	33	5	-	-	-	-	981	5	491	390	121	78	21	8	1	-	1,110
Arkansas	1	265	112	50	13	7	10	1	3	461	3	207	821	514	193	64	15	18	4	1,836
California	-	272	523	228	144	65	14	22	13	1,281	4	430	1,712	770	357	114	18	4	2	3,407
Colorado	-	80	303	155	90	40	17	-	-	685	-	152	979	378	255	42	35	9	14	1,864
Connecticut	-	1	33	6	2	1	-	-	-	43	-	6	46	55	37	10	2	1	1	158
Delaware	-	-	-	-	-	-	-	-	-	-	-	4	95	55	15	1	-	-	-	170
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	-	463	286	-	-	-	-	-	-	749	-	573	797	121	14	-	-	-	-	1,505
Georgia	-	435	246	28	6	-	-	-	-	715	141	1,679	1,133	94	15	2	3	-	-	2,926
Hawaii	-	-	-	1	5	-	-	-	-	6	-	-	12	27	26	28	7	1	3	104
Idaho	-	26	380	83	29	1	-	2	-	521	-	53	984	360	192	34	21	1	1	1,646
Illinois	-	389	684	196	78	12	-	-	-	1,359	-	90	616	362	323	142	65	50	13	1,661
Indiana 3/	-	149	542	114	33	15	-	-	-	853	1	242	590	266	112	78	31	9	1	1,329
Iowa	-	77	275	169	69	26	6	3	3	628	37	243	697	476	280	152	83	39	30	2,000
Kansas	10	212	372	30	12	19	-	-	-	645	51	752	1,546	196	13	17	-	3	2	2,529
Kentucky	-	204	224	74	37	15	-	-	-	554	-	414	987	216	118	3	1	-	-	1,739
Louisiana	56	163	137	77	62	4	13	16	6	478	12	96	382	220	141	95	32	26	26	1,018
Maine	-	99	145	34	15	5	1	-	-	299	-	98	351	145	81	58	32	9	11	785
Maryland	1	60	107	9	4	1	1	-	-	182	8	119	243	54	25	8	3	1	1	454
Massachusetts	-	13	39	23	-	16	-	-	-	91	-	88	18	43	13	4	-	-	-	166
Michigan	-	76	187	144	71	52	42	9	27	608	-	490	883	418	162	84	46	24	37	2,144
Minnesota 4/	-	33	350	159	102	16	15	-	-	675	-	667	1,118	474	257	49	8	3	1	2,577
Mississippi	-	45	338	33	24	18	4	18	9	489	-	175	747	236	217	122	43	48	20	1,608
Missouri	-	358	398	28	11	4	-	-	-	799	-	356	1,099	468	286	199	93	50	8	2,559
Montana	-	402	623	53	29	16	5	1	1	1,130	-	484	1,584	390	121	25	9	1	-	2,614
Nebraska	-	233	140	24	17	6	-	-	-	420	-	540	970	274	203	200	43	67	12	2,309
Nevada	-	380	48	16	6	-	-	-	-	450	-	1,112	295	11	1	-	1	-	-	1,420
New Hampshire	-	53	51	8	2	1	-	6	29	150	-	50	188	89	42	23	6	4	9	411
New Jersey	-	6	22	15	11	6	4	2	-	66	8	-	50	85	49	46	12	6	4	252
New Mexico	-	549	257	33	3	3	-	-	-	845	-	881	519	206	71	29	2	1	1	1,710
New York	-	58	474	105	83	50	28	26	13	837	72	81	818	337	111	42	37	11	15	1,452
North Carolina	-	67	294	69	52	22	16	1	-	521	-	154	1,097	375	210	73	49	22	8	1,988
North Dakota	-	168	246	80	9	16	-	-	-	519	-	306	869	374	266	192	39	13	28	2,087
Ohio	-	293	385	32	11	2	-	-	-	723	-	303	864	249	156	39	8	3	2	1,624
Oklahoma	2	191	346	94	22	21	7	-	-	681	1	245	787	500	236	118	82	70	59	2,097
Oregon	-	38	435	79	2	-	-	-	-	554	9	299	1,386	541	279	71	18	6	11	2,611
Pennsylvania	1	345	444	184	62	26	5	1	3	1,070	3	169	796	445	227	105	33	18	14	1,807
Rhode Island	-	1	21	-	-	-	-	-	-	22	-	-	2	7	11	9	7	7	5	48
South Carolina	-	158	268	62	47	33	10	3	-	581	-	43	737	210	98	12	3	2	2	1,107
South Dakota	-	78	329	177	26	-	-	-	-	610	-	320	1,100	308	188	99	67	71	39	2,192
Tennessee	-	588	84	6	9	1	-	-	-	688	-	612	636	122	29	14	5	2	2	1,422
Texas	-	473	1,298	326	59	23	-	-	-	2,179	4	724	3,157	1,780	541	116	17	8	-	6,343
Utah	-	135	399	95	58	22	-	8	4	721	-	32	392	205	170	82	25	13	7	926
Vermont	-	142	110	21	3	1	-	4	-	281	-	10	197	35	25	35	9	3	6	320
Virginia	-	94	511	42	17	2	-	-	-	666	-	66	844	311	84	52	27	3	2	1,389
Washington	-	118	189	50	29	53	25	-	4	468	-	323	1,136	329	127	66	27	25	4	2,037
West Virginia	-	79	200	31	37	21	-	1	8	377	4	59	486	291	137	33	11	10	5	1,032
Wisconsin	-	100	231	95	25	14	4	9	1	479	-	690	906	508	222	78	42	16	5	2,467
Wyoming	-	188	455	139	16	6	-	10	1	815	5	147	943	620	179	51	4	11	1	1,956
U.S. Total	71	9,380	14,197	3,891	1,706	735	298	149	156	30,512	540	15,709	38,493	14,966	7,136	3,022	1,236	713	531	81,806
Puerto Rico	1	-	-	1	10	15	1	1	-	28	2	-	1	4	12	2	5	2	2	28
Grand Total	72	9,380	14,197	3,892	1,716	750	299	150	156	30,540	542	15,709	38,494	14,970	7,148	3,024	1,241	715	533	81,834

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2006
MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL

TABLE HM-47
SHEET 2 OF 4

OCTOBER 2007

STATE	INTERNATIONAL ROUGHNESS INDEX (IRI) 1/									
	TOTAL RURAL NHS									
	NOT REPORTED 2/	< 60	60-94	95-119	120-144	145-170	171-194	195-220	> 220	TOTAL REPORTED
Alabama	-	945	1,409	168	48	15	19	2	11	2,617
Alaska	172	94	410	508	354	143	159	27	134	1,829
Arizona	5	1,110	713	153	83	21	8	1	-	2,089
Arkansas	4	472	934	564	206	71	25	19	7	2,298
California	4	702	2,235	998	501	179	32	26	16	4,689
Colorado	-	232	1,282	533	345	83	52	9	14	2,550
Connecticut	-	7	79	60	39	12	2	1	1	201
Delaware	-	4	95	55	15	1	-	-	-	170
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-
Florida	-	1,035	1,083	121	14	-	-	-	-	2,253
Georgia	141	2,114	1,379	122	21	2	3	-	-	3,641
Hawaii	-	-	12	28	32	28	7	1	3	111
Idaho	-	79	1,364	444	221	35	21	3	1	2,168
Illinois	-	479	1,299	558	401	154	65	51	13	3,020
Indiana 3/	1	390	1,132	379	145	93	31	9	1	2,180
Iowa	37	320	972	646	349	178	90	42	33	2,630
Kansas	61	964	1,918	227	25	36	-	3	2	3,175
Kentucky	-	618	1,211	291	155	17	1	-	-	2,293
Louisiana	68	259	519	297	203	99	45	41	32	1,495
Maine	-	197	496	179	96	63	33	9	11	1,084
Maryland	10	179	351	63	28	9	4	1	1	636
Massachusetts	-	101	57	66	13	20	-	-	-	257
Michigan	-	566	1,070	562	233	136	88	34	63	2,752
Minnesota 4/	-	700	1,468	632	359	65	23	4	1	3,252
Mississippi	-	221	1,085	269	240	140	47	66	29	2,097
Missouri	-	715	1,497	496	296	203	94	50	8	3,359
Montana	-	886	2,207	444	150	41	14	2	1	3,745
Nebraska	-	773	1,111	298	220	206	43	67	12	2,730
Nevada	-	1,492	343	26	7	1	1	-	-	1,870
New Hampshire	-	104	239	97	44	24	6	10	38	562
New Jersey	8	6	72	100	60	51	16	8	4	317
New Mexico	-	1,430	776	238	74	33	2	1	1	2,555
New York	72	139	1,292	442	195	91	65	37	29	2,290
North Carolina	-	220	1,391	444	262	96	66	22	8	2,509
North Dakota	-	474	1,115	454	275	208	39	13	28	2,606
Ohio	-	596	1,249	281	167	40	8	3	2	2,346
Oklahoma	3	436	1,133	594	258	139	89	70	59	2,778
Oregon	9	337	1,821	620	282	71	18	6	11	3,166
Pennsylvania	3	514	1,240	628	289	131	38	19	18	2,877
Rhode Island	-	1	22	7	11	9	7	7	5	69
South Carolina	-	201	1,005	271	144	45	14	5	2	1,687
South Dakota	-	399	1,429	485	213	99	67	71	39	2,802
Tennessee	-	1,200	720	128	38	15	5	2	2	2,110
Texas	4	1,197	4,455	2,106	599	139	17	9	-	8,522
Utah	-	167	791	300	228	103	25	21	11	1,646
Vermont	-	152	307	55	28	35	9	7	6	599
Virginia	-	160	1,355	353	101	54	27	3	2	2,055
Washington	-	441	1,325	380	156	118	53	26	7	2,506
West Virginia	4	138	687	322	174	53	11	11	13	1,409
Wisconsin	-	790	1,136	603	248	92	47	25	6	2,947
Wyoming	5	336	1,399	760	195	57	4	21	2	2,774
U.S. Total	611	25,092	52,690	18,855	8,840	3,754	1,540	865	687	112,323
Puerto Rico	3	-	1	5	22	17	7	3	2	57
Grand Total	614	25,092	52,691	18,860	8,862	3,771	1,547	868	689	112,380

For footnotes, see Footnotes Page.

**NATIONAL HIGHWAY SYSTEM LENGTH - 2006
MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN**

TABLE HM-47
SHEET 3 OF 4

OCTOBER 2007

STATE	INTERNATIONAL ROUGHNESS INDEX (IRI) 1/																			
	INTERSTATE SYSTEM										OTHER									
	NOT REPORTED 2/	< 60	60-94	95-119	120-144	145-170	171-194	195-220	> 220	TOTAL REPORTED	NOT REPORTED 2/	< 60	60-94	95-119	120-144	145-170	171-194	195-220	> 220	TOTAL REPORTED
Alabama	1	161	101	27	20	20	11	14	7	361	1	179	411	95	44	29	3	2	4	767
Alaska	-	11	29	18	10	-	-	-	-	68	-	11	15	24	10	9	2	3	2	76
Arizona	-	58	86	30	14	-	-	-	-	188	19	123	150	86	60	21	9	5	9	463
Arkansas	-	33	80	34	18	18	6	2	3	194	3	13	85	50	30	36	18	8	11	251
California	2	84	358	219	255	111	107	37	7	1,178	2	84	514	448	239	211	116	66	80	1,758
Colorado	-	15	110	73	37	19	11	3	-	268	-	29	233	161	155	80	39	23	25	745
Connecticut	-	28	151	70	33	9	7	2	2	302	-	13	115	143	80	46	27	13	23	460
Delaware	1	5	16	13	2	2	1	1	-	40	-	2	56	44	13	4	3	3	3	128
Dist. of Columbia	-	-	-	2	3	1	1	-	-	12	-	-	-	2	4	3	5	7	48	69
Florida	1	315	376	16	7	6	1	-	-	721	-	317	808	159	48	21	16	9	11	1,389
Georgia	-	365	133	22	8	1	-	-	-	529	22	525	484	82	24	14	4	-	-	1,133
Hawaii	-	-	7	12	11	6	7	5	1	49	-	14	23	33	27	47	26	11	12	193
Idaho	-	7	53	16	5	-	-	4	5	90	4	6	30	31	16	10	3	3	7	106
Illinois	-	119	265	205	118	64	27	8	4	810	-	29	219	398	356	282	189	148	266	1,887
Indiana 3/	-	15	153	70	42	30	5	1	-	316	5	18	93	96	53	56	35	12	15	378
Iowa	2	8	58	30	22	15	8	5	6	152	26	19	91	93	53	38	26	19	40	379
Kansas	20	19	109	57	12	1	-	-	-	198	8	25	237	29	6	8	5	2	7	319
Kentucky	-	57	77	41	29	2	3	-	-	209	1	34	190	73	37	31	12	5	6	388
Louisiana	53	47	87	45	55	51	20	3	9	317	24	22	148	133	72	65	83	39	89	651
Maine	-	7	40	13	6	-	2	-	-	68	-	7	41	24	20	13	14	7	9	135
Maryland	10	49	144	50	15	10	8	6	6	288	11	54	187	79	54	38	17	17	62	508
Massachusetts	5	63	255	94	30	32	2	1	-	477	2	969	102	50	30	34	13	14	17	1,229
Michigan	1	67	257	147	76	39	14	14	18	632	-	118	358	224	223	164	96	68	128	1,379
Minnesota 4/	-	11	118	52	32	22	2	-	-	237	1	27	194	112	87	41	11	7	6	485
Mississippi	-	26	95	29	21	15	5	5	1	197	-	23	132	82	54	57	28	16	17	409
Missouri	-	99	204	40	17	10	3	5	3	381	5	50	243	167	105	55	30	7	13	670
Montana	-	6	41	5	5	3	1	2	-	63	-	4	20	15	14	4	4	2	4	67
Nebraska	-	9	19	11	7	9	4	1	1	61	2	10	16	24	39	65	42	36	45	277
Nevada	-	39	28	20	17	11	2	-	-	117	3	57	55	21	8	4	1	2	3	151
New Hampshire	-	27	33	5	-	-	-	1	8	74	-	34	68	34	15	9	3	2	4	169
New Jersey	5	12	82	106	71	27	33	13	17	361	17	9	160	307	300	222	124	94	155	1,371
New Mexico	-	53	69	12	10	7	2	1	1	155	-	38	80	43	30	14	6	6	9	226
New York	13	51	348	161	139	44	32	30	39	844	41	34	418	473	320	201	118	77	280	1,921
North Carolina	-	49	260	138	71	23	12	5	2	560	-	29	350	187	112	56	31	16	18	799
North Dakota	-	8	33	8	3	-	-	-	-	52	-	-	10	29	12	5	5	5	3	69
Ohio	-	234	448	103	42	14	4	3	2	850	-	124	494	235	188	87	40	26	35	1,229
Oklahoma	1	49	108	30	22	13	7	7	13	249	-	28	139	52	45	29	19	25	31	368
Oregon	1	15	122	27	7	1	-	-	-	172	5	25	156	87	52	31	24	14	11	400
Pennsylvania	13	121	295	154	58	24	13	5	3	673	9	118	493	445	333	238	137	79	88	1,931
Rhode Island	-	9	25	13	2	-	-	-	-	49	-	-	35	40	27	17	11	8	14	152
South Carolina	-	71	131	39	16	3	1	-	-	261	-	18	266	160	108	50	27	19	25	673
South Dakota	-	8	28	16	12	4	1	-	-	69	-	-	17	10	14	16	7	2	3	69
Tennessee	-	224	134	28	14	7	1	6	1	415	-	199	275	112	66	37	15	10	27	741
Texas	3	52	449	290	166	71	22	2	-	1,052	40	89	966	886	710	423	215	135	230	3,654
Utah	-	51	60	33	49	19	4	1	-	217	13	35	109	51	31	21	8	3	4	262
Vermont	-	6	21	3	3	7	-	-	-	40	-	-	20	9	8	7	4	3	3	54
Virginia	4	29	179	126	72	23	12	4	2	447	32	7	334	240	133	87	63	36	43	943
Washington	-	102	91	34	19	15	16	8	12	297	1	63	227	118	69	42	28	26	44	617
West Virginia	-	37	90	25	16	4	5	1	1	179	30	14	102	42	19	14	8	4	3	206
Wisconsin	3	30	102	81	21	16	10	1	-	261	13	39	211	201	164	113	91	62	77	958
Wyoming	-	15	31	26	9	11	2	-	3	97	-	4	36	20	11	4	1	1	4	81
U.S. Total	139	2,976	6,589	2,919	1,749	840	435	207	182	15,897	340	3,689	10,216	6,759	4,728	3,209	1,862	1,207	2,073	33,743
Puerto Rico	1	-	11	36	58	71	23	27	7	233	4	-	4	17	17	24	23	9	17	111
Grand Total	140	2,976	6,600	2,955	1,807	911	458	234	189	16,130	344	3,689	10,220	6,776	4,745	3,233	1,885	1,216	2,090	33,854

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2006
MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN

TABLE HM-47
SHEET 4 OF 4

OCTOBER 2007

STATE	INTERNATIONAL ROUGHNESS INDEX (IRI) 1/									
	TOTAL URBAN NHS									TOTAL REPORTED
	NOT REPORTED 2/	< 60	60-94	95-119	120-144	145-170	171-194	195-220	> 220	
Alabama	2	340	512	122	65	49	14	15	12	1,129
Alaska	-	22	44	42	20	9	2	3	2	144
Arizona	19	181	236	115	74	22	9	5	9	651
Arkansas	3	47	164	84	47	55	24	9	14	444
California	4	168	872	666	494	322	223	103	86	2,934
Colorado	-	45	343	234	192	100	50	26	25	1,015
Connecticut	-	41	266	213	113	56	33	15	25	762
Delaware	1	7	72	56	15	6	3	4	4	167
Dist. of Columbia	-	-	-	4	7	5	7	8	53	84
Florida	1	632	1,184	175	55	26	17	9	11	2,109
Georgia	22	890	617	104	32	16	4	-	-	1,663
Hawaii	-	14	30	45	38	54	33	16	13	243
Idaho	4	13	82	46	21	10	3	7	11	193
Illinois	-	148	484	603	474	346	216	156	271	2,698
Indiana 3/	5	33	246	166	95	86	40	14	15	695
Iowa	28	28	149	122	75	53	34	24	46	531
Kansas	29	44	346	86	18	9	5	2	7	517
Kentucky	1	91	267	114	66	34	15	5	6	598
Louisiana	77	69	235	177	127	116	103	41	98	966
Maine	-	14	81	37	26	13	15	7	9	202
Maryland	21	103	331	129	70	48	25	24	68	798
Massachusetts	7	1,032	358	144	59	66	15	16	17	1,707
Michigan	1	185	615	371	299	203	110	82	147	2,012
Minnesota 4/	1	39	312	164	119	63	13	7	6	723
Mississippi	-	49	228	111	75	72	33	21	18	607
Missouri	5	149	447	207	121	66	34	12	16	1,052
Montana	-	9	61	19	19	7	5	5	4	129
Nebraska	2	19	36	35	46	74	45	37	46	338
Nevada	3	96	82	41	26	15	3	2	3	268
New Hampshire	-	61	101	38	15	9	3	3	12	242
New Jersey	22	22	243	413	371	249	156	107	172	1,733
New Mexico	-	91	149	55	40	21	8	7	10	381
New York	55	86	765	635	460	245	150	108	319	2,768
North Carolina	-	78	610	325	183	79	43	21	20	1,359
North Dakota	-	8	43	37	15	5	5	5	3	121
Ohio	-	358	942	338	231	101	44	29	37	2,080
Oklahoma	1	77	246	81	67	42	26	32	43	614
Oregon	7	40	278	114	58	32	24	14	11	571
Pennsylvania	22	239	788	598	391	262	150	84	91	2,603
Rhode Island	-	9	60	53	28	17	12	8	14	201
South Carolina	-	89	397	199	125	54	28	19	25	936
South Dakota	-	8	45	26	26	21	8	2	3	139
Tennessee	-	423	409	140	81	45	16	16	27	1,157
Texas	43	141	1,414	1,176	876	494	237	137	231	4,706
Utah	13	86	169	85	80	40	12	4	4	480
Vermont	-	7	41	12	10	13	4	3	3	93
Virginia	36	36	513	366	205	110	75	40	44	1,389
Washington	1	165	318	151	88	58	44	33	56	913
West Virginia	30	51	192	67	35	18	13	5	4	385
Wisconsin	16	69	313	282	186	129	101	63	77	1,220
Wyoming	-	19	67	46	20	15	3	1	8	179
U.S. Total	482	6,671	16,803	9,669	6,479	4,060	2,295	1,416	2,256	49,649
Puerto Rico	5	-	15	53	75	95	46	36	24	344
Grand Total	487	6,671	16,818	9,722	6,554	4,155	2,341	1,452	2,280	49,993

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2006

MILES BY MEASURED PAVEMENT ROUGHNESS

HM-47 Footnotes Page:

- 1/ Data are reported as the International Roughness Index (IRI) in inches per mile. Reference: World Bank Technical Paper Number 46, 1986. Lower IRI represents smoother roadways. To obtain a comprehensive assessment of pavement condition, additional measures of pavement distress are needed
- 2/ May include sections entirely on structures and unpaved miles
- 3/ May exclude up to 788 miles of Federal agency owned roads
- 4/ Includes 274 miles of miscoded non-Interstate functional system length or rural/urban categorization or both