

FUNCTIONAL SYSTEM LENGTH - 2007
MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL

TABLE HM-64
SHEET 1 OF 4

OCTOBER 2008

STATE	INTERNATIONAL ROUGHNESS INDEX (IRI) 1/									
	INTERSTATE									TOTAL REPORTED
	NOT REPORTED 2/	< 60	60-94	95-119	120-144	145-170	171-194	195-220	> 220	
Alabama	-	428	88	-	11	1	11	-	4	543
Alaska	-	25	234	429	204	59	53	8	-	1,012
Arizona	-	580	347	38	11	2	3	-	-	981
Arkansas	1	175	188	55	16	8	11	4	3	460
California	-	93	533	193	169	84	68	75	66	1,281
Colorado	-	80	303	155	90	40	17	-	-	685
Connecticut	-	-	31	10	1	1	-	-	-	43
Delaware	-	-	-	-	-	-	-	-	-	-
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-
Florida	2	479	267	-	-	-	-	-	-	746
Georgia	144	307	237	24	3	-	-	-	-	571
Hawaii	-	-	-	-	6	-	-	-	-	6
Idaho	-	15	372	87	34	10	-	3	-	521
Illinois	-	391	678	198	78	12	-	-	-	1,357
Indiana 4/	-	69	436	166	30	6	-	-	-	707
Iowa	-	102	280	154	62	20	5	3	2	628
Kansas	10	302	276	65	3	-	-	-	-	646
Kentucky	2	203	275	25	36	12	-	-	-	551
Louisiana	59	163	140	76	60	1	13	16	6	475
Maine	-	82	161	37	19	-	-	-	-	299
Maryland	1	65	109	7	1	-	-	-	-	182
Massachusetts	-	14	38	23	-	16	-	-	-	91
Michigan	-	175	265	52	59	43	-	13	1	608
Minnesota 5/	-	83	299	113	105	47	9	5	-	661
Mississippi	-	81	317	43	33	14	4	-	1	493
Missouri	-	315	380	19	4	3	-	-	-	721
Montana	-	455	584	27	40	20	4	-	-	1,130
Nebraska	-	240	132	31	11	6	-	-	-	420
Nevada	-	387	24	23	13	4	-	-	-	451
New Hampshire	-	66	69	12	1	-	-	-	1	149
New Jersey	-	7	23	14	12	5	1	3	-	65
New Mexico	-	499	285	55	4	3	-	-	-	846
New York	2	128	447	120	31	42	37	20	7	832
North Carolina	-	78	308	63	47	28	16	1	-	541
North Dakota	-	189	250	59	15	6	-	-	-	519
Ohio	-	260	371	65	17	7	1	2	1	724
Oklahoma	-	188	351	94	22	21	7	-	-	683
Oregon	-	41	457	55	1	-	-	-	-	554
Pennsylvania	1	387	459	150	56	13	3	1	1	1,070
Rhode Island	-	1	21	-	-	-	-	-	-	22
South Carolina	-	218	225	76	33	27	1	-	-	580
South Dakota	-	78	330	155	34	5	-	-	-	602
Tennessee	-	574	96	9	2	6	-	1	1	689
Texas	89	428	1,262	265	95	32	8	1	-	2,091
Utah	-	172	378	112	26	28	-	6	1	723
Vermont	-	127	121	17	5	1	4	4	-	279
Virginia	-	90	521	37	16	2	-	-	-	666
Washington	-	132	178	44	55	47	11	-	-	467
West Virginia	-	23	254	48	27	18	-	1	5	376
Wisconsin	-	86	210	113	42	12	6	9	-	478
Wyoming	-	188	455	139	16	6	-	10	1	815
U.S. Total	311	9,269	14,065	3,752	1,656	718	293	186	101	30,040
Puerto Rico	1	-	-	8	4	8	4	6	-	30
Grand Total	312	9,269	14,065	3,760	1,660	726	297	192	101	30,070

For footnotes, see Footnotes Page.

FUNCTIONAL SYSTEM LENGTH - 2007
MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL

TABLE HM-64
 SHEET 2 OF 4

OCTOBER 2008

STATE	INTERNATIONAL ROUGHNESS INDEX (IRI) 1/																			
	OTHER PRINCIPAL ARTERIAL										MINOR ARTERIAL 3/									
	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	5	813	1,165	130	24	9	4	1	1	2,147	27	924	2,070	354	302	140	-	-	-	3,790
Alaska	155	50	187	84	83	43	25	72	107	651	154	9	28	16	65	77	95	-	-	290
Arizona	2	528	376	135	65	40	14	2	5	1,165	27	499	499	184	104	44	-	-	-	1,330
Arkansas	3	167	956	683	264	108	30	13	10	2,231	-	2	909	1,082	545	251	157	-	7	2,953
California	9	151	1,708	813	475	165	103	51	38	3,504	76	71	1,229	2,050	1,595	772	414	142	264	6,537
Colorado	1	228	1,125	439	332	89	48	35	21	2,317	174	123	1,251	1,067	614	383	143	3	-	3,584
Connecticut	-	6	45	53	42	15	1	1	1	164	-	-	26	70	90	52	10	-	-	248
Delaware	-	2	99	61	1	2	-	-	-	165	-	-	67	31	3	2	-	-	-	103
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	9	997	1,567	201	37	20	15	8	-	2,845	-	737	1,450	105	90	18	-	-	-	2,400
Georgia	17	1,631	929	42	2	1	-	-	-	2,605	7	2,756	2,408	40	-	-	-	-	-	5,204
Hawaii	-	-	15	22	31	30	3	6	3	110	-	-	6	91	39	118	11	3	29	297
Idaho	12	60	1,030	387	159	53	17	2	2	1,710	19	56	853	239	158	35	16	-	-	1,357
Illinois	-	112	909	591	349	213	103	36	24	2,337	-	230	2,009	1,046	259	442	208	515	-	4,709
Indiana 4/	-	457	836	247	114	57	10	12	1	1,734	-	618	853	476	151	79	35	9	-	2,221
Iowa	28	421	1,119	743	490	322	202	86	55	3,438	-	630	1,135	635	449	572	199	115	176	3,911
Kansas	32	620	1,967	372	46	19	3	3	2	3,032	-	764	3,168	286	29	9	9	13	6	4,284
Kentucky	-	631	1,188	343	152	21	5	1	1	2,342	-	33	691	810	134	46	4	-	8	1,726
Louisiana	12	79	386	213	123	92	39	26	22	980	-	80	829	248	70	200	52	40	70	1,589
Maine	-	85	349	147	84	56	34	15	17	787	-	61	486	172	134	72	49	7	33	1,014
Maryland	9	146	216	50	14	7	1	-	1	435	-	48	573	163	26	9	3	19	-	841
Massachusetts	-	4	41	76	34	8	4	-	-	167	-	11	106	136	126	5	17	4	-	405
Michigan	-	941	1,108	323	136	47	22	5	3	2,585	-	1,144	1,961	832	504	100	84	8	324	4,957
Minnesota 5/	-	785	1,465	667	388	281	78	25	7	3,696	-	1,393	1,938	1,766	939	447	253	100	74	6,910
Mississippi	-	274	1,060	193	211	70	33	35	9	1,885	-	92	1,137	912	486	294	529	103	142	3,695
Missouri	-	456	1,300	600	416	212	90	36	10	3,120	-	76	779	2,007	721	110	137	121	10	3,961
Montana	-	625	1,469	374	109	37	2	5	1	2,622	1	305	1,926	497	176	76	-	-	-	2,980
Nebraska	-	568	1,144	444	310	101	90	21	15	2,693	-	906	1,931	612	273	316	49	77	5	4,169
Nevada	1	1,124	269	11	1	1	1	-	2	1,409	2	355	280	22	76	-	-	2	-	735
New Hampshire	-	85	190	39	25	12	2	2	7	362	-	83	241	40	36	25	1	13	30	469
New Jersey	-	4	65	45	91	31	12	4	2	254	-	14	37	102	69	56	14	8	13	313
New Mexico	11	955	523	216	105	23	5	2	2	1,831	10	446	668	438	188	40	25	71	51	1,927
New York	6	113	784	372	136	70	23	16	23	1,537	-	51	2,044	677	709	202	-	22	36	3,741
North Carolina	-	194	1,184	337	143	68	16	11	10	1,963	-	35	1,238	910	323	70	27	-	4	2,607
North Dakota	-	695	1,187	513	256	175	81	1	24	2,932	-	307	916	508	452	264	69	-	-	2,516
Ohio	-	290	1,060	326	192	80	13	3	4	1,968	-	113	1,627	331	242	121	174	45	4	2,657
Oklahoma	1	249	834	617	280	125	82	71	59	2,317	-	132	1,216	699	277	174	66	97	25	2,686
Oregon	1	317	1,471	599	278	82	21	4	11	2,783	-	285	1,012	600	284	120	12	48	-	2,361
Pennsylvania	37	147	861	528	229	112	30	9	9	1,925	-	106	1,481	1,178	671	687	187	127	103	4,540
Rhode Island	-	-	2	7	11	9	7	8	5	49	-	-	3	11	23	14	10	2	3	66
South Carolina	-	68	821	231	115	40	3	2	2	1,282	-	4	1,888	695	565	103	8	16	9	3,288
South Dakota	-	393	1,253	429	216	73	65	70	35	2,534	-	429	946	391	354	434	504	229	49	3,336
Tennessee	-	823	859	137	31	10	3	2	6	1,871	-	998	1,418	405	298	13	8	-	60	3,200
Texas	20	685	3,462	1,950	610	186	61	42	5	7,001	-	432	3,836	4,026	1,124	358	159	5	62	10,002
Utah	-	38	384	249	180	70	42	17	6	986	-	96	420	357	230	338	45	-	5	1,491
Vermont	-	12	190	41	25	35	9	3	5	320	-	4	190	138	134	122	76	44	20	728
Virginia	-	38	931	336	76	18	6	2	1	1,408	-	59	1,376	1,670	272	25	10	-	-	3,412
Washington	-	279	1,200	291	114	30	51	2	13	1,980	-	210	664	357	453	178	-	-	3	1,865
West Virginia	-	37	465	272	166	70	20	12	9	1,051	-	-	522	246	407	135	7	-	23	1,340
Wisconsin	1	871	1,143	626	325	140	44	25	9	3,183	-	1,732	1,577	644	469	286	88	27	9	4,832
Wyoming	5	150	960	631	176	54	1	10	1	1,983	-	117	424	359	157	89	71	4	-	1,221
U.S. Total	377	18,404	43,857	17,236	8,272	3,632	1,574	815	606	94,396	497	17,576	54,342	30,731	15,895	8,523	4,035	2,039	1,657	134,798
Puerto Rico	3	-	1	4	25	4	7	3	6	50	36	-	-	1	6	18	32	40	99	196
Grand Total	380	18,404	43,858	17,240	8,297	3,636	1,581	818	612	94,446	533	17,576	54,342	30,732	15,901	8,541	4,067	2,079	1,756	134,994

For footnotes, see Footnotes Page.

FUNCTIONAL SYSTEM LENGTH - 2007
MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN

TABLE HM-64
SHEET 3 OF 4

OCTOBER 2008

STATE	INTERNATIONAL ROUGHNESS INDEX (IRI) 1/									
	INTERSTATE									TOTAL REPORTED
	NOT REPORTED 2/	< 60	60-94	95-119	120-144	145-170	171-194	195-220	> 220	
Alabama	18	204	75	19	11	21	8	5	2	345
Alaska	-	12	33	13	6	3	-	1	-	68
Arizona	-	70	76	28	13	1	-	-	-	188
Arkansas	-	24	93	32	17	16	8	2	4	196
California	2	24	284	212	224	142	98	95	98	1,177
Colorado	-	15	110	73	37	19	11	3	-	268
Connecticut	-	27	145	69	36	11	7	4	3	302
Delaware	1	-	25	8	2	3	1	1	-	40
Dist. of Columbia	-	-	-	-	5	2	-	2	3	12
Florida	3	342	352	17	6	1	1	-	-	719
Georgia	83	313	103	23	4	2	-	-	-	445
Hawaii	-	-	10	6	8	12	4	3	5	48
Idaho	1	4	51	21	1	-	4	2	7	90
Illinois	-	121	264	211	114	64	27	8	4	813
Indiana 4/	-	28	228	115	49	32	5	4	4	465
Iowa	1	12	62	33	18	13	7	5	2	152
Kansas	20	30	84	59	22	2	1	-	-	198
Kentucky	-	62	65	49	23	9	-	1	-	209
Louisiana	53	52	82	53	53	54	11	7	5	317
Maine	-	9	38	13	6	-	1	-	-	67
Maryland	10	59	144	35	17	10	9	6	9	289
Massachusetts	5	92	234	92	24	33	1	1	-	477
Michigan	1	66	255	140	74	52	19	18	10	634
Minnesota 5/	-	15	111	56	45	21	2	-	3	253
Mississippi	-	24	90	36	23	16	5	3	10	207
Missouri	-	129	249	43	20	7	4	4	3	459
Montana	-	16	35	3	4	1	2	-	-	61
Nebraska	-	5	34	7	5	7	3	1	1	63
Nevada	-	53	28	19	9	9	1	-	-	119
New Hampshire	-	34	32	4	-	-	-	-	7	77
New Jersey	5	33	102	90	47	25	34	16	14	361
New Mexico	-	42	86	17	8	3	-	-	-	156
New York	34	71	371	145	81	62	37	24	27	818
North Carolina	-	75	271	129	55	21	11	4	1	567
North Dakota	-	10	33	8	1	-	-	-	-	52
Ohio	-	154	435	145	77	23	10	3	2	849
Oklahoma	1	48	109	29	22	14	7	7	13	249
Oregon	2	25	114	22	10	1	-	-	-	172
Pennsylvania	13	123	323	143	52	18	10	3	1	673
Rhode Island	-	9	25	14	1	-	-	-	-	49
South Carolina	-	78	125	37	15	5	1	1	-	262
South Dakota	-	8	23	25	13	3	4	-	-	76
Tennessee	-	213	151	28	14	6	3	1	1	417
Texas	8	47	424	258	179	85	41	9	3	1,046
Utah	-	57	84	29	26	12	4	-	-	212
Vermont	-	6	15	10	1	2	7	-	-	41
Virginia	7	22	195	102	70	43	8	3	2	445
Washington	-	81	125	40	12	27	7	2	2	296
West Virginia	-	23	93	32	12	11	5	1	-	177
Wisconsin	3	28	95	80	32	13	13	1	-	262
Wyoming	-	15	31	26	9	11	2	-	3	97
U.S. Total	271	3,010	6,622	2,898	1,613	948	444	251	249	16,035
Puerto Rico	1	-	10	47	53	63	24	24	10	231
Grand Total	272	3,010	6,632	2,945	1,666	1,011	468	275	259	16,266

For footnotes, see Footnotes Page.

FUNCTIONAL SYSTEM LENGTH - 2007
MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN

TABLE HM-64
SHEET 4 OF 4

OCTOBER 2008

STATE	INTERNATIONAL ROUGHNESS INDEX (IRI) 1/																			
	OTHER FREEWAYS AND EXPRESSWAYS										OTHER PRINCIPAL ARTERIAL									
	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	2	14	20	4	-	-	-	1	-	39	71	290	467	129	52	29	11	2	6	986
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	13	17	13	6	8	2	3	62
Arizona	1	114	40	4	7	4	1	-	-	170	413	61	161	172	223	159	104	56	52	988
Arkansas	1	9	32	16	8	14	9	6	6	100	7	9	123	153	128	77	54	35	33	612
California	7	21	380	338	386	195	136	38	49	1,543	118	30	276	576	927	1,192	1,031	907	1,357	6,296
Colorado	-	18	151	70	50	17	7	1	1	315	3	20	186	204	281	187	125	81	102	1,186
Connecticut	-	13	93	76	29	16	4	3	2	236	-	-	30	138	167	130	80	60	80	685
Delaware	-	1	21	6	2	1	-	-	-	31	1	-	47	56	31	14	6	6	18	178
Dist. of Columbia	-	-	-	3	4	5	-	5	3	20	-	-	-	-	2	10	10	79	101	-
Florida	2	116	423	17	8	6	3	-	-	573	24	523	1,809	699	310	132	44	23	32	3,572
Georgia	1	68	32	7	3	2	-	-	-	112	93	707	863	187	56	36	9	2	2	1,862
Hawaii	-	-	6	4	9	5	3	3	4	34	-	14	32	32	44	31	35	15	25	228
Idaho	-	-	-	-	-	-	-	-	-	-	74	13	87	63	44	37	15	16	18	293
Illinois	-	7	10	26	19	30	6	14	3	115	-	51	441	651	597	485	283	224	325	3,057
Indiana 4/	-	11	45	28	31	8	5	5	2	135	4	94	334	266	268	209	141	100	126	1,538
Iowa	-	-	-	-	-	-	-	-	-	-	67	38	180	144	102	84	56	48	87	739
Kansas	6	9	116	33	16	4	1	-	1	180	88	17	211	75	68	99	96	82	50	698
Kentucky	-	14	40	2	10	-	-	-	-	66	-	44	259	211	127	68	30	22	23	784
Louisiana	5	-	18	6	10	-	8	-	2	44	46	29	178	190	120	112	118	94	172	1,013
Maine	-	4	6	4	3	1	1	-	1	20	-	6	32	35	16	14	12	11	15	141
Maryland	8	40	131	66	20	14	5	3	6	285	12	51	226	161	138	109	80	64	238	1,067
Massachusetts	3	52	154	56	27	9	6	5	-	309	-	21	80	251	341	399	281	231	242	1,846
Michigan	-	63	132	67	30	29	6	2	2	331	-	67	329	317	362	335	261	249	382	2,302
Minnesota 5/	-	11	76	42	17	8	4	2	-	160	-	45	172	145	112	62	28	12	17	593
Mississippi	-	13	32	8	6	3	6	-	1	69	-	34	239	179	189	127	90	67	60	985
Missouri	5	70	196	69	35	11	9	3	3	396	257	60	277	204	165	86	40	36	50	918
Montana	-	-	-	-	-	-	-	-	-	-	5	4	32	36	32	26	13	13	27	183
Nebraska	-	5	1	2	5	7	1	1	-	22	3	10	46	39	82	83	63	56	89	468
Nevada	-	21	19	13	15	4	-	-	-	72	10	85	104	40	26	9	7	3	10	284
New Hampshire	-	29	23	1	1	-	-	2	-	56	-	22	93	39	25	16	11	7	9	222
New Jersey	1	16	158	114	60	20	20	7	7	402	97	1	79	208	281	288	191	175	384	1,607
New Mexico	-	-	5	-	-	-	-	-	-	6	41	46	186	129	119	70	47	35	34	666
New York	15	20	186	198	160	79	73	22	45	783	62	35	440	469	385	265	181	132	878	2,785
North Carolina	-	28	225	77	42	19	5	1	1	398	-	50	726	411	259	139	60	44	87	1,776
North Dakota	-	-	-	-	-	-	-	-	-	-	-	5	22	45	34	24	16	10	11	167
Ohio	-	39	238	99	67	23	11	3	4	484	-	214	624	482	394	243	164	117	179	2,417
Oklahoma	-	7	100	21	22	14	5	8	14	191	6	30	150	194	152	138	100	92	183	1,039
Oregon	-	5	38	11	1	3	-	-	-	58	1	38	206	152	126	96	53	37	48	756
Pennsylvania	12	61	204	138	65	45	15	5	5	538	18	80	500	648	608	440	256	152	141	2,825
Rhode Island	-	-	35	35	10	5	-	1	-	86	-	-	5	25	72	80	56	50	72	360
South Carolina	-	6	51	11	6	9	-	-	1	84	-	20	325	304	186	104	46	32	40	1,057
South Dakota	-	-	4	5	1	2	-	-	-	12	22	1	11	18	19	23	20	15	13	120
Tennessee	-	61	44	21	12	4	2	1	1	146	-	301	628	248	153	86	40	32	57	1,545
Texas	5	39	445	336	231	117	50	15	7	1,240	96	101	877	1,097	916	642	474	400	610	5,117
Utah	-	-	6	5	1	-	-	-	-	12	31	43	140	69	44	24	13	3	4	340
Vermont	-	2	6	5	2	1	5	-	-	21	-	-	31	14	17	17	8	7	9	103
Virginia	3	16	123	87	16	11	10	2	2	267	33	7	326	326	197	163	82	73	77	1,251
Washington	1	55	222	55	19	8	4	7	4	374	-	18	212	220	207	182	109	104	255	1,307
West Virginia	-	-	2	1	2	2	1	1	-	9	-	37	119	55	50	26	17	13	15	332
Wisconsin	-	7	99	88	50	32	4	6	-	286	314	77	270	286	275	237	171	134	153	1,603
Wyoming	-	-	-	3	-	-	-	-	-	3	13	4	62	43	33	18	14	6	19	199
U.S. Total	78	1,085	4,388	2,278	1,518	787	426	173	177	10,832	2,030	3,453	13,266	10,852	9,573	7,660	5,260	4,197	6,998	61,259
Puerto Rico	2	-	3	13	7	18	10	4	9	64	31	-	2	26	59	67	84	65	57	360
Grand Total	80	1,085	4,391	2,291	1,525	805	436	177	186	10,896	2,061	3,453	13,268	10,878	9,632	7,727	5,344	4,262	7,055	61,619

For footnotes, see Footnotes Page.

FUNCTIONAL SYSTEM LENGTH - 2007

MILES BY MEASURED PAVEMENT ROUGHNESS

HM-64 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 riding 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/ Estimated from sample data.
- 4/ Excludes 788 miles of Federal agency owned roads.
- 5/ Excludes 437 miles of local government owned roads.