

FUNCTIONAL SYSTEM LENGTH - 2005
MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL

TABLE HM-64
SHEET 1 OF 4

OCTOBER 2006

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	-	32	359	55	26	10	33	17	19	551
Alaska	-	17	287	268	252	147	5	17	21	1,014
Arizona	2	738	221	15	5	-	-	-	-	979
Arkansas	1	202	182	43	17	9	9	3	-	465
California	-	278	531	241	169	56	14	22	13	1,324
Colorado	-	84	290	177	89	38	7	-	1	686
Connecticut	-	1	34	7	1	1	-	-	-	44
Delaware	-	-	-	-	-	-	-	-	-	-
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-
Florida	5	462	278	4	-	-	-	-	-	744
Georgia	-	445	247	23	1	-	-	-	-	716
Hawaii	-	-	-	1	5	-	-	-	-	6
Idaho	-	44	352	78	42	3	-	2	-	521
Illinois	-	334	699	288	87	52	-	-	3	1,463
Indiana 4/	-	149	542	114	33	15	-	-	-	853
Iowa	-	95	249	176	73	22	8	2	3	628
Kansas	10	82	415	97	52	-	-	-	-	646
Kentucky	1	212	220	80	28	12	-	-	-	552
Louisiana	56	136	138	105	60	31	7	-	-	477
Maine	-	92	160	30	15	1	-	-	-	298
Maryland	1	22	124	28	6	1	1	-	-	182
Massachusetts	-	21	30	23	-	16	-	-	-	90
Michigan	-	48	208	135	115	56	29	11	7	609
Minnesota	-	28	340	144	134	34	-	-	-	680
Mississippi	-	66	348	37	22	1	-	5	6	485
Missouri	-	202	367	130	75	20	3	2	-	799
Montana	-	379	658	38	29	19	5	1	-	1,129
Nebraska	-	129	224	29	16	17	9	-	-	424
Nevada	-	380	48	16	6	-	-	-	-	450
New Hampshire	-	29	121	-	-	1	-	-	-	151
New Jersey	-	5	18	20	11	4	4	2	-	64
New Mexico	-	549	257	33	3	3	-	-	-	845
New York 5/	15	99	426	139	82	61	41	36	47	931
North Carolina	-	26	312	65	47	57	5	3	6	521
North Dakota	-	166	231	100	13	11	-	-	-	521
Ohio	-	300	351	43	25	5	-	-	-	724
Oklahoma	-	174	328	76	81	17	7	1	-	684
Oregon	-	80	414	58	2	-	-	-	-	554
Pennsylvania	1	297	452	203	79	23	7	5	3	1,069
Rhode Island	-	1	21	-	-	-	-	-	-	22
South Carolina	-	180	262	96	30	9	-	-	-	577
South Dakota	-	45	324	216	20	6	-	-	-	611
Tennessee	-	589	77	9	16	-	-	-	-	691
Texas	-	478	1,254	322	97	38	1	1	-	2,191
Utah	-	154	384	105	36	11	16	11	3	720
Vermont	-	148	96	27	4	1	-	4	-	280
Virginia	-	88	547	12	15	3	-	-	-	665
Washington	-	154	156	64	43	37	10	3	-	467
West Virginia	-	85	212	33	37	21	-	1	8	397
Wisconsin	-	80	244	103	28	13	1	9	1	479
Wyoming	-	265	438	93	3	13	10	-	1	823
U.S. Total	92	8,670	14,476	4,199	2,030	895	232	158	142	30,802
Puerto Rico	-	-	1	1	9	17	3	1	-	32
Grand Total	92	8,670	14,477	4,200	2,039	912	235	159	142	30,834

For footnotes, see Footnotes Page.

FUNCTIONAL SYSTEM LENGTH - 2005
MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL

TABLE HM-64
 SHEET 2 OF 4

OCTOBER 2006

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	-	235	1,031	521	265	59	16	6	12	2,145	-	120	2,212	952	298	117	70	1	16	3,786
Alaska	155	19	153	107	39	109	38	21	165	651	172	-	34	59	-	91	60	-	27	271
Arizona	11	556	345	157	52	31	15	-	-	1,156	34	386	558	195	135	26	28	-	-	1,328
Arkansas	7	61	913	736	297	138	50	19	11	2,225	-	1	1,055	748	471	443	187	44	25	2,974
California	5	458	1,800	783	391	115	21	10	18	3,596	23	110	1,962	2,218	1,099	654	306	80	274	6,703
Colorado	7	236	1,112	439	348	81	50	27	28	2,321	-	174	1,519	1,188	533	274	63	-	-	3,751
Connecticut	-	5	44	52	45	11	2	3	1	163	-	-	35	43	79	77	13	-	-	247
Delaware	-	4	94	50	13	1	-	-	-	162	-	1	57	39	9	1	2	4	1	114
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	6	817	1,735	210	49	14	15	8	-	2,848	7	416	1,740	234	-	-	-	-	5	2,395
Georgia	-	1,551	960	88	7	-	-	-	-	2,606	-	1,724	3,068	265	186	-	-	-	-	5,243
Hawaii	-	-	12	28	34	25	7	4	-	110	-	-	7	95	58	112	11	14	1	298
Idaho	15	64	1,034	341	208	48	8	3	-	1,706	18	88	818	248	119	47	2	-	-	1,322
Illinois	-	128	890	628	481	199	118	57	19	2,520	-	861	1,834	821	564	217	-	424	-	4,721
Indiana 4/	-	324	790	350	138	94	33	10	3	1,742	-	414	897	426	342	102	20	37	-	2,238
Iowa	49	403	1,017	800	460	331	217	99	85	3,412	27	626	1,170	321	670	578	58	274	201	3,898
Kansas	55	737	1,948	276	37	13	4	3	1	3,019	17	465	3,182	424	172	7	-	20	1	4,271
Kentucky	-	437	1,305	374	195	19	4	1	-	2,335	-	-	740	696	259	28	5	-	-	1,728
Louisiana	24	93	394	186	143	53	54	32	15	970	-	157	712	189	209	229	28	17	52	1,593
Maine	-	99	364	146	84	47	20	10	19	789	-	60	320	236	123	122	64	34	56	1,015
Maryland	9	79	248	66	25	11	1	1	1	432	-	23	479	182	61	34	20	41	-	840
Massachusetts	-	-	45	62	44	13	1	1	-	166	-	26	100	66	142	20	44	4	4	406
Michigan	2	565	1,057	513	201	173	53	12	9	2,583	472	863	1,898	885	439	290	5	1	-	4,381
Minnesota	-	902	1,431	730	422	70	17	5	5	3,582	-	846	2,113	1,598	1,310	602	88	15	8	6,580
Mississippi	-	217	950	292	252	103	18	22	33	1,887	-	81	1,268	928	516	306	400	-	152	3,651
Missouri	6	296	1,206	473	269	126	74	22	33	3,182	-	-	1,246	1,816	684	121	275	11	39	4,192
Montana	-	486	1,581	369	147	21	10	2	1	2,617	-	316	1,931	480	170	38	1	-	52	2,988
Nebraska	461	211	908	534	215	195	88	71	15	2,237	-	731	1,586	822	529	143	139	31	185	4,166
Nevada	-	1,110	282	11	1	-	1	-	-	1,405	30	323	298	17	-	-	-	-	-	638
New Hampshire	-	30	179	80	20	15	14	5	15	358	-	45	266	113	21	12	-	-	8	465
New Jersey	8	-	47	96	42	39	13	8	2	247	-	10	23	106	62	72	6	11	21	311
New Mexico	6	915	572	223	78	31	6	4	2	1,831	13	491	702	198	276	48	75	-	129	1,919
New York 5/	24	95	902	351	171	113	88	35	72	1,827	-	-	2,351	877	612	114	91	30	50	4,125
North Carolina	-	123	1,095	347	196	110	51	29	33	1,984	-	-	840	822	436	292	165	22	85	2,662
North Dakota	-	400	1,182	554	384	318	53	13	30	2,934	-	230	927	378	609	320	34	15	-	2,513
Ohio	-	323	1,019	357	174	74	11	6	6	1,970	-	474	1,299	580	201	79	-	16	7	2,656
Oklahoma	11	182	942	555	290	187	95	33	25	2,309	-	233	1,253	537	393	72	93	88	18	2,687
Oregon	10	228	1,059	863	463	109	28	3	22	2,775	-	310	694	694	401	143	66	42	12	2,362
Pennsylvania	3	199	818	486	240	128	43	16	10	1,940	-	98	1,447	1,151	704	714	193	97	100	4,504
Rhode Island	-	-	2	7	10	9	7	8	5	48	-	-	3	11	23	14	10	2	3	66
South Carolina	-	64	829	237	117	25	33	4	1	1,310	-	200	1,643	963	372	94	5	-	9	3,286
South Dakota	62	182	1,085	387	315	183	166	99	58	2,475	217	198	737	106	761	549	361	242	176	3,130
Tennessee	-	739	831	151	31	7	6	4	3	1,772	-	1,146	1,367	405	297	22	-	13	57	3,307
Texas	5	606	3,494	1,996	593	111	44	25	10	6,879	-	607	4,193	3,704	882	114	118	5	-	9,623
Utah	-	75	501	253	97	53	9	1	-	989	9	118	461	613	214	36	-	-	-	1,442
Vermont	-	36	173	37	31	16	11	4	12	320	-	25	157	190	160	95	52	16	33	728
Virginia	-	94	828	360	85	56	14	2	11	1,450	9	15	1,401	1,562	263	112	100	-	-	3,453
Washington	-	325	1,165	302	119	34	32	2	2	1,981	1	135	737	478	354	119	32	33	2	1,890
West Virginia	-	68	505	300	138	36	11	13	5	1,076	-	-	570	464	248	45	11	12	35	1,385
Wisconsin	-	851	1,159	659	287	134	64	26	11	3,191	-	1,455	1,530	671	624	197	115	191	48	4,831
Wyoming	5	465	1,139	287	81	4	1	5	1	1,983	-	183	448	347	176	75	46	-	-	1,275
U.S. Total	946	16,093	43,175	18,453	9,028	4,035	1,787	846	799	94,216	1,049	14,785	55,888	31,161	17,266	8,017	3,462	1,887	1,892	134,358
Puerto Rico	3	-	1	13	13	7	10	2	4	50	63	-	-	1	-	30	26	30	81	168
Grand Total	949	16,093	43,176	18,466	9,041	4,042	1,797	848	803	94,266	1,112	14,785	55,888	31,162	17,266	8,047	3,488	1,917	1,973	134,526

For footnotes, see Footnotes Page.

FUNCTIONAL SYSTEM LENGTH - 2005
MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN

TABLE HM-64
SHEET 3 OF 4

OCTOBER 2006

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	-	29	161	58	25	19	10	21	34	357
Alaska	-	12	30	16	10	1	-	-	-	69
Arizona	-	85	65	27	8	1	-	-	-	186
Arkansas	-	24	93	25	16	19	4	4	3	188
California	2	69	357	206	238	113	107	37	7	1,134
Colorado	-	16	96	82	41	16	17	2	-	270
Connecticut	-	27	135	76	41	11	5	4	3	302
Delaware	1	5	16	13	2	2	1	1	-	40
Dist. of Columbia	-	-	-	-	4	1	1	1	5	12
Florida	5	325	350	31	5	5	1	-	-	717
Georgia	-	351	149	23	5	-	-	-	-	528
Hawaii	-	1	5	12	7	11	7	3	4	50
Idaho	-	10	60	9	-	4	-	5	4	92
Illinois	-	35	243	195	114	80	24	12	4	707
Indiana 4/	-	15	153	70	42	30	5	1	-	316
Iowa	2	10	51	31	23	12	10	7	9	153
Kansas	21	12	94	59	30	1	-	-	-	196
Kentucky	1	44	97	47	17	1	3	-	-	209
Louisiana	53	38	101	59	36	58	15	5	4	316
Maine	-	7	40	16	4	-	1	-	-	68
Maryland	10	32	143	55	23	12	12	6	4	287
Massachusetts	5	48	262	106	22	36	2	1	1	478
Michigan	-	43	215	132	94	69	36	19	26	634
Minnesota	-	11	115	51	28	23	6	-	-	234
Mississippi	-	27	98	29	21	13	4	3	-	195
Missouri	-	49	192	60	33	25	7	10	4	380
Montana	1	11	36	2	-	4	6	1	-	60
Nebraska	-	4	26	7	3	9	6	2	-	57
Nevada	-	39	27	16	16	11	2	-	-	111
New Hampshire	-	16	51	7	-	-	-	-	-	74
New Jersey	7	13	81	99	89	32	19	17	10	360
New Mexico	-	53	69	12	10	7	2	1	1	155
New York 5/	17	54	269	123	92	56	35	28	54	711
North Carolina	-	27	280	105	58	36	18	8	30	562
North Dakota	-	2	37	10	2	-	-	-	-	51
Ohio	-	237	416	135	38	12	7	3	2	850
Oklahoma	8	37	93	37	20	20	11	9	14	241
Oregon	1	16	129	20	5	1	-	-	-	171
Pennsylvania	12	108	295	168	59	27	8	5	3	673
Rhode Island	-	9	25	13	2	-	-	-	-	49
South Carolina	-	63	147	37	14	4	1	-	-	266
South Dakota	-	1	36	21	6	4	1	-	-	69
Tennessee	-	207	154	28	11	7	4	2	1	414
Texas	3	89	409	258	183	74	18	8	1	1,040
Utah	-	52	91	59	13	4	-	-	-	219
Vermont	-	10	17	4	3	7	-	-	-	41
Virginia	4	21	177	117	66	48	13	2	3	447
Washington	-	97	98	39	24	20	13	2	4	297
West Virginia	-	29	80	23	16	4	5	1	1	159
Wisconsin	4	31	135	52	19	12	9	1	-	259
Wyoming	-	24	31	10	9	5	8	1	2	90
U.S. Total	157	2,575	6,530	2,890	1,647	967	464	233	238	15,544
Puerto Rico	1	-	16	41	55	70	20	23	8	233
Grand Total	158	2,575	6,546	2,931	1,702	1,037	484	256	246	15,777

For footnotes, see Footnotes Page.

FUNCTIONAL SYSTEM LENGTH - 2005
MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN

TABLE HM-64
 SHEET 4 OF 4

OCTOBER 2006

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	-	-	15	7	3	1	-	2	1	29	-	137	371	222	178	83	35	25	25	1,076
Alaska	-	-	-	-	-	-	-	-	-	-	-	2	15	17	12	8	3	3	2	62
Arizona	1	33	74	32	8	7	1	-	-	155	524	111	145	193	157	119	73	37	41	876
Arkansas	-	3	36	18	8	13	11	6	4	99	17	2	75	141	126	92	48	41	50	575
California	6	72	455	417	218	185	94	37	10	1,488	40	46	282	604	973	1,200	955	869	1,231	6,160
Colorado	-	18	149	66	53	18	5	4	-	313	7	22	173	224	257	182	135	97	98	1,188
Connecticut	-	10	89	85	28	12	8	2	3	237	-	-	28	139	164	138	81	56	79	685
Delaware	-	-	7	6	1	1	-	-	-	15	1	9	85	48	23	11	8	6	11	201
Dist. of Columbia	-	-	-	1	1	5	3	3	10	23	-	-	-	-	1	7	3	80	91	91
Florida	3	102	405	26	6	6	2	-	-	547	21	490	1,804	739	299	113	51	24	20	3,540
Georgia	-	67	45	7	1	-	1	-	-	121	-	818	838	171	51	18	8	-	-	1,904
Hawaii	-	-	4	4	5	9	4	4	6	36	-	14	24	31	45	44	32	17	19	226
Idaho	-	-	-	-	-	-	-	-	-	-	47	8	72	66	47	39	19	21	17	289
Illinois	-	-	9	24	31	23	3	1	2	93	1	41	421	679	513	438	272	182	303	2,849
Indiana 4/	-	16	42	37	14	14	7	5	1	136	6	55	245	325	271	246	144	112	134	1,532
Iowa	-	-	-	-	-	-	-	-	-	-	67	26	160	147	101	82	58	51	111	736
Kansas	32	14	107	25	6	3	3	1	1	160	179	30	125	70	65	66	69	47	123	595
Kentucky	-	1	50	-	-	12	-	-	-	63	-	41	270	204	134	81	26	12	16	784
Louisiana	5	-	20	6	3	14	2	-	3	48	30	25	213	154	98	134	114	123	173	1,034
Maine	-	1	9	4	2	1	1	1	1	20	-	4	38	20	20	19	14	10	17	142
Maryland	9	23	114	74	32	16	6	7	8	280	12	20	170	178	160	146	95	68	226	1,063
Massachusetts	7	14	162	71	32	6	9	9	2	305	12	6	71	245	323	379	377	227	204	1,832
Michigan	-	22	130	61	56	35	12	4	6	326	143	23	269	301	343	365	276	203	384	2,164
Minnesota	-	9	73	38	18	13	3	-	-	154	-	49	166	131	98	68	19	17	18	566
Mississippi	-	11	35	14	7	3	-	-	1	71	-	25	199	311	141	106	82	37	58	959
Missouri	1	20	98	76	76	48	16	7	5	346	32	9	133	174	383	105	74	51	79	1,008
Montana	-	-	-	-	-	-	-	-	-	-	5	4	33	28	32	28	16	13	23	177
Nebraska	-	-	1	1	5	7	5	2	-	21	72	4	16	34	37	81	48	48	111	379
Nevada	1	12	19	15	5	3	-	-	-	54	30	98	73	39	31	8	6	6	5	266
New Hampshire	-	21	28	1	2	-	-	-	-	52	-	12	94	48	21	22	3	9	10	219
New Jersey	1	-	108	130	83	44	26	4	7	402	98	-	54	191	305	304	193	171	387	1,605
New Mexico	-	-	5	-	-	-	-	-	-	5	37	59	149	149	114	67	54	34	41	667
New York 5/	21	23	174	165	114	97	80	48	76	777	132	9	292	325	279	227	161	123	919	2,335
North Carolina	-	13	188	68	56	30	14	7	9	385	37	15	610	357	273	193	92	59	123	1,722
North Dakota	-	-	-	-	-	-	-	-	-	-	-	-	21	52	29	17	17	11	17	164
Ohio	-	72	204	113	61	14	11	3	5	483	-	223	563	495	405	248	164	120	191	2,409
Oklahoma	3	17	84	27	26	15	8	6	3	186	11	19	179	191	160	125	108	91	166	1,039
Oregon	-	4	23	14	11	2	-	-	-	54	7	28	149	168	165	91	61	36	51	749
Pennsylvania	3	50	202	124	81	43	23	11	9	543	7	68	459	591	579	515	283	179	177	2,851
Rhode Island	-	-	35	33	10	5	-	1	-	84	-	-	5	23	68	81	56	151	72	356
South Carolina	-	3	41	18	13	16	1	-	1	93	-	19	331	288	207	91	47	39	39	1,061
South Dakota	3	-	3	-	3	2	-	-	1	9	24	-	11	23	17	16	20	9	19	115
Tennessee	-	47	52	17	7	8	2	1	3	137	-	305	602	221	150	104	47	40	60	1,529
Texas	8	46	406	330	217	122	37	8	8	1,174	88	76	852	992	950	647	456	349	636	4,958
Utah	1	-	8	3	2	-	-	-	-	13	3	64	141	66	45	17	5	2	1	341
Vermont	-	2	6	5	1	1	4	-	-	19	-	1	27	19	13	14	9	10	10	103
Virginia	3	2	111	70	22	14	9	3	5	236	38	12	255	347	203	148	103	64	84	1,216
Washington	-	62	205	68	16	10	6	3	3	373	34	40	221	226	208	156	111	98	188	1,248
West Virginia	-	-	3	3	1	-	1	-	-	8	-	14	125	65	33	19	11	6	9	282
Wisconsin	-	14	98	65	49	26	11	3	1	267	287	74	264	307	269	246	159	129	171	1,619
Wyoming	-	-	2	1	-	-	-	-	-	3	15	28	62	43	21	16	10	4	12	196
U.S. Total	108	824	4,134	2,370	1,394	904	429	193	195	10,443	2,064	3,185	11,980	10,822	9,596	7,764	5,315	4,040	7,041	59,743
Puerto Rico	2	-	-	12	7	13	8	3	13	56	36	-	5	25	63	75	73	58	56	355
Grand Total	110	824	4,134	2,382	1,401	917	437	196	208	10,499	2,100	3,185	11,985	10,847	9,659	7,839	5,388	4,098	7,097	60,098

For footnotes, see Footnotes Page.

FUNCTIONAL SYSTEM LENGTH - 2005

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 770 miles of Federal agency owned roads.
- 5/ 2004 data used.

