

**NATIONAL HIGHWAY SYSTEM LENGTH - 2000**  
**MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL**

TABLE HM-47  
 SHEET 1 OF 4

OCTOBER 2001

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	-	229	258	73	33	4	3	-	-	600	-	491	1,157	299	64	9	9	2	-	2,031
Alaska	-	13	333	313	234	136	1	-	-	1,030	455	7	135	98	76	103	23	31	28	501
Arizona	-	882	99	8	4	3	1	-	-	997	17	307	360	236	129	75	6	7	-	1,120
Arkansas	3	2	89	72	68	98	72	22	39	462	52	9	565	565	289	176	80	38	11	1,733
California	6	45	539	347	198	116	48	37	22	1,352	80	32	993	1,094	877	429	111	49	9	3,594
Colorado	-	1	766	-	-	-	-	-	-	767	-	9	1,210	279	143	124	47	7	12	1,831
Connecticut	-	1	80	13	3	2	-	-	1	100	-	-	70	85	60	24	9	2	2	252
Delaware	-	-	-	-	-	-	-	-	-	-	10	4	77	85	21	2	3	3	1	196
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	30	767	66	16	49	19	5	-	-	922	40	920	655	109	44	9	-	1	1	1,739
Georgia	-	557	211	36	4	-	-	-	-	808	6	1,886	590	32	2	1	-	-	-	2,511
Hawaii	6	-	-	-	-	-	-	-	-	-	164	-	-	-	-	-	-	-	-	-
Idaho	-	189	233	84	11	1	4	3	1	526	-	211	833	361	204	35	11	3	3	1,661
Illinois	-	99	798	330	233	47	6	-	2	1,515	-	83	599	451	408	172	77	34	19	1,843
Indiana	-	454	341	52	5	1	-	-	-	853	4	258	579	212	146	45	40	1	-	1,281
Iowa	-	67	281	164	87	36	-	-	-	635	95	215	740	365	268	177	140	26	10	1,941
Kansas	-	262	321	96	3	11	-	1	-	694	15	746	1,535	252	80	19	8	2	1	2,643
Kentucky	-	196	189	12	113	23	-	-	-	533	-	274	941	253	178	58	16	-	-	1,720
Louisiana	54	49	226	90	92	50	35	4	10	556	22	47	393	209	236	147	97	31	19	1,179
Maine	-	27	225	52	7	1	1	-	-	313	-	35	440	168	98	34	8	3	2	788
Maryland	1	17	163	34	9	3	-	-	-	226	11	54	335	103	33	11	6	5	3	550
Massachusetts	-	-	66	65	6	24	-	-	1	162	4	1	46	128	70	41	21	9	5	321
Michigan	-	67	257	185	130	55	23	14	11	742	-	430	914	434	281	150	47	22	28	2,306
Minnesota	-	155	365	131	28	1	-	-	-	680	9	661	1,175	527	158	31	15	3	1	2,571
Mississippi	-	85	236	108	59	43	19	8	-	558	57	141	732	400	208	78	13	22	3	1,597
Missouri	-	3	144	364	197	89	4	5	-	806	3	31	377	706	717	510	92	32	110	2,575
Montana	-	354	501	123	99	45	7	5	-	1,134	6	322	1,531	492	164	32	47	1	9	2,598
Nebraska	-	215	72	39	58	20	19	14	-	437	-	515	808	302	338	113	66	70	36	2,248
Nevada	-	132	260	47	20	11	7	1	1	479	19	139	638	223	247	148	25	-	-	1,420
New Hampshire	-	26	147	4	-	-	-	-	-	177	-	56	233	81	42	24	7	2	14	459
New Jersey	-	1	46	45	9	11	4	3	1	120	10	-	72	122	98	149	35	8	49	533
New Mexico	-	17	112	485	205	46	14	13	1	893	-	75	608	556	287	110	59	27	33	1,755
New York	15	115	507	134	74	22	31	25	17	925	22	103	1,115	326	136	52	33	17	26	1,808
North Carolina	-	62	289	133	66	74	8	18	1	651	6	75	1,126	486	282	164	62	21	9	2,225
North Dakota	-	142	294	75	20	-	-	-	-	531	-	202	1,010	543	237	86	4	6	-	2,088
Ohio	-	361	368	86	14	1	-	-	-	830	-	324	1,166	274	59	14	6	4	4	1,851
Oklahoma	-	84	339	148	113	14	22	1	1	722	-	42	893	582	289	191	77	23	18	2,115
Oregon	1	-	206	346	29	-	-	-	-	581	105	28	303	1,310	767	133	25	5	2	2,573
Pennsylvania	5	160	708	220	76	22	6	6	3	1,201	6	166	930	566	313	157	64	31	19	2,246
Rhode Island	-	-	18	3	-	-	-	-	-	21	2	-	24	23	9	4	1	2	-	63
South Carolina	-	239	302	95	31	4	-	-	-	671	-	88	849	225	74	20	13	10	5	1,284
South Dakota	-	32	324	147	39	69	18	-	-	629	134	61	497	408	435	303	152	110	93	2,059
Tennessee	-	536	190	7	1	1	-	-	-	735	115	569	695	80	35	15	1	1	-	1,396
Texas	40	375	1,303	316	127	43	1	8	-	2,173	38	391	3,148	1,926	672	235	63	29	20	6,484
Utah	-	173	367	115	48	56	9	2	-	770	6	27	451	337	122	52	17	-	-	1,006
Vermont	-	9	230	30	4	-	1	4	2	280	-	1	136	50	47	35	21	17	12	319
Virginia	-	47	627	48	3	5	-	-	-	730	22	61	769	401	143	67	22	12	3	1,478
Washington	-	210	220	49	19	-	2	-	-	500	11	329	1,288	344	83	31	4	4	2	2,085
West Virginia	-	33	259	57	46	35	8	9	8	455	-	94	404	315	173	51	19	19	4	1,079
Wisconsin	1	61	322	131	41	25	-	-	-	580	-	459	1,014	573	343	134	64	47	26	2,660
Wyoming	-	316	429	40	34	7	-	-	-	826	-	847	919	119	29	37	-	3	3	1,957
U.S. Total	162	7,867	14,726	5,568	2,749	1,274	379	203	122	32,888	1,546	11,826	36,078	18,115	10,214	4,817	1,766	802	655	84,273
Puerto Rico	-	-	5	31	41	17	-	3	5	102	9	-	-	1	8	23	10	2	-	44
Grand Total	162	7,867	14,731	5,599	2,790	1,291	379	206	127	32,990	1,555	11,826	36,078	18,116	10,222	4,840	1,776	804	655	84,317

**NATIONAL HIGHWAY SYSTEM LENGTH - 2000**  
**MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL**

TABLE HM-47  
SHEET 2 OF 4

OCTOBER 2001

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	-	720	1,415	372	97	13	12	2	-	2,631
Alaska	455	20	467	411	310	240	23	31	28	1,530
Arizona	17	1,188	459	244	133	78	7	7	-	2,116
Arkansas	55	11	654	638	357	274	152	60	51	2,197
California	86	77	1,532	1,440	1,075	545	159	86	30	4,944
Colorado	-	10	1,976	279	143	124	47	7	12	2,598
Connecticut	-	1	151	98	64	26	9	2	3	354
Delaware	10	4	77	85	21	2	3	3	1	196
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-
Florida	70	1,687	721	125	93	28	5	1	1	2,661
Georgia	6	2,443	800	68	5	1	-	-	-	3,317
Hawaii	170	-	-	-	-	-	-	-	-	-
Idaho	-	400	1,066	445	215	36	15	7	3	2,187
Illinois	-	182	1,397	781	641	219	83	34	21	3,358
Indiana	4	712	920	264	151	46	40	1	-	2,134
Iowa	95	282	1,021	529	354	213	140	26	10	2,575
Kansas	15	1,009	1,856	348	83	30	8	2	1	3,337
Kentucky	-	470	1,131	265	291	81	16	-	-	2,254
Louisiana	76	96	620	299	328	197	132	35	29	1,736
Maine	-	62	665	220	105	35	9	3	2	1,101
Maryland	13	71	498	137	42	14	6	5	3	776
Massachusetts	4	1	112	193	76	66	21	9	6	484
Michigan	-	497	1,171	619	411	205	70	36	39	3,048
Minnesota	9	816	1,541	658	187	32	16	3	1	3,254
Mississippi	57	226	968	509	267	121	32	30	3	2,156
Missouri	3	33	521	1,071	914	599	96	37	110	3,381
Montana	6	676	2,032	615	263	77	54	6	10	3,733
Nebraska	-	730	880	341	396	133	84	84	37	2,685
Nevada	19	272	898	271	267	160	32	2	1	1,903
New Hampshire	-	82	380	84	42	24	7	2	14	635
New Jersey	10	1	118	168	107	160	39	11	50	654
New Mexico	-	92	720	1,041	492	156	73	40	33	2,647
New York	36	218	1,623	460	210	75	64	42	43	2,735
North Carolina	6	137	1,414	619	348	238	70	39	9	2,874
North Dakota	-	344	1,304	618	258	86	4	6	-	2,620
Ohio	-	685	1,534	360	73	14	6	4	4	2,680
Oklahoma	-	126	1,232	730	402	205	99	24	18	2,836
Oregon	106	28	509	1,656	796	133	25	5	2	3,154
Pennsylvania	11	326	1,638	786	389	179	71	37	22	3,448
Rhode Island	2	-	43	26	9	4	1	2	-	85
South Carolina	-	327	1,151	320	105	24	13	10	5	1,955
South Dakota	134	93	821	555	474	372	170	110	93	2,688
Tennessee	115	1,105	885	87	37	15	2	1	-	2,132
Texas	78	766	4,451	2,243	799	279	64	38	20	8,660
Utah	6	200	818	451	170	109	27	2	-	1,777
Vermont	-	9	366	81	51	35	22	21	14	599
Virginia	22	109	1,396	449	146	72	22	12	3	2,209
Washington	11	539	1,508	393	103	31	6	4	2	2,586
West Virginia	-	127	663	371	219	87	26	28	11	1,532
Wisconsin	1	519	1,336	703	384	159	64	47	26	3,238
Wyoming	-	1,163	1,348	159	63	44	-	3	3	2,783
U.S. Total	1,708	19,692	50,807	23,685	12,966	6,096	2,146	1,007	774	117,173
Puerto Rico	9	-	5	32	49	41	10	5	5	147
Grand Total	1,717	19,692	50,812	23,717	13,015	6,137	2,156	1,012	779	117,320

**NATIONAL HIGHWAY SYSTEM LENGTH - 2000  
MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN**

TABLE HM-47  
SHEET 3 OF 4

OCTOBER 2001

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	-	86	115	35	35	27	7	-	-	305	-	199	353	110	38	6	6	2	4	718
Alaska	-	4	34	9	3	3	-	-	-	53	-	7	15	24	14	7	3	-	1	71
Arizona	-	101	34	26	10	-	-	-	-	171	139	32	107	53	43	11	5	4	1	256
Arkansas	1	3	34	33	41	39	19	9	10	188	34	1	33	55	32	40	17	13	18	209
California	1	32	184	160	249	245	132	63	30	1,095	23	9	197	282	399	296	132	62	95	1,472
Colorado	-	2	182	-	-	-	-	-	-	184	-	8	459	69	11	5	3	50	15	620
Connecticut	-	9	97	76	31	14	10	3	6	246	-	7	71	112	70	50	22	14	19	365
Delaware	1	-	7	11	7	3	6	2	3	39	2	4	25	24	7	2	1	1	2	66
Dist. of Columbia	-	-	3	2	-	1	1	3	3	13	1	-	-	1	4	7	10	11	32	65
Florida	38	270	146	26	21	12	6	-	-	481	137	339	434	107	50	21	10	4	6	971
Georgia	1	307	111	16	1	-	-	-	-	435	26	457	287	44	19	4	1	-	-	812
Hawaii	49	-	-	-	-	-	-	-	-	-	124	-	-	-	1	-	-	-	-	2
Idaho	-	32	33	8	4	3	6	-	-	86	-	8	25	18	17	12	7	4	5	96
Illinois	1	11	218	222	127	30	39	2	-	649	57	35	350	341	278	196	152	122	151	1,625
Indiana	-	72	165	53	12	10	4	2	-	318	17	26	80	66	77	47	36	5	24	361
Iowa	-	4	44	36	31	16	10	-	6	147	39	7	79	69	37	42	34	8	29	305
Kansas	2	5	82	68	18	1	-	-	1	175	54	26	73	43	22	11	10	2	4	191
Kentucky	1	67	90	28	29	3	9	3	-	229	-	10	163	114	53	28	10	10	2	390
Louisiana	51	1	73	53	32	48	20	2	2	231	91	10	71	50	43	67	55	39	78	413
Maine	-	-	44	9	1	-	-	-	-	54	-	-	49	27	23	16	11	6	4	136
Maryland	14	4	110	74	23	9	10	5	3	238	91	15	109	69	40	27	16	14	18	308
Massachusetts	-	-	149	127	44	80	2	1	2	405	31	1	70	152	194	223	152	113	116	1,021
Michigan	1	20	180	107	100	43	25	13	11	499	2	16	102	154	163	173	158	110	296	1,172
Minnesota	-	42	125	45	15	4	-	-	-	231	13	74	202	109	49	20	2	4	2	462
Mississippi	-	2	24	45	41	10	2	3	-	127	6	23	79	50	52	27	8	8	15	262
Missouri	-	47	99	115	71	27	6	6	6	371	24	-	28	86	147	92	96	60	84	593
Montana	-	4	27	12	9	4	1	-	-	57	-	1	15	15	10	6	4	3	7	61
Nebraska	-	5	16	6	10	3	2	2	-	44	10	8	18	27	39	29	38	22	47	228
Nevada	-	13	26	21	6	14	-	-	-	80	-	11	60	26	8	8	3	5	5	126
New Hampshire	-	13	30	6	-	-	-	-	-	49	-	15	54	24	9	4	4	-	2	112
New Jersey	11	2	54	123	49	43	5	7	7	290	57	-	75	164	242	195	136	61	161	1,034
New Mexico	-	1	26	26	30	16	1	3	5	108	3	6	38	56	37	17	9	7	5	175
New York	15	39	267	156	70	57	32	27	64	712	75	24	342	294	212	200	110	94	294	1,570
North Carolina	-	4	191	78	46	25	6	16	7	373	4	2	170	122	76	65	32	12	9	488
North Dakota	-	10	15	8	7	-	-	-	-	40	-	-	18	17	14	9	3	2	-	63
Ohio	-	176	403	115	26	12	6	3	1	742	-	82	347	207	122	89	32	18	27	924
Oklahoma	-	3	55	49	32	28	22	11	9	209	-	-	74	65	54	41	23	14	7	278
Oregon	4	-	29	70	36	7	-	-	-	142	69	-	21	90	78	53	21	11	6	280
Pennsylvania	24	29	259	142	50	21	15	6	3	525	23	39	279	297	285	221	123	82	88	1,414
Rhode Island	1	-	16	12	13	5	1	-	-	47	-	1	44	38	27	7	5	2	2	126
South Carolina	-	46	80	18	10	1	-	1	-	156	-	13	163	114	64	57	23	12	31	477
South Dakota	-	1	12	6	14	12	1	2	1	49	46	-	2	1	5	3	1	2	1	15
Tennessee	-	132	132	39	17	6	5	1	-	332	35	114	289	90	53	32	10	11	9	608
Texas	5	39	403	308	176	79	10	4	2	1,021	311	95	752	869	631	409	212	134	266	3,368
Utah	-	16	58	41	31	13	7	1	-	167	12	6	82	49	30	27	9	3	5	211
Vermont	-	6	20	6	8	-	-	-	-	40	-	-	9	13	10	8	6	3	6	55
Virginia	-	9	172	105	70	21	5	3	2	387	38	14	211	218	145	84	49	41	43	805
Washington	1	63	112	26	24	27	5	4	-	261	122	44	216	79	66	24	14	6	13	462
West Virginia	-	10	53	14	7	5	3	1	-	93	-	4	38	26	19	16	6	5	3	117
Wisconsin	4	21	63	41	16	17	-	-	-	158	2	21	125	112	138	116	85	57	112	766
Wyoming	-	29	25	21	8	3	-	-	1	87	-	27	35	5	6	5	2	1	-	81
U.S. Total	226	1,745	4,875	2,817	1,755	1,091	462	209	185	13,139	1,718	1,841	6,938	5,247	4,263	3,156	1,917	1,274	2,170	26,806
Puerto Rico	1	-	5	46	36	36	13	5	6	147	7	-	-	15	15	32	18	5	6	91
Grand Total	227	1,745	4,880	2,863	1,791	1,127	475	214	191	13,286	1,725	1,841	6,938	5,262	4,278	3,188	1,935	1,279	2,176	26,897

**NATIONAL HIGHWAY SYSTEM LENGTH - 2000**  
**MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN**

TABLE HM-47  
SHEET 4 OF 4

OCTOBER 2001

STATE	INTERNATIONAL ROUGHNESS INDEX (IRI) 1/									
	TOTAL URBAN NHS									
	NOT REPORTED 2/	< 60	60-94	95-119	120-144	145-170	171-194	195-220	> 220	TOTAL REPORTED
Alabama	-	285	468	145	74	33	13	2	4	1,024
Alaska	-	11	49	33	18	10	3	-	1	125
Arizona	139	133	142	79	52	12	5	4	1	428
Arkansas	34	4	67	88	73	79	37	22	28	398
California	25	41	381	442	647	541	264	125	125	2,566
Colorado	-	10	641	69	11	5	3	50	15	804
Connecticut	-	16	168	188	100	64	32	16	25	609
Delaware	4	4	32	35	14	5	6	3	5	104
Dist. of Columbia	2	-	3	3	4	8	11	14	35	78
Florida	175	610	580	133	71	33	16	5	6	1,454
Georgia	27	764	398	61	20	4	1	-	-	1,248
Hawaii	173	-	-	-	1	1	-	-	-	2
Idaho	-	40	58	26	21	15	13	4	5	182
Illinois	58	46	568	563	405	227	190	124	152	2,275
Indiana	17	97	246	119	88	56	40	7	24	677
Iowa	39	10	123	105	68	58	44	8	35	451
Kansas	57	32	155	111	40	12	10	2	4	366
Kentucky	1	76	253	141	83	31	19	13	2	618
Louisiana	142	12	144	103	75	114	75	41	80	644
Maine	-	-	93	36	24	16	11	6	4	190
Maryland	105	19	219	143	63	37	25	19	21	546
Massachusetts	31	1	218	279	238	302	154	114	118	1,424
Michigan	3	36	282	261	263	215	183	123	307	1,670
Minnesota	14	116	326	154	63	24	2	4	2	691
Mississippi	6	25	104	95	93	36	10	12	16	391
Missouri	24	-	75	186	261	163	124	66	90	965
Montana	-	6	42	27	19	10	6	3	7	120
Nebraska	10	13	34	33	49	32	40	25	47	273
Nevada	-	24	86	46	14	21	4	5	5	205
New Hampshire	-	28	84	30	9	4	4	-	2	161
New Jersey	68	2	129	287	292	238	141	68	168	1,325
New Mexico	3	7	64	83	68	33	11	10	10	286
New York	90	64	609	450	282	257	142	121	358	2,283
North Carolina	4	6	362	201	122	90	38	28	17	864
North Dakota	-	10	33	25	21	9	3	2	-	103
Ohio	-	257	750	322	148	101	38	21	28	1,665
Oklahoma	-	3	129	114	86	69	45	24	16	486
Oregon	74	-	50	160	114	61	21	11	6	423
Pennsylvania	47	68	539	440	335	242	139	88	91	1,942
Rhode Island	1	2	60	50	40	12	6	3	2	175
South Carolina	-	59	244	132	74	58	23	13	31	634
South Dakota	47	1	14	7	19	15	2	4	1	63
Tennessee	40	246	421	129	70	39	15	12	9	941
Texas	311	133	1,155	1,178	807	488	222	138	267	4,388
Utah	12	22	140	90	61	40	16	4	5	378
Vermont	-	6	29	19	17	8	6	3	6	94
Virginia	38	23	382	324	214	105	54	44	45	1,191
Washington	122	107	328	105	90	52	19	10	13	724
West Virginia	-	14	91	40	27	21	9	6	3	211
Wisconsin	6	42	189	153	154	134	85	57	112	926
Wyoming	-	56	60	25	14	8	3	1	1	168
U.S. Total	1,949	3,587	11,817	8,068	6,016	4,248	2,383	1,485	2,355	39,959
Puerto Rico	8	-	5	61	50	68	31	10	12	237
Grand Total	1,957	3,587	11,822	8,129	6,066	4,316	2,414	1,495	2,367	40,196

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.