

**NATIONAL HIGHWAY SYSTEM LENGTH - 2017
MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL**

TABLE HM-47
SHEET 1 OF 4

August 23, 2018

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	NOT REPORTED (2)	< 60	60-94	95-119	120-144	145-170	171-194	195-220	> 220	TOTAL
Alabama	9	354	139	35	18	12	2	1	1	562	15	855	854	162	62	30	16	8	9	1,986
Alaska	1	204	341	157	114	78	45	26	35	1,001	281	86	155	75	71	76	59	49	136	707
Arizona	16	537	221	71	35	19	8	5	3	900	10	429	412	165	93	50	23	15	10	1,197
Arkansas	1	218	147	37	16	10	4	2	3	438	2	225	834	396	223	125	66	33	33	1,935
California	3	437	392	155	92	49	24	13	21	1,183	80	813	1,507	548	281	153	77	48	71	3,497
Colorado	-	134	270	127	49	31	22	10	4	648	-	541	1,081	488	234	122	55	29	24	2,576
Connecticut	-	17	7	3	1	0	0	0	0	29	-	23	62	35	19	10	5	3	1	158
Delaware	-	-	-	-	-	-	-	-	-	-	1	35	68	15	4	2	1	0	0	126
District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	35	537	127	10	5	3	0	0	0	682	69	1,110	1,220	236	73	25	8	3	3	2,678
Georgia	-	216	209	65	26	12	5	2	2	537	14	757	1,578	501	193	78	28	12	15	3,162
Hawaii	-	-	-	-	-	-	-	-	-	-	-	1	22	15	11	13	8	4	6	80
Idaho	-	270	180	40	18	7	3	1	1	520	20	458	817	245	103	45	22	10	11	1,710
Illinois	-	716	390	76	29	18	8	4	3	1,243	-	369	1,032	490	270	181	58	39	28	2,469
Indiana	42	450	171	42	26	17	9	6	7	728	51	577	608	227	124	64	30	17	17	1,664
Iowa	20	246	219	67	33	15	6	3	2	591	194	774	1,093	583	347	193	100	64	77	3,231
Kansas	-	397	173	45	15	6	2	1	0	639	8	1,740	961	181	71	39	17	8	7	3,023
Kentucky	23	419	121	28	14	10	3	1	1	598	62	790	606	143	61	27	12	7	9	1,656
Louisiana	13	183	132	87	67	32	12	4	2	520	39	137	473	209	117	73	44	24	27	1,105
Maine	0	151	79	28	14	4	2	0	0	279	2	190	308	113	54	38	23	17	36	780
Maryland	-	63	59	13	4	1	1	0	1	142	0	181	142	28	10	6	3	3	3	377
Massachusetts	-	36	22	3	1	0	0	0	1	63	0	63	177	81	46	26	14	9	15	431
Michigan	6	219	224	57	29	18	7	4	3	561	0	1,076	930	252	115	53	26	13	18	2,483
Minnesota	-	227	267	41	28	12	6	4	2	588	0	1,257	1,123	489	286	164	81	44	44	3,488
Mississippi	-	375	118	32	22	13	6	2	1	569	-	505	729	252	148	89	42	22	25	1,812
Missouri	-	545	230	38	15	8	4	1	0	842	1	1,208	1,257	314	121	47	24	10	8	2,989
Montana	19	556	391	69	29	12	7	5	7	1,075	8	658	1,329	414	178	84	38	25	39	2,765
Nebraska	0	240	125	29	12	5	2	1	1	414	14	1,081	884	299	173	104	55	30	44	2,670
Nevada	-	395	32	7	4	4	4	1	0	447	-	963	473	76	22	7	3	2	2	1,547
New Hampshire	-	116	22	3	1	-	-	-	-	142	-	171	138	37	17	9	5	4	6	387
New Jersey	-	21	21	1	1	1	0	0	-	45	-	42	59	29	23	18	11	5	7	195
New Mexico	2	532	214	58	26	9	3	2	2	845	0	626	676	212	117	64	30	15	19	1,760
New York	2	306	323	86	42	19	10	7	8	801	140	299	1,091	362	186	105	52	31	32	2,157
North Carolina	0	325	151	33	21	13	5	2	1	551	11	553	1,075	324	128	57	27	15	16	2,194
North Dakota	-	282	185	31	8	2	1	0	0	510	-	1,262	1,095	318	144	64	24	13	21	2,941
Ohio	-	350	197	51	19	12	6	3	3	643	1	638	794	234	97	49	23	13	12	1,861
Oklahoma	0	307	245	46	23	12	7	4	2	646	10	402	965	391	205	113	62	40	44	2,222
Oregon	-	244	177	52	15	4	2	1	1	495	1	582	1,328	422	182	77	34	20	11	2,656
Pennsylvania	-	451	435	104	52	22	11	6	6	1,086	-	457	854	278	149	85	45	27	39	1,933
Rhode Island	-	15	3	0	-	-	-	-	-	18	-	8	13	16	19	19	12	8	12	108
South Carolina	-	181	239	61	31	20	8	4	3	546	0	216	712	311	175	88	42	24	21	1,590
South Dakota	-	221	294	47	17	7	4	1	0	591	-	416	1,237	606	309	167	80	45	30	2,891
Tennessee	0	528	85	16	9	4	1	1	0	644	2	805	668	147	69	31	14	6	3	1,744
Texas	11	946	793	160	56	21	8	3	2	1,990	34	2,404	3,158	1,176	508	226	92	37	30	7,631
Utah	0	329	277	59	12	4	2	1	1	684	12	170	516	244	124	63	25	9	10	1,162
Vermont	1	192	52	7	3	1	1	0	-	255	0	102	119	36	19	14	5	5	7	306
Virginia	-	252	271	45	17	9	2	1	0	598	22	277	883	306	135	62	24	10	5	1,703
Washington	-	170	145	41	28	18	10	8	9	429	-	333	927	351	147	72	38	25	32	1,925
West Virginia	1	143	135	21	10	5	3	1	1	319	1	102	446	214	117	67	32	20	18	1,016
Wisconsin	-	221	140	70	40	24	7	5	5	512	-	840	944	579	359	183	98	63	89	3,155
Wyoming	-	483	215	57	30	14	4	3	2	807	6	692	842	268	106	40	15	8	7	1,977
U.S. Total	205	14,755	9,406	2,415	1,177	617	288	153	145	28,957	1,110	28,297	39,279	13,892	6,844	3,598	1,732	990	1,191	95,824
Puerto Rico (3)	6	1	7	7	2	3	2	3	13	38	37	-	-	0	1	1	1	1	2	6
Grand Total	211	14,756	9,413	2,422	1,179	620	290	156	159	28,995	1,147	28,297	39,279	13,893	6,845	3,599	1,733	992	1,193	95,830

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2017
MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL

TABLE HM-47
SHEET 2 OF 4

August 23, 2018

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	24	1,209	992	197	81	41	18	10	10	2,558
Alaska	282	291	496	232	185	154	104	75	171	1,708
Arizona	26	966	634	236	129	69	31	20	13	2,097
Arkansas	3	443	982	432	239	136	70	35	36	2,373
California	83	1,250	1,899	703	373	202	101	62	91	4,679
Colorado	-	676	1,351	616	283	154	77	39	28	3,224
Connecticut	-	40	70	38	19	11	5	3	2	186
Delaware	1	35	68	15	4	2	1	0	0	126
District of Columbia	-	-	-	-	-	-	-	-	-	-
Florida	104	1,647	1,346	246	79	28	8	4	3	3,361
Georgia	14	973	1,787	566	219	90	33	14	17	3,699
Hawaii	-	1	22	15	11	13	8	4	6	80
Idaho	20	727	997	285	121	52	25	11	12	2,230
Illinois	-	1,085	1,421	566	299	199	67	44	31	3,712
Indiana	93	1,027	780	269	149	81	40	23	24	2,392
Iowa	214	1,019	1,312	650	381	208	106	67	79	3,822
Kansas	8	2,136	1,134	226	87	45	19	9	7	3,663
Kentucky	85	1,209	728	172	76	37	16	8	9	2,254
Louisiana	52	320	605	296	184	105	56	29	30	1,624
Maine	2	341	387	141	68	43	25	18	36	1,059
Maryland	0	244	202	40	14	7	4	4	4	519
Massachusetts	0	99	199	84	47	27	14	9	16	494
Michigan	6	1,295	1,154	308	144	71	34	17	21	3,044
Minnesota	0	1,484	1,391	531	314	176	88	48	45	4,076
Mississippi	-	879	847	284	171	102	48	23	26	2,381
Missouri	1	1,753	1,487	352	136	55	27	12	9	3,830
Montana	27	1,215	1,721	482	207	96	45	29	45	3,840
Nebraska	14	1,320	1,010	328	185	109	56	31	45	3,084
Nevada	-	1,358	505	83	26	11	7	2	2	1,995
New Hampshire	-	287	159	41	18	9	5	4	6	529
New Jersey	-	62	80	31	24	19	11	6	7	240
New Mexico	2	1,158	890	270	143	73	34	17	21	2,605
New York	142	605	1,413	448	227	124	62	39	40	2,958
North Carolina	11	878	1,226	357	148	70	32	17	17	2,745
North Dakota	-	1,544	1,280	350	152	66	25	14	21	3,451
Ohio	1	988	992	285	117	62	29	17	15	2,503
Oklahoma	10	709	1,210	437	228	125	69	43	46	2,868
Oregon	1	826	1,505	473	197	81	36	21	12	3,151
Pennsylvania	-	908	1,289	382	201	107	56	33	44	3,019
Rhode Island	-	23	16	16	19	19	12	8	12	126
South Carolina	0	398	951	372	206	108	50	27	24	2,137
South Dakota	-	637	1,531	653	326	174	84	46	30	3,482
Tennessee	2	1,333	753	163	79	35	15	7	4	2,388
Texas	45	3,350	3,950	1,336	564	247	100	40	32	9,621
Utah	12	499	793	303	136	67	27	10	11	1,846
Vermont	1	294	171	43	22	15	5	5	7	561
Virginia	22	529	1,154	351	153	71	27	11	5	2,300
Washington	-	503	1,072	392	175	90	48	33	41	2,354
West Virginia	1	245	581	236	127	72	35	20	19	1,335
Wisconsin	-	1,061	1,084	650	398	206	105	68	94	3,668
Wyoming	6	1,175	1,057	324	135	54	20	11	9	2,785
U.S. Total	1,315	43,052	48,686	16,308	8,022	4,215	2,019	1,143	1,336	124,781
Puerto Rico (3)	43	1	7	7	3	4	3	5	15	44
Grand Total	1,358	43,053	48,692	16,315	8,024	4,219	2,022	1,148	1,351	124,825

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2017
MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN

TABLE HM-47
SHEET 3 OF 4

August 23, 2018

STATE	INTERNATIONAL ROUGHNESS INDEX (IRI) (1)																			TOTAL REPORTED
	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	
Alabama	4	246	82	34	26	18	12	7	4	429	18	395	486	149	80	51	35	19	49	1,264
Alaska	1	14	40	13	7	2	1	0	1	78	6	18	41	30	21	14	11	7	13	155
Arizona	3	152	60	21	10	3	2	1	0	249	36	177	200	117	101	71	51	34	33	784
Arkansas	-	105	105	43	20	16	8	6	8	310	5	49	213	129	89	61	40	30	62	673
California	2	243	412	213	147	99	59	43	53	1,268	128	374	1,045	991	1,040	993	804	707	2,059	8,013
Colorado	-	57	123	54	38	16	8	5	3	304	1	110	371	237	199	154	95	71	141	1,379
Connecticut	-	154	102	32	16	7	3	2	1	317	-	102	248	175	140	106	64	42	80	958
Delaware	1	3	19	9	3	2	2	1	1	40	3	35	113	43	22	14	8	6	14	254
District of Columbia	0	-	1	-	4	-	2	-	4	12	1	-	2	-	15	-	28	-	77	121
Florida	78	382	234	45	23	10	4	1	1	700	196	1,143	1,871	602	309	180	91	58	90	4,343
Georgia	-	334	236	72	33	18	8	5	4	710	32	531	1,164	437	241	139	82	57	135	2,787
Hawaii	-	1	13	11	10	9	6	3	3	55	3	22	49	47	49	43	31	21	51	312
Idaho	0	44	36	6	3	1	1	0	0	91	19	61	114	54	36	26	17	12	28	348
Illinois	-	335	395	93	53	32	16	9	7	942	-	159	777	619	484	382	263	203	397	3,283
Indiana	66	187	104	56	31	21	12	7	7	425	53	198	200	100	67	44	27	18	24	678
Iowa	6	57	66	21	10	6	4	3	2	170	76	84	190	156	125	91	54	42	107	849
Kansas	1	117	63	24	15	10	3	1	1	234	9	142	168	68	45	33	18	12	20	505
Kentucky	4	107	67	18	11	9	3	1	2	217	56	188	215	90	58	44	29	18	39	682
Louisiana	10	103	87	51	50	50	25	17	13	395	119	83	225	158	136	120	84	73	151	1,031
Maine	0	50	23	7	5	1	0	0	0	87	2	13	52	35	26	15	12	8	18	178
Maryland	0	141	120	27	15	11	6	5	12	338	8	236	391	160	114	94	65	57	175	1,292
Massachusetts	2	321	122	24	12	12	6	4	10	510	36	196	349	309	300	283	218	181	458	2,294
Michigan	3	173	269	86	58	41	23	17	15	682	3	229	618	447	353	290	214	179	406	2,733
Minnesota	0	86	140	47	21	16	7	4	4	325	3	199	324	132	71	45	27	17	30	847
Mississippi	-	146	48	22	15	11	5	3	3	253	-	138	301	162	113	84	54	39	119	1,010
Missouri	-	308	137	41	24	15	7	4	2	538	2	322	445	185	125	93	58	39	74	1,341
Montana	1	41	41	7	3	3	1	1	1	97	5	24	59	37	26	19	13	11	26	216
Nebraska	1	22	28	9	4	3	1	1	1	68	61	28	89	48	41	37	32	28	93	397
Nevada	-	75	39	17	13	8	2	1	1	155	-	126	105	58	48	31	21	10	21	420
New Hampshire	-	65	14	3	1	0	-	0	0	83	0	115	85	34	21	16	12	9	29	320
New Jersey	-	134	133	41	25	15	11	11	16	387	1	257	525	291	250	226	178	155	460	2,343
New Mexico	0	97	41	9	3	2	1	0	0	153	1	78	103	63	45	31	16	12	22	370
New York	9	225	374	127	65	44	33	23	40	931	222	130	880	617	467	383	272	234	850	3,832
North Carolina	0	304	252	80	42	20	12	6	4	721	21	306	751	422	263	152	95	57	116	2,161
North Dakota	-	22	26	7	4	1	1	0	0	61	-	24	58	35	28	19	13	9	23	208
Ohio	1	384	319	95	54	37	19	10	12	930	15	329	635	328	253	191	119	96	256	2,207
Oklahoma	3	89	109	34	19	14	8	5	6	283	6	88	211	123	88	58	30	26	39	663
Oregon	-	75	107	25	12	8	4	2	1	234	15	109	282	165	119	83	55	36	63	912
Pennsylvania	-	241	299	93	64	37	20	11	10	775	-	268	851	589	496	371	242	185	363	3,364
Rhode Island	0	19	24	5	2	1	1	0	0	52	6	21	51	44	53	53	42	40	114	417
South Carolina	-	85	118	39	27	16	10	5	4	304	0	68	376	262	182	125	61	35	52	1,161
South Dakota	-	16	49	14	5	2	1	0	0	88	-	6	38	29	28	19	14	12	10	155
Tennessee	3	382	100	36	17	10	4	2	2	554	5	597	713	271	172	106	67	47	93	2,066
Texas	16	428	543	216	135	72	27	13	7	1,442	222	762	1,865	1,113	813	612	412	330	793	6,700
Utah	0	70	112	38	18	10	3	2	1	253	8	126	262	121	75	41	23	14	18	681
Vermont	-	46	12	3	2	1	0	0	0	64	3	16	38	18	13	9	4	4	8	110
Virginia	13	152	223	68	33	20	7	4	2	508	27	132	550	336	248	184	115	75	79	1,718
Washington	-	113	124	43	22	11	7	6	8	335	7	163	436	280	225	172	119	109	359	1,864
West Virginia	-	102	85	20	14	7	3	2	1	235	3	21	166	84	53	33	18	17	21	411
Wisconsin	-	104	107	59	46	24	12	7	5	364	-	124	283	308	299	242	151	132	389	1,928
Wyoming	-	36	35	17	8	4	3	1	2	106	1	29	58	30	19	13	9	7	18	184
U.S. Total	232	7,192	6,417	2,174	1,295	806	428	263	287	18,861	1,448	9,149	19,641	11,336	8,682	6,697	4,615	3,641	9,164	72,924
Puerto Rico (3)	24	2	44	44	35	27	18	14	48	233	361	-	2	5	8	12	10	9	31	78
Grand Total	256	7,194	6,461	2,218	1,330	833	446	277	335	19,094	1,809	9,149	19,643	11,340	8,690	6,709	4,625	3,650	9,196	73,002

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2017

MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN

TABLE HM-47

SHEET 4 OF 4

August 23, 2018

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	22	640	568	183	106	69	48	25	53	1,693
Alaska	7	32	80	43	28	16	12	8	13	232
Arizona	39	329	260	137	111	74	52	35	34	1,033
Arkansas	5	154	317	172	109	77	49	36	70	984
California	131	618	1,457	1,204	1,187	1,092	863	750	2,111	9,281
Colorado	1	167	494	291	237	170	102	76	144	1,683
Connecticut	-	256	350	207	156	114	68	44	81	1,275
Delaware	3	37	133	51	25	16	10	7	15	294
District of Columbia	1	-	3	-	19	-	30	-	81	133
Florida	275	1,525	2,105	647	332	190	95	59	90	5,043
Georgia	32	866	1,400	509	274	157	90	62	139	3,497
Hawaii	3	23	61	57	59	52	37	23	55	367
Idaho	19	104	151	60	39	27	18	12	29	439
Illinois	-	494	1,172	712	537	414	279	212	405	4,225
Indiana	119	384	303	156	99	66	39	25	31	1,103
Iowa	82	141	256	177	136	97	58	46	109	1,019
Kansas	10	259	231	92	59	43	22	13	20	739
Kentucky	60	295	282	109	69	53	32	19	41	899
Louisiana	129	186	312	209	186	170	109	91	164	1,426
Maine	2	63	74	42	30	17	12	9	18	265
Maryland	8	376	512	188	128	105	71	62	187	1,630
Massachusetts	38	517	471	333	312	294	224	185	469	2,804
Michigan	6	401	886	533	411	331	237	196	420	3,415
Minnesota	3	285	464	179	92	61	35	21	35	1,172
Mississippi	-	285	349	184	128	94	60	42	121	1,263
Missouri	2	630	582	226	149	108	66	43	76	1,880
Montana	6	65	100	44	29	22	14	11	27	312
Nebraska	62	50	117	56	45	40	33	29	94	465
Nevada	-	201	144	75	61	39	22	10	22	575
New Hampshire	0	180	99	37	21	17	12	9	29	403
New Jersey	1	392	658	332	275	241	189	166	476	2,729
New Mexico	2	175	144	72	48	32	17	12	22	523
New York	231	355	1,254	744	532	427	305	257	890	4,763
North Carolina	22	609	1,003	502	305	172	107	63	120	2,882
North Dakota	-	46	84	42	31	20	13	9	23	269
Ohio	16	713	954	423	307	228	138	106	267	3,137
Oklahoma	9	178	320	156	106	72	38	31	45	947
Oregon	15	184	390	190	131	90	59	38	64	1,147
Pennsylvania	-	509	1,150	681	560	408	262	196	373	4,139
Rhode Island	7	40	75	49	55	53	42	40	114	469
South Carolina	0	153	494	300	209	141	71	40	56	1,465
South Dakota	-	22	86	42	33	21	16	12	10	243
Tennessee	9	978	812	307	189	116	72	49	95	2,619
Texas	238	1,191	2,408	1,329	948	684	439	343	800	8,142
Utah	8	196	374	159	93	51	25	16	19	934
Vermont	3	61	50	22	15	10	4	4	9	174
Virginia	40	284	773	404	281	204	122	78	81	2,227
Washington	7	276	560	323	248	184	126	116	367	2,199
West Virginia	3	123	251	104	67	40	21	18	22	646
Wisconsin	-	227	391	367	345	266	164	139	394	2,292
Wyoming	1	65	93	47	27	17	13	9	19	290
U.S. Total	1,679	16,340	26,058	13,509	9,977	7,503	5,043	3,903	9,451	91,785
Puerto Rico (3)	386	2	46	49	44	39	28	23	80	311
Grand Total	2,065	16,342	26,104	13,558	10,020	7,542	5,071	3,927	9,531	92,096

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2017

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 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) Data may be incomplete.