

NATIONAL HIGHWAY SYSTEM LENGTH - 2023

MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL

TABLE HM-47
SHEET 1 OF 4

November 19, 2024

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	0	466	56	20	12	7	4	3	3	570	4	1,095	664	140	59	25	10	7	5	2,004
Alaska	-	189	356	167	104	77	47	27	35	1,001	278	135	216	81	72	62	40	32	72	710
Arizona	2	528	204	66	41	27	15	12	21	913	3	308	392	196	127	79	39	25	30	1,197
Arkansas	-	255	124	31	17	8	5	2	3	445	-	564	802	285	150	74	32	17	17	1,942
California	1	281	404	148	99	56	31	20	27	1,065	32	839	1,658	705	379	226	106	61	90	4,062
Colorado	-	68	324	121	55	34	19	14	14	648	-	557	1,118	427	222	118	60	38	36	2,576
Connecticut	-	22	6	1	0	-	-	-	0	30	-	29	60	34	18	7	4	3	2	156
Delaware	-	-	-	-	-	-	-	-	-	-	2	45	69	15	4	1	0	0	0	136
District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	4	586	101	15	6	3	1	0	0	713	2	1,417	959	237	92	43	16	6	7	2,779
Georgia	-	338	147	31	11	6	2	1	1	538	-	1,260	1,321	401	165	66	20	8	7	3,248
Hawaii	-	-	-	-	-	-	-	-	-	-	1	6	28	19	9	7	4	2	4	79
Idaho	1	310	156	28	15	6	3	1	2	521	1	644	690	192	90	44	18	11	10	1,698
Illinois	-	809	280	73	32	19	8	4	4	1,228	1	720	784	375	243	142	77	46	62	2,449
Indiana	0	460	185	50	27	14	7	4	5	752	4	925	530	153	74	36	11	6	4	1,738
Iowa	-	271	231	60	27	11	5	2	3	611	14	868	1,105	608	370	218	109	69	64	3,410
Kansas	0	425	142	43	19	6	2	1	1	639	1	1,630	1,068	186	75	40	16	8	10	3,031
Kentucky	2	519	124	30	19	9	4	2	2	710	11	831	544	151	58	28	14	5	7	1,638
Louisiana	4	173	135	91	61	40	16	6	3	524	2	125	403	227	143	89	49	30	31	1,097
Maine	-	231	41	5	2	1	0	0	0	279	1	373	273	65	32	20	13	8	16	800
Maryland	-	67	55	11	5	2	0	1	1	142	1	182	152	30	10	7	3	2	4	390
Massachusetts	-	44	13	2	1	1	1	0	1	63	0	102	188	66	36	19	7	5	5	428
Michigan	20	282	186	29	20	14	7	3	3	542	36	1,339	769	188	76	35	17	10	16	2,450
Minnesota	-	289	223	39	13	6	2	1	0	574	8	1,239	1,235	483	225	120	57	34	26	3,419
Mississippi	-	354	151	34	18	11	6	2	2	578	0	512	696	255	150	100	50	28	31	1,821
Missouri	-	640	135	32	15	10	5	2	3	841	1	1,291	1,106	316	134	62	26	13	11	2,957
Montana	-	559	412	74	32	12	4	1	11	1,105	-	737	1,239	444	194	86	40	20	26	2,786
Nebraska	-	218	157	23	9	5	2	0	0	415	1	756	933	399	251	147	72	49	54	2,661
Nevada	-	409	29	8	5	2	1	1	1	457	0	950	423	115	48	19	8	3	3	1,567
New Hampshire	-	104	16	6	2	0	0	0	-	129	0	203	121	32	12	6	4	3	3	382
New Jersey	-	20	18	4	1	1	0	0	0	45	-	87	72	16	8	5	2	1	2	192
New Mexico	0	496	194	66	40	24	11	7	6	844	1	543	642	252	137	82	40	24	27	1,749
New York	8	372	282	69	36	21	8	5	4	798	36	358	1,147	366	177	97	43	25	22	2,235
North Carolina	4	571	178	27	13	6	4	2	3	803	23	762	1,135	409	163	64	24	12	15	2,583
North Dakota	-	320	152	22	11	2	1	1	1	510	-	1,351	1,106	274	112	45	19	13	26	2,946
Ohio	1	420	153	39	16	8	3	2	1	642	1	707	755	244	106	50	21	11	8	1,902
Oklahoma	7	296	264	44	17	10	5	3	2	642	22	564	891	379	210	109	51	34	49	2,288
Oregon	0	302	146	27	11	5	2	1	0	495	1	723	1,291	363	144	64	28	20	24	2,657
Pennsylvania	-	583	324	73	38	20	11	7	11	1,066	2	447	889	303	147	66	35	21	34	1,941
Rhode Island	-	15	2	0	0	0	-	-	0	18	1	16	19	13	18	17	11	7	6	107
South Carolina	463	-	-	-	-	-	-	-	-	-	5	302	689	227	116	54	23	13	10	1,434
South Dakota	-	327	232	20	7	4	1	1	0	591	-	1,042	1,176	374	163	70	31	18	17	2,890
Tennessee	0	529	75	19	13	5	2	1	1	644	1	686	643	171	96	57	28	16	17	1,714
Texas	1	827	826	193	68	31	11	6	3	1,965	84	2,886	3,231	1,220	566	243	89	45	34	8,313
Utah	-	389	215	53	18	6	2	0	1	685	0	287	504	214	108	48	12	6	5	1,184
Vermont	0	181	55	10	6	2	1	1	1	255	1	107	131	32	15	9	5	2	5	307
Virginia	-	270	190	31	9	4	2	1	0	507	-	260	836	324	141	60	23	9	7	1,661
Washington	-	209	108	36	25	11	7	6	4	407	1	405	766	391	181	75	38	23	26	1,906
West Virginia	-	134	136	23	13	7	3	2	1	320	1	103	438	217	130	63	35	19	17	1,023
Wisconsin	2	300	119	54	20	10	4	1	1	510	13	1,257	791	456	294	160	85	47	55	3,143
Wyoming	-	526	168	57	32	13	6	4	2	807	55	743	818	225	84	29	8	4	3	1,913
U.S. Total	521	15,983	8,230	2,107	1,061	576	282	162	187	28,588	650	33,318	37,517	13,296	6,632	3,393	1,570	916	1,059	97,700
Puerto Rico	4	3	15	9	4	3	2	3	11	50	0	-	5	12	12	12	7	6	14	67
Grand Total	525	15,986	8,245	2,116	1,065	580	284	164	198	28,638	650	33,318	37,522	13,307	6,644	3,405	1,576	922	1,073	97,767

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2023

MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL

TABLE HM-47
SHEET 2 OF 4

November 19, 2024

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	5	1,561	720	160	71	32	14	9	8	2,575
Alaska	278	324	572	248	177	139	86	59	107	1,711
Arizona	5	836	596	261	168	106	54	37	51	2,109
Arkansas	-	819	926	316	167	82	38	20	20	2,387
California	33	1,120	2,061	852	478	281	137	81	117	5,127
Colorado	-	625	1,442	547	277	152	80	51	50	3,224
Connecticut	-	52	66	35	18	7	4	3	2	185
Delaware	2	45	69	15	4	1	0	0	0	136
District of Columbia	-	-	-	-	-	-	-	-	-	-
Florida	7	2,003	1,060	253	98	46	17	6	7	3,492
Georgia	-	1,598	1,468	432	177	73	22	9	8	3,786
Hawaii	1	6	28	19	9	7	4	2	4	79
Idaho	2	954	846	220	105	49	21	12	11	2,218
Illinois	1	1,529	1,064	447	275	161	85	51	66	3,677
Indiana	4	1,385	714	203	100	50	18	10	9	2,490
Iowa	14	1,139	1,337	668	396	229	114	71	67	4,021
Kansas	2	2,055	1,209	230	94	46	18	9	10	3,671
Kentucky	12	1,350	667	182	77	38	18	7	9	2,348
Louisiana	6	298	538	318	204	129	65	35	34	1,621
Maine	1	604	313	70	34	21	13	8	17	1,080
Maryland	1	249	207	42	15	8	3	3	5	533
Massachusetts	0	147	201	68	37	20	8	5	5	491
Michigan	56	1,620	955	216	96	48	24	13	19	2,992
Minnesota	8	1,529	1,458	523	239	126	58	35	26	3,993
Mississippi	0	866	847	289	168	111	56	30	33	2,399
Missouri	1	1,931	1,241	348	149	71	30	16	13	3,799
Montana	-	1,296	1,652	518	226	98	43	21	38	3,892
Nebraska	1	974	1,090	423	259	152	74	49	54	3,076
Nevada	0	1,360	452	123	53	21	9	3	3	2,024
New Hampshire	0	306	137	38	13	6	4	3	3	511
New Jersey	-	108	90	20	9	6	2	1	2	237
New Mexico	1	1,039	837	319	177	105	51	32	33	2,593
New York	43	730	1,430	435	214	118	51	29	26	3,033
North Carolina	27	1,333	1,313	436	176	69	27	14	17	3,387
North Dakota	-	1,671	1,258	296	123	48	20	13	27	3,456
Ohio	1	1,126	908	282	122	59	24	12	10	2,544
Oklahoma	29	860	1,155	423	227	119	56	37	52	2,930
Oregon	1	1,026	1,437	390	155	69	30	20	24	3,152
Pennsylvania	2	1,029	1,213	376	185	86	46	28	44	3,007
Rhode Island	1	31	21	13	18	17	11	7	6	125
South Carolina	468	302	689	227	116	54	23	13	10	1,434
South Dakota	-	1,369	1,407	394	170	74	31	19	17	3,481
Tennessee	1	1,215	717	190	109	62	30	17	18	2,358
Texas	85	3,712	4,057	1,414	634	274	100	51	37	10,279
Utah	0	676	719	267	127	54	15	6	6	1,868
Vermont	1	288	187	42	21	10	6	3	6	562
Virginia	-	530	1,026	356	150	64	25	10	7	2,168
Washington	1	614	875	427	206	87	45	29	30	2,313
West Virginia	1	237	575	240	143	71	38	21	18	1,343
Wisconsin	15	1,557	910	510	314	170	89	48	56	3,653
Wyoming	55	1,269	986	281	116	42	14	8	5	2,720
U.S. Total	1,170	49,301	45,747	15,403	7,693	3,969	1,851	1,077	1,246	126,288
Puerto Rico	4	3	19	21	16	15	9	9	25	117
Grand Total	1,175	49,303	45,767	15,424	7,709	3,984	1,861	1,086	1,271	126,405

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2023

MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN

TABLE HM-47
SHEET 3 OF 4

November 19, 2024

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	309	58	23	17	9	5	4	7	432	9	466	485	149	78	44	23	14	21	1,281
Alaska	-	30	32	10	4	2	1	-	0	79	1	28	49	28	19	11	7	6	12	160
Arizona	6	139	63	18	10	7	3	2	2	243	10	157	192	133	118	83	59	37	52	831
Arkansas	-	145	91	36	21	13	7	4	6	323	1	113	241	102	67	46	29	20	66	685
California	0	235	395	216	167	107	58	34	35	1,247	48	382	971	867	973	1,007	823	752	2,144	7,920
Colorado	-	53	108	56	40	24	10	7	6	304	0	110	364	252	210	145	88	67	147	1,381
Connecticut	-	149	116	28	13	5	3	1	1	317	1	107	304	186	134	83	50	34	60	958
Delaware	0	13	13	6	3	2	1	1	1	40	4	43	112	39	23	13	7	5	11	253
District of Columbia	8	-	1	1	0	1	0	0	0	4	3	1	1	2	6	8	10	12	79	119
Florida	6	496	185	42	24	16	6	2	1	772	10	1,246	1,780	677	360	202	109	70	117	4,560
Georgia	-	421	173	59	28	16	6	3	2	709	-	767	1,105	398	213	116	63	33	61	2,756
Hawaii	-	5	14	11	8	8	5	3	1	55	4	30	73	47	38	38	27	18	46	317
Idaho	0	46	35	6	2	2	1	1	-	92	9	54	90	34	21	17	8	7	12	244
Illinois	-	417	327	84	48	37	19	10	15	958	1	338	696	526	437	328	220	168	403	3,116
Indiana	2	257	128	45	29	18	8	4	3	492	30	238	226	80	45	32	16	9	10	656
Iowa	2	46	68	30	15	8	4	2	2	175	9	97	209	191	144	93	60	46	88	929
Kansas	3	133	52	23	13	7	3	2	1	234	32	135	147	57	43	31	20	13	22	468
Kentucky	0	117	59	24	13	9	6	2	3	232	49	174	232	117	62	33	20	13	22	673
Louisiana	3	128	84	52	48	46	28	13	16	414	85	110	220	145	124	113	87	71	174	1,044
Maine	-	59	21	5	1	1	1	-	0	87	1	37	41	18	16	14	10	6	16	159
Maryland	0	125	131	31	15	10	7	5	12	336	11	238	381	151	110	87	67	61	198	1,293
Massachusetts	1	366	75	23	15	12	5	3	5	504	52	291	390	308	291	263	191	160	400	2,294
Michigan	31	237	237	65	40	28	15	9	15	645	516	282	550	389	296	213	141	115	230	2,217
Minnesota	2	125	138	40	18	11	3	1	2	338	1	253	336	154	83	44	22	13	15	919
Mississippi	-	142	56	20	12	12	5	4	3	254	5	149	280	167	119	86	51	40	100	992
Missouri	-	302	140	41	26	18	8	5	4	544	3	323	438	205	132	96	62	46	80	1,383
Montana	-	54	23	4	3	1	0	0	1	87	-	36	63	31	22	17	11	10	17	206
Nebraska	-	18	33	12	4	2	1	0	0	69	5	23	94	63	55	46	37	35	105	457
Nevada	-	90	32	15	13	7	2	2	1	162	0	123	110	63	42	32	15	13	20	418
New Hampshire	-	83	11	1	0	0	0	-	-	96	-	124	103	34	23	14	8	6	12	324
New Jersey	-	177	127	31	16	12	9	6	9	387	0	430	578	277	240	211	155	126	320	2,337
New Mexico	-	83	41	11	8	5	2	3	2	155	4	66	109	60	47	35	20	12	27	376
New York	15	218	362	121	80	51	28	20	33	912	128	156	907	610	472	374	266	254	855	3,894
North Carolina	13	326	186	49	22	12	7	5	4	611	35	187	498	360	247	159	80	56	73	1,659
North Dakota	-	23	29	6	3	1	0	0	-	61	1	31	56	33	26	18	11	9	18	204
Ohio	1	483	272	82	46	25	14	8	6	937	15	333	664	340	260	190	119	94	203	2,202
Oklahoma	1	77	113	43	20	13	7	4	5	282	9	85	234	119	78	54	30	25	42	667
Oregon	-	107	87	18	10	6	4	1	1	234	15	134	260	155	117	80	53	39	81	919
Pennsylvania	-	345	254	81	44	29	17	11	17	797	3	313	826	577	490	377	247	179	411	3,420
Rhode Island	0	42	5	2	1	1	0	0	0	52	7	44	58	42	53	49	40	34	93	415
South Carolina	388	-	-	-	-	-	-	-	-	-	7	192	466	247	170	108	55	33	36	1,306
South Dakota	-	21	46	12	5	2	1	0	-	88	3	14	40	29	21	18	12	9	10	154
Tennessee	0	398	96	31	14	8	4	2	3	557	3	567	670	273	184	118	72	51	107	2,042
Texas	6	369	587	240	156	86	40	17	11	1,505	80	757	1,882	1,147	809	569	382	293	704	6,542
Utah	0	77	102	40	17	11	4	2	1	253	2	146	258	123	74	43	22	14	23	702
Vermont	0	38	18	5	3	1	0	0	0	64	3	20	27	12	7	6	4	3	8	86
Virginia	-	214	253	75	33	18	8	5	3	610	1	129	600	352	278	203	125	86	91	1,864
Washington	0	138	125	47	22	12	5	4	4	356	12	183	430	278	246	195	141	116	283	1,872
West Virginia	-	91	90	23	15	9	4	3	2	236	3	41	154	83	50	33	19	12	14	406
Wisconsin	4	97	122	59	44	23	10	5	3	362	46	145	301	278	280	257	172	136	328	1,896
Wyoming	-	46	30	10	7	5	4	2	2	106	6	42	53	25	16	12	8	5	12	174
U.S. Total	495	8,108	5,844	2,015	1,216	767	387	221	253	18,811	1,283	10,491	19,352	11,032	8,471	6,465	4,372	3,489	8,477	72,150
Puerto Rico	6	5	48	46	35	28	18	15	30	225	8	2	19	30	45	55	50	50	146	396
Grand Total	501	8,113	5,891	2,061	1,251	795	405	237	283	19,035	1,291	10,493	19,372	11,063	8,516	6,520	4,422	3,539	8,623	72,546

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2023

MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN

TABLE HM-47

SHEET 4 OF 4

November 19, 2024

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	9	775	543	172	95	53	28	18	28	1,713
Alaska	1	58	81	38	23	13	8	6	12	238
Arizona	16	296	255	151	128	89	61	39	55	1,075
Arkansas	1	258	332	138	87	60	36	24	71	1,008
California	48	618	1,366	1,083	1,140	1,114	881	786	2,180	9,167
Colorado	0	163	472	308	249	169	98	74	153	1,685
Connecticut	1	255	420	215	147	89	53	35	61	1,275
Delaware	4	56	125	45	26	15	9	6	12	294
District of Columbia	12	1	3	3	6	9	11	12	80	122
Florida	16	1,742	1,964	719	384	218	115	72	118	5,332
Georgia	-	1,188	1,278	457	242	132	69	37	63	3,465
Hawaii	4	35	87	58	46	47	32	20	47	371
Idaho	9	100	125	40	23	19	9	8	12	336
Illinois	1	755	1,023	610	485	366	239	178	418	4,074
Indiana	33	495	354	125	75	50	24	13	13	1,148
Iowa	10	143	277	221	160	101	64	48	90	1,103
Kansas	35	268	199	80	56	39	23	15	23	702
Kentucky	49	291	291	141	75	42	26	16	25	905
Louisiana	88	238	305	197	172	159	115	83	189	1,458
Maine	1	96	62	23	18	15	10	6	16	246
Maryland	11	363	512	182	125	97	74	66	210	1,629
Massachusetts	53	657	465	331	306	275	196	164	404	2,799
Michigan	547	519	787	454	335	241	157	124	245	2,862
Minnesota	3	378	474	194	101	54	25	14	17	1,257
Mississippi	5	291	336	188	131	98	56	44	103	1,245
Missouri	3	625	578	245	158	115	70	51	84	1,926
Montana	-	90	86	35	25	19	11	11	18	293
Nebraska	5	41	127	74	59	47	37	35	105	526
Nevada	0	213	143	77	55	39	17	15	21	580
New Hampshire	-	207	114	36	24	14	8	6	12	420
New Jersey	0	607	705	307	256	223	164	132	329	2,724
New Mexico	4	149	150	71	55	40	22	15	29	532
New York	143	374	1,270	731	551	424	294	274	888	4,807
North Carolina	49	513	684	410	268	170	87	60	78	2,271
North Dakota	1	54	85	39	29	19	12	10	18	265
Ohio	16	816	936	422	306	215	133	102	209	3,140
Oklahoma	11	163	347	161	98	68	37	29	46	949
Oregon	15	241	347	173	127	86	56	40	82	1,153
Pennsylvania	3	657	1,080	658	534	405	264	190	428	4,217
Rhode Island	7	86	63	44	54	50	41	35	93	467
South Carolina	394	192	466	247	170	108	55	33	36	1,306
South Dakota	3	35	86	41	27	20	13	10	10	241
Tennessee	4	965	766	304	198	126	76	53	110	2,598
Texas	86	1,126	2,468	1,387	965	655	421	310	715	8,047
Utah	2	223	360	163	91	54	25	16	24	956
Vermont	3	58	44	17	10	6	4	3	8	150
Virginia	1	343	853	428	311	221	133	91	94	2,474
Washington	12	321	554	325	267	207	146	120	288	2,228
West Virginia	3	132	244	106	65	42	23	15	16	642
Wisconsin	50	241	423	338	324	280	182	140	331	2,258
Wyoming	6	88	83	35	24	17	11	7	14	280
U.S. Total	1,778	18,599	25,196	13,047	9,687	7,232	4,759	3,711	8,730	90,960
Puerto Rico	14	7	67	76	80	83	68	65	176	621
Grand Total	1,792	18,605	25,263	13,123	9,767	7,315	4,827	3,776	8,906	91,581

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2023

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.