

NATIONAL HIGHWAY SYSTEM LENGTH - 2020
MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL

TABLE HM-47b
SHEET 1 OF 2

NOVEMBER, 2021

| STATE | INTERNATIONAL ROUGHNESS INDEX (IRI) (1) | | | | | | | | | | | | | | |
|----------------------|---|--------|--------|-------|----------------|------------------|--------|--------|-------|----------------|------------------|--------|--------|-------|----------------|
| | INTERSTATE SYSTEM | | | | | OTHER | | | | | TOTAL | | | | |
| | NOT REPORTED (2) | < 95 | 95-170 | > 170 | TOTAL REPORTED | NOT REPORTED (2) | < 95 | 95-170 | > 170 | TOTAL REPORTED | NOT REPORTED (2) | < 95 | 95-170 | > 170 | TOTAL REPORTED |
| Alabama | 0 | 516 | 46 | 8 | 571 | 5 | 1,765 | 205 | 27 | 1,997 | 5 | 2,280 | 251 | 36 | 2,568 |
| Alaska | 20 | 566 | 321 | 94 | 982 | 322 | 277 | 225 | 165 | 667 | 342 | 843 | 546 | 260 | 1,648 |
| Arizona | 7 | 751 | 138 | 20 | 909 | 11 | 727 | 392 | 72 | 1,192 | 18 | 1,478 | 530 | 92 | 2,101 |
| Arkansas | - | 360 | 67 | 12 | 439 | - | 1,167 | 649 | 122 | 1,938 | - | 1,527 | 716 | 134 | 2,377 |
| California | 0 | 850 | 305 | 55 | 1,209 | 58 | 2,573 | 1,144 | 213 | 3,930 | 59 | 3,423 | 1,449 | 267 | 5,139 |
| Colorado | - | 401 | 193 | 54 | 648 | - | 1,677 | 778 | 121 | 2,576 | - | 2,078 | 972 | 175 | 3,224 |
| Connecticut | - | 27 | 2 | 0 | 29 | 0 | 93 | 57 | 7 | 157 | 0 | 120 | 59 | 8 | 186 |
| Delaware | - | - | - | - | - | 0 | 112 | 24 | 3 | 138 | 0 | 112 | 24 | 3 | 138 |
| District of Columbia | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Florida | - | 699 | 17 | 1 | 717 | 3 | 2,379 | 364 | 18 | 2,762 | 3 | 3,079 | 381 | 20 | 3,479 |
| Georgia | - | 482 | 52 | 5 | 538 | - | 2,653 | 557 | 35 | 3,245 | - | 3,135 | 608 | 40 | 3,784 |
| Hawaii | - | - | - | - | - | 1 | 28 | 38 | 13 | 79 | 1 | 28 | 38 | 13 | 79 |
| Idaho | 2 | 463 | 46 | 11 | 519 | 7 | 1,315 | 288 | 92 | 1,695 | 9 | 1,778 | 334 | 103 | 2,214 |
| Illinois | - | 1,106 | 121 | 17 | 1,243 | 0 | 1,334 | 877 | 198 | 2,408 | 0 | 2,440 | 998 | 214 | 3,652 |
| Indiana | 0 | 648 | 100 | 21 | 769 | 0 | 1,398 | 318 | 29 | 1,745 | 0 | 2,046 | 417 | 51 | 2,514 |
| Iowa | - | 497 | 104 | 9 | 610 | 34 | 2,075 | 1,086 | 230 | 3,392 | 34 | 2,573 | 1,190 | 239 | 4,002 |
| Kansas | 0 | 557 | 78 | 5 | 640 | 1 | 2,709 | 285 | 38 | 3,031 | 1 | 3,265 | 362 | 42 | 3,670 |
| Kentucky | 1 | 653 | 52 | 6 | 710 | 6 | 1,255 | 350 | 33 | 1,638 | 7 | 1,908 | 402 | 38 | 2,348 |
| Louisiana | 3 | 326 | 184 | 16 | 527 | 4 | 562 | 458 | 104 | 1,125 | 6 | 889 | 642 | 120 | 1,651 |
| Maine | - | 228 | 47 | 4 | 279 | 1 | 588 | 152 | 60 | 800 | 1 | 816 | 200 | 64 | 1,080 |
| Maryland | - | 124 | 17 | 2 | 142 | 0 | 326 | 39 | 12 | 377 | 0 | 450 | 55 | 14 | 519 |
| Massachusetts | - | 55 | 7 | 1 | 63 | 0 | 261 | 134 | 35 | 430 | 0 | 315 | 141 | 35 | 492 |
| Michigan | 4 | 436 | 105 | 17 | 558 | 0 | 1,949 | 471 | 63 | 2,483 | 4 | 2,385 | 576 | 80 | 3,041 |
| Minnesota | - | 488 | 95 | 5 | 588 | 0 | 2,624 | 767 | 97 | 3,488 | 0 | 3,112 | 862 | 103 | 4,076 |
| Mississippi | - | 513 | 57 | 9 | 578 | - | 1,265 | 477 | 70 | 1,812 | - | 1,778 | 534 | 78 | 2,391 |
| Missouri | - | 786 | 51 | 5 | 842 | - | 2,476 | 481 | 44 | 3,001 | - | 3,262 | 532 | 48 | 3,843 |
| Montana | - | 961 | 120 | 15 | 1,095 | - | 1,925 | 733 | 115 | 2,773 | - | 2,886 | 852 | 129 | 3,868 |
| Nebraska | - | 366 | 46 | 3 | 415 | 1 | 2,025 | 539 | 118 | 2,682 | 1 | 2,390 | 586 | 121 | 3,096 |
| Nevada | - | 442 | 13 | 1 | 457 | - | 1,374 | 156 | 14 | 1,544 | - | 1,816 | 170 | 15 | 2,001 |
| New Hampshire | - | 135 | 6 | 1 | 142 | - | 310 | 59 | 18 | 387 | - | 445 | 65 | 18 | 529 |
| New Jersey | - | 37 | 7 | 1 | 45 | - | 140 | 43 | 12 | 195 | - | 178 | 50 | 12 | 240 |
| New Mexico | - | 701 | 119 | 24 | 843 | - | 1,272 | 407 | 70 | 1,749 | - | 1,973 | 525 | 94 | 2,593 |
| New York | 8 | 645 | 131 | 22 | 798 | 33 | 1,480 | 669 | 110 | 2,259 | 41 | 2,125 | 800 | 132 | 3,057 |
| North Carolina | 21 | 506 | 34 | 4 | 544 | 25 | 1,662 | 478 | 34 | 2,174 | 46 | 2,167 | 512 | 38 | 2,718 |
| North Dakota | - | 481 | 26 | 2 | 510 | - | 2,452 | 416 | 77 | 2,945 | - | 2,933 | 442 | 79 | 3,455 |
| Ohio | 0 | 544 | 85 | 14 | 643 | 1 | 1,449 | 401 | 43 | 1,893 | 2 | 1,993 | 486 | 57 | 2,536 |
| Oklahoma | 9 | 540 | 82 | 15 | 637 | 14 | 1,444 | 701 | 150 | 2,295 | 24 | 1,983 | 783 | 165 | 2,932 |
| Oregon | 2 | 436 | 54 | 3 | 494 | 4 | 1,967 | 612 | 75 | 2,653 | 6 | 2,403 | 666 | 78 | 3,146 |
| Pennsylvania | - | 876 | 158 | 32 | 1,066 | 0 | 1,303 | 501 | 80 | 1,885 | 0 | 2,180 | 659 | 113 | 2,951 |
| Rhode Island | - | 17 | 1 | 0 | 18 | - | 36 | 50 | 22 | 108 | - | 54 | 51 | 22 | 126 |
| South Carolina | - | 490 | 51 | 5 | 546 | 4 | 1,081 | 450 | 58 | 1,589 | 4 | 1,571 | 501 | 63 | 2,135 |
| South Dakota | - | 526 | 63 | 3 | 591 | - | 2,055 | 743 | 92 | 2,889 | - | 2,580 | 805 | 95 | 3,481 |
| Tennessee | 0 | 608 | 32 | 4 | 645 | 11 | 1,401 | 288 | 38 | 1,728 | 11 | 2,010 | 320 | 43 | 2,373 |
| Texas | 1 | 1,688 | 287 | 25 | 2,000 | 17 | 5,519 | 1,936 | 166 | 7,621 | 18 | 7,207 | 2,223 | 190 | 9,621 |
| Utah | - | 610 | 73 | 2 | 685 | - | 759 | 397 | 28 | 1,183 | - | 1,369 | 469 | 30 | 1,868 |
| Vermont | 1 | 233 | 19 | 3 | 255 | 0 | 229 | 62 | 17 | 307 | 1 | 462 | 81 | 20 | 562 |
| Virginia | - | 539 | 57 | 2 | 598 | 0 | 1,208 | 519 | 34 | 1,760 | 0 | 1,747 | 575 | 36 | 2,358 |
| Washington | - | 351 | 60 | 18 | 429 | 1 | 1,155 | 674 | 95 | 1,924 | 1 | 1,506 | 734 | 112 | 2,353 |
| West Virginia | - | 265 | 43 | 11 | 319 | 7 | 526 | 402 | 84 | 1,013 | 7 | 791 | 446 | 95 | 1,332 |
| Wisconsin | 4 | 384 | 111 | 13 | 508 | 45 | 1,723 | 1,183 | 208 | 3,114 | 49 | 2,107 | 1,294 | 221 | 3,622 |
| Wyoming | - | 697 | 97 | 13 | 807 | 54 | 1,445 | 441 | 29 | 1,914 | 54 | 2,142 | 538 | 41 | 2,721 |
| U.S. Total | 84 | 24,612 | 3,977 | 609 | 29,199 | 674 | 69,526 | 23,478 | 3,687 | 96,691 | 758 | 94,138 | 27,455 | 4,296 | 125,890 |
| Puerto Rico | 1 | 13 | 20 | 20 | 53 | 0 | 5 | 30 | 33 | 68 | 1 | 18 | 50 | 53 | 121 |
| Grand Total | 85 | 24,626 | 3,997 | 630 | 29,252 | 674 | 69,531 | 23,508 | 3,720 | 96,759 | 759 | 94,157 | 27,505 | 4,349 | 126,011 |

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2020
MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN

TABLE HM-47b
SHEET 2 OF 2

NOVEMBER, 2021

| STATE | INTERNATIONAL ROUGHNESS INDEX (IRI) (1) | | | | | | | | | | | | | | |
|----------------------|---|--------|--------|-------|----------------|------------------|--------|--------|--------|----------------|------------------|--------|--------|--------|----------------|
| | INTERSTATE SYSTEM | | | | | OTHER | | | | | TOTAL | | | | |
| | NOT REPORTED (2) | < 95 | 95-170 | > 170 | TOTAL REPORTED | NOT REPORTED (2) | < 95 | 95-170 | > 170 | TOTAL REPORTED | NOT REPORTED (2) | < 95 | 95-170 | > 170 | TOTAL REPORTED |
| Alabama | 0 | 344 | 66 | 22 | 433 | 13 | 944 | 268 | 64 | 1,277 | 14 | 1,288 | 335 | 86 | 1,709 |
| Alaska | 0 | 63 | 14 | 1 | 78 | 1 | 82 | 59 | 19 | 161 | 1 | 145 | 73 | 21 | 239 |
| Arizona | 8 | 205 | 34 | 5 | 245 | 20 | 362 | 331 | 127 | 820 | 28 | 567 | 365 | 132 | 1,065 |
| Arkansas | - | 223 | 72 | 16 | 310 | 0 | 284 | 260 | 134 | 678 | 0 | 507 | 332 | 150 | 989 |
| California | 4 | 651 | 476 | 117 | 1,243 | 381 | 1,287 | 2,523 | 3,765 | 7,575 | 385 | 1,937 | 2,999 | 3,881 | 8,818 |
| Colorado | - | 172 | 112 | 20 | 304 | 0 | 512 | 582 | 285 | 1,380 | 0 | 684 | 694 | 305 | 1,683 |
| Connecticut | - | 267 | 45 | 5 | 318 | 14 | 372 | 405 | 166 | 944 | 14 | 640 | 450 | 171 | 1,261 |
| Delaware | 0 | 24 | 13 | 4 | 40 | 1 | 147 | 83 | 26 | 256 | 1 | 171 | 96 | 29 | 296 |
| District of Columbia | - | 4 | 6 | 2 | 12 | 1 | 4 | 14 | 103 | 121 | 1 | 8 | 20 | 105 | 133 |
| Florida | 0 | 672 | 94 | 12 | 778 | 7 | 3,074 | 1,202 | 266 | 4,542 | 7 | 3,746 | 1,295 | 279 | 5,320 |
| Georgia | - | 602 | 97 | 10 | 709 | - | 1,863 | 707 | 176 | 2,747 | - | 2,465 | 805 | 186 | 3,456 |
| Hawaii | 0 | 12 | 29 | 14 | 55 | 9 | 86 | 143 | 82 | 311 | 10 | 97 | 172 | 96 | 366 |
| Idaho | 1 | 80 | 10 | 2 | 92 | 2 | 157 | 63 | 36 | 255 | 3 | 237 | 73 | 37 | 347 |
| Illinois | - | 722 | 174 | 45 | 942 | 2 | 972 | 1,376 | 808 | 3,156 | 2 | 1,695 | 1,550 | 853 | 4,098 |
| Indiana | 0 | 354 | 117 | 21 | 492 | 5 | 437 | 196 | 48 | 682 | 5 | 791 | 313 | 69 | 1,173 |
| Iowa | - | 126 | 43 | 8 | 178 | 21 | 300 | 410 | 209 | 919 | 21 | 426 | 453 | 217 | 1,096 |
| Kansas | 1 | 184 | 43 | 7 | 235 | 1 | 291 | 151 | 67 | 509 | 2 | 475 | 194 | 74 | 743 |
| Kentucky | 2 | 181 | 44 | 5 | 230 | 35 | 382 | 248 | 62 | 691 | 37 | 563 | 291 | 67 | 921 |
| Louisiana | 10 | 216 | 148 | 50 | 414 | 51 | 334 | 422 | 323 | 1,078 | 61 | 550 | 570 | 372 | 1,492 |
| Maine | - | 76 | 9 | 1 | 87 | 12 | 63 | 55 | 30 | 148 | 12 | 140 | 64 | 31 | 235 |
| Maryland | 0 | 257 | 55 | 23 | 336 | 6 | 630 | 367 | 314 | 1,311 | 6 | 887 | 423 | 337 | 1,647 |
| Massachusetts | 3 | 435 | 52 | 15 | 502 | 44 | 593 | 857 | 856 | 2,305 | 47 | 1,027 | 909 | 871 | 2,807 |
| Michigan | 3 | 436 | 184 | 52 | 673 | 36 | 828 | 1,093 | 777 | 2,699 | 39 | 1,265 | 1,277 | 830 | 3,371 |
| Minnesota | - | 242 | 73 | 10 | 325 | 1 | 557 | 248 | 43 | 848 | 1 | 800 | 320 | 54 | 1,174 |
| Mississippi | - | 208 | 37 | 8 | 253 | - | 437 | 376 | 184 | 997 | - | 645 | 413 | 192 | 1,250 |
| Missouri | - | 442 | 79 | 16 | 538 | - | 750 | 423 | 175 | 1,347 | - | 1,192 | 502 | 192 | 1,886 |
| Montana | - | 86 | 10 | 2 | 98 | - | 86 | 84 | 49 | 219 | - | 172 | 94 | 51 | 317 |
| Nebraska | - | 47 | 19 | 3 | 69 | 3 | 122 | 159 | 180 | 461 | 3 | 169 | 178 | 183 | 530 |
| Nevada | - | 114 | 44 | 4 | 162 | - | 229 | 142 | 49 | 419 | - | 343 | 185 | 53 | 581 |
| New Hampshire | - | 81 | 2 | 0 | 83 | 0 | 211 | 74 | 34 | 319 | 0 | 292 | 76 | 34 | 402 |
| New Jersey | - | 279 | 72 | 36 | 387 | - | 879 | 761 | 701 | 2,341 | - | 1,158 | 833 | 737 | 2,728 |
| New Mexico | - | 125 | 26 | 6 | 156 | - | 167 | 143 | 70 | 380 | - | 292 | 168 | 75 | 536 |
| New York | 9 | 563 | 273 | 87 | 923 | 111 | 1,081 | 1,481 | 1,369 | 3,931 | 121 | 1,644 | 1,754 | 1,455 | 4,853 |
| North Carolina | 13 | 661 | 102 | 18 | 780 | 23 | 1,059 | 848 | 200 | 2,107 | 36 | 1,720 | 949 | 218 | 2,888 |
| North Dakota | - | 53 | 7 | 1 | 61 | 1 | 87 | 80 | 38 | 205 | 1 | 140 | 88 | 38 | 266 |
| Ohio | 3 | 714 | 174 | 42 | 931 | 11 | 965 | 771 | 466 | 2,201 | 13 | 1,679 | 945 | 509 | 3,132 |
| Oklahoma | 2 | 204 | 65 | 15 | 284 | 14 | 315 | 246 | 90 | 651 | 17 | 519 | 311 | 105 | 935 |
| Oregon | 2 | 192 | 34 | 7 | 233 | 16 | 380 | 369 | 161 | 910 | 18 | 571 | 404 | 167 | 1,142 |
| Pennsylvania | - | 581 | 167 | 49 | 797 | 4 | 1,126 | 1,459 | 829 | 3,414 | 4 | 1,708 | 1,626 | 877 | 4,211 |
| Rhode Island | - | 46 | 5 | 1 | 52 | 6 | 81 | 147 | 190 | 418 | 6 | 127 | 152 | 191 | 470 |
| South Carolina | - | 255 | 46 | 3 | 304 | 41 | 464 | 510 | 143 | 1,117 | 41 | 719 | 556 | 146 | 1,422 |
| South Dakota | - | 67 | 20 | 1 | 88 | 2 | 49 | 71 | 35 | 154 | 2 | 116 | 90 | 36 | 242 |
| Tennessee | 0 | 488 | 59 | 9 | 556 | 4 | 1,263 | 566 | 228 | 2,057 | 4 | 1,751 | 625 | 237 | 2,613 |
| Texas | 4 | 936 | 463 | 58 | 1,457 | 81 | 2,679 | 2,665 | 1,560 | 6,905 | 85 | 3,615 | 3,128 | 1,618 | 8,362 |
| Utah | - | 184 | 63 | 7 | 253 | - | 401 | 240 | 56 | 697 | - | 584 | 303 | 63 | 950 |
| Vermont | - | 58 | 6 | 1 | 64 | 2 | 46 | 29 | 12 | 87 | 2 | 104 | 35 | 13 | 151 |
| Virginia | - | 402 | 105 | 13 | 521 | 0 | 698 | 786 | 280 | 1,765 | 0 | 1,100 | 891 | 294 | 2,285 |
| Washington | - | 256 | 69 | 10 | 335 | 15 | 640 | 719 | 495 | 1,854 | 15 | 896 | 788 | 505 | 2,188 |
| West Virginia | 1 | 169 | 45 | 21 | 235 | 3 | 197 | 159 | 55 | 411 | 5 | 366 | 204 | 76 | 646 |
| Wisconsin | - | 213 | 134 | 19 | 366 | 46 | 370 | 901 | 625 | 1,896 | 46 | 582 | 1,035 | 645 | 2,262 |
| Wyoming | - | 70 | 29 | 7 | 106 | 3 | 87 | 63 | 27 | 177 | 3 | 157 | 92 | 34 | 282 |
| U.S. Total | 69 | 14,042 | 4,166 | 913 | 19,120 | 1,051 | 29,428 | 26,337 | 17,086 | 72,851 | 1,120 | 43,470 | 30,503 | 17,998 | 91,971 |
| Puerto Rico | 3 | 47 | 102 | 79 | 227 | 11 | 16 | 120 | 276 | 412 | 14 | 62 | 222 | 355 | 639 |
| Grand Total | 72 | 14,088 | 4,267 | 992 | 19,347 | 1,063 | 29,444 | 26,457 | 17,362 | 73,263 | 1,134 | 43,533 | 30,724 | 18,353 | 92,610 |

For footnotes, see Footnotes Page.

NATIONAL HIGHWAY SYSTEM LENGTH - 2020

MILES BY MEASURED PAVEMENT ROUGHNESS

HM-47b 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.