

**NATIONAL HIGHWAY SYSTEM LENGTH - 1997**  
**PAVED MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL 1/**

TABLE HM-47  
 SHEET 1 OF 4

OCTOBER 1998

| STATE             | INTERNATIONAL ROUGHNESS INDEX (IRI) 2/ |       |        |        |         |         |         |         |       |                |              |       |        |        |         |         |         |         |       |                |
|-------------------|--|-------|--------|--------|---------|---------|---------|---------|-------|----------------|--------------|-------|--------|--------|---------|---------|---------|---------|-------|----------------|
|                   | INTERSTATE SYSTEM 3/                   |       |        |        |         |         |         |         |       |                | OTHER        |       |        |        |         |         |         |         |       |                |
|                   | NOT REPORTED                           | < 60  | 60-94  | 95-119 | 120-144 | 145-170 | 171-194 | 195-220 | > 220 | TOTAL REPORTED | NOT REPORTED | < 60  | 60-94  | 95-119 | 120-144 | 145-170 | 171-194 | 195-220 | > 220 | TOTAL REPORTED |
| Alabama           | -                                      | 75    | 367    | 95     | 42      | 21      | -       | -       | 600   | -              | 92           | 1,116 | 624    | 159    | 40      | 10      | 2       | 7       | 2,050 |                |
| Alaska            | -                                      | 1     | 174    | 336    | 332     | 92      | 81      | 13      | 1,034 | 454            | -            | 78    | 116    | 178    | 68      | 22      | 9       | 23      | 494   |                |
| Arizona           | -                                      | 602   | 304    | 48     | 30      | 6       | -       | -       | 997   | -              | 185          | 394   | 294    | 166    | 52      | 48      | 6       | 2       | 1,137 |                |
| Arkansas          | 18                                     | -     | 53     | 44     | 85      | 84      | 50      | 22      | 378   | 127            | 9            | 525   | 515    | 323    | 204     | 84      | 24      | 10      | 1,694 |                |
| California        | -                                      | 7     | 608    | 299    | 235     | 124     | 40      | 13      | 1,353 | -              | 24           | 1,020 | 1,075  | 874    | 428     | 86      | 47      | 2       | 3,556 |                |
| Colorado          | -                                      | 17    | 193    | 163    | 167     | 81      | 102     | 17      | 769   | -              | 26           | 313   | 390    | 433    | 249     | 129     | 89      | 208     | 1,837 |                |
| Connecticut       | -                                      | -     | 55     | 22     | 17      | 3       | 3       | -       | 102   | -              | -            | 51    | 94     | 59     | 32      | 10      | 4       | 3       | 253   |                |
| Delaware          | -                                      | -     | -      | -      | -       | -       | -       | -       | -     | -              | 4            | 77    | 91     | 22     | 2       | 3       | 3       | 1       | 203   |                |
| Dist. of Columbia | -                                      | -     | -      | -      | 246     | 78      | -       | -       | -     | -              | -            | -     | -      | 424    | 147     | -       | 27      | -       | -     |                |
| Florida           | 15                                     | 168   | 265    | 182    | -       | -       | -       | -       | 939   | 51             | 96           | 528   | 474    | -      | -       | -       | -       | -       | 1,734 |                |
| Georgia 4/        | 606                                    | 90    | 98     | 13     | 1       | -       | -       | -       | 202   | 2,303          | 93           | 14    | 1      | -      | -       | -       | -       | -       | 108   |                |
| Hawaii            | 5                                      | -     | -      | -      | -       | -       | -       | -       | -     | 136            | -            | -     | -      | 1      | 1       | 1       | -       | -       | 4     |                |
| Idaho             | -                                      | 168   | 271    | 69     | 11      | 2       | 7       | -       | 529   | 1              | 210          | 650   | 486    | 236    | 57      | 19      | 4       | 8       | 1,670 |                |
| Illinois          | -                                      | 58    | 553    | 435    | 274     | 174     | 22      | 2       | 1,518 | -              | 19           | 445   | 592    | 386    | 209     | 100     | 50      | 53      | 1,854 |                |
| Indiana           | -                                      | 96    | 522    | 129    | 27      | 77      | 1       | -       | 852   | 4              | 17           | 490   | 289    | 253    | 154     | 29      | 25      | 12      | 1,269 |                |
| Iowa              | 9                                      | 50    | 331    | 179    | 65      | -       | -       | -       | 625   | 85             | 145          | 653   | 382    | 292    | 258     | 120     | 35      | 9       | 1,894 |                |
| Kansas            | -                                      | 223   | 274    | 78     | 77      | 30      | 17      | -       | 699   | 509            | 1,256        | 449   | 193    | 79     | 18      | -       | -       | 10      | 2,514 |                |
| Kentucky          | -                                      | 163   | 192    | 46     | 88      | 47      | -       | -       | 536   | -              | 95           | 224   | 1,052  | 261    | 138     | 51      | 5       | 3       | 1,735 |                |
| Louisiana         | -                                      | 25    | 201    | 137    | 117     | 92      | 13      | 3       | 611   | 13             | 46           | 339   | 168    | 162    | 144     | 109     | 74      | 113     | 1,155 |                |
| Maine             | 50                                     | 86    | 158    | 17     | 2       | -       | -       | -       | 263   | 34             | 111          | 391   | 150    | 57     | 21      | 11      | 7       | 6       | 754   |                |
| Maryland 4/       | -                                      | 2     | 138    | 75     | 7       | 7       | -       | -       | 229   | -              | 34           | 318   | 120    | 38     | 22      | 11      | 8       | 9       | 560   |                |
| Massachusetts     | -                                      | 5     | 112    | 39     | 1       | 1       | 2       | 1       | 161   | 30             | -            | 101   | 115    | 33     | 26      | 9       | 9       | 5       | 298   |                |
| Michigan          | -                                      | 70    | 286    | 186    | 122     | 43      | 23      | 8       | 739   | -              | 224          | 996   | 473    | 353    | 133     | 91      | 7       | 15      | 2,292 |                |
| Minnesota         | -                                      | 96    | 207    | 235    | 106     | 15      | 23      | -       | 662   | -              | 386          | 885   | 582    | 345    | 195     | 69      | 59      | 52      | 2,573 |                |
| Mississippi       | -                                      | 12    | 223    | 147    | 67      | 77      | 23      | 5       | 559   | -              | 15           | 597   | 456    | 377    | 159     | 35      | 34      | 14      | 1,689 |                |
| Missouri          | -                                      | 40    | 365    | 270    | 102     | 14      | 1       | -       | 809   | 7              | 52           | 733   | 898    | 533    | 232     | 55      | 24      | 37      | 2,564 |                |
| Montana           | -                                      | 275   | 578    | 154    | 76      | 43      | 5       | 5       | 1,136 | -              | 247          | 1,302 | 546    | 272    | 158     | 53      | 20      | 5       | 2,603 |                |
| Nebraska          | -                                      | 172   | 81     | 53     | 69      | 43      | 19      | -       | 437   | -              | 578          | 717   | 330    | 275    | 131     | 126     | 57      | 46      | 2,260 |                |
| Nevada            | -                                      | 227   | 142    | 44     | 24      | 12      | 21      | 4       | 478   | -              | 165          | 592   | 210    | 356    | 90      | 23      | -       | 2       | 1,438 |                |
| New Hampshire     | -                                      | 25    | 149    | 3      | -       | -       | -       | -       | 177   | -              | -            | 260   | 119    | 40     | 18      | 12      | -       | 7       | 456   |                |
| New Jersey        | 6                                      | -     | 32     | 34     | 18      | 6       | 12      | 8       | 113   | 94             | -            | 43    | 89     | 106    | 76      | 41      | 36      | 61      | 452   |                |
| New Mexico        | -                                      | 2     | 185    | 216    | 279     | 113     | 48      | 33      | 892   | 44             | 41           | 682   | 411    | 257    | 109     | 73      | 46      | 80      | 1,699 |                |
| New York          | -                                      | -     | 521    | 151    | 79      | 26      | 10      | 2       | 796   | 6              | 2            | 1,025 | 351    | 169    | 150     | 113     | 64      | 93      | 1,967 |                |
| North Carolina    | -                                      | 10    | 47     | 152    | 168     | 169     | 68      | 24      | 639   | 42             | 1            | 422   | 412    | 611    | 421     | 162     | 50      | 49      | 2,128 |                |
| North Dakota      | -                                      | 73    | 301    | 118    | 38      | -       | -       | -       | 530   | -              | 195          | 1,048 | 589    | 169    | 37      | 42      | 7       | 2       | 2,089 |                |
| Ohio              | -                                      | 218   | 477    | 101    | 31      | 3       | -       | -       | 830   | -              | 198          | 1,269 | 232    | 110    | 57      | 8       | 2       | 3       | 1,879 |                |
| Oklahoma          | -                                      | 81    | 351    | 146    | 105     | 14      | 22      | 1       | 721   | -              | 37           | 942   | 527    | 301    | 186     | 76      | 24      | 17      | 2,110 |                |
| Oregon            | -                                      | -     | 222    | 295    | 58      | 5       | -       | 1       | 580   | -              | 29           | 470   | 1,248  | 697    | 214     | 19      | 6       | 3       | 2,686 |                |
| Pennsylvania      | -                                      | 78    | 476    | 307    | 194     | 65      | 33      | 27      | 1,202 | 23             | 66           | 737   | 599    | 406    | 228     | 114     | 54      | 37      | 2,241 |                |
| Rhode Island      | 21                                     | -     | -      | -      | -       | -       | -       | -       | -     | 67             | -            | -     | -      | -      | -       | -       | -       | -       | -     |                |
| South Carolina    | -                                      | 120   | 299    | 174    | 70      | 8       | -       | -       | 671   | -              | 25           | 693   | 258    | 161    | 96      | 21      | 13      | 5       | 1,272 |                |
| South Dakota      | 13                                     | 9     | 171    | 136    | 123     | 127     | 43      | 6       | 615   | 245            | -            | 421   | 480    | 412    | 363     | 129     | 42      | 98      | 1,945 |                |
| Tennessee         | 638                                    | 20    | 54     | 12     | 12      | -       | -       | -       | 98    | 1,295          | 13           | 100   | 30     | 26     | 7       | 8       | -       | -       | 184   |                |
| Texas             | -                                      | 770   | 1,104  | 230    | 63      | 29      | -       | 12      | 2,208 | -              | 1,682        | 2,643 | 1,443  | 416    | 93      | 23      | 9       | 8       | 6,317 |                |
| Utah              | -                                      | 359   | 285    | 96     | 30      | 1       | -       | -       | 771   | -              | 257          | 614   | 95     | 20     | 16      | 2       | 8       | 1       | 1,013 |                |
| Vermont           | -                                      | 45    | 171    | 24     | 21      | 18      | -       | -       | 279   | -              | 10           | 72    | 59     | 67     | 59      | 25      | 14      | 11      | 317   |                |
| Virginia          | -                                      | 6     | 360    | 280    | 56      | 9       | 3       | -       | 714   | -              | 6            | 533   | 478    | 233    | 125     | 50      | 31      | 25      | 1,481 |                |
| Washington        | -                                      | 27    | 146    | 151    | 120     | 34      | 16      | 7       | 501   | 13             | -            | 230   | 549    | 688    | 453     | 94      | 40      | 9       | 2,063 |                |
| West Virginia     | 1                                      | 53    | 219    | 79     | 62      | 39      | 3       | 3       | 458   | 100            | 77           | 435   | 237    | 127    | 55      | 7       | 5       | 7       | 950   |                |
| Wisconsin         | -                                      | 44    | 185    | 171    | 126     | 43      | 5       | -       | 574   | -              | 194          | 793   | 628    | 428    | 239     | 174     | 101     | 60      | 2,617 |                |
| Wyoming           | -                                      | 251   | 369    | 134    | 52      | 19      | -       | -       | 825   | 8              | 482          | 956   | 119    | 20     | 16      | 4       | -       | -       | 1,597 |                |
| U.S. Total        | 1,382                                  | 4,919 | 12,875 | 6,505  | 4,095   | 1,894   | 716     | 222     | 205   | 31,431         | 5,277        | 6,826 | 30,011 | 19,136 | 12,402  | 6,360   | 2,499   | 1,180   | 1,241 | 79,655         |
| Puerto Rico       | -                                      | -     | -      | 10     | 63      | 20      | 6       | -       | 3     | 102            | 18           | -     | -      | 2      | 1       | 17      | 6       | -       | 4     | 30             |
| Grand Total       | 1,382                                  | 4,919 | 12,875 | 6,515  | 4,158   | 1,914   | 722     | 222     | 208   | 31,533         | 5,295        | 6,826 | 30,011 | 19,138 | 12,403  | 6,377   | 2,505   | 1,180   | 1,245 | 79,685         |

**NATIONAL HIGHWAY SYSTEM LENGTH - 1997**  
**PAVED MILES BY MEASURED PAVEMENT ROUGHNESS - RURAL 1/**

TABLE HM-47  
SHEET 2 OF 4

OCTOBER 1998

| STATE             | INTERNATIONAL ROUGHNESS INDEX (IRI) 2/ |        |        |        |         |         |         |         |       |                   |
|-------------------|--|--------|--------|--------|---------|---------|---------|---------|-------|-------------------|
|                   | TOTAL RURAL NHS                        |        |        |        |         |         |         |         |       | TOTAL<br>REPORTED |
|                   | NOT<br>REPORTED                        | < 60   | 60-94  | 95-119 | 120-144 | 145-170 | 171-194 | 195-220 | > 220 |                   |
| Alabama           | -                                      | 167    | 1,483  | 719    | 201     | 61      | 10      | 2       | 7     | 2,650             |
| Alaska            | 454                                    | 1      | 252    | 452    | 510     | 160     | 103     | 22      | 28    | 1,528             |
| Arizona           | -                                      | 787    | 688    | 342    | 196     | 58      | 48      | 6       | 9     | 2,134             |
| Arkansas          | 145                                    | 9      | 578    | 559    | 408     | 288     | 134     | 64      | 32    | 2,072             |
| California        | -                                      | 31     | 1,628  | 1,374  | 1,109   | 552     | 126     | 60      | 29    | 4,909             |
| Colorado          | -                                      | 43     | 506    | 553    | 600     | 330     | 231     | 106     | 237   | 2,606             |
| Connecticut       | -                                      | -      | 106    | 116    | 76      | 35      | 13      | 4       | 5     | 355               |
| Delaware          | -                                      | 4      | 77     | 91     | 22      | 2       | 3       | 3       | 1     | 203               |
| Dist. of Columbia | -                                      | -      | -      | -      | -       | -       | -       | -       | -     | -                 |
| Florida           | 66                                     | 264    | 793    | 656    | 670     | 225     | 26      | 27      | 12    | 2,673             |
| Georgia 4/        | 2,909                                  | 183    | 112    | 14     | 1       | -       | -       | -       | -     | 310               |
| Hawaii            | 141                                    | -      | -      | -      | 1       | 1       | 1       | 1       | -     | 4                 |
| Idaho             | 1                                      | 378    | 921    | 555    | 247     | 59      | 26      | 4       | 9     | 2,199             |
| Illinois          | -                                      | 77     | 998    | 1,027  | 660     | 383     | 122     | 52      | 53    | 3,372             |
| Indiana           | 4                                      | 113    | 1,012  | 418    | 280     | 231     | 30      | 25      | 12    | 2,121             |
| Iowa              | 94                                     | 195    | 984    | 561    | 357     | 258     | 120     | 35      | 9     | 2,519             |
| Kansas            | 95                                     | 732    | 1,530  | 527    | 270     | 109     | 35      | -       | 10    | 3,213             |
| Kentucky          | -                                      | 387    | 1,244  | 307    | 226     | 98      | 5       | 3       | 1     | 2,271             |
| Louisiana         | 13                                     | 71     | 540    | 305    | 279     | 236     | 122     | 77      | 136   | 1,766             |
| Maine             | 84                                     | 197    | 549    | 167    | 59      | 21      | 11      | 7       | 6     | 1,017             |
| Maryland 4/       | -                                      | 36     | 456    | 195    | 45      | 29      | 11      | 8       | 9     | 789               |
| Massachusetts     | 30                                     | 5      | 213    | 154    | 34      | 27      | 11      | 10      | 5     | 459               |
| Michigan          | -                                      | 294    | 1,282  | 659    | 475     | 176     | 114     | 15      | 16    | 3,031             |
| Minnesota         | -                                      | 482    | 1,092  | 817    | 451     | 210     | 92      | 59      | 52    | 3,255             |
| Mississippi       | -                                      | 27     | 820    | 605    | 444     | 236     | 58      | 39      | 19    | 2,248             |
| Missouri          | 7                                      | 92     | 1,098  | 1,168  | 635     | 246     | 56      | 24      | 54    | 3,373             |
| Montana           | -                                      | 522    | 1,880  | 700    | 348     | 201     | 58      | 25      | 5     | 3,739             |
| Nebraska          | -                                      | 750    | 798    | 383    | 344     | 174     | 145     | 57      | 46    | 2,697             |
| Nevada            | -                                      | 392    | 734    | 254    | 380     | 102     | 44      | 4       | 6     | 1,916             |
| New Hampshire     | -                                      | 25     | 409    | 122    | 40      | 18      | 12      | -       | 7     | 633               |
| New Jersey        | 100                                    | -      | 75     | 123    | 124     | 82      | 53      | 44      | 64    | 565               |
| New Mexico        | 44                                     | 43     | 867    | 627    | 536     | 222     | 121     | 79      | 96    | 2,591             |
| New York          | 6                                      | 2      | 1,546  | 502    | 248     | 176     | 123     | 66      | 100   | 2,763             |
| North Carolina    | 42                                     | 11     | 469    | 564    | 779     | 590     | 230     | 74      | 50    | 2,767             |
| North Dakota      | -                                      | 268    | 1,349  | 707    | 207     | 37      | 42      | 7       | 2     | 2,619             |
| Ohio              | -                                      | 416    | 1,746  | 333    | 141     | 60      | 8       | 2       | 3     | 2,709             |
| Oklahoma          | -                                      | 118    | 1,293  | 673    | 406     | 200     | 98      | 25      | 18    | 2,831             |
| Oregon            | -                                      | 29     | 692    | 1,543  | 755     | 219     | 19      | 6       | 3     | 3,266             |
| Pennsylvania      | 23                                     | 144    | 1,213  | 906    | 600     | 293     | 147     | 81      | 59    | 3,443             |
| Rhode Island      | 88                                     | -      | -      | -      | -       | -       | -       | -       | -     | -                 |
| South Carolina    | -                                      | 145    | 992    | 432    | 231     | 104     | 21      | 13      | 5     | 1,943             |
| South Dakota      | 258                                    | 9      | 592    | 616    | 535     | 490     | 172     | 48      | 98    | 2,560             |
| Tennessee         | 1,933                                  | 33     | 154    | 42     | 38      | 7       | 8       | -       | -     | 282               |
| Texas             | -                                      | 2,452  | 3,747  | 1,673  | 479     | 122     | 23      | 9       | 20    | 8,525             |
| Utah              | -                                      | 616    | 899    | 191    | 50      | 17      | 2       | 8       | 1     | 1,784             |
| Vermont           | -                                      | 55     | 243    | 83     | 88      | 77      | 25      | 14      | 11    | 596               |
| Virginia          | -                                      | 12     | 893    | 758    | 289     | 134     | 53      | 31      | 25    | 2,195             |
| Washington        | 13                                     | 27     | 376    | 700    | 808     | 487     | 110     | 47      | 9     | 2,564             |
| West Virginia     | 101                                    | 130    | 654    | 316    | 189     | 94      | 10      | 8       | 7     | 1,408             |
| Wisconsin         | -                                      | 238    | 978    | 799    | 554     | 282     | 179     | 101     | 60    | 3,191             |
| Wyoming           | 8                                      | 733    | 1,325  | 253    | 72      | 35      | 4       | -       | -     | 2,422             |
| U.S. Total        | 6,659                                  | 11,745 | 42,886 | 25,641 | 16,497  | 8,254   | 3,215   | 1,402   | 1,446 | 111,086           |
| Puerto Rico       | 18                                     | -      | -      | 12     | 64      | 37      | 12      | -       | 7     | 132               |
| Grand Total       | 6,677                                  | 11,745 | 42,886 | 25,653 | 16,561  | 8,291   | 3,227   | 1,402   | 1,453 | 111,218           |

**NATIONAL HIGHWAY SYSTEM LENGTH - 1997**  
**PAVED MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN 1/**

TABLE HM-47  
 SHEET 3 OF 4

OCTOBER 1998

| STATE             | INTERNATIONAL ROUGHNESS INDEX (IRI) 2/ |      |       |        |         |         |         |         |       |              |       |       |        |         |         |         |         |       |       |        |
|-------------------|--|------|-------|--------|---------|---------|---------|---------|-------|--------------|-------|-------|--------|---------|---------|---------|---------|-------|-------|--------|
|                   | INTERSTATE SYSTEM 3/                   |      |       |        |         |         |         |         |       | OTHER        |       |       |        |         |         |         |         |       | TOTAL |        |
|                   | NOT REPORTED                           | < 60 | 60-94 | 95-119 | 120-144 | 145-170 | 171-194 | 195-220 | > 220 | NOT REPORTED | < 60  | 60-94 | 95-119 | 120-144 | 145-170 | 171-194 | 195-220 | > 220 |       |        |
| Alabama           | -                                      | 22   | 127   | 70     | 44      | 35      | 5       | -       | 303   | -            | 16    | 50    | 322    | 203     | 71      | 24      | 4       | 3     | 3     | 680    |
| Alaska            | -                                      | -    | 14    | 26     | 9       | 4       | -       | -       | 53    | -            | -     | -     | 15     | 26      | 16      | 11      | 2       | 1     | 1     | 72     |
| Arizona           | -                                      | 65   | 66    | 26     | 13      | 2       | -       | -       | 172   | -            | -     | 51    | 121    | 77      | 55      | 39      | 12      | 2     | 5     | 362    |
| Arkansas          | 12                                     | 4    | 9     | 24     | 27      | 38      | 19      | 11      | 138   | -            | 25    | 6     | 44     | 43      | 37      | 31      | 20      | 13    | 15    | 209    |
| California        | -                                      | 24   | 146   | 195    | 288     | 231     | 103     | 62      | 1,067 | -            | -     | 36    | 236    | 259     | 450     | 280     | 111     | 50    | 29    | 1,451  |
| Colorado          | -                                      | 3    | 50    | 35     | 43      | 33      | 16      | 4       | 184   | -            | -     | 7     | 81     | 128     | 119     | 80      | 30      | 70    | 52    | 567    |
| Connecticut       | -                                      | -    | 88    | 73     | 39      | 24      | 9       | 6       | 244   | -            | 1     | -     | 53     | 83      | 84      | 71      | 37      | 14    | 20    | 362    |
| Delaware          | -                                      | -    | 7     | 11     | 8       | 3       | 6       | 3       | 41    | -            | -     | 3     | 25     | 24      | 6       | 2       | 1       | 1     | 2     | 64     |
| Dist. of Columbia | -                                      | -    | 1     | 4      | 1       | 1       | 1       | 1       | 11    | -            | 4     | -     | -      | 5       | 4       | 3       | 7       | 66    | 85    | 85     |
| Florida           | 49                                     | 63   | 163   | 83     | 113     | 43      | 3       | -       | 468   | 90           | 49    | 278   | 266    | 188     | 136     | 17      | 10      | 7     | 7     | 951    |
| Georgia 4/        | 326                                    | 47   | 60    | -      | 4       | -       | -       | -       | 111   | 699          | 15    | 3     | 1      | -       | -       | -       | -       | -     | -     | 19     |
| Hawaii            | 46                                     | -    | -     | -      | -       | 2       | 1       | -       | 3     | 87           | -     | -     | 2      | 1       | 8       | 6       | 2       | -     | -     | 19     |
| Idaho             | -                                      | 18   | 35    | 10     | 9       | 10      | -       | 1       | 83    | -            | 12    | 4     | 19     | 19      | 12      | 6       | 4       | 4     | 4     | 72     |
| Illinois          | -                                      | 33   | 124   | 201    | 147     | 72      | 41      | 23      | 646   | -            | -     | 21    | 96     | 240     | 277     | 231     | 196     | 168   | 429   | 1,658  |
| Indiana           | 2                                      | 25   | 116   | 79     | 40      | 16      | 26      | 8       | 316   | -            | 17    | 6     | 63     | 71      | 54      | 61      | 43      | 25    | 34    | 357    |
| Iowa              | 13                                     | -    | 48    | 41     | 19      | 8       | 18      | -       | 134   | -            | 96    | 7     | 54     | 43      | 40      | 53      | 14      | 16    | 15    | 242    |
| Kansas            | -                                      | 4    | 13    | 78     | 60      | 16      | 4       | -       | 171   | -            | 75    | 20    | 57     | 39      | 23      | 15      | 9       | 2     | 4     | 169    |
| Kentucky          | -                                      | 60   | 83    | 38     | 25      | 16      | 4       | 2       | 228   | -            | 75    | 34    | 177    | 87      | 35      | 31      | 16      | 8     | 3     | 391    |
| Louisiana         | -                                      | 1    | 62    | 74     | 64      | 45      | 17      | 7       | 282   | 90           | 22    | 46    | 44     | 82      | 66      | 61      | 28      | 65    | 414   | 414    |
| Maine             | 3                                      | 10   | 35    | 3      | 1       | -       | -       | -       | 49    | -            | 10    | 8     | 52     | 20      | 8       | 4       | 2       | 2     | 2     | 104    |
| Maryland 4/       | -                                      | 5    | 127   | 56     | 29      | 14      | 11      | 5       | 252   | -            | -     | 3     | 121    | 86      | 47      | 45      | 23      | 27    | 45    | 397    |
| Massachusetts     | 3                                      | 3    | 196   | 145    | 37      | 14      | 5       | 1       | 402   | 411          | -     | 8     | 93     | 175     | 140     | 101     | 48      | 39    | 53    | 649    |
| Michigan          | -                                      | 23   | 192   | 117    | 88      | 49      | 19      | 12      | 502   | -            | 4     | 8     | 107    | 196     | 168     | 248     | 149     | 100   | 197   | 1,173  |
| Minnesota         | -                                      | 29   | 125   | 50     | 19      | 8       | 1       | -       | 232   | -            | -     | 53    | 152    | 108     | 57      | 49      | 23      | 6     | 16    | 464    |
| Mississippi       | -                                      | -    | 12    | 28     | 57      | 20      | 3       | 5       | 125   | -            | -     | 77    | 47     | 57      | 36      | 19      | 11      | 16    | 265   | 265    |
| Missouri          | -                                      | 5    | 104   | 126    | 79      | 33      | 11      | 8       | 370   | -            | 50    | -     | 53     | 131     | 141     | 115     | 71      | 26    | 24    | 561    |
| Montana           | 4                                      | 27   | 15    | 6      | 2       | -       | -       | 1       | 55    | -            | -     | 2     | 15     | 14      | 9       | 8       | 3       | 3     | 8     | 62     |
| Nebraska          | -                                      | 10   | 15    | 6      | 4       | 5       | 4       | 1       | 45    | -            | 9     | 17    | 22     | 22      | 27      | 45      | 22      | 26    | 54    | 235    |
| Nevada            | -                                      | 14   | 27    | 13     | 15      | 10      | 1       | -       | 80    | -            | -     | 8     | 65     | 24      | 12      | 7       | 3       | 3     | 3     | 125    |
| New Hampshire     | -                                      | 11   | 29    | 8      | -       | -       | -       | -       | 48    | -            | -     | 1     | 79     | 13      | 7       | 9       | -       | 1     | 3     | 113    |
| New Jersey        | 17                                     | -    | 26    | 72     | 35      | 44      | 46      | 17      | 284   | 215          | -     | 84    | 171    | 216     | 183     | 76      | 76      | 68    | 874   | 874    |
| New Mexico        | -                                      | -    | 34    | 10     | 13      | 21      | 12      | 9       | 108   | -            | 15    | 5     | 41     | 44      | 20      | 21      | 12      | 4     | 16    | 163    |
| New York          | 4                                      | -    | 258   | 131    | 79      | 66      | 58      | 31      | 698   | 17           | 7     | 318   | 286    | 237     | 196     | 125     | 116     | 363   | 1,648 | 1,648  |
| North Carolina    | -                                      | -    | 59    | 63     | 106     | 54      | 29      | 27      | 350   | 16           | 1     | 101   | 75     | 81      | 100     | 46      | 16      | 23    | 443   | 443    |
| North Dakota      | -                                      | 13   | 18    | 9      | -       | -       | -       | -       | 40    | -            | -     | 4     | 22     | 11      | 8       | 10      | 4       | 1     | 3     | 63     |
| Ohio              | -                                      | 150  | 387   | 146    | 32      | 19      | 4       | 2       | 743   | -            | -     | 40    | 341    | 223     | 141     | 84      | 39      | 22    | 23    | 913    |
| Oklahoma          | -                                      | 3    | 59    | 44     | 32      | 30      | 19      | 11      | 207   | -            | -     | -     | 71     | 64      | 53      | 43      | 22      | 11    | 7     | 271    |
| Oregon            | -                                      | 1    | 18    | 78     | 40      | 8       | 1       | -       | 146   | -            | -     | -     | 15     | 85      | 107     | 74      | 24      | 11    | 12    | 328    |
| Pennsylvania      | 3                                      | 3    | 146   | 170    | 126     | 54      | 25      | 15      | 547   | 68           | -     | 13    | 177    | 267     | 285     | 253     | 145     | 102   | 133   | 1,375  |
| Rhode Island      | 47                                     | -    | -     | -      | -       | -       | -       | -       | 123   | -            | -     | -     | -      | -       | -       | -       | -       | -     | -     | -      |
| South Carolina    | -                                      | 6    | 90    | 34     | 19      | 6       | 1       | -       | 156   | 26           | -     | 14    | 173    | 112     | 69      | 44      | 16      | 9     | 9     | 446    |
| South Dakota      | 13                                     | -    | 3     | 6      | 8       | 16      | 1       | 2       | 36    | 51           | -     | 8     | 3      | 1       | 3       | 1       | 1       | -     | -     | 9      |
| Tennessee         | 229                                    | 5    | 46    | 28     | 12      | 10      | 3       | 3       | 109   | 523          | -     | 8     | 43     | 24      | 11      | 11      | 2       | 2     | 3     | 104    |
| Texas             | -                                      | 84   | 466   | 288    | 129     | 53      | 2       | 1       | 1,026 | -            | -     | 458   | 1,214  | 764     | 637     | 304     | 111     | 73    | 47    | 3,608  |
| Utah              | -                                      | 36   | 61    | 51     | 15      | 6       | -       | -       | 169   | -            | -     | 39    | 95     | 39      | 24      | 11      | 7       | 2     | 1     | 218    |
| Vermont           | -                                      | 1    | 28    | 10     | -       | -       | -       | -       | 39    | -            | -     | 2     | 9      | 8       | 12      | 8       | 5       | 4     | 8     | 56     |
| Virginia          | -                                      | 2    | 94    | 155    | 93      | 30      | 8       | 7       | 392   | -            | -     | -     | 148    | 234     | 194     | 111     | 58      | 59    | 56    | 860    |
| Washington        | -                                      | 7    | 42    | 65     | 75      | 29      | 27      | 14      | 263   | 124          | -     | 29    | 98     | 139     | 90      | 36      | 21      | 21    | 434   | 434    |
| West Virginia     | -                                      | 15   | 46    | 11     | 10      | 5       | 3       | -       | 91    | 38           | -     | 3     | 32     | 17      | 12      | 8       | 4       | 2     | 1     | 79     |
| Wisconsin         | -                                      | 9    | 23    | 33     | 51      | 37      | 12      | 5       | 172   | -            | -     | 19    | 83     | 110     | 132     | 137     | 85      | 69    | 128   | 763    |
| Wyoming           | -                                      | 7    | 37    | 19     | 17      | 5       | 1       | -       | 86    | -            | -     | 23    | 29     | 4       | 3       | 2       | -       | 1     | 1     | 63     |
| U.S. Total        | 771                                    | 834  | 4,107 | 3,041  | 2,135   | 1,235   | 576     | 305     | 244   | 12,477       | 2,912 | 1,069 | 5,554  | 5,128   | 4,612   | 3,511   | 1,769   | 1,269 | 2,098 | 25,010 |
| Puerto Rico       | 3                                      | -    | -     | 32     | 38      | 27      | 19      | 10      | 20    | 146          | -     | 5     | -      | 1       | 17      | 10      | 25      | 13    | 9     | 88     |
| Grand Total       | 774                                    | 834  | 4,107 | 3,073  | 2,173   | 1,262   | 595     | 315     | 264   | 12,623       | 2,917 | 1,069 | 5,555  | 5,145   | 4,622   | 3,536   | 1,782   | 1,278 | 2,111 | 25,098 |

**NATIONAL HIGHWAY SYSTEM LENGTH - 1997**  
**PAVED MILES BY MEASURED PAVEMENT ROUGHNESS - URBAN 1/**

TABLE HM-47  
SHEET 4 OF 4

OCTOBER 1998

| STATE             | INTERNATIONAL ROUGHNESS INDEX (IRI) 2/ |       |       |        |         |         |         |         |       |                   |
|-------------------|--|-------|-------|--------|---------|---------|---------|---------|-------|-------------------|
|                   | TOTAL URBAN NHS                        |       |       |        |         |         |         |         |       | TOTAL<br>REPORTED |
|                   | NOT<br>REPORTED                        | < 60  | 60-94 | 95-119 | 120-144 | 145-170 | 171-194 | 195-220 | > 220 |                   |
| Alabama           | 16                                     | 72    | 449   | 273    | 115     | 59      | 9       | 3       | 3     | 983               |
| Alaska            | -                                      | -     | 29    | 52     | 25      | 15      | 2       | 1       | 1     | 125               |
| Arizona           | -                                      | 116   | 187   | 103    | 68      | 41      | 12      | 2       | 5     | 534               |
| Arkansas          | 37                                     | 10    | 53    | 67     | 64      | 69      | 39      | 24      | 21    | 347               |
| California        | -                                      | 60    | 382   | 454    | 738     | 511     | 214     | 112     | 47    | 2,518             |
| Colorado          | -                                      | 10    | 131   | 163    | 162     | 113     | 46      | 74      | 52    | 751               |
| Connecticut       | 1                                      | -     | 141   | 156    | 123     | 95      | 46      | 20      | 25    | 606               |
| Delaware          | -                                      | 3     | 32    | 35     | 14      | 5       | 7       | 4       | 5     | 105               |
| Dist. of Columbia | 4                                      | -     | 1     | 1      | 9       | 5       | 4       | 8       | 68    | 96                |
| Florida           | 139                                    | 112   | 441   | 349    | 301     | 179     | 20      | 10      | 7     | 1,419             |
| Georgia 4/        | 1,025                                  | 62    | 63    | 5      | -       | -       | -       | -       | -     | 130               |
| Hawaii            | 133                                    | -     | -     | 2      | 1       | 10      | 7       | 2       | -     | 22                |
| Idaho             | 12                                     | 22    | 54    | 29     | 21      | 16      | 4       | 5       | 4     | 155               |
| Illinois          | -                                      | 54    | 220   | 441    | 424     | 303     | 237     | 191     | 434   | 2,304             |
| Indiana           | 19                                     | 31    | 179   | 150    | 94      | 77      | 69      | 33      | 40    | 673               |
| Iowa              | 109                                    | 7     | 102   | 84     | 59      | 61      | 32      | 16      | 15    | 376               |
| Kansas            | 79                                     | 33    | 135   | 99     | 39      | 19      | 9       | 2       | 4     | 340               |
| Kentucky          | -                                      | 94    | 260   | 125    | 60      | 47      | 20      | 10      | 3     | 619               |
| Louisiana         | 90                                     | 23    | 108   | 118    | 146     | 111     | 78      | 35      | 77    | 696               |
| Maine             | 13                                     | 18    | 87    | 23     | 9       | 8       | 4       | 2       | 2     | 153               |
| Maryland 4/       | -                                      | 8     | 248   | 142    | 76      | 59      | 34      | 32      | 50    | 649               |
| Massachusetts     | 414                                    | 3     | 289   | 320    | 177     | 115     | 53      | 40      | 54    | 1,051             |
| Michigan          | 4                                      | 31    | 299   | 313    | 256     | 297     | 168     | 112     | 199   | 1,675             |
| Minnesota         | -                                      | 82    | 277   | 158    | 76      | 57      | 24      | 6       | 16    | 696               |
| Mississippi       | -                                      | 2     | 89    | 75     | 114     | 56      | 22      | 16      | 16    | 390               |
| Missouri          | 50                                     | 5     | 157   | 257    | 220     | 148     | 82      | 34      | 28    | 931               |
| Montana           | -                                      | 6     | 42    | 29     | 15      | 10      | 3       | 4       | 8     | 117               |
| Nebraska          | 9                                      | 27    | 37    | 28     | 31      | 50      | 26      | 27      | 54    | 280               |
| Nevada            | -                                      | 22    | 92    | 37     | 27      | 17      | 4       | 3       | 3     | 205               |
| New Hampshire     | -                                      | 12    | 108   | 21     | 7       | 9       | -       | 1       | 3     | 161               |
| New Jersey        | 232                                    | -     | 110   | 243    | 251     | 227     | 122     | 93      | 112   | 1,158             |
| New Mexico        | 15                                     | 5     | 75    | 54     | 33      | 42      | 24      | 13      | 25    | 271               |
| New York          | 21                                     | 7     | 576   | 417    | 316     | 262     | 183     | 147     | 438   | 2,346             |
| North Carolina    | 16                                     | 1     | 160   | 138    | 187     | 154     | 75      | 43      | 35    | 793               |
| North Dakota      | -                                      | 17    | 40    | 20     | 8       | 10      | 4       | 1       | 3     | 103               |
| Ohio              | -                                      | 190   | 728   | 369    | 173     | 103     | 43      | 24      | 26    | 1,656             |
| Oklahoma          | -                                      | 3     | 130   | 108    | 85      | 73      | 41      | 22      | 16    | 478               |
| Oregon            | -                                      | 1     | 33    | 163    | 147     | 82      | 25      | 11      | 12    | 474               |
| Pennsylvania      | 71                                     | 16    | 323   | 437    | 411     | 307     | 170     | 117     | 141   | 1,922             |
| Rhode Island      | 170                                    | -     | -     | -      | -       | -       | -       | -       | -     | -                 |
| South Carolina    | 26                                     | 20    | 263   | 146    | 88      | 50      | 17      | 9       | 9     | 602               |
| South Dakota      | 64                                     | -     | 6     | 7      | 11      | 17      | 2       | 2       | -     | 45                |
| Tennessee         | 752                                    | 13    | 89    | 52     | 23      | 21      | 5       | 5       | 5     | 213               |
| Texas             | -                                      | 542   | 1,680 | 1,052  | 766     | 357     | 113     | 74      | 50    | 4,634             |
| Utah              | -                                      | 75    | 156   | 90     | 39      | 17      | 7       | 2       | 1     | 387               |
| Vermont           | -                                      | 3     | 37    | 18     | 12      | 8       | 5       | 4       | 8     | 95                |
| Virginia          | -                                      | 2     | 242   | 389    | 287     | 141     | 66      | 66      | 59    | 1,252             |
| Washington        | 124                                    | 7     | 71    | 163    | 214     | 119     | 63      | 35      | 25    | 697               |
| West Virginia     | 38                                     | 18    | 78    | 28     | 22      | 13      | 7       | 2       | 2     | 170               |
| Wisconsin         | -                                      | 28    | 106   | 143    | 183     | 174     | 97      | 74      | 130   | 935               |
| Wyoming           | -                                      | 30    | 66    | 23     | 20      | 7       | 1       | 1       | 1     | 149               |
| U.S. Total        | 3,683                                  | 1,903 | 9,661 | 8,169  | 6,747   | 4,746   | 2,345   | 1,574   | 2,342 | 37,487            |
| Puerto Rico       | 8                                      | -     | 1     | 49     | 48      | 52      | 32      | 19      | 33    | 234               |
| Grand Total       | 3,691                                  | 1,903 | 9,662 | 8,218  | 6,795   | 4,798   | 2,377   | 1,593   | 2,375 | 37,721            |

1/ Table does not include unpaved mileage.

2/ 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.

3/ Although the Interstate System is part of the National Highway System, its mileage is shown separately.

4/ 1996 data.