

## WASHINGTON'S CITY ARTERIALS CONDITION REPORT 2006

By Bob Brooks – Highways & Local Programs

### BACKGROUND:

In April 2003 the legislature passed the transportation efficiencies bill. This legislation established planning and efficiency goals for the state and local transportation network. Among other provisions of the bill is a requirement for cities to report pavement condition data for their arterial and collector streets beginning with the 2003-2005 biennium.

*RCW 46.68.113: During the 2003-2005 biennium, cities and towns shall provide to the transportation commission, or its successor entity, preservation rating information on at least seventy percent of the total city and town arterial network. Thereafter, the preservation rating information requirement shall increase in five percent increments in subsequent biennia. The rating system used by cities and towns must be based upon the Washington state pavement rating method or an equivalent standard approved by the department of transportation. Beginning January 1, 2007, the preservation rating information shall be submitted to the department.*

To meet this reporting requirement Highways & Local Programs (H&LP) working in partnership with the Association of Washington Cities (AWC) established a split between large and small cities based on a population threshold of 22,500. This is the threshold at which the large cities assume a greater maintenance responsibility for city streets that are also state highways. It was determined that large cities had sufficient resources to survey their street networks and report the results while small cities would need assistance in accomplishing this reporting requirement.

To assist the small cities, H&LP arranged with the WSDOT Materials Laboratory to use their automated data collection van to survey the state's small cities and forward the results of the survey to H&LP for analysis and reporting. Starting in 2006, half the states small cities will be surveyed each year split basically eastside and westside.

In response to our latest request, 30 large cities submitted condition data on 1,328.17 centerline miles of federal functionally classified arterials and 712.07 centerline miles of federal functionally classified collector routes. The small city survey resulted in 28 cities with 172.56 centerline miles of federal functionally classified arterials and 144 cities with 370.65 centerline miles of federal functionally classified collector routes.

The following report constitutes the results of the 2006 survey of the state's large and small cities.

**DISCUSSION:**

The following table summarizes the data for city surveyed streets:

| <b>Functional Class</b>     | <b>Centerline Miles</b> | <b>IRI Average</b> | <b>Ave. Rating Score</b> |
|-----------------------------|-------------------------|--------------------|--------------------------|
| Principal & Minor Arterials | 1,500.73                | 196                | 67                       |
| Major & Minor Collectors    | 1,082.72                | 209                | 63                       |
| <b>Totals – Averages</b>    | <b>2,583.45</b>         | <b>201</b>         | <b>65</b>                |

**THE ARTERIAL NETWORK:**

City Data: The combined principal and minor arterial network information for each city is shown in Appendix A at the back of this report. The data shown in Appendix A represents 76% of the statewide total city arterial mileage as listed in the January 2005 Functional Class Report from the WSDOT’s Transportation Data Office .

The extent of average rating scores within the various cities was large and ranged from a low of 38 in College Place to a high of 90 in West Richland with the overall average at 67. The average rating score is at a point where the overall arterial system would benefit from a targeted infusion of preservation funding to slow or reverse the rate of deterioration.

The average rating score for large cities surveyed in 2004 and 2006 showed only a 2 point drop during that time. While the number of cities surveyed and the time frame is small, the indication is that the arterial system condition is being maintained near its current level. Future surveys will better indicate the level at which the system is deteriorating. The average arterial rating score between the states large and small cities may help to illustrate the difference between the resources available to these two groups and the level of service that this allows. The average arterial score for small cities surveyed was 57 while the average score for large cities was 73, a significant 16 point difference.

The Materials Laboratory collects the International Roughness Index, IRI, as a part of the small city survey. The IRI is another measurement of pavement condition preferred by the FHWA. The arterial system had an average index of 196, a ranking of fair. An inverse correlation coefficient of -0.39 to the rating scores, indicates a weak correlation. This may well be due to the difficulties of collecting IRI readings within an urban environment, such as short section lengths, traffic congestion, speed restrictions, traffic signals, and surface treatments.

The following table interprets the IRI index:

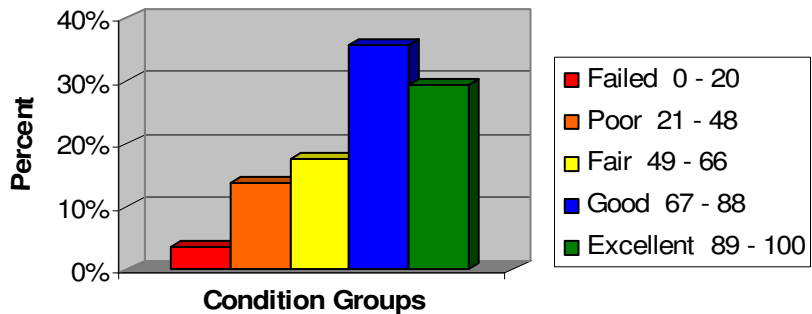
| <b>International Roughness Index Category</b> | <b>Index Score</b> |
|---|--------------------|
| Very Good                                     | <= 95              |

|   |                    |
|---|--------------------|
| Good  | 96 - 170           |
| <b>International Roughness Index Category</b> | <b>Index Score</b> |
| Fair  | 171 - 220          |
| Poor  | 221 - 320          |
| Very Poor                                     | > 320              |

**Condition Groups:** The following pavement rating condition grouping shows the distribution of the arterial system within the various condition groups. This distribution shows that 17% of the arterial mileage falls within the failed to poor categories and that 65% fall within the good to excellent categories. The remaining 18% falls into the central fair category. Since large cities make up 88% of the total arterial mileage surveyed in 2006 this percentage distribution is very similar to the large city condition grouping from the survey conducted in 2004.

| Condition Group  | Centerline Miles | Ave. Rating Score | Percentage    |
|------------------|------------------|-------------------|---------------|
| Failed 0-20      | 53.89            | 9                 | 3.6%          |
| Poor 21-48       | 205.56           | 37                | 13.7%         |
| Fair 49-66       | 262.89           | 58                | 17.5%         |
| Good 67-88       | 537.70           | 78                | 35.8%         |
| Excellent 89-100 | 440.68           | 96                | 29.4%         |
| <b>Totals</b>    | <b>1,500.73</b>  | <b>67</b>         | <b>100.0%</b> |

Distribution of arterials within the pavement condition rating groups

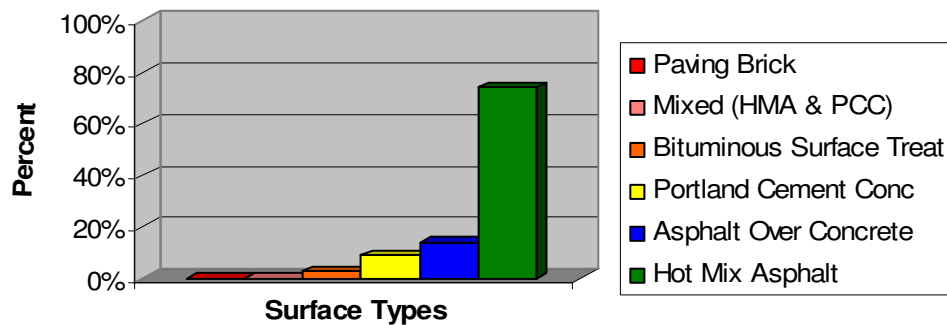


Percent arterial network within condition groups

**Surface Types:** The following table and chart show the distribution of the pavement surface types within the arterial network. As would be expected, the majority of the lane mileage, 74% is comprised of hot mix asphalt. Asphalt over portland cement concrete makes up the second largest surface type at just under 14%. This is followed by portland cement concrete at 9% and bituminous surface treatment at 3%. Paving brick and mixed segments, those containing both hot mix asphalt and portland cement concrete make up the remainder.

| Pavement Type            | Centerline Miles | Ave. Rating Score | Percentage    |
|--------------------------|------------------|-------------------|---------------|
| Paving Brick             | 0.13             | 80                | 0.0%          |
| Mixed (HMA & PCC )       | 1.78             | 72                | 0.1%          |
| Bituminous Surface Treat | 42.08            | 68                | 2.8%          |
| Portland Cement Conc     | 133.95           | 76                | 8.9%          |
| Asphalt Over Concrete    | 208.70           | 64                | 13.9%         |
| Hot Mix Asphalt          | 1,114.09         | 74                | 74.2%         |
| <b>Totals</b>            | <b>1,500.73</b>  | <b>67</b>         | <b>100.0%</b> |

Arterial surface types



Percent arterial network by surface type

## THE COLLECTOR NETWORK:

City Data: The combined major and minor collector network information for each city is shown in Appendix B at the back of this report. The data shown in Appendix B represents 69% of the statewide total city collector mileage as listed in the January 2005 Functional Class Report from the WSDOT's Transportation Data Office. Under RCW 47.26.090 the states collector network is considered to be a part of the arterial system.

The extent of average rating scores for collectors was considerably larger than that of the arterials and ranged from a low of 11 in Tekoa to a high of 98 in DuPont and Palouse with the overall average at 63. From the distribution of collector mileage within condition groups (see below), the overall collector network appears to be in poorer condition than that of the arterial system.

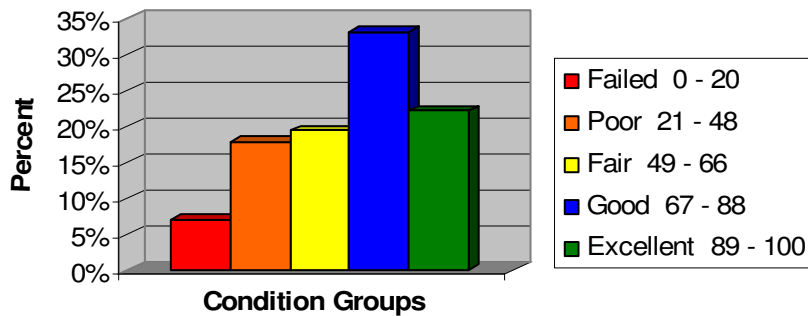
The average rating score for large city collectors surveyed in 2004 and 2006 showed only a 1 point drop during that time, an insignificant difference. Future surveys will better indicate the level at which the system is able to be maintained. The average collector rating for the small cities surveyed was 59 while the average score for large cities was 70, an 11 point difference, a tighter range than the 16 point difference seen in the arterial network.

The International Roughness Index, IRI, for the collector network has an average index of 209 which indicates a fair surface condition. The correlation coefficient of -0.52 to the rating scores indicates a slightly stronger correlation than seen in the arterials and may be the result of less congestion on the collector network.

Condition Groups: The following table and chart show the distribution of the collector mileage within the various condition groups. The distribution shows that 25% of the collector mileage falls within the failed to poor category and that 56% of the mileage falls within the very good to excellent categories. The remaining 19% falls into the central fair category. The collector distribution indicates that a greater percentage of the overall mileage is contained within the lower ranked condition groups than the arterial network. The average rating score within each condition group is identical to that of the arterial network.

| Condition Group  | Centerline Miles | Ave. Rating Score | Percentage    |
|------------------|------------------|-------------------|---------------|
| Failed 0-20      | 76.36            | 9                 | 7.1%          |
| Poor 21-48       | 194.44           | 37                | 18.0%         |
| Fair 49-66       | 210.18           | 58                | 19.4%         |
| Good 67-88       | 360.94           | 78                | 33.3%         |
| Excellent 89-100 | 240.80           | 96                | 22.2%         |
| <b>Totals</b>    | <b>1,082.72</b>  | <b>63</b>         | <b>100.0%</b> |

Distribution of collectors within the pavement condition rating groups

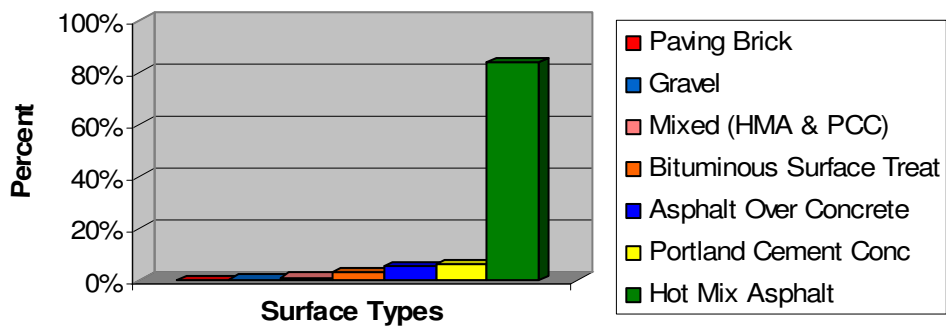


Collector lane mileage within the condition groups

Surface Types: The following information show the distribution of the pavement surface types within the collector network. The majority of the mileage is comprised of hot mix asphalt at 84%. Portland cement concrete makes up the second largest surface type at a distant 6%. This is followed by asphalt over portland cement concrete at 5% and bituminous surface treatment at 3%. There are minor amounts of mixed segments (HMA & PCC), paving brick and gravel.

| Pavement Type            | Centerline Miles | Ave. Rating Score | Percentage    |
|--------------------------|------------------|-------------------|---------------|
| Paving Brick             | 0.13             | 93                | 0.0%          |
| Gravel                   | 1.83             | 100               | 0.2%          |
| Mixed (HMA & PCC)        | 11.23            | 62                | 1.0%          |
| Bituminous Surface Treat | 34.13            | 62                | 3.2%          |
| Asphalt Over Concrete    | 56.74            | 62                | 5.2%          |
| Portland Cement Concrete | 68.45            | 67                | 6.3%          |
| Hot Mix Asphalt          | 910.21           | 69                | 84.1%         |
| <b>Totals</b>            | <b>1,082.72</b>  | <b>63</b>         | <b>100.0%</b> |

Percent collector network by surface type



Collector mileage by surface type

### Appendix A - 2006 Arterial Condition Data By City

| City           | Federal Functionally Classified Arterial C/L Mileage* | Average International Roughness Index (IRI) Score | Average Pavement Condition Index (PCI) Score - 2006 | Average Pavement Condition Index (PCI) Score - 2004 |
|----------------|---|---|---|---|
| Aberdeen       | 5.64  | 229   | 65  |   |
| Auburn         | 20.60   |   | 79  | 72  |
| Bellevue       | 57.51   |   | 81  | 86  |
| Bellingham     | 41.94   |   | 82  | 74  |
| Bothell        | 8.46  |   | 74  |   |
| Bremerton      | 15.11   |   | 70  |   |
| Burien         | 10.09   |   | 70  |   |
| Camas          | 15.90   | 216   | 69  |   |
| Centralia      | 5.93  | 162   | 77  |   |
| Chehalis       | 9.79  | 177   | 72  |   |
| Cheney         | 3.76  | 189   | 78  |   |
| Chewelah       | 0.60  | 234   | 52  |   |
| Clarkston      | 3.08  | 158   | 59  |   |
| College Place  | 5.35  | 176   | 38  |   |
| Des Moines     | 5.74  |   | 76  |   |
| DuPont         | 1.87  | 196   | 83  |   |
| East Wenatchee | 4.34  | 190   | 52  |   |
| Edmonds        | 9.18  |   | 81  |   |
| Ellensburg     | 17.12   | 178   | 56  | 58  |
| Ephrata        | 6.89  | 190   | 67  |   |
| Federal Way    | 24.06   |   | 82  | 83  |
| Grandview      | 8.03  | 166   | 49  |   |
| Hoquiam        | 1.50  | 173   | 66  |   |
| Kelso          | 9.96  | 211   | 61  |   |
| Kennewick      | 48.44   |   | 88  | 90  |
| Kent           | 32.00   |   | 83  | 83  |
| Kirkland       | 22.76   |   | 61  | 64  |
| Lacey          | 27.00   |   | 74  | 67  |
| Lakewood       | 13.03   |   | 72  |   |
| Lynnwood       | 13.01   |   | 78  |   |
| Millwood       | 0.96  | 223   | 44  |   |
| Moses lake     | 12.89   | 191   | 55  |   |
| Mount Vernon   | 19.99   |   | 87  | 89  |
| Napavine       | 2.35  | 124   | 89  |   |
| Olympia        | 39.79   |   | 75  | 68  |
| Othello        | 7.65  | 168   | 55  |   |
| Pullman        | 12.99   |   | 51  |   |
| Puyallup       | 20.51   |   | 80  | 78  |
| Quincy         | 3.32  | 196   | 40  |   |

| City             | Federal Functionally Classified Arterial C/L Mileage* | Average International Roughness Index (IRI) Score | Average Pavement Condition Index (PCI) Score - 2006 | Average Pavement Condition Index (PCI) Score - 2004 |
|------------------|---|---|---|---|
| Redmond          | 27.62   |   | 85  | 91  |
| Renton           | 36.24   |   | 66  | 77  |
| Seattle          | 311.62  |   | 69  | 69  |
| Selah            | 2.95  | 192   | 40  |   |
| Shoreline        | 18.73   |   | 65  |   |
| Spokane          | 161.94  |   | 77  | 75  |
| Spokane Valley   | 94.81   |   | 72  | 87  |
| Sunnyside        | 9.75  | 469   | 49  |   |
| Tacoma           | 125.61  |   | 68  | 56  |
| Tenino           | 0.10  | 156   | 69  |   |
| Toppenish        | 2.71  | 215   | 45  |   |
| Tumwater         | 16.21   | 171   | 58  | 80  |
| Union Gap        | 4.26  | 185   | 43  |   |
| University Place | 4.10  |   | 82  |   |
| Vancouver        | 42.20   |   | 65  | 70  |
| Washougal        | 6.54  | 251   | 40  |   |
| Wenatchee        | 19.15   |   | 80  |   |
| West Richland    | 3.11  | 99  | 90  |   |
| Yakima           | 43.94   |   | 75  | 77  |
| <b>Totals</b>    | <b>1,500.73</b>                                       | <b>196</b>  | <b>67</b>   | <b>76</b>   |

\* Federal Functionally Classified Mileage from Transportation Data Office, Functional Class Report effective January 2005

### Appendix B - 2006 Collector Condition Data By City

| City           | Federal Functionally Classified Collector C/L Mileage* | Average International Roughness Index (IRI) Score | Average Pavement Condition Index (PCI) Score - 2006 | Average Pavement Condition Index (PCI) Score - 2004 |
|----------------|--|---|---|---|
| Aberdeen       | 15.61  | 288   | 63  |   |
| Airway Heights | 1.50   | 98  | 56  |   |
| Albion         | 1.06   | 193   | 95  |   |
| Almira         | 1.72   | 216   | 80  |   |
| Auburn         | 18.19  |   | 67  | 69  |
| Battle Ground  | 2.12   | 209   | 47  |   |
| Bellevue       | 51.43  |   | 82  | 85  |
| Bellingham     | 26.67  |   | 82  | 72  |
| Bothell        | 16.59  |   | 71  |   |
| Bremerton      | 22.82  |   | 63  |   |
| Brewster       | 2.89   | 169   | 82  |   |
| Bridgeport     | 3.85   | 212   | 86  |   |
| Bucoda         | 0.51   | 48  | 69  |   |
| Burien         | 13.91  |   | 73  |   |
| Camas          | 7.78   | 205   | 59  |   |
| Cashmere       | 3.28   | 231   | 57  |   |
| Castle Rock    | 3.28   | 250   | 67  |   |
| Cathlamet      | 0.78   | 154   | 95  |   |
| Centralia      | 12.00  | 275   | 57  |   |
| Chehalis       | 2.98   | 227   | 63  |   |
| Chelan         | 1.61   | 237   | 67  |   |
| Cheney         | 5.80   | 164   | 63  |   |
| Chewelah       | 2.87   | 250   | 30  |   |
| Clarkston      | 7.47   | 232   | 52  |   |
| Cle Elum       | 1.42   | 198   | 44  |   |
| Colfax         | 0.37   | 281   | 36  |   |
| College Place  | 1.99   | 312   | 21  |   |
| Colton         | 0.35   | 333   | 48  |   |
| Colville       | 3.90   | 243   | 48  |   |
| Conconully     | 0.99   | 192   | 57  |   |
| Connell        | 2.16   | 134   | 82  |   |
| Cosmopolis     | 1.03   | 184   | 59  |   |
| Coulee Dam     | 1.64   | 189   | 67  |   |
| Creston        | 0.84   | 192   | 70  |   |
| Cusick         | 0.69   | 198   | 76  |   |
| Davenport      | 2.65   | 160   | 91  |   |
| Dayton         | 3.78   | 244   | 26  |   |
| Deer Park      | 2.66   | 155   | 53  |   |
| Des Moines     | 4.63   |   | 82  |   |
| DuPont         | 0.44   | 150   | 98  |   |

| City           | Federal Functionally Classified Collector C/L Mileage* | Average International Roughness Index (IRI) Score | Average Pavement Condition Index (PCI) Score - 2006 | Average Pavement Condition Index (PCI) Score - 2004 |
|----------------|--|---|---|---|
| East Wenatchee | 3.07   | 166   | 60  |   |
| Electric City  | 0.88   | 244   | 56  |   |
| Ellensburg     | 7.86   | 222   | 60  |   |
| Elma           | 0.35   | 143   | 67  |   |
| Elmer City     | 1.46   | 136   | 82  |   |
| Endicott       | 1.34   | 89  | 89  |   |
| Entiat         | 0.10   | 103   | 72  |   |
| Ephrata        | 3.39   | 207   | 53  |   |
| Fairfield      | 1.92   | 311   | 81  |   |
| Farmington     | 0.86   | 192   | 49  |   |
| Federal Way    | 14.97  |   | 88  | 85  |
| Garfield       | 0.57   | 265   | 41  |   |
| George         | 1.55   | 146   | 71  |   |
| Goldendale     | 3.52   | 177   | 67  |   |
| Grand Coulee   | 1.92   | 276   | 47  |   |
| Grandview      | 6.33   | 206   | 43  |   |
| Granger        | 3.14   | 180   | 53  |   |
| Hamilton       | 0.82   | 236   | 40  |   |
| Harrah         | 1.42   | 152   | 91  |   |
| Harrington     | 0.71   | 198   | 59  |   |
| Hartline       | 0.12   | 325   | 45  |   |
| Hatton         | 0.35   | 199   | 87  |   |
| Hoquiam        | 13.10  | 224   | 57  |   |
| Ilwaco         | 1.29   | 332   | 65  |   |
| Ione           | 0.12   | 269   | 30  |   |
| Kahlotus       | 0.27   | 159   | 72  |   |
| Kalama         | 6.33   | 164   | 68  |   |
| Kelso          | 11.56  | 289   | 55  |   |
| Kennewick      | 19.27  |   | 83  |   |
| Kent           | 13.66  |   | 61  |   |
| Kettle Falls   | 2.18   | 144   | 73  |   |
| Kirkland       | 29.65  |   | 72  | 72  |
| Kittitas       | 1.83   | 240   | 27  |   |
| Krupp          | 0.60   | 338   | 59  |   |
| Lacey          | 5.93   |   | 78  | 67  |
| LaCrosse       | 1.26   | 272   | 79  |   |
| Lakewood       | 1.31   |   | 74  |   |
| Lamont         | 0.43   | 218   | 38  |   |
| Latah          | 1.04   | 311   | 32  |   |
| Leavenworth    | 1.29   | 235   | 47  |   |
| Lind           | 1.88   | 231   | 88  |   |
| Long Beach     | 5.40   | 265   | 53  |   |
| Lynnwood       | 18.28  |   | 65  |   |

| City             | Federal Functionally Classified Collector C/L Mileage* | Average International Roughness Index (IRI) Score | Average Pavement Condition Index (PCI) Score - 2006 | Average Pavement Condition Index (PCI) Score - 2004 |
|------------------|--|---|---|---|
| Mabton           | 1.00   | 132   | 71  |   |
| Malden           | 1.12   | 328   | 25  |   |
| Mansfield        | 1.40   | 179   | 93  |   |
| Mattawa          | 2.04   | 256   | 30  |   |
| McCleary         | 0.57   | 210   | 68  |   |
| Medical Lake     | 6.46   | 172   | 55  |   |
| Mesa             | 0.97   | 157   | 63  |   |
| Millwood         | 1.31   | 193   | 75  |   |
| Montesano        | 1.54   | 184   | 42  |   |
| Morton           | 0.34   | 115   | 84  |   |
| Moses Lake       | 12.05  | 193   | 70  |   |
| Mossyrock        | 0.45   | 157   | 36  |   |
| Mount Vernon     | 7.76   |   | 91  | 89  |
| Moxee            | 1.10   | 170   | 55  |   |
| Naches           | 1.39   | 146   | 71  |   |
| Nespelem         | 0.88   | 251   | 48  |   |
| Newport          | 1.93   | 243   | 68  |   |
| North Bonneville | 1.00   | 159   | 57  |   |
| Northport        | 1.38   | 197   | 59  |   |
| Oakesdale        | 1.19   | 186   | 68  |   |
| Oakville         | 0.48   | 235   | 51  |   |
| Ocean Shores     | 22.87  | 264   | 60  |   |
| Odessa           | 0.64   | 379   | 38  |   |
| Okanogan         | 1.56   | 222   | 72  |   |
| Olympia          | 24.33  |   | 74  | 67  |
| Omak             | 2.23   | 160   | 68  |   |
| Oroville         | 1.21   | 167   | 89  |   |
| Othello          | 3.02   | 184   | 56  |   |
| Palouse          | 0.61   | 120   | 98  |   |
| Pateros          | 1.43   | 133   | 86  |   |
| Pe Ell           | 0.48   | 211   | 55  |   |
| Pomeroy          | 1.19   | 189   | 63  |   |
| Prescott         | 0.63   | 167   | 84  |   |
| Prosser          | 8.74   | 209   | 52  |   |
| Pullman          | 10.96  |   | 40  |   |
| Puyallup         | 13.71  |   | 82  | 76  |
| Quincy           | 3.55   | 179   | 54  |   |
| Rainier          | 1.93   | 143   | 62  |   |
| Raymond          | 2.02   | 243   | 58  |   |
| Redmond          | 13.05  |   | 79  | 89  |
| Renton           | 21.54  |   | 66  | 70  |
| Republic         | 2.01   | 160   | 96  |   |
| Ridgefield       | 0.59   | 220   | 61  |   |

| City           | Federal Functionally Classified Collector C/L Mileage* | Average International Roughness Index (IRI) Score | Average Pavement Condition Index (PCI) Score - 2006 | Average Pavement Condition Index (PCI) Score - 2004 |
|----------------|--|---|---|---|
| Ritzville      | 4.45   | 213   | 36  |   |
| Riverside      | 1.34   | 188   | 79  |   |
| Rockford       | 0.44   | 117   | 62  |   |
| Rosalia        | 1.95   | 234   | 61  |   |
| Seattle        | 141.41   |   | 65  | 68  |
| Selah          | 2.11   | 202   | 55  |   |
| Shoreline      | 16.43  |   | 60  |   |
| Soap Lake      | 2.87   | 280   | 27  |   |
| South Bend     | 4.04   | 322   | 56  |   |
| South Cle Elum | 1.21   | 156   | 60  |   |
| Spangle        | 0.50   | 205   | 21  |   |
| Spokane        | 47.70  |   | 69  | 58  |
| Spokane Valley | 36.25  |   | 73  | 85  |
| Sprague        | 1.46   | 259   | 39  |   |
| Springdale     | 0.07   | 232   | 91  |   |
| St. John       | 1.72   | 284   | 22  |   |
| Starbuck       | 0.55   | 163   | 95  |   |
| Stevenson      | 2.79   | 219   | 80  |   |
| Sunnyside      | 8.04   | 225   | 60  |   |
| Tacoma         | 62.07  |   | 64  | 51  |
| Tekoa          | 0.95   | 292   | 11  |   |
| Tenino         | 2.61   | 177   | 68  |   |
| Tieton         | 3.08   | 250   | 48  |   |
| Toledo         | 0.11   | 191   | 85  |   |
| Tonasket       | 1.10   | 196   | 65  |   |
| Toppenish      | 4.63   | 303   | 43  |   |
| Tumwater       | 11.51  | 178   | 53  | 83  |
| Twisp          | 1.36   | 199   | 44  |   |
| Union Gap      | 1.81   | 137   | 83  |   |
| Vancouver      | 24.94  |   | 65  | 69  |
| Waitsburg      | 1.57   | 234   | 60  |   |
| Wapato         | 3.89   | 227   | 47  |   |
| Warden         | 2.64   | 163   | 61  |   |
| Washougal      | 6.82   | 261   | 55  |   |
| Waterville     | 2.60   | 203   | 57  |   |
| Waverly        | 0.82   | 145   | 97  |   |
| West Richland  | 8.45   | 128   | 72  |   |
| Westport       | 0.38   | 163   | 78  |   |
| White Salmon   | 0.57   | 249   | 52  |   |
| Wilbur         | 1.70   | 238   | 61  |   |
| Wilson Creek   | 1.99   | 225   | 62  |   |
| Winlock        | 0.98   | 237   | 91  |   |
| Winthrop       | 1.49   | 232   | 74  |   |

| City          | Federal Functionally Classified Collector C/L Mileage* | Average International Roughness Index (IRI) Score | Average Pavement Condition Index (PCI) Score - 2006 | Average Pavement Condition Index (PCI) Score - 2004 |
|---------------|--|---|---|---|
| Woodland      | 3.03   | 224   | 52  |   |
| Yacolt        | 1.21   | 220   | 71  |   |
| Yakima        | 14.68  |   | 71  | 73  |
| Yelm          | 2.89   | 197   | 71  |   |
| Zillah        | 3.26   | 209   | 40  |   |
| <b>Totals</b> | <b>1,082.72</b>  | <b>209</b>  | <b>63</b>   | <b>74</b>   |

\* Federal Functionally Classified Mileage from Transportation Data Office, Functional Class Report effective January 2005