

How Many Vehicles Are There in the Washington Area?

A lot! There were more than 3.2 million cars, trucks, and other vehicles registered in area jurisdictions in 1998. This number does not include those of visitors, and of residents not required to register vehicles with area jurisdictions. Government vehicles are included in Maryland and the District. With about 1.9 registered vehicles per household, it is little wonder that the roads are crowded and getting more so. In just four years from 1994 to 1998,

there were 211,174 additional vehicles added to the total number in the area. Fairfax County alone added 49,384 vehicles.

All jurisdictions, except the District, had an increase in registered vehicles between 1994 and 1998. Over the entire area, the four-year increase was 7.2 percent, but the rate varied sharply among jurisdictions. The fast-growing counties of Loudoun, Prince William, Stafford,

Motor Vehicles in the Washington Area

| | 1994 | 1998 | 1994-1998 | Percent Change |
|------------------------|------------------|------------------|----------------|----------------|
| District | 248,795 | 230,000* | -18,795 | -7.6% |
| Arlington County | 127,799 | 137,015 | 9,216 | 7.2% |
| Fairfax County | 701,824 | 751,208 | 49,384 | 7.0% |
| Loudoun County | 102,137 | 132,006 | 29,869 | 29.2% |
| Prince William County | 183,207 | 207,020 | 23,813 | 13.0% |
| Stafford County | 64,953 | 75,222 | 10,269 | 15.8% |
| City of Alexandria | 99,988 | 113,539 | 13,551 | 13.6% |
| Subtotal | 1,279,908 | 1,416,010 | 136,102 | 10.6% |
| Montgomery County | 593,307 | 629,888 | 36,581 | 6.2% |
| Prince George's County | 518,305 | 541,973 | 23,668 | 4.6% |
| Frederick County | 156,703 | 171,972 | 15,269 | 9.7% |
| Charles County | 92,274 | 100,960 | 8,686 | 9.4% |
| Calvert County | 56,293 | 65,956 | 9,663 | 17.2% |
| Subtotal | 1,416,882 | 1,510,749 | 93,867 | 6.6% |
| Total Area | 2,945,585 | 3,156,759 | 211,174 | 7.2% |

*Estimated based on 1997 numbers.

Source: Maryland and Virginia numbers are from the respective state motor vehicle administrations. District numbers are from *Highway Statistics*, Federal Highway Administration, Office of Highway Information Management, various years.

and Calvert, all had increases greater than 13 percent. Alexandria also had more than a 13 percent increase for reasons that are unclear, but perhaps due to an influx of commercial vehicle registrations. Because detailed information is not available about changes in population between 1994 and 1998 it is not possible to determine how many of the vehicles resulted from increased population and how many came from existing households adding vehicles.

As could be expected, the density of vehicles is directly related to the density of population and the availability of public transportation. The District had an average of only one vehicle per household in 1996, the last year for which household numbers are available. In contrast, four of the outer suburban counties had in excess of two and one-half vehicles per household. The four jurisdictions that adjoin the District and that have best access to public transportation had less than two vehicles per household. If all the suburbs had the same number of vehicles per household as transit-rich Arlington County, there would have been 643,000 fewer registered vehicles in the area in 1996.

Vehicles are almost evenly divided between Maryland and Virginia suburbs when measured either by total numbers or by vehicles per household. Virginia suburbs had 1.4 million in 1998, while Maryland had 1.5 million. Virginia had 2.07 per household compared to 2.04 in Maryland in 1996. The slightly larger number of vehicles per household in Virginia appears to mean that the high personal property tax on vehicles did not discourage ownership. However, the 10.6 percent increase in vehicles in Virginia over the four years was well in

Ratio of Motor Vehicles to Households 1996

| | Vehicles 1996 | Households 1996 | Ratio |
|-------------------|--------------------------|----------------------------|--------------|
| District | 237,415 | 231,854 | 1.02 |
| Arlington | 129,820 | 81,945 | 1.58 |
| Fairfax | 730,134 | 332,907 | 2.19 |
| Loudoun | 112,346 | 44,086 | 2.55 |
| Prince William | 189,690 | 99,341 | 1.91 |
| Stafford | 71,786 | 28,196 | 2.55 |
| Alexandria | 100,555 | 56,663 | 1.77 |
| Subtotal | 1,334,331 | 643,138 | 2.07 |
| Montgomery | 605,950 | 305,024 | 1.99 |
| Prince George's | 525,153 | 280,058 | 1.88 |
| Frederick | 159,936 | 63,376 | 2.52 |
| Charles | 93,851 | 38,340 | 2.45 |
| Calvert | 59,593 | 21,905 | 2.72 |
| Subtotal | 1,444,483 | 708,703 | 2.04 |
| Total Area | 3,016,229 | 1,583,695 | 1.90 |

Source: Household numbers are from George Grier, *Washington Area Growth and Change in the 1990s*, Greater Washington Research Center, November 1998. Maryland and Virginia vehicle numbers are from the respective state motor vehicle administrations, and District vehicle numbers are from *Highway Statistics 1996*, Federal Highway Administration, Office of Highway Information Management, September 1997.

excess of the 6.6 percent increase in Maryland. The Virginia increase may mirror a faster increase in population, as well as sales stimulated by the publicized decrease in personal property taxes that was implemented in 1998.

Overall, it is apparent that the Washington area traffic congestion stems from a large and increasing number of vehicles and an especially high density of vehicles in the fast-growing outer suburbs.