Chapter 2
Vehicle Miles of Travel (VMT)

This chapter describes characteristics of vehicle miles of travel (VMT) in privately operated vehicles, including travel purpose, vehicle type, trip length, type of trip, gender of traveler, and average vehicle occupancy. Comparisons are made among households of various size, income level, number of available vehicles, and number of vehicles per driver. Comparisons are also made between several population groups, between 1983 and 1990 travel, between vehicle trips and vehicle travel, and between the travel characteristics of households located inside and outside the central cities of urbanized areas.

The information is for trips of 75 miles or less.

Key Findings

- Travel (VMT) increased 37 percent between 1983 and 1990; this compares with a 4 percent increase in population. The high rate of VMT growth is due to increasing personal trip-making, shifts to driving alone, increasing trip lengths, and an increasing propensity to make trips in POVs.

- Commuting represented 36 percent of total average daily VMT in 1990, up from 34 percent in 1983. Commutes of 8 miles or more account for more than 80 percent of commuting VMT.

- Travel to accomplish family and personal business, other than shopping, which was second in importance to commuting VMT in both 1983 and 1990, is the fastest growing element of household VMT.

- Females had shorter commute distances and a smaller share of commuting VMT. However, women still report more VMT for shopping and other family/personal business trips.

- Commuting VMT increases with increases in household size, income, and available vehicles.

Total Travel Increased 37 Percent Between 1983 and 1990

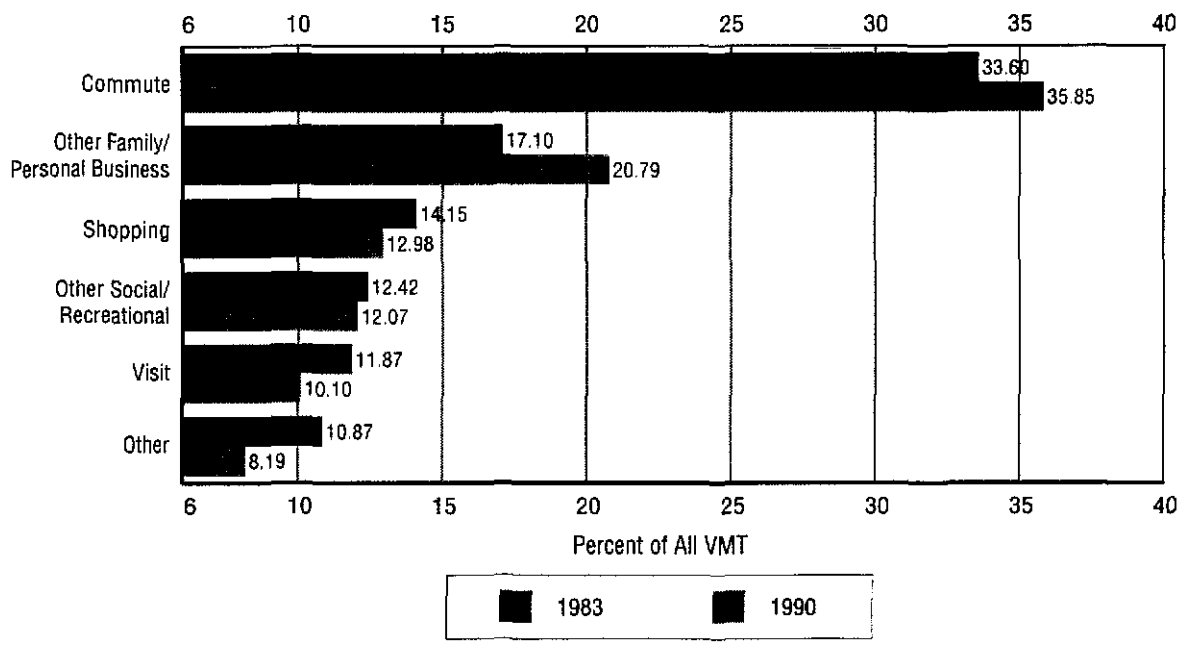
Based on the NPTS data, vehicle miles of travel increased from about 878 million in 1983 to 1.2 billion in 1990, or 37 percent (Table 2-1). Caution should be exercised when using this information. First, these findings are based on a small sample of households particularly in 1983, when the NPTS sample had only 6,500 households. (Please refer to discussion in Introduction, page 5.) Second, the information does not represent all trip-making. Trips greater than 75 miles were excluded.

Part of this disproportionately large VMT increase is due to the 6 percent increase in personal trip-making (see Chapter 1). Part is due to travel mode shift to POVs (82 to 87 percent) between 1983 and 1990 (see Chapter 4). Part is due to the 11 percent increase in average trip lengths between 1983 and 1990 (Table 2-2). And part is due to the increasing propensity to travel alone, especially for commuting trips (Table 2-5). These shifts and increases, when combined with the effects of increased population and households, all contribute to the extraordinary VMT increase between 1983 and 1990.

Commute Travel Dominates

More than one-third of all 1990 VMT (35.9 percent) was for commuting (Figure 2-1). This is up by 2.3 percent from 1983. Even in large urban areas with rail, commuting trips in pri-

FIGURE 2-1
Vehicle Miles of Travel by Trip Purpose
(Privately Operated Vehicles)



Note: Excludes trips greater than 75 miles.

vately operated vehicles command an increasing share of VMT (Table 2-1).

As shown in Table 2-10, 1990 commuting travel represented an especially high proportion of travel (38.0 percent) in households outside the central cities of urbanized areas. This is indicative of the longer average commute trip length for suburbanites and likely reflects the suburbanization of employment between 1983 and 1990.

Factors Contributing to Commuting Travel

Tables 2-5 through 2-7 show the positive relationship between household income, household size, and vehicle availability with commute VMT.

Income

As shown in Table 2-5, both the number of commute trips and VMT are disproportionately greater in higher income households than in lower income households. For example, the 16 percent of all 1990 households that had incomes above $60,000 generated 27 percent of the 1990 commute VMT. Conversely, households with incomes below $10,000 were 12.6 percent of 1990 households and generated only 2.9 percent of the commute VMT.

Household income is also a factor in commuting trip lengths. Table 2-5 shows that trip lengths generally increase as income rises.

Size

We expect commute VMT per household to increase with household size, as larger households are more likely to have more people in the labor force. This is confirmed in Table 2-6 showing that households of one and two persons generate a lesser proportion of commute VMT than households of larger size.

Household size is also an indication of average POV occupancy of household commuters. Table 2-6 shows that larger households are more likely to carpool or vanpool than smaller households.

Vehicle Availability

Table 2-7 shows the relationships between the number of vehicles available in a household and other factors such as average commute trip length. It shows a decline from 1983 to 1990 in the proportion of households with no vehicles available (from 15.7 to 10.9 percent), while at the same time shows the substantial increase in two-vehicle households (from 32.5 to 37.7 percent). Consequently, the proportion of commute VMT generated by zero- and one-vehicle households dropped from 21.3 percent to 17.4 percent over the 1983 to 1990 period.

Other Family/Personal Business Travel is Fast Growing

Although Table 2-1 shows commuting VMT in privately operated vehicles increased from 33.6 percent to 35.9 percent between 1983 and 1990, VMT to accomplish other family/personal business increased at a faster pace, from 17.1 percent of total VMT in 1983 to 20.8 percent in 1990. Americans' continued pursuit of a suburban lifestyle, together with their increasingly complex society, makes it necessary to make more other family/personal business trips but also more trips of longer lengths.

Most Households Have at Least One Vehicle per Driver

In 83.9 percent of 1990 urbanized area households, there was one or more vehicles for each driver (Table 2-8). Furthermore, 17.4 percent of 1990 urbanized area households had two or

more vehicles per driver, up from just 7.5 percent in 1983. In more than six out of every 10 urbanized area households (63.1 percent in 1983 and 60.5 percent in 1990), there was between 1.0 and 1.5 vehicles for every driver, and the trips of these households accounted for almost two-thirds of all urbanized commute VMT in both survey years.

Male VMT is Increasing Faster Than Female VMT

The increase in travel by women has been discussed widely, but travel by men has also increased rapidly. Table 2-9 shows that VMT by males increased absolutely and proportionally faster over the 1983 to 1990 period than female VMT. Consistent with the fact that the average woman made fewer average daily vehicle trips than men in 1990 (Chapter 1), women reported 26 percent fewer VMT. Women, however, retained major shares of shopping and other family personal/business travel.

TABLE 2-1
Vehicle Miles of Travel by Trip Purpose and Urban Size Group
(Privately Operated Vehicles)

1983

Trip Purpose	Urban Size Group: Under 1.25 Million	1.25 Million + w/o Rail	1.25 Million + w/ Rail	Not Urban Area	All
Earning a Living					
To or From Work	31.53%	39.19%	37.88%	31.47%	33.60%
Work-Related Business	3.44	3.43	5.19	4.23	3.99
Family and Personal Business					
Shopping	13.91	13.48	11.96	15.51	14.15
Other Family/Personal Business	16.48	16.85	15.04	17.97	17.10
Civic/Educational/Religious	4.34	4.34	4.77	4.49	4.51
Social and Recreational					
Vacation/Pleasure Driving	2.26	0.84	1.43	0.87	1.34
Visit Friends/Relatives	12.94	10.62	9.73	12.45	11.87
Other Social/Recreational	14.48	9.48	12.85	11.98	12.42
Other	0.62	1.77	1.15	1.03	1.03
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Total VMT (in Millions)	247,215	131,632	122,389	363,536	878,323

Note: Excludes trips greater than 75 miles.

(Continued)

TABLE 2-1 (Continued)
Vehicle Miles of Travel by Trip Purpose and Urban Size Group
(Privately Operated Vehicles)

1990

Trip Purpose	Urban Size Group: Under 1 Million	1 Million + w/o Rail	1 Million + w/ Rail	Not Urban Area	All
Earning a Living					
To or From Work	33.10%	37.69%	38.86%	34.96%	35.85%
Work-Related Business	2.39	1.89	1.49	2.17	2.04
Family and Personal Business					
Shopping	12.83	11.09	11.96	14.37	12.98
Other Family/Personal Business	20.31	21.24	17.87	22.03	20.79
Civic/Educational/Religious	5.32	4.42	4.06	4.76	4.67
Social and Recreational					
Vacation/Pleasure Driving	1.02	0.40	0.93	1.01	0.87
Visit Friends/Relatives	11.72	9.80	10.99	9.14	10.10
Other Social/Recreational	12.64	12.62	13.37	10.99	12.07
Other	0.66	0.84	0.44	0.56	0.61
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Total VMT (in Millions)	230,907	243,323	216,618	513,607	1,204,454

Note: Excludes trips greater than 75 miles.

TABLE 2-2
Average Trip Length by Trip Purpose and Urban Size Group
(Privately Operated Vehicles)

1983

Trip Purpose	Urban Size Group: Under 1.25 Million	1.25 Million + w/o Rail	1.25 Million + w/ Rail	Not Urban Area	All
Earning a Living					
To or From Work	6.78 Mi.	9.36 Mi.	9.13 Mi.	8.99 Mi.	8.36 Mi.
Work-Related Business	7.86	9.75	10.99	10.48	9.63
Family and Personal Business					
Shopping	4.10	4.50	4.33	6.05	4.91
Other Family/Personal Business	5.53	5.92	5.61	6.71	6.13
Civic/Educational/Religious	4.32	5.21	5.85	6.08	5.35
Social and Recreational					
Vacation/Pleasure Driving	21.37	19.04	31.94	17.66	20.15
Visit Friends/Relatives	7.95	8.37	7.78	8.91	8.39
Other Social/Recreational	6.68	6.14	7.86	7.84	7.21
Other	3.74	10.26	4.40	6.25	5.76
All	6.05 Mi.	7.02 Mi.	7.10 Mi.	7.68 Mi.	6.98 Mi.

Note: Excludes trips greater than 75 miles.

(Continued)

TABLE 2-2 (Continued)
Average Trip Length by Trip Purpose and Urban Size Group
(Privately Operated Vehicles)

1990

Trip Purpose	Urban Size Group: Under 1 Million	1 Million + w/o Rail	1 Million + w/ Rail	Not Urban Area	All
Earning a Living					
To or From Work	8.18 Mi.	10.54 Mi.	11.04 Mi.	11.62 Mi.	10.50 Mi.
Work-Related Business	8.71	8.59	8.70	9.82	9.16
Family and Personal Business					
Shopping	4.08	4.19	4.37	6.06	4.91
Other Family/Personal Business	5.27	6.30	5.94	7.25	6.38
Civic/Educational/Religious	5.79	6.72	6.56	7.57	6.79
Social and Recreational					
Vacation/Pleasure Driving	22.83	15.89	23.33	19.90	20.59
Visit Friends/Relatives	7.92	9.12	9.37	9.37	8.96
Other Social/Recreational	7.17	8.28	8.59	9.10	8.37
Other	5.94	9.18	8.38	7.17	7.44
All	6.40 Mi.	7.58 Mi.	7.76 Mi.	8.63 Mi.	7.74 Mi.

Note: Excludes trips greater than 75 miles.

TABLE 2-3
Vehicle Miles of Travel by Mode and Urban Size Group

1990

	Urban Size Group				
Travel Mode	Under 1 Million	1 Million + w/o Rail	1 Million + w/ Rail	Not Urban Area	All
Auto	79.85%	79.18%	88.17%	71.83%	77.79%
Passenger Van	4.83	4.81	4.38	5.02	4.83
Pickup/Other Truck	13.81	15.41	6.02	21.83	16.15
Other POV	1.50	0.60	1.43	1.32	1.23
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Total VMT (in Millions)	230,907	243,323	216,618	513,607	1,204,454

Note: Excludes trips greater than 75 miles.

TABLE 2-4
Commute Vehicle Miles of Travel by Trip Length and Urban Size Group

1990

	Urban Size Group				
Trip Length	Under 1 Million	1 Million + w/o Rail	1 Million + w/ Rail	Not Urban Area	All
< .5 Mile	0.14%	0.09%	0.10%	0.11%	0.11%
1 Mile	0.99	0.62	0.64	0.77	0.75
2 Miles	2.51	1.48	1.52	1.50	1.68
3 Miles	4.03	2.44	2.05	2.02	2.47
4 Miles	3.13	1.66	1.88	1.48	1.89
5 Miles	6.70	4.12	3.81	3.34	4.19
6 Miles	3.68	2.32	1.98	1.71	2.24
7 Miles	4.32	3.06	2.97	2.73	3.13
8 to 10 Miles	18.23	13.86	12.66	9.68	12.66
11 to 15 Miles	19.67	19.27	16.82	14.91	17.05
16 to 20 Miles	10.47	16.84	13.10	13.38	13.54
21 to 30 Miles	10.75	19.78	18.70	18.99	17.64
31 to 40 Miles	6.86	7.30	11.65	12.64	10.29
41 to 50 Miles	4.70	4.46	6.95	8.31	6.59
51 to 75 Miles	3.82	2.70	5.16	8.45	5.77
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Total VMT (in Millions)	76,421	91,714	84,186	179,533	431,853

Note: Excludes trips greater than 75 miles.

TABLE 2-5
Average Commute Trip Length and Occupancy by Household Income
(Urbanized Area Households)

1983

Annual Household Income	Average Trip Length (All Modes)	Average Trip Length (POV)	Average Occupancy (POV)	Percent of All Commute Trips	Percent of All Commute VMT	Percent of All Households
< $5,000	6.00 Mi.	7.31 Mi.	1.23	2.70%	2.20%	10.60%
$5,000 to 9,999	6.40	6.64	1.20	6.20	4.20	15.00
$10,000 to 14,999	6.23	6.30	1.16	11.20	7.60	13.90
$15,000 to 19,999	6.67	6.94	1.16	11.90	10.40	11.70
$20,000 to 24,999	8.13	8.18	1.23	14.10	14.40	11.50
$25,000 to 29,999	8.72	8.48	1.20	11.90	13.10	9.40
$30,000 to 34,999	8.71	8.64	1.21	9.80	10.70	7.30
$35,000 to 39,999	8.42	8.36	1.10	8.00	8.90	5.30
$40,000 to 44,999	8.77	8.55	1.20	7.40	8.40	4.30
$45,000 to 49,999	9.45	9.76	1.11	3.70	4.60	2.60
$50,000 to 54,999	9.47	9.29	1.20	3.30	4.20	2.40
$55,000 to 59,999	7.61	7.69	1.11	2.30	2.50	1.40
$60,000 to 64,999	7.16	7.54	1.18	1.20	1.20	0.80
$65,000 to 69,999	9.64	10.50	1.14	1.30	1.80	0.80
$70,000 to 74,999	8.92	9.16	1.20	1.10	1.60	0.70
$75,000 to 79,999	9.67	8.56	1.15	1.20	1.20	0.60
$80,000 +	9.00	8.04	1.08	2.60	3.10	1.80
All/Total	7.91 Mi.	8.00 Mi.	1.18	100.00%	100.00%	100.00%
Commute Trips, VMT, and HH[1] (in Millions)	N/A	N/A	N/A	29,586	180,738	56

[1]HH = Households
N/A = not applicable.
1983 figures have not been adjusted to 1990 dollars.

Note: Excludes trips greater than 75 miles.

(Continued)

TABLE 2-5 (Continued)
Average Commute Trip Length and Occupancy by Household Income
(Urbanized Area Households)

1990

Annual Household Income	Average Trip Length (All Modes)	Average Trip Length (POV)	Average Occupancy (POV)	Percent of All Commute Trips	Percent of All Commute VMT	Percent of All Households
< $5,000	7.01 Mi.	8.72 Mi.	1.13	1.10%	0.70%	3.80%
$5,000 to 9,999	9.89	7.71	1.23	3.80	2.20	8.80
$10,000 to 14,999	6.53	6.53	1.12	4.80	2.80	8.70
$15,000 to 19,999	7.56	7.73	1.16	7.40	5.40	9.10
$20,000 to 24,999	7.61	7.74	1.08	7.50	5.80	8.20
$25,000 to 29,999	9.25	9.89	1.09	8.90	8.60	9.60
$30,000 to 34,999	8.24	8.97	1.09	9.10	8.30	8.50
$35,000 to 39,999	9.50	9.64	1.10	9.00	9.30	7.90
$40,000 to 44,999	10.61	11.13	1.13	6.90	8.00	5.30
$45,000 to 49,999	9.18	9.13	1.12	6.80	6.60	5.20
$50,000 to 54,999	11.38	11.56	1.12	6.20	7.90	4.80
$55,000 to 59,999	11.97	11.85	1.11	5.90	7.60	4.20
$60,000 to 64,999	10.74	10.97	1.12	3.60	4.20	2.60
$65,000 to 69,999	11.10	10.85	1.12	4.40	5.00	2.90
$70,000 to 74,999	10.19	9.99	1.17	2.70	3.10	1.80
$75,000 to 79,999	11.44	12.21	1.20	2.10	2.80	1.60
$80,000 +	11.29	11.28	1.08	9.80	11.90	7.10
All/Total	9.59 Mi.	9.82 Mi.	1.12	100.00%	100.00%	100.00%
Commute Trips, VMT, and HH[1] (in Millions)	N/A	N/A	N/A	24,237[2]	195,516[2]	42[2]

[1]HH = Households
[2]Excludes households with missing income value.
N/A = not applicable.

Note: Excludes trips greater than 75 miles.

TABLE 2-6
Average Commute Trip Length and Occupancy by Household Size
(Urbanized Area Households)

1983

Persons per Household	Average Trip Length (All Modes)	Average Trip Length (POV)	Average Occupancy (POV)	Percent of All Commute Trips	Percent of All Commute VMT	Percent of All Households
One	7.03 Mi.	7.21 Mi.	1.08	10.60%	9.50%	24.70%
Two	7.58	7.83	1.13	26.40	25.70	31.60
Three	8.04	7.74	1.15	21.10	21.10	16.40
Four	8.21	8.34	1.21	24.20	25.90	16.10
Five +	8.39	8.62	1.32	17.80	17.90	11.20
All/Total	7.91 Mi.	8.00 Mi.	1.18	100.00%	100.00%	100.00%
Commute Trips, VMT, and HH[1] (in Millions)	N/A	N/A	N/A	29,586	180,738	56

[1]HH = Households
N/A = not applicable.

Note: Excludes trips greater than 75 miles.

1990

Persons per Household	Average Trip Length (All Modes)	Average Trip Length (POV)	Average Occupancy (POV)	Percent of All Commute Trips	Percent of All Commute VMT	Percent of All Households
One	8.15 Mi.	8.86 Mi.	1.04	12.10%	10.50%	25.30%
Two	9.89	10.10	1.09	29.30	30.60	31.70
Three	9.43	9.52	1.12	21.50	21.10	17.30
Four	9.77	10.07	1.15	20.40	21.60	14.70
Five +	9.84	10.12	1.14	16.80	16.20	11.00
All/Total	9.55 Mi.	9.83 Mi.	1.11	100.00%	100.00%	100.00%
Commute Trips, VMT, and HH[1] (in Millions)	N/A	N/A	N/A	31,584	252,320	59

[1]HH = Households
N/A = not applicable.

Note: Excludes trips greater than 75 miles.

TABLE 2-7
Average Commute Trip Length and Occupancy by Household Vehicles
(Urbanized Area Households)

1983

Household Vehicles	Average Trip Length (All Modes)	Average Trip Length (POV)	Average Occupancy (POV)	Percent of All Commute Trips	Percent of All Commute VMT	Percent of All Households
Zero	6.02 Mi.	6.38 Mi.	1.24	4.70%	0.10%	15.70%
One	7.54	7.44	1.26	24.70	21.20	36.10
Two	7.97	8.18	1.15	39.70	43.70	32.50
Three	8.34	8.22	1.16	19.70	22.10	10.90
Four	8.73	8.43	1.14	7.00	8.30	3.00
Five	8.62	7.99	1.07	2.10	2.50	1.20
Six	7.37	6.51	1.02	1.50	1.40	0.40
Seven +	9.54	7.70	1.53	0.70	0.80	0.20
All/Total	7.91 Mi.	8.00 Mi.	1.18	100.00%	100.00%	100.00%
Commute Trips, VMT, and HH[1] (in Millions)	N/A	N/A	N/A	29,586	180,738	56

[1]HH = Households
N/A = not applicable.

Note: Excludes trips greater than 75 miles.

TABLE 2-7 (Continued)
Average Commute Trip Length and Occupancy by Household Vehicles
(Urbanized Area Households)

1990

Household Vehicles	Average Trip Length (All Modes)	Average Trip Length (POV)	Average Occupancy (POV)	Percent of All Commute Trips	Percent of All Commute VMT	Percent of All Households
Zero	6.32 Mi.	9.27 Mi.	1.05	4.10%	0.30%	10.90%
One	8.24	8.19	1.14	23.70	17.10	34.70
Two	10.09	10.20	1.11	45.50	51.20	37.70
Three	10.06	10.09	1.09	18.10	20.80	11.90
Four	10.47	10.50	1.10	5.70	6.70	3.30
Five	11.24	11.53	1.05	2.30	3.20	1.10
Six	11.20	12.11	1.06	0.50	0.60	0.30
Seven +	11.34	11.23	1.05	0.10	0.20	0.10
All/Total	9.55 Mi.	9.83 Mi.	1.11	100.00%	100.00%	100.00%
Commute Trips, VMT, and HH[1] (in Millions)	N/A	N/A	N/A	31,584	252,320	59

[1]HH = Households
N/A = not applicable.

Note: Excludes trips greater than 75 miles.

TABLE 2-8
Average Commute Trip Length and Occupancy by Household Vehicles per Driver
(Urbanized Area Households)

1983

Vehicles Per Driver	Average Trip Length (All Modes)	Average Trip Length (POV)	Average Occupancy (POV)	Percent of All Commute Trips	Percent of All Commute VMT	Percent of All Households
0	6.47 Mi.	5.00 Mi.	2.00	2.80%	0.00%	5.70%
< .5	7.54	7.09	1.26	0.90	0.60	0.80
.5 - .99	7.81	8.20	1.35	18.20	15.60	16.10
1 - 1.49	8.01	7.84	1.14	62.30	64.90	63.10
1.5 - 1.99	8.00	8.17	1.16	9.80	11.70	6.80
2 +	8.57	9.00	1.20	6.10	7.10	7.50
All/Total	7.96 Mi.	8.00 Mi.	1.18	100.00%	100.00%	100.00%
Commute Trips, VMT, and HH[1] (in Millions)	N/A	N/A	N/A	28,899	180,296	49

[1]HH = Households
N/A = not applicable.

Note: Excludes trips greater than 75 miles.

1990

Vehicles Per Driver	Average Trip Length (All Modes)	Average Trip Length (POV)	Average Occupancy (POV)	Percent of All Commute Trips	Percent of All Commute VMT	Percent of All Households
0	6.68 Mi.	* Mi.	*	2.30%	0.20%	4.20%
< .5	8.17	5.76	1.18	0.90	0.30	0.60
.5 - .99	8.53	8.69	1.17	14.10	10.40	11.30
1 - 1.49	9.63	9.84	1.10	61.70	64.80	60.50
1.5 - 1.99	10.60	10.75	1.10	8.50	10.40	6.00
2 +	10.35	10.28	1.12	12.50	14.00	17.40
All/Total	9.56 Mi.	9.83 Mi.	1.11	100.00%	100.00%	100.00%
Commute Trips, VMT, and HH[1] (in Millions)	N/A	N/A	N/A	30,791	252,094	52

[1]HH = Households
N/A = not applicable.
** Insufficient data*

Note: Excludes trips greater than 75 miles.

TABLE 2-9
Vehicle Miles of Travel by Trip Purpose and Gender of Driver
(Urbanized Area Households)

1983

Trip Purpose	Gender of Driver: Male	Female	All
Earning a Living			
To or From Work	41.39%	27.11%	35.11%
Work-Related Business	5.18	2.07	3.81
Family and Personal Business			
Shopping	9.78	17.51	13.18
Other Family/Personal Business	14.62	18.87	16.48
Civic/Educational/Religious	4.11	5.03	4.52
Social and Recreational			
Vacation/Pleasure Driving	2.14	1.06	1.67
Visit Friends/Relatives	9.91	13.44	11.46
Other Social/Recreational	12.25	13.35	12.73
Other	0.62	1.56	1.03
Total	100.00%	100.00%	100.00%
Total VMT (in Millions)	288,516	226,270	514,787

Note: Excludes trips greater than 75 miles.

(Continued)

TABLE 2-9 (Continued)
Vehicle Miles of Travel by Trip Purpose and Gender of Driver
(Urbanized Area Households)

1990

Trip Purpose	Gender of Driver: Male	Female	All
Earning a Living			
To or From Work	39.70%	32.21%	36.52%
Work-Related Business	2.48	1.19	1.93
Family and Personal Business			
Shopping	9.92	14.70	11.95
Other Family/Personal Business	17.27	23.40	19.87
Civic/Educational/Religious	4.02	5.40	4.61
Social and Recreational			
Vacation/Pleasure Driving	1.03	0.43	0.78
Visit Friends/Relatives	10.11	11.78	10.82
Other Social/Recreational	14.76	10.29	12.86
Other	0.70	0.59	0.65
Total	100.00%	100.00%	100.00%
Total VMT (in Millions)	397,968	292,793	690,761

Note: Excludes trips greater than 75 miles.

TABLE 2-10
Person Trips and Vehicle Miles of Travel by Trip Purpose
Residence Inside or Outside the Central City
(Urbanized Area Households)

1990

	Person Trips		VMT	
Trip Purpose	Inside	Outside	Inside	Outside
Earning a Living				
To or From Work	20.59%	21.32%	35.07%	37.99%
Work-Related Business	1.25	1.28	1.85	2.01
Family and Personal Business				
Shopping	19.36	19.29	11.99	11.90
Other Family/Personal Business	21.95	21.61	21.28	18.45
Civic/Educational/Religious	11.36	10.71	4.54	4.68
Social and Recreational				
Vacation/Pleasure Driving	0.28	0.41	0.73	0.82
Visit Friends/Relatives	10.17	9.17	11.00	10.63
Other Social/Recreational	14.39	15.49	12.95	12.77
Other	0.62	0.71	0.57	0.74
Total	100.00%	100.00%	100.00%	100.00%
Person Trips/Total VMT (in Millions)	85,373	65,697	347,574	343,273

Note: Excludes trips greater than 75 miles.

TABLE 2-11
Commute Vehicle Miles of Travel by Trip Length and Gender of Driver
(Urbanized Area Households)

1990

	Gender of Driver		
Trip Length	Male	Female	All
< .5 Mile	0.08%	0.16%	0.11%
1 Mile	0.56	1.03	0.74
2 Miles	1.41	2.46	1.80
3 Miles	2.36	3.52	2.79
4 Miles	1.84	2.75	2.18
5 Miles	3.98	6.18	4.80
6 Miles	2.21	3.31	2.62
7 Miles	2.74	4.54	3.41
8 to 10 Miles	13.15	17.49	14.77
11 to 15 Miles	17.63	20.18	18.58
16 to 20 Miles	14.72	11.90	13.67
21 to 30 Miles	19.10	12.64	16.69
31 to 40 Miles	9.11	7.80	8.62
41 to 50 Miles	6.10	4.14	5.36
51 to 75 Miles	5.03	1.91	3.86
Total	100.00%	100.00%	100.00%
Commute VMT (in Millions)	157,986	94,295	252,280

Note: Excludes trips greater than 75 miles.