

point to another, usually within a certain circumscribed area, whereas the word "transportation" implies movement, but not within any boundary. Second, "transportation" refers to the means, or mode of travel, whereas "circulation" does not.

The following five sections highlight changes in travel behavior, travel patterns, trip time, means of transportation, and supply and demand.

### I. CHANGES IN TRAVEL BEHAVIOR

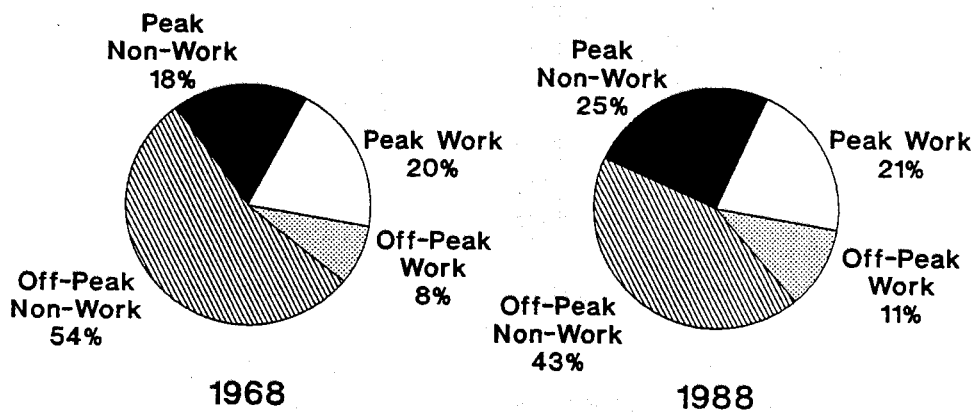
\* Growth in both population and employment and more frequent travel by existing residents resulted in more trips in 1988 than in 1968. Overall, the total number of trips made by County residents for all purposes increased by 68 percent between 1968 and 1988. The total daily trip rate has grown from about 2.3 to 2.8 trips per person per day. Non-work trip rates increased from 1.67 to 1.95 trips per person per day, while

work trips per resident worker have decreased, from 1.60 to 1.46 trips per day. Advances in telecommuting, flexible work hours, and increases in part-time work may have contributed to the decrease in the rate of work trips per worker.

\* Growth in peak period auto travel exceeds growth in non-peak travel in Montgomery County. In 1988, 46 percent of all trips made by auto drivers and passengers were made during the AM and PM peak periods, up from 38 percent in 1968. In 1988, there was a higher proportion of non-work trips (25 percent) made during peak periods than work trips (21 percent), as compared with 1968 when work trips were more prevalent (20 percent vs. 18 percent). The peak period hours are defined as the hours between 6:00-9:00 AM and 3:30-6:30 PM.

\* A major factor influencing growth in non-work trips made during peak periods is the increase in "linked trips". Linked trips are the

### More Non-Work Auto Trips Were Made in the Peak Period Than Work Trips; Work Trips In Off-Peak Hours Increased



Source: Metro. Wash. Council of Govts. & Montgomery County Planning Department

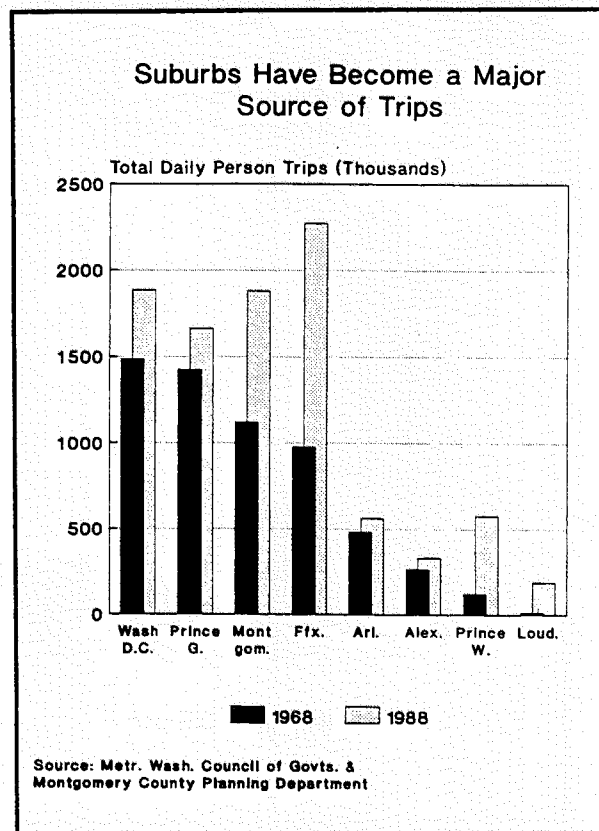
intermediate stops that are made along the way to a traveler's final destination. Typical linked trips include grocery shopping, dry cleaning, fuel stops, and pick-up or drop-off at school or day-care. The growth in both labor force participation rates for women and in two-wage-earner households have been major factors in the growth of linked trips. In the PM peak period, 36 percent of all working women made at least one linked trip in 1988, compared with 25 percent for men.

**\* An increased labor force participation rate for women has created changes in travel behavior.** Between 1970 and 1990, the female labor force participation rate of Montgomery County residents grew from 45 percent to 66 percent, well above the national participation rate of 54 percent. Consequently, the proportion of work trips made by women increased 160 percent. Average commuting time for women in 1988 was 21 minutes, 6 minutes shorter than the average commute time for men.

**\* The proportion of work trips made during off-peak hours increased.** Between 1968 and 1988, the proportion of work trips made during off-peak hours grew from 8 percent to 11 percent of the total trips. The proportion of work trips made in off-peak hours grew from about 30 percent to about 35 percent of daily work trips. Contributing to this increase are a growing number of commuters who depart for work after 9 AM to avoid congested roads and an increase in part-time work in the retail and service sectors.

## II. CHANGES IN TRAVEL PATTERNS

**\* Multiple employment, shopping, and recreational centers have developed in suburban locations throughout the Washington region.** As a result, the suburbs are a major source of trips in the region. An increased proportion of trips, particularly work trips, is made within or between suburbs. Between 1968 and 1988, the proportion of the region's work trips both originating and terminating in areas beyond the Capital Beltway throughout the region has increased from 50 percent to 62 percent, while the proportion of work



trips originating in outer suburbs and terminating inside the Beltway declined. Almost 40 percent of all work trips in the Washington region terminated in areas beyond the Beltway in 1988 compared to 23 percent in 1968. With the exception of Arlington County, the share of trips beginning and ending within the same jurisdiction has increased.

**\* More County residents work here and the share of trips destined for Washington, D.C. has decreased since 1970.** Work trips beginning and ending in the County increased from 54 percent to 59 percent between 1970 and 1987. In absolute terms, trips destined for each of the other jurisdictions increased. However, work trips to the District decreased as a share of the total, from 33 to 25 percent, while the share of work trips terminating in other jurisdictions increased by 3 percent, from 14 to 17 percent.

**\* A shrinking proportion of Montgomery County's work force commutes here from outside the County.** Between 1968 and 1988, the proportion of all work trips that originated in