

III. FACTORS THAT IMPACT TRAVEL BEHAVIOR/PATTERNS

Since 1960, the growth of the Baltimore region has been driven by ever-increasing suburbanization, as city dwellers relocated to adjacent counties, and “migratory spillover” from suburban Washington, D.C. became a factor in the Baltimore region. A look at the recent past may be helpful in understanding the forces that will determine future travel behavior.

From 1960 to 1980, newly constructed transportation facilities in the Baltimore region were designed to facilitate more efficient travel into and out of Baltimore City and from the Baltimore region to the Washington region. The principal area of investment and effort during this period was the I-95 corridor. I-95 remains the primary north-south travel route on the eastern seaboard, so the Baltimore region experiences large volumes of purely “pass-through” traffic in this corridor as well.

Median household incomes in Maryland exceed United States (U.S.) national averages and, as a result, in most Maryland cities and counties there are high rates of automobile ownership and availability. According to the *Baltimore Regional Household Travel Survey: Findings (1995)*, 91 percent of households in the region have at least one available vehicle for every licensed driver.

The emergence of two-income families has also made suburban and rural housing available to a wide range of the region’s citizens, contributing to the population shift away from Baltimore City. The dispersion of population and households to the suburban areas of the region has also resulted in longer work trips.

The primary factors that have impacted our transportation system are socio-economic changes and land development. The locational choices made by individuals and businesses in the region have sent a clear challenge to transportation planners and providers.

Demographic and Socio-Economic Factors

Continuing evolution in the gender makeup of the paid workforce, along with different land development patterns, have radically altered the movement of persons and goods. Continuing reductions in household size, widespread auto availability, and the ongoing suburbanization of population and jobs have resulted in intense use of the region’s transportation system. The highway system in particular has been heavily impacted due to revised commuting behavior. The challenge to planners and decision makers is to be mindful of the social and economic forces responsible for these changes.

Significant changes in travel behavior during the last 20 years can be attributed to the increased participation of women in the work force. By 1990, 60 percent of all married women in the U.S., and at least that many single women, were members of the paid labor force. Even when engaged in paid employment, women retain most traditional domestic obligations, such as childcare and shopping for the family’s needs.

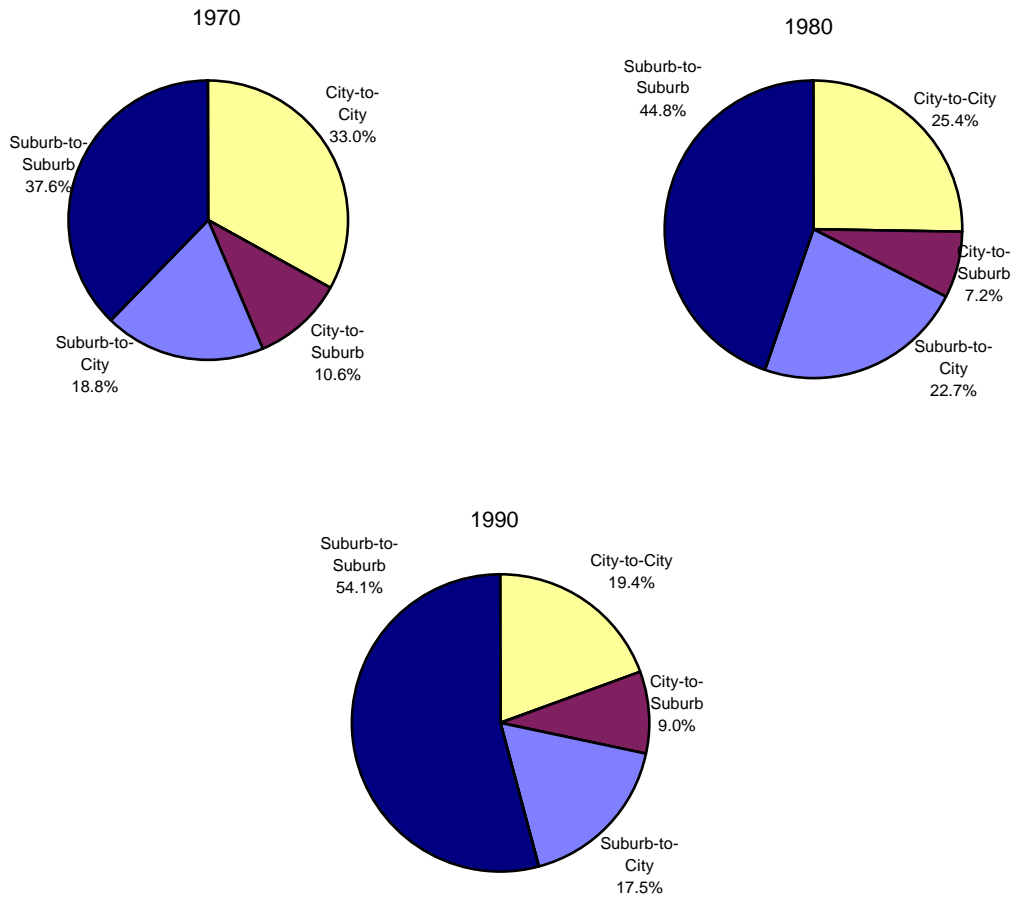
The commute patterns of men and women alike reflect the realities that govern dispersed, suburban lifestyles and two-income families. For all commuters, the need for flexible, easily-adjusted time schedules continues to increase. This may be a reason for the expansion of the morning and evening peak commute periods in large urban areas.

Commuting Choices

Commuting patterns in the Baltimore region were quite different in the 1970s and into the 1980s.

Census data have historically displayed commuting patterns. Baltimore City was the premier employment destination, with a predominant number of workers living within five miles of the City. Baltimore City still remains as a strong anchor for attracting and producing work trips in the Baltimore region. However, a large increase in the percentage of commute trips from suburb to suburb has emerged, often to suburbs on opposite sides of the region. From 1970 to 1990, the suburb-to-suburb commute trips, as a percentage of total work trips in the region, increased from 38 percent to 54 percent. Figure III-1 illustrates changes in commuting patterns from 1970 to 1990.

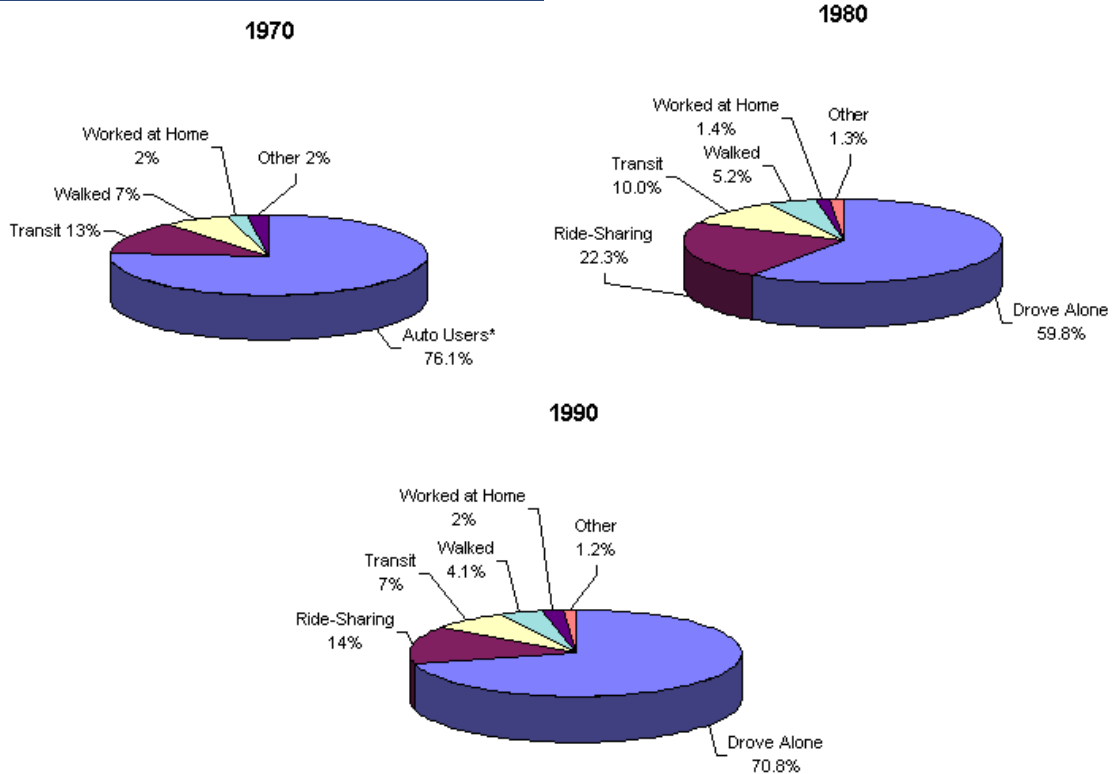
Figure III-1 Commuting Patterns — 1970, 1980, & 1990



Source: 1970, 1980, & 1990 Census

The availability of automobiles has long been a major factor in determining a population’s travel behavior. Nearly 85 percent of work trips in the Baltimore area in 1990 were made by drivers and passengers in automobiles as shown in Figure III-2. This compares to 78 percent in 1970, and 82 percent in 1980. In 1970, public transit was a very useful option for commuters, and was used by 13 percent of workers regionwide. By 1990, the percentage of Baltimore region commuters using transit was down to seven percent. Walking to work, as late as 1970, commanded a seven percent share of work commute travel, as might be expected when workers and jobs are in fairly close proximity. By 1990, with the population dispersing from the central city, walk trips had diminished to four percent of total work trips.

Figure III-2 Distribution of Work Travel Modes — 1970, 1980, & 1990



* 1970 data did not distinguish between "Drove Alone" and "Ride-Sharing"
 Source: 1970, 1980, & 1990 Census

Land Development Patterns

The transportation system of the Baltimore region is increasingly pressed to serve our growing and dispersed patterns of travel. Two factors in particular are stretching the transportation system to its limits: the growth of suburban job centers and suburban housing development.

The distribution of population in these areas is even more significant than the absolute numbers, since the effects on trip-making are directly linked to the distribution of residences, employment, and desired services. The dispersal of the region's population brought on by increasing suburbanization is a major factor in increased trip-making and traffic congestion. Travel is especially heavy along corridors that connect major activity centers:

- I-95 between I-695 and I-495 in the Washington region
- MD 32 between the Odenton and Fort Meade areas
- I-83 between Hunt Valley, Timonium, Towson and downtown Baltimore
- I-795/Route 140 between the Baltimore Beltway, Owings Mills and Carroll County

- I-95 between White Marsh and Havre de Grace
- MD 24 between Edgewood and Bel Air

The revised travel patterns resulting from dispersed suburban development are difficult to serve using the existing radial highway and transit network. Traffic congestion, previously limited to peak hours of operation on urban freeways, has spread to the cross-county roadway system and occurs during a larger portion of the day. The rush hour is increasing in both location and duration. Interaction of the Baltimore region with surrounding regions is also projected to become a more significant travel pattern.