A Demographic Exploration of Frederick County
Census 2000
Commuting Characteristics

Welcome to the May, 2004 edition of "A Demographic Exploration of Frederick County." This month, Commuting characteristics will be explored. Using the responses from the 2000 US Census, these attributes will be examined in order to create "A Demographic Exploration of Frederick County." For further information on the demographics of Frederick County, please visit the Demographics Home Page at http://www.co.frederick.md.us/planning/Demographics/DemographicsHome.html

According to the 2000 US Census, there has been a national trend toward longer commutes to and from work. In 1990, the average time Americans spent going to work was 22 minutes. In 2000, this time increased to 26 minutes. The residents of Frederick County are no exception to this national trend. They actually spend, on average, 5 more minutes commuting to work than most Americans (Figure 1). 1 in every 6 Frederick County residents, who do not work at home, commutes 60 minutes or more to work each day.

The mean travel time to work for the County's residents has progressive gotten higher in the last 20 years. The reasons for this increase in commuting time may be multifaceted. Perhaps it is due to the increase in traffic volume throughout the area or it may be due to people living further away from their work place. Most likely, it is a combination of the two. The impacts of where people live in relation to where they work have been a consideration for planning residential developments, road networks and improvements, transit systems, population projections, environmental policies, and economic growth. The US Census brings to light some of the trends occurring that may help us to better understanding issues in commuting.

	1980	**1990**	**2000**	**Percent of Increase from 1980 to 2000**
Mean Travel Time to Work (Minutes)	26.6	28.3	31.9	20 %

Figure 1.

By examining the Means of Transportation to Work table (SF P30), created by the US Census, some interesting trends can be highlighted (Figure 2). For example, since 1980 the percentage of people carpooling to work in Frederick County has dropped 17 %, while the number of persons driving alone to work has increased 155 %. This trend may cause more traffic congestion, hence longer commutes to work. In 1980, 1 in every 54 people rode public transportation to work. In 1990, 1 in every 50 people rode public transportation to work. The amount of people riding public transportation to work rose 65 % during this decade. However, since 1990, this increase has greatly lost ground in commuting considerations. In 2000, only 1 in every 73 people rode public transportation to work. That is a 14 % drop from 1990.

One interesting trend is that even though Public Transportation as a whole has been on a downward trend since 1990, the people using the Subway/Elevated has been on the rise in Frederick County. An increase of 37 % occurred through out the last decade. With the new MARC train coming into the area, maybe the Public Transportation section will see another upward swing in the next decade.

Means of Transportation to Work Frederick County Residents 1980 To 2000					
	1980	**1990**	**2000**	**Absolute Change 1980 – 2000***	**% Change 1980 – 2000***
Total Workers 16 Years & Over	53,447	80,850	102,318	48,871	91 %
Means of Transportation to Work					
Car/Truck/Van:	47,074	72,769	93,757	46,683	99 %
Drove Alone	31,755	58,955	81,092	49,337	155 %
Carpooled	15,319	13,814	12,665	-2,654	-17 %
Public Transportation:	988	1,626	1,405	417	42 %
Bus Trolley Bus	N/A	689	439	-250	-36 %
Streetcar/Trolley Car	N/A	9	8	-1	-11 %
Subway/Elevated	N/A	222	304	82	37 %
Railroad	N/A	585	521	-64	-11 %
Ferryboat	N/A	6	0	-6	-100 %
Taxicab	N/A	115	133	18	16 %
Other Means:	657	677	440	-217	-33 %
Motorcycle	N/A	86	78	-8	-9 %
Bicycle	N/A	111	137	26	23 %
Walked/Worked at Home:	4,728	5,778	6,501	1,773	38 %
Walked	N/A	2,929	2,413	-516	-9 %
Worked at Home	N/A	2,849	4,088	1,239	44 %
* If 1980 number is N/A it is not included in this statistic. The change presented is only from 1990 to 2000.					

Figure 2.

Another consideration when discussing commuting and travel times is where are people living in relation to where they are working. This could also be one of the reasons why Frederick County has a higher than the national average mean travel time to work. Frederick County is centrally located between south central Pennsylvania, western Maryland, and the Washington DC Metro Areas. This causes a great influx of people commuting into and out of Frederick County each day in order to get to work. Figure 3 is a great map, which shows where people are commuting from and to each day.

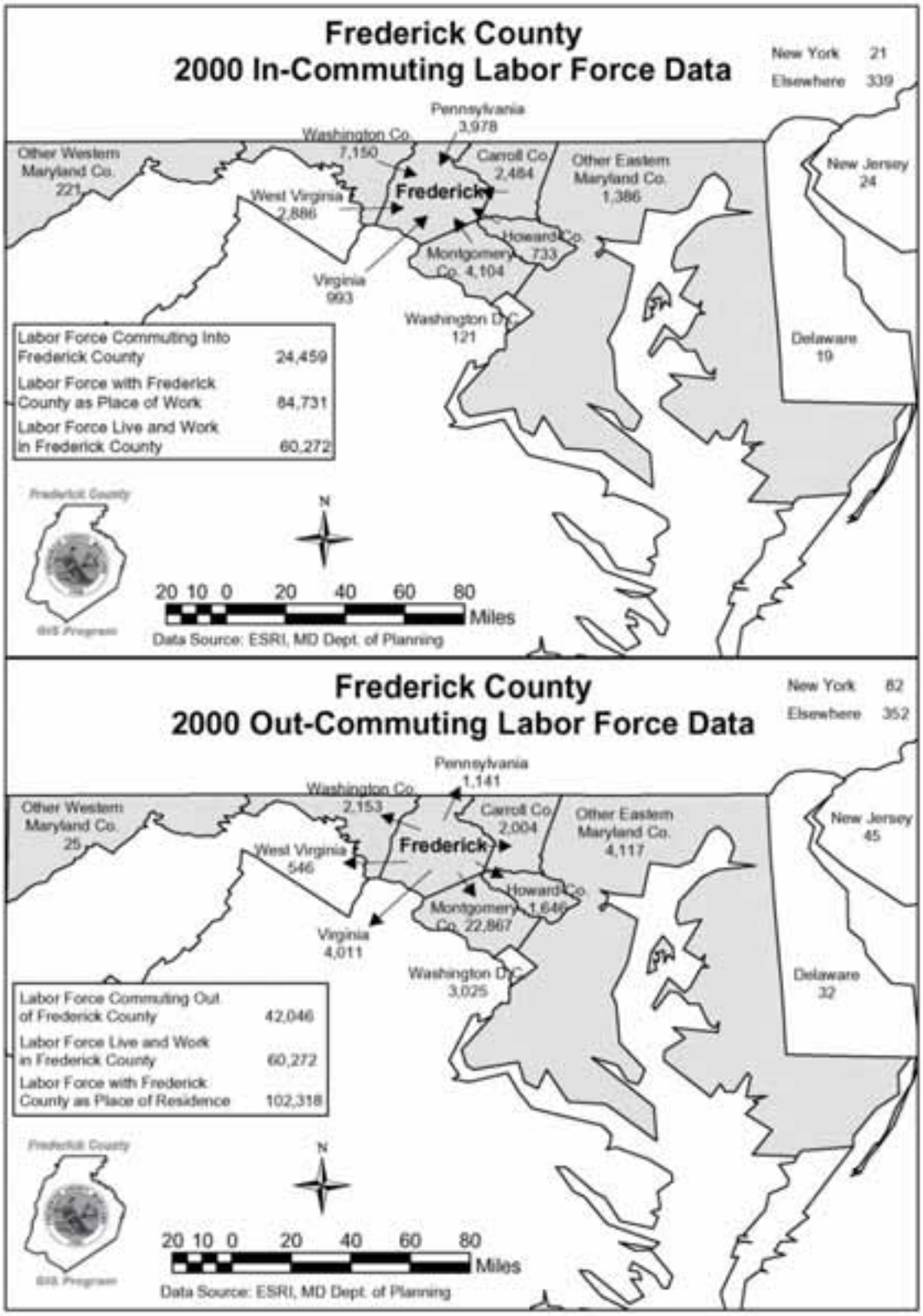
Frederick County
2000 In-Commuting Labor Force Data
New York 21
Elsewhere 339
Pennsylvania 3,978
Washington Co. 7,150
Carroll Co. 2,484
Other Western Maryland Co. 221
Other Eastern Maryland Co. 1,386
New Jersey 24
West Virginia 2,886
Frederick
Howard Co. 733
Montgomery Co. 4,104
Virginia 993
Washington D.C. 121
Delaware 19
Labor Force Commuting Into Frederick County 24,459
Labor Force with Frederick County as Place of Work 84,731
Labor Force Live and Work in Frederick County 60,272
N
20 10 0 20 40 60 80 Miles
Data Source: ESRI, MD Dept. of Planning
Frederick County 2000 Out-Commuting Labor Force Data
New York 82
Elsewhere 352
Pennsylvania 1,141
Washington Co. 2,153
Carroll Co. 2,004
Other Western Maryland Co. 25
Other Eastern Maryland Co. 4,117
New Jersey 45
West Virginia 546
Frederick
Howard Co. 1,646
Montgomery Co. 22,867
Virginia 4,011
Washington D.C. 3,025
Delaware 32
Labor Force Commuting Out of Frederick County 42,046
Labor Force Live and Work in Frederick County 60,272
Labor Force with Frederick County as Place of Residence 102,318
N
20 10 0 20 40 60 80 Miles
Data Source: ESRI, MD Dept. of Planning

Figure 3.

In 2000, 1 in every 2 people (59 %) lived and worked in Frederick County. This was approximately the same figure for 1990, with 60 % of the population living and working in Frederick County. This is slightly higher than Maryland; 54 % of Maryland residents live and work in the same county.

The residents of Frederick County who do not work here mostly commute to the east, including eastern Maryland counties, Washington DC, and Virginia. In 2000, the top 3 areas residents of Frederick County commuted to where 1. Montgomery County 2. Virginia and 3. Washington DC. In 1990, the top 3 areas to commute to were 1. Montgomery County 2. Washington DC and 3. Eastern Maryland.

The workers of Frederick County, who do not live here, mostly come from the north, west, and southwestern regions. In both 1990 and 2000 the top 3 areas of in commuting workers were 1. Washington County 2. Pennsylvania and 3. West Virginia (see Figure 4).

Area of Commuting	**Net Commuting* 1990**	**Net Commuting* 2000**	**Percentage of Change 1990 - 2000**
Western Maryland	161	196	22 %
West Virginia	1,384	2,340	69 %
Virginia	-2,213	-3,018	-36 %
Washington County	3,999	4,997	25 %
Pennsylvania	2,837	1,828	55 %
Carroll County	-198	480	142 %
Eastern Maryland	-2,235	-2,731	-22 %
Howard County	-462	-913	-98 %
Montgomery County	-16,644	-18,763	-13 %
Washington DC	-2,563	-2,904	-13 %
* Net commuting is in-commuting minus out-commuting			

Figure 4.

For the most part, between 1990 and 2000, the areas Frederick County residents were commuting to stayed the same. The only county that lost Frederick County resident workers was Carroll. In 1990, there were 1,688 Frederick County residents commuting into Carroll County and 1,490 Carroll County residents commuting into Frederick County. This means there were 198 more Frederick County residents that commuted to Carroll County. In 2000, there were 2,484 Carroll County residents coming into Frederick County to work and 2,004 Frederick County residents going to Carroll County to work. This is a net-commuting rate of 480 more people coming to work in Frederick than were leaving to work in Carroll. In essence, Frederick County gained 282 workers from Carroll County between 1990 and 2000.

The mean travel time to work for Frederick County residents may be on the rise due to a number of factors; a longer mileage commute or just more traffic due to a rise in solo drivers. What the cause may be has important consequences for the planning and development of the County from traffic control, environmental policy, health programs, and residential development.