

Journey-to-Work Trends in Eight Suburban Townships 1970 - 1990



DIRECTION 2020

A Region on the Rise

**JOURNEY-TO-WORK TRENDS
IN EIGHT SUBURBAN TOWNSHIPS
1970 - 1990**

Direction 2020 Report #17



**DELAWARE VALLEY
REGIONAL PLANNING COMMISSION**

**The Bourse Building
21 South 5th Street, Philadelphia, PA 19106**

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DELAWARE VALLEY REGIONAL PLANNING COMMISSION

Publication Abstract

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JOURNEY-TO-WORK TRENDS IN EIGHT SUBURBAN TOWNSHIPS 1970 - 1990	Publication No. 94004

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Mount Laurel, Voorhees, Washington, and East Windsor (New Jersey)
Lower Makefield, West Whiteland, Concord, and Upper Merion (Pennsylvania)

Key Words:

Journey-to-work, resident workers, employment, households, automobile ownership, means of transportation, travel time, commuting patterns.

ABSTRACT

Journey-to-Work data from the 1990 Census are used to construct profiles of resident and employed workers and to determine commuting patterns for eight suburban townships of the Delaware Valley Region. Comparison with similar data from the 1970 and 1980 census is used to establish demographic, employment, and automobile ownership trends. Changes in the means of transportation and travel times are also analyzed.

For More Information Contact:



Delaware Valley Regional Planning Commission
Regional Information Services Center
The Bourse Building
21 South 5th Street
Philadelphia Pa. 19106
(215) 592-1800

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 - III. 1990 Census Journey-to-Work Travel Patterns of Resident Workers
 - IV. 1990 Census Journey-to-Work Travel Patterns of Employed Workers
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EXECUTIVE SUMMARY

This report analyzes work trips made in the following eight suburban townships within the Delaware Valley region: Mount Laurel (Burlington County), Voorhees (Camden), Washington (Gloucester), and East Windsor (Mercer) in New Jersey, Lower Makefield (Bucks County), West Whiteland (Chester), Concord (Delaware), and Upper Merion (Montgomery) in Pennsylvania. This report is based on data obtained at the municipal level from the 1990 Census Transportation Planning Package (CTPP). Some of the values may differ slightly from census numbers obtained from other files.

These eight townships are representative of the growth in population and employment, and the development that occurred between 1970 and 1990, in each of the eight counties of the Delaware Valley Region. A comparison with 1970 and 1980 census data is used to determine demographic, employment, and travel trends. The report provides profiles of workers by sex, income, occupation, industry, and employment class. The means of transportation used to travel to work and the time required are also analyzed.

The worker profiles constructed from the census data show that:

- The number of female workers is increasing faster than the number of male workers in each of the study townships. However, the number of female employed workers is more mixed. In some townships the employed work force is predominantly male and in the other townships the majority of employed workers is female.
 - On average, resident workers earn more than employed workers, indicating that township residents are commuting to better paying jobs than those filled by employed workers commuting from other jurisdictions.
 - *The service* sector employs from one-fourth to one-third of the resident workers. *Manufacturing* ranks second in this category in all townships except Voorhees and Washington. In these townships, the second position is held by retail trade and the third by manufacturing.
 - In general, the number of carless and single-car households has not changed significantly over the last twenty year period. However, all townships experienced increases in two-car and three-or-more-car households during both the 1970s and 1980s.
 - Overall travel times, which largely reflect driving times, and which have not changed significantly since 1980, average between 15 and 30 minutes. Further, in all the selected townships except Upper Merion, employed workers enjoyed shorter trip times than did resident workers.
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I. INTRODUCTION

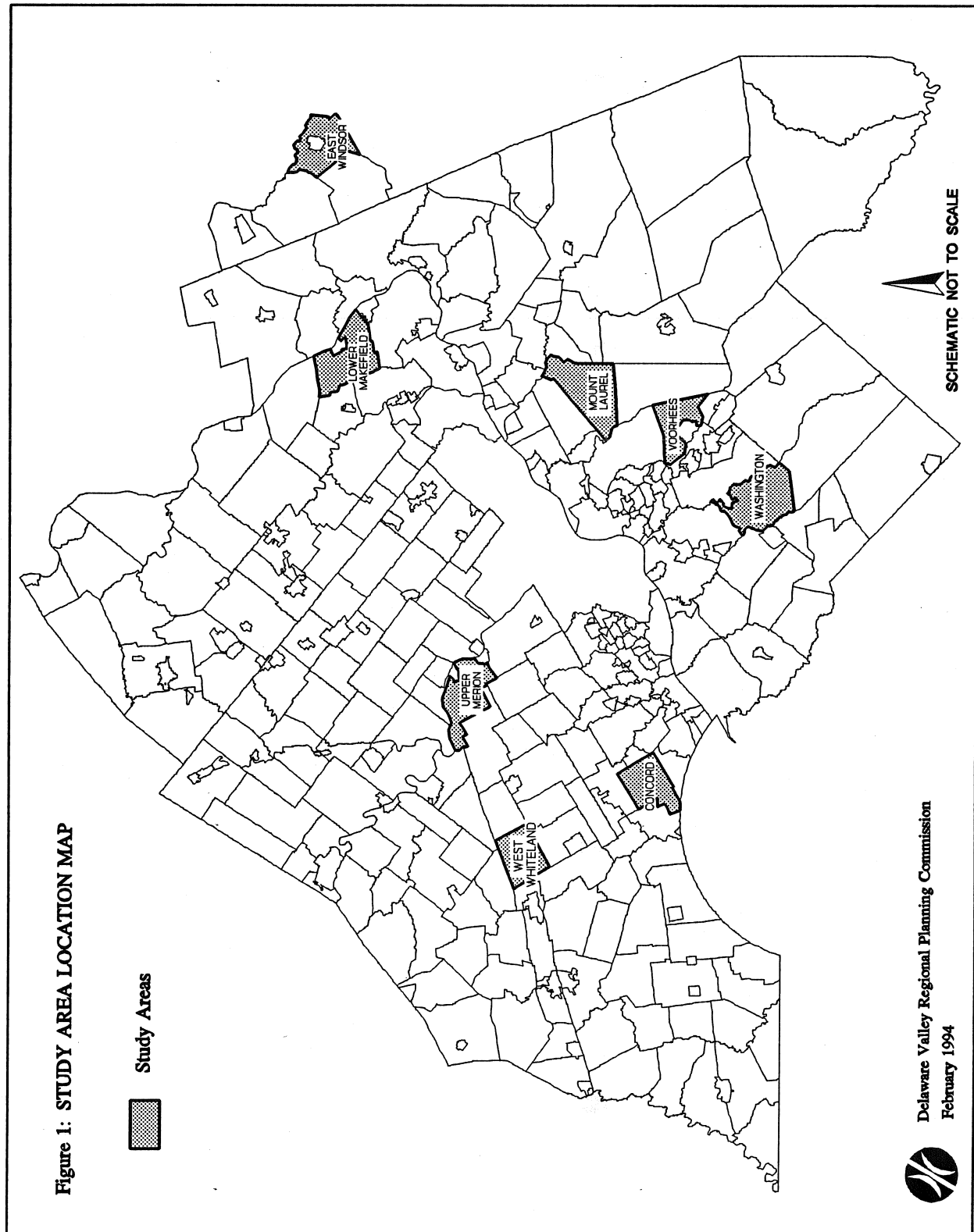
Since its inception in 1965, the Delaware Valley Regional Planning Commission (DVRPC) has maintained a transportation data base for the nine counties that comprise the region and their component municipalities. These data are derived mainly from the decennial census, which includes a component on work commutation based on returns from a detailed questionnaire sent to approximately 17 percent of households. The release of 1990 census data provides DVRPC with an opportunity to update its data base and examine transportation trends throughout the region. This report develops profiles and describes the commutation patterns of workers who either live or work in eight suburban townships contained within the region: Mount Laurel (Burlington County), Voorhees (Camden), Washington (Gloucester), and East Windsor (Mercer) in New Jersey, Lower Makefield (Bucks County), West Whiteland (Chester), Concord (Delaware), and Upper Merion (Montgomery) in Pennsylvania. The report supersedes an earlier report, Worker Profiles and Journey-to-Work Trends in Eight Suburban Townships, that was published by DVRPC in May 1986.

This report is based on data obtained at the municipal level from the 1990 Census Transportation Planning Package (CTPP). Some of the values may differ slightly from census numbers obtained from other files.

These eight townships examined are representative of the growth in population and employment, and the development that occurred between 1970 and 1990 in each of the eight counties of the Delaware Valley Region. Philadelphia County is treated in a separate report published concurrently.¹

The Census Bureau gathers the employment and journey-to-work data found in the CTPP by asking its respondents where they worked during the previous week, and matching the results with their places of residence. It should be noted that these data do not count all employment. Most importantly, the method does not account for people who for whatever reason were absent from work during the census week, and second, since the question refers to the primary place of employment, it does not include information on second jobs. A third factor is also present, as the job worked during the census week may be a temporary assignment, and if the job is far removed from the usual place of work, the work trip indicated may not represent daily commutation. Finally, a fourth factor relates to problems in coding. The census coding firmly establishes the home end of the work trip, but locating the work end can sometimes be more difficult. The employment data used in this report are census numbers and do not represent all the employment (jobs) present. Typically, full employment is about five to ten percent higher than the figures reported here.

¹ Journey-To-Work Trends in Camden, Trenton, Chester, and Philadelphia, 1970-1990, D.V.R.P.C., Pub. No. 94002, February 1994



II. DEMOGRAPHIC AND EMPLOYMENT TRENDS

A. Population

Washington Township, with almost 42,000 people, has the largest population of the eight townships. The next largest townships are Mount Laurel and Lower Makefield, with approximately 30,000 and 25,000, respectively. Concord Township is the smallest of the eight, with a population less than 7,000. Table 1 shows changes in population and households that occurred between 1970 and 1990.

This table indicates that the population increased faster during the 1970s than during the 1980s for all of the townships except Mount Laurel and Lower Makefield. Indeed, Mount Laurel Township experienced an increase of almost 72 percent in population during the 1980s, compared to an increase of 57 percent during the 1970s. Lower Makefield Township experienced a similar pattern, but to a smaller magnitude (i.e., an increase of 45 percent in the 1980s and 17 percent during the 1970s). This can be explained by the fact that, in general, most of these suburban townships were developed during the 1970s, except townships such as Lower Makefield and Mount Laurel. During 1980s, however, these two townships became more attractive due to several factors, including improved highway and transit access.

Upper Merion Township, however, experienced a slight decrease in population during the 1980s (approximately 1.6 percent). Growth in Upper Merion Township peaked earlier, and household size declined as the population matured. Figure 2 illustrates the above findings.

B. Households

Table 1 indicates that Washington Township, with more than 13,000 households, has the largest number of households of the eight townships. The next townships are Mount Laurel and Upper Merion Townships, with 11,800 and 10,600 households, respectively. While the number of households changed in consort with the population, in all cases the household growth rates exceeded those for population. Throughout the region household size has declined. Except for Mount Laurel and Lower Makefield townships, all of the townships experienced lower growth during the 1980s than during the 1970s.

C. Resident workers

Resident workers counts workers where they live, regardless of where they worked. The trends were positive for all eight townships during the 1970s and 1980s. The largest resident work force is found in Washington Township, where 21,600 workers start their trips. Next highest are Mount Laurel and Upper Merion townships, with 17,300 and 15,500 workers, respectively. Concord Township has the smallest number of *resident workers*, approximately 3,600. In percentage terms the biggest gains were registered in Mount Laurel, where the

number of residents with jobs increased by approximately 103 and 113 percent during the 1970s and 1980s, respectively. This was followed by Voorhees Township, which grew steadily during the two decades. Significant increases in the number of *resident workers* were also recorded in Washington and Lower Makefield townships, which saw increases of 85 and 68 percent, respectively, during the 1980s. The smallest increase was experienced by Upper Merion Township, where the number of *resident workers* increased during the 1980s by a relatively modest 9 percent.

D. Employment

Employment counts people where they work, i.e., it represents the number of primary jobs held in each jurisdiction. Of the eight selected townships, Upper Merion offers the largest concentration of jobs, over 40,000. This is followed by Mount Laurel and Voorhees townships, with 19,500 and 14,900, respectively. Upper Makefield Township, with 3,700 jobs, offers the least employment.

The biggest gains were in Mount Laurel, where employment increased by 106 and 197 percent during 1970s and 1980s, respectively. Large percentage gains during the 1980s were also recorded by West Whiteland (168%), Voorhees (134%), and Washington (100%) townships. Figure 3 and Table 1 illustrate the above findings.

E. Automobile Ownership

Table 2 shows automobile ownership for the eight townships between 1970 and 1990. Overall, the number of carless and single-car households has not changed significantly over the twenty-year period. The share of households that is transit dependent, i.e., owns no automobiles, ranges from 1 to 6 percent, with Lower Makefield Township at the low end and Voorhees at the high end.

In contrast, all of the townships experienced increases in two-car and three-or-more-car households during both the 1970s and 1980s. The share of households owning three or more cars now ranges from 14 percent in East Windsor Township to 34 percent in Concord Township. In all but two townships, Mount Laurel and West Whiteland, this share was higher in 1990 than in 1980.

In each of the townships the total number of automobiles owned by residents has steadily increased, largely because of an increase in multi-car households, rather than a decline in carless households. The largest percentage gains during the 1980s occurred in Mount Laurel (120%), Voorhees (116%), and Washington (90%).

Table 1
DEMOGRAPHIC AND EMPLOYMENT TRENDS
1970 – 1990

POPULATION

Township	1970	1980	1990	Percent Change	
				*70--*80	*80--*90
Mount Laurel	11,221	17,614	30,270	57.0	71.9
Voorhees	6,214	12,919	24,559	107.9	90.1
Washington	15,741	27,878	41,960	77.1	50.5
East Windsor	11,736	21,041	22,353	79.3	6.2
Lower Makefield	14,804	17,351	25,124	17.2	44.8
West Whiteland	7,149	9,581	12,403	34.0	29.5
Concord	4,592	6,437	6,933	40.2	7.7
Upper Merion	23,699	26,138	25,722	10.3	-1.6

HOUSEHOLDS

Township	1970	1980	1990	Percent Change	
				*70--*80	*80--*90
Mount Laurel	2,847	5,371	11,784	88.7	119.4
Voorhees	1,665	4,592	9,085	175.8	97.8
Washington	4,223	8,275	13,212	96.0	59.7
East Windsor	3,879	7,514	8,591	93.7	14.3
Lower Makefield	3,923	5,216	8,576	33.0	64.4
West Whiteland	1,859	3,018	4,655	62.3	54.2
Concord	1,192	1,802	2,239	51.2	24.3
Upper Merion	6,894	9,295	10,551	34.8	13.5

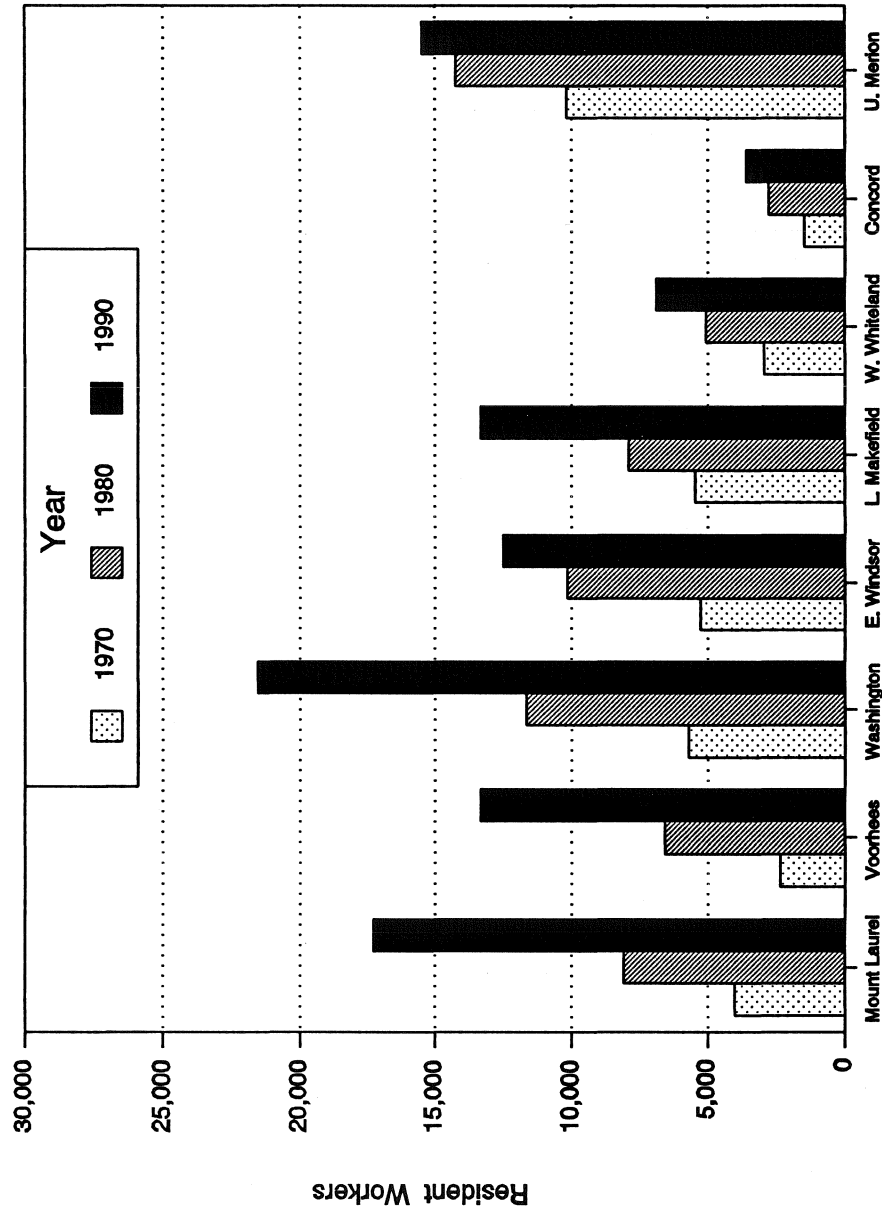
RESIDENT WORKERS

Township	1970	1980	1990	Percent Change	
				*70--*80	*80--*90
Mount Laurel	3,999	8,115	17,265	102.9	112.8
Voorhees	2,342	6,582	13,314	181.0	102.3
Washington	5,707	11,630	21,573	103.8	85.5
East Windsor	5,279	10,160	12,492	92.5	23.0
Lower Makefield	5,463	7,903	13,314	44.7	68.5
West Whiteland	2,924	5,067	6,917	73.3	36.5
Concord	1,478	2,758	3,580	86.6	29.8
Upper Merion	10,189	14,215	15,486	39.5	8.9

EMPLOYMENT

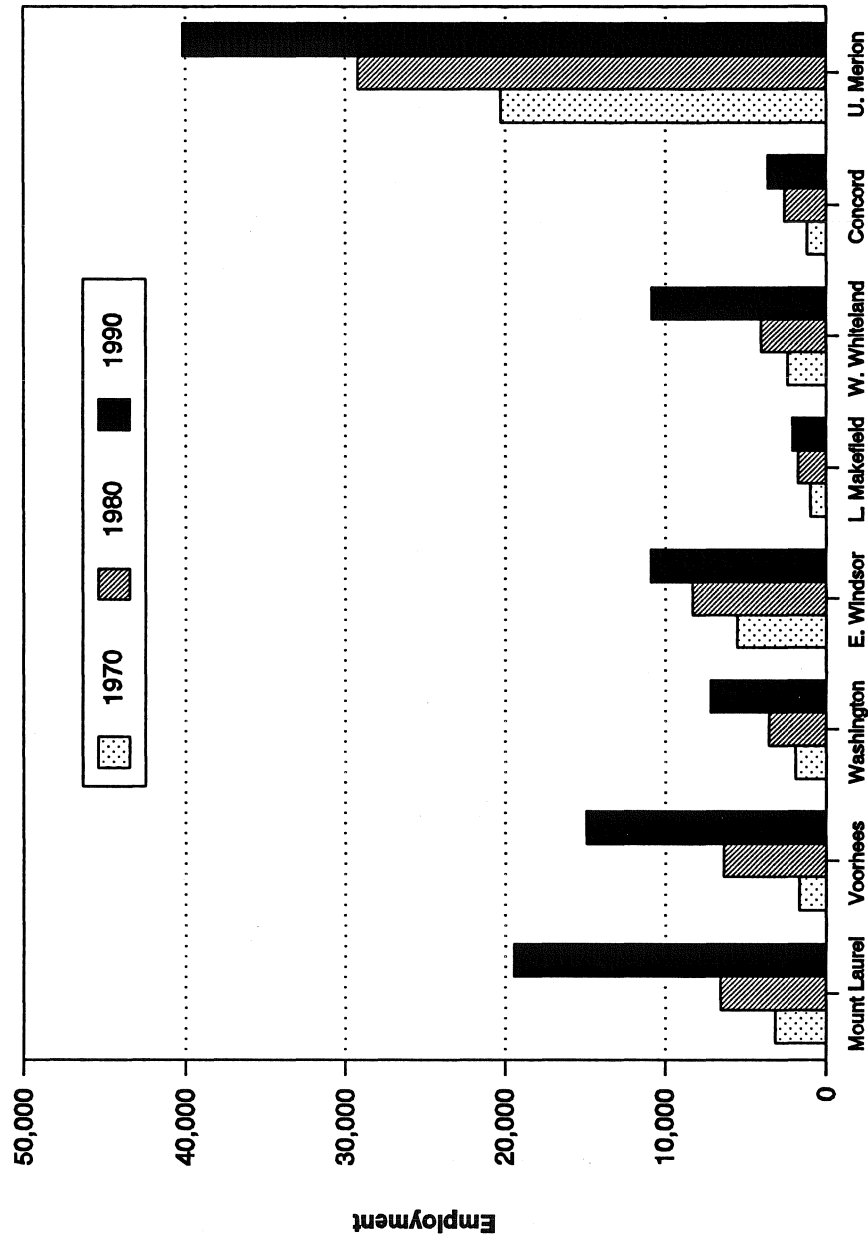
Township	1970	1980	1990	Percent Change	
				*70--*80	*80--*90
Mount Laurel	3,176	6,554	19,455	106.4	196.8
Voorhees	1,676	6,381	14,925	280.7	133.9
Washington	1,926	3,590	7,185	86.4	100.1
East Windsor	5,514	8,315	10,928	50.8	31.4
Lower Makefield	1,005	1,766	2,132	75.7	20.7
West Whiteland	2,404	4,054	10,859	68.6	167.9
Concord	1,210	2,612	3,655	115.9	39.9
Upper Merion	20,261	29,231	40,215	44.3	37.6

Figure 2 : 1970, 1980 AND 1990 RESIDENT WORKERS



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Figure 3: 1970, 1980 AND 1990 EMPLOYMENT



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Table 2
TRENDS IN AUTOMOBILE OWNERSHIP
1970 – 1990

0–CAR HOUSEHOLDS

Place of Residence	1970	1980	1990	Percent Change	
				'70–'80	'80–'90
Mount Laurel	90	72	195	-20.0	170.8
Voorhees	82	178	533	117.1	199.4
Washington	115	198	262	72.2	32.3
East Windsor	102	518	413	407.8	-20.3
Lower Makefield	41	58	96	41.5	65.5
West Whiteland	49	71	79	44.9	11.3
Concord	42	53	29	26.2	-45.3
Upper Merion	221	262	360	18.6	37.4

1–CAR HOUSEHOLDS

Place of Residence	1970	1980	1990	Percent Change	
				'70–'80	'80–'90
Mount Laurel	987	1,752	3,907	77.5	123.0
Voorhees	774	2,003	2,852	158.8	42.4
Washington	1,859	3,034	2,893	63.2	-4.6
East Windsor	1,833	3,366	3,061	83.6	-9.1
Lower Makefield	957	1,093	1,516	14.2	38.7
West Whiteland	734	1,092	1,198	48.8	9.7
Concord	416	539	411	29.6	-23.7
Upper Merion	2,817	3,606	3,516	28.0	-2.5

2–CAR HOUSEHOLDS

Place of Residence	1970	1980	1990	Percent Change	
				'70–'80	'80–'90
Mount Laurel	1,592	2,671	5,875	67.8	120.0
Voorhees	704	1,844	4,199	161.9	127.7
Washington	1,895	4,180	7,240	120.6	73.2
East Windsor	1,822	3,088	3,913	69.5	26.7
Lower Makefield	2,419	3,051	4,702	26.1	54.1
West Whiteland	832	1,401	2,524	68.4	80.2
Concord	568	816	1,030	43.7	26.2
Upper Merion	3,280	4,362	4,827	33.0	10.7

3+ CAR HOUSEHOLDS

Place of Residence	1970	1980	1990	Percent Change	
				'70–'80	'80–'90
Mount Laurel	178	876	1,807	392.1	106.3
Voorhees	105	567	1,501	440.0	164.7
Washington	354	863	2,817	143.8	226.4
East Windsor	122	542	1,204	344.3	122.1
Lower Makefield	506	1,014	2,262	100.4	123.1
West Whiteland	244	454	854	86.1	88.1
Concord	166	394	769	137.3	95.2
Upper Merion	576	1,065	1,848	84.9	73.5

AUTOMOBILES

Place of Residence	1970	1980	1990	Percent Change	
				'70–'80	'80–'90
Mount Laurel	4,722	9,897	21,747	109.6	119.7
Voorhees	2,507	7,503	16,242	199.3	116.5
Washington	6,746	14,156	26,963	109.8	90.5
East Windsor	5,855	11,276	14,996	92.6	33.0
Lower Makefield	7,363	10,440	18,541	41.8	77.6
West Whiteland	3,154	5,347	9,203	69.5	72.1
Concord	2,066	3,432	5,139	66.1	49.7
Upper Merion	11,162	15,738	19,310	41.0	22.7

III. 1990 WORKER PROFILES

Data from the 1990 CTPP permits the construction of profiles that display the characteristics of the work force, both resident and *employed* in the eight townships. These characteristics are summarized in Table 3, and shown with greater detail in Appendices I (*resident workers*) and II (*employed workers*).

A. Sex

In each of the study townships there are more male *resident workers* than female. However, in each case the number of female workers is increasing faster than male. The greatest gender imbalance is found in Concord Township, where men constitute 58% of the resident work force; the least imbalance is found in Upper Merion (53% male). Whereas in 1980 the imbalance ranged from 64 percent (Washington) down to 56 percent (East Windsor).

The picture is more mixed with respect to *employed workers*. In some townships the *employed* work force is predominantly male, such as East Windsor Township (61% male), whereas in others the imbalance goes as far in the other direction, e.g., Voorhees Township (40% male). Other townships where women fill the majority of local jobs are Washington (43% male) and Lower Makefield (44% male). Generally, women are increasing their presence in the *employed* work force, but in East Windsor Township the mix has moved in the other direction. The gender ratio in Concord Township is essentially the same in 1990 as in 1980 (59% male). Table 3 supports the preceding findings.

B. Income

Table 3 shows the median and mean income for resident and *employed workers* in the eight townships. Median earnings of *resident workers* range from \$26,600 in Washington Township to \$33,400 in Lower Makefield Township. Household income follows the same order, and is roughly 1.5 times the earnings of individual workers.

Median earnings of *employed workers* range from \$17,100 in Washington Township to \$27,400 in Upper Merion Township. In each case the earnings of *employed workers* are less than that of *resident workers*. In other words, township residents are commuting to better paying jobs than those filled by *employed workers* commuting from other jurisdictions.

Mean earnings are generally about 15 to 30 percent higher than median earnings, although some of the ratios fall outside this range. This is caused by the skewness of the income distribution, in which a relatively few individuals (or households) earn incomes well above the median.

Table 3
1990 WORKER PROFILES

Characteristics	Mount Laurel		Voorhees		Washington		East Windsor	
	Resident Workers	Employment	Resident Workers	Employment	Resident Workers	Employment	Resident Workers	Employment
SEX								
Male	9,301	10,392	7,345	6,013	12,149	3,105	6,754	6,617
Female	7,964	9,063	5,969	8,912	9,424	4,080	5,738	4,311
Total	17,265	19,455	13,314	14,925	21,573	7,185	12,492	10,928
OCCUPATION								
Executive	3,551	3,673	3,147	1,939	3,762	601	2,729	2,038
Professional	3,328	2,048	2,866	2,222	4,228	1,328	2,710	2,112
Clerical	3,086	4,644	1,722	3,274	3,482	1,096	2,356	2,142
Service	1,110	1,676	935	1,902	1,818	1,013	969	834
Laborer	1,030	2,045	756	723	1,779	896	861	1,101
Other	5,160	5,369	3,888	4,865	6,504	2,251	2,867	2,701
INDUSTRY								
Manufacturing	2,467	2,819	1,836	420	2,956	432	2,255	4,775
Transp/Comm/Util	1,169	1,521	795	630	1,747	519	811	505
Retail Trade	2,458	2,259	2,024	313	3,692	2,109	1,539	1,187
F.I.R.E.	1,807	3,516	1,517	461	1,774	473	1,433	1,103
Services	6,020	5,566	4,702	11,769	7,734	2,798	4,709	2,199
Government	854	320	525	9	869	154	505	230
Other	2,490	3,454	1,915	1,323	2,801	700	1,240	929
CLASS								
Private	14,023	17,767	10,767	13,199	17,100	5,256	10,104	9,673
Government	2,337	906	1,459	973	3,553	1,346	1,921	798
Self-Employed	853	756	1,022	736	878	546	442	422
Unpaid Family	52	26	66	17	42	37	25	35
WORKER EARNINGS								
Median	\$28,713	\$23,525	\$30,751	\$19,857	\$26,645	\$17,108	\$28,037	\$27,440
Mean	\$34,821	\$29,716	\$42,016	\$26,060	\$29,943	\$21,629	\$32,509	\$33,046

Prepared by the Delaware Valley Regional Planning Commission

Table 3 (continued)

1990 WORKER PROFILES

Characteristics	Lower Makefield		West Whiteland		Concord		Upper Merion	
	Resident Workers	Employment	Resident Workers	Employment	Resident Workers	Employment	Resident Workers	Employment
SEX								
Male	7,573	948	3,834	5,684	2,075	1,838	8,217	23,863
Female	5,741	1,184	3,083	5,175	1,505	1,817	7,269	16,352
Total	13,314	2,132	6,917	10,859	3,580	3,655	15,486	40,215
OCCUPATION								
Executive	3,545	241	1,504	1,797	749	549	2,994	7,354
Professional	3,126	630	1,644	1,638	714	350	3,461	6,879
Clerical	1,661	255	980	1,635	488	1,056	2,728	7,470
Service	667	377	401	868	292	333	1,076	3,141
Laborer	553	144	422	934	265	391	1,079	3,048
Other	3,762	485	1,966	3,987	1,072	976	4,148	12,323
INDUSTRY								
Manufacturing	2,245	188	1,304	2,263	681	567	2,982	11,302
Transp/Comm/Util	696	45	416	174	239	133	897	2,991
Retail Trade	2,028	231	951	2,724	588	425	2,220	7,210
F.I.R.E.	1,480	105	634	892	208	1,127	1,443	3,188
Services	4,820	1,163	2,602	3,382	1,238	864	5,661	9,652
Government	485	193	86	61	74	24	364	704
Other	1,560	207	924	1,363	552	515	1,919	5,168
CLASS								
Private	10,922	1,454	6,009	9,937	3,017	3,257	13,175	36,863
Government	1,468	414	477	405	329	274	1,361	1,940
Self-Employed	869	251	417	471	216	118	894	1,322
Unpaid Family	55	13	14	46	18	6	56	90
WORKER EARNINGS								
Median	\$33,369	\$20,332	\$28,203	\$22,639	\$29,911	\$22,382	\$26,665	\$27,444
Mean	\$45,920	\$26,242	\$33,230	\$27,623	\$35,865	\$26,601	\$33,305	\$32,456

Prepared by the Delaware Valley Regional Planning Commission

C. Occupation

Occupation characterizes workers by the type of work performed. *Service* includes private household help, protective service, personal care, etc.; *laborer* includes machine operators, assembler, transportation workers, cleaners, helpers, etc.; and clerical are those jobs providing administrative support. The top two categories in each case are either *executive*, *administrative*, *managerial* or *professional specialty*. The third and fourth positions are either *sales* or *clerical*.

The order of occupational priorities for *employed workers* is quite different than that for *resident workers*. With one exception, either *clerical* or *sales* ranks first (see Appendix IV). Since these jobs are clustered at the lower end of the income scale, this supports the earlier observation regarding the income disparity between resident and *employed workers*. [The exception is Lower Makefield Township, where *professional* is at the top of the list for *employed workers*.]

D. Industry

Industry characterizes workers by the principal activity at the work site. In each of the townships, the service sector employs from one-fourth to one-third of the *resident workers*. The service sector includes business and repair services, personal services, entertainment and recreation, and professional services. With respect to the residents of the selected townships, the last category provides the largest share of jobs. (See Appendix I.) Manufacturing ranks second in all townships except Voorhees and Washington. In the latter two townships, the second position is held by retail trade and the third by manufacturing.

The townships display a much greater variability with respect to the industrial profile of jobs provided within their boundaries. Mount Laurel and Concord townships both rank *finance*, *insurance*, and *real estate* first, followed by *manufacturing* and *professional services*. In East Windsor and Upper Merion townships, it is *manufacturing* that ranks first, with *retail trade* and *professional services* in the next two positions. *Professional services* provide the most jobs in Washington and Lower Makefield townships, with *retail trade* in the second position; whereas in West Whiteland the order of these categories is reversed. Voorhees Township has the most unique profile of the eight: *entertainment and recreation* at the top of the list, followed by *business and repair services*.

E. Class

The private sector employs the majority of workers, generally 80 to 90 percent, that are either resident or *employed* in the townships. Only Washington (73%) and Lower Makefield (68%) townships fall below this range. Generally, the share of *employed workers* in the private sector

is greater than that of *resident workers*, and in most cases these shares increased during the 1980s.

Most of the remaining jobs are either in the public or government sector or arise through self-employment. The government sector is usually the larger of the two and employs about ten percent of the *resident workers*. The largest shares of government employment are found in Washington and Lower Makefield townships (about 20%). The only other category available is *unpaid family*, and that is negligible in all cases.

IV. MEANS OF TRANSPORTATION

The means of transportation used by *resident workers* and *employed workers* to reach their jobs is tabulated in Tables 4 through 7. Highway modes include single-occupant vehicles (*drove alone*) and *carpools*, which includes vanpools. Public transportation is disaggregated into *bus/trolley*, *subway/elevated*, and *railroad* (regional or commuter rail). *Other means* tabulates trips by ferryboats, taxicabs, motorcycles, bicycles, and any other means not included elsewhere. Share calculations exclude those who worked at home.

Several problems in the interpretation of data arise from the manner in which it is collected and tabulated. First, if several modes are used to complete the journey to work, e.g., auto to a train station, railroad to Center City, and subway to the place of work; it is not always clear which should be indicated on the census questionnaire, although the census instructions do indicate that the major mode used should be listed. Second, it may not be clear to an individual how the major mode should be categorized. E.g., PATCO's Lindenwold line should be categorized as *subway/elevated*, but some respondents may have indicated *railroad*. For the most part, however, these problems are relatively minor.

Table 4 shows how *resident workers* traveled to work in 1990. In all eight townships, the overwhelming majority of *resident workers* *drove alone* to work, with the share ranging from 77 percent in East Windsor and Voorhees townships to just above 87 percent in West Whiteland and Concord townships. Use of *carpools* adds another 6 (Lower Makefield) to 12 percent (Washington) to the aggregate highway share. Taken together the highway modes provide the means used for work commutation by 86 to 96 percent of the local residents, and of the eight only Voorhees and East Windsor fall under 90 percent. Widespread auto ownership and widely dispersed job sites both contribute to the dominant use of automobiles.

The use of public transportation is highest in Voorhees (11%) and East Windsor (9%) townships, and in Concord Township (2%). It should be noted that while Voorhees Township enjoys direct service to Philadelphia via the Lindenwold rail line transit and East Windsor Township sends significant numbers of commuters to New York City on public transportation, either via express buses operating on the New Jersey Turnpike or via rail from nearby Princeton Junction, transit services are poorly developed in many of these townships.

Walking seems to not to be a significant means of transportation among *resident workers* of the eight townships. Upper Merion Township has the highest share (2.4%) of *resident workers* who walk to work and Mount Laurel Township has the lowest (0.8%).

Table 5 and Figures 4 and 5 illustrate the trend in the means of transportation used by *resident workers* between 1980 and 1990. *Drove alone* increased and *carpool* decreased for all eight townships. Automobile availability has steadily increased, and interest in energy conservation, which sparked ridesharing during the 1970s has declined. The trend in the use of public

transportation is mixed. It has increased significantly for townships such as East Windsor and Lower Makefield, increased slightly for West Whiteland and Mount Laurel townships, and declined in the remaining four. Lower prices for housing and good public transportation to New York have attracted new residents to Bucks and Mercer counties, and improved service has increased from Chester County. Appendix III and IV also support the above analysis. Tables 6 illustrates the 1990 means of transportation of *employed workers* and Table 7 shows 1980 and 1990 modal share of *employed workers*.

Table 4
1990 MEANS OF TRANSPORTATION
OF RESIDENT WORKERS

Means of Transportation	Mount Laurel		Voorhees		Washington		East Windsor	
	Number	Share*	Number	Share*	Number	Share*	Number	Share*
Drove Alone	14,516	86.1%	10,013	76.9%	17,597	83.3%	9,369	76.5%
2-Person Carpool	1,211	7.2%	956	7.3%	1,929	9.1%	1,059	8.6%
3-Person Carpool	182	1.1%	170	1.3%	306	1.4%	115	0.9%
4+ Person Carpool	116	0.7%	92	0.7%	268	1.3%	217	1.8%
Total Highway	16,025	95.0%	11,231	86.3%	20,100	95.1%	10,760	87.9%
Bus/Trolley	85	0.5%	36	0.3%	238	1.1%	564	4.6%
Subway/Elevated	257	1.5%	638	4.9%	173	0.8%	12	0.1%
Railroad	246	1.5%	789	6.1%	203	1.0%	574	4.7%
Total Public Transp.	588	3.5%	1,463	11.2%	614	2.9%	1,150	9.4%
Bicycle	34	0.2%	21	0.2%	52	0.2%	21	0.2%
Walked	138	0.8%	198	1.5%	260	1.2%	207	1.7%
Other Means	82	0.5%	104	0.8%	111	0.5%	106	0.9%
Total Commuters	16,867	100.0%	13,017	100.0%	21,137	100.0%	12,244	100.0%
Worked at Home	398		297		436		248	
Total	17,265		13,314		21,573		12,492	

Means of Transportation	Lower Makefield		West Whiteland		Concord		Upper Merion	
	Number	Share*	Number	Share*	Number	Share*	Number	Share*
Drove Alone	10,873	84.3%	5,920	87.6%	3,019	87.2%	12,649	83.9%
2-Person Carpool	651	5.0%	378	5.6%	230	6.6%	1,175	7.8%
3-Person Carpool	96	0.7%	52	0.8%	31	0.9%	156	1.0%
4+ Person Carpool	62	0.5%	41	0.6%	31	0.9%	94	0.6%
Total Highway	11,682	90.6%	6,391	94.6%	3,311	95.6%	14,074	93.4%
Bus/Trolley	21	0.2%	27	0.4%	0	0.0%	191	1.3%
Subway/Elevated	13	0.1%	7	0.1%	5	0.1%	44	0.3%
Railroad	957	7.4%	238	3.5%	71	2.1%	328	2.2%
Total Public Transp.	991	7.7%	272	4.0%	76	2.2%	563	3.7%
Bicycle	18	0.1%	0	0.0%	0	0.0%	18	0.1%
Walked	168	1.3%	88	1.3%	65	1.9%	366	2.4%
Other Means	35	0.3%	8	0.1%	11	0.3%	53	0.4%
Total Commuters	12,894	100.0%	6,759	100.0%	3,463	100.0%	15,074	100.0%
Worked at Home	420		158		117		412	
Total	13,314		6,917		3,580		15,486	

* Does not include Worked at Home

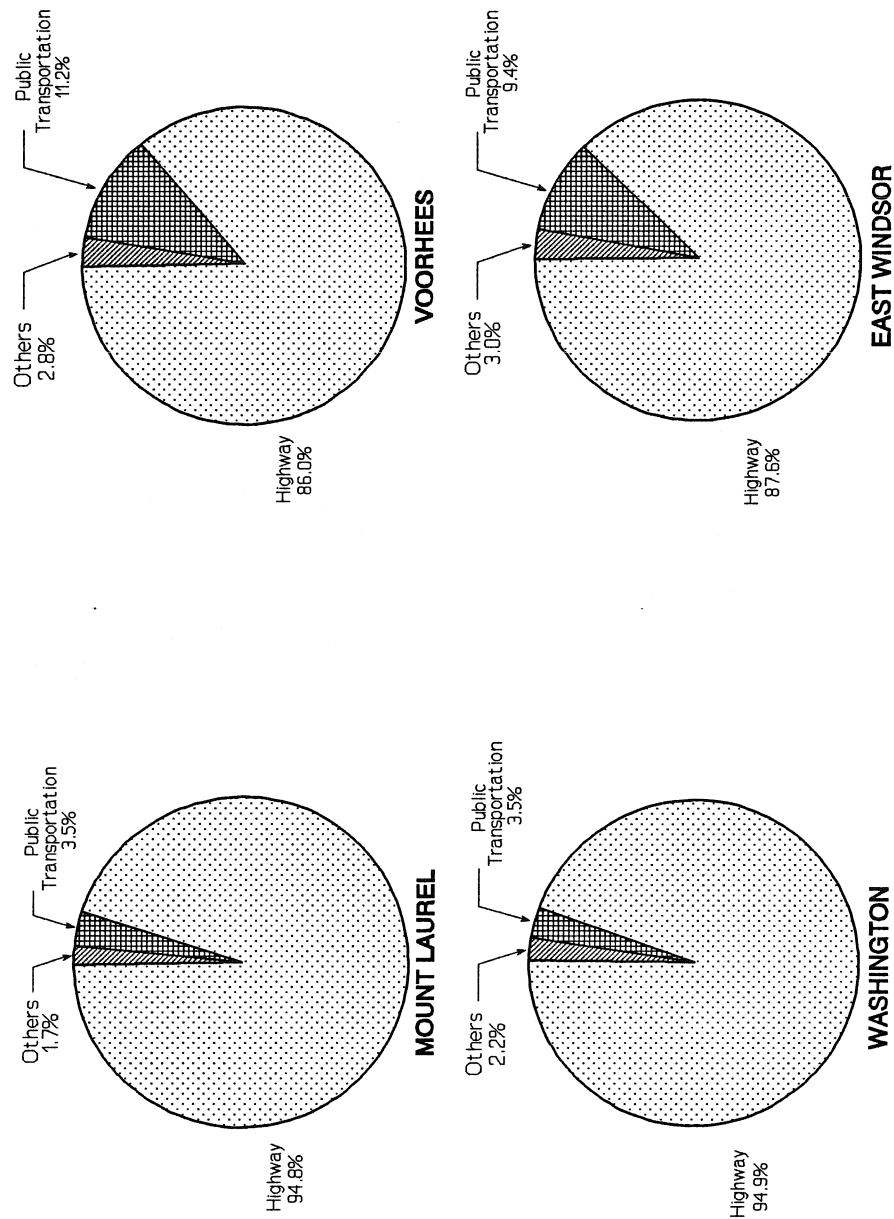
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Table 5
1980 AND 1990 MODAL SHARE
USED BY RESIDENT WORKERS

(Percent of Total Resident Workers Who Did Not Worked at Home)

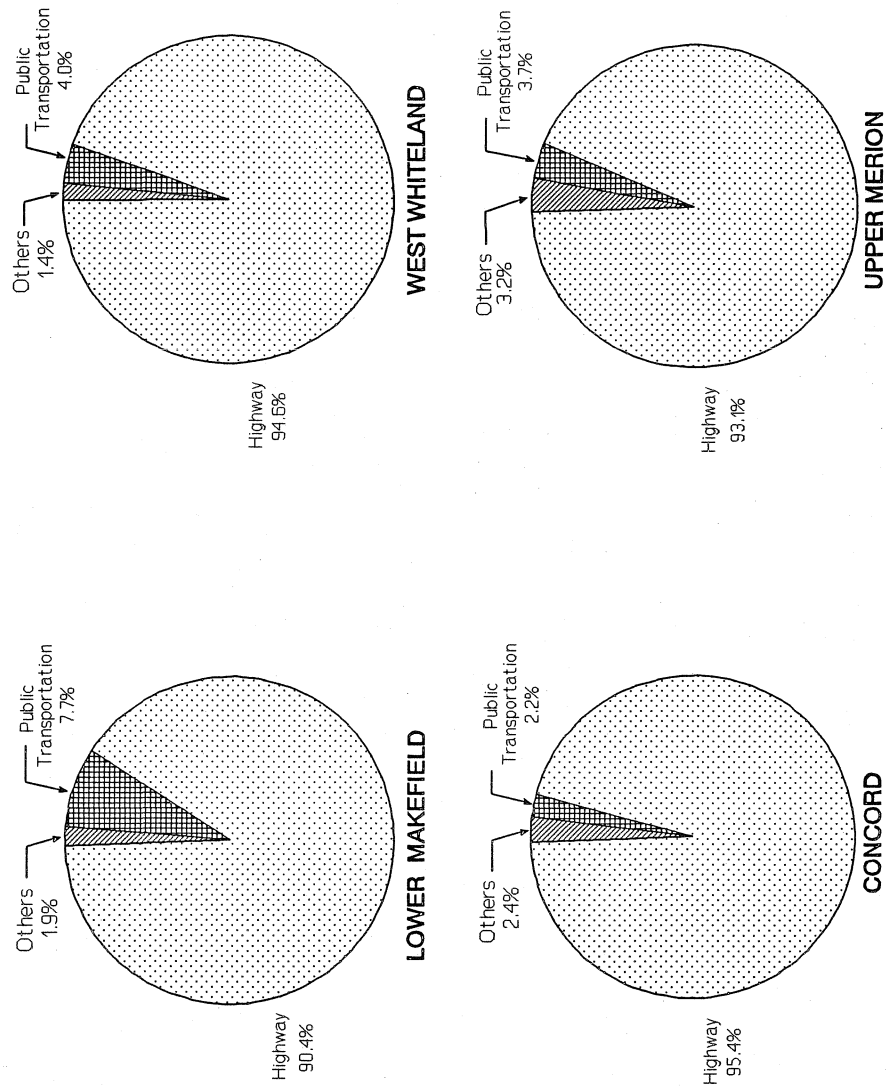
Place of Residence	Drive Alone		Carpool		Public Trans.		Bicycle/Walk		Other	
	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990
Mount Laurel	73.9	86.1	17.4	8.7	3.4	3.5	1.2	1.2	4.1	0.5
Voorhees	68.1	76.9	10.9	9.2	16.3	11.2	0.6	2.0	4.1	0.8
Washington	73.3	83.3	19.7	11.6	4.1	2.9	1.7	1.7	1.2	0.5
East Windsor	71.4	76.5	19.7	11.1	1.8	9.4	4.2	2.1	2.9	0.9
Lower Makefield	75.8	84.3	16.5	6.1	3.0	7.7	0.9	1.6	3.8	0.3
West Whiteland	78.5	87.6	12.8	7.0	3.1	4.0	2.4	1.3	3.2	0.1
Concord	70.5	87.2	19.9	8.2	4.6	2.2	1.5	1.9	3.5	0.3
Upper Merion	71.1	83.9	17.2	9.2	6.4	3.7	3.4	2.8	2.0	0.4

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Figure 4 : 1990 MEANS OF TRANSPORTATION OF RESIDENT WORKERS IN NEW JERSEY

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Figure 5: 1990 MEANS OF TRANSPORTATION OF RESIDENT WORKERS IN PENNSYLVANIA



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February 1994

Table 6
1990 MEANS OF TRANSPORTATION
OF EMPLOYEES

Means of Transportation	Mount Laurel		Voorhees		Washington		East Windsor	
	Number	Share*	Number	Share*	Number	Share*	Number	Share*
Drove Alone	16,440	86.3%	12,660	86.5%	5,878	87.1%	8,720	81.6%
2-Person Carpool	1,683	8.8%	1,232	8.4%	498	7.4%	1,166	10.9%
3-Person Carpool	225	1.2%	97	0.7%	44	0.7%	221	2.1%
4+ Person Carpool	135	0.7%	55	0.4%	23	0.3%	174	1.6%
Total Highway	18,483	97.0%	14,044	96.0%	6,443	95.5%	10,281	96.3%
Bus/Trolley	214	1.1%	171	1.2%	57	0.8%	56	0.5%
Subway/Elevated	38	0.2%	77	0.5%	0	0.0%	0	0.0%
Railroad	19	0.1%	21	0.1%	0	0.0%	18	0.2%
Total Public Transp.	271	1.4%	269	1.8%	57	0.8%	74	0.7%
Bicycle	56	0.3%	50	0.3%	44	0.7%	27	0.3%
Walked	108	0.6%	215	1.5%	137	2.0%	217	2.0%
Other Means	139	0.7%	50	0.3%	68	1.0%	81	0.8%
Total Commuters	19,057	100.0%	14,628	100.0%	6,749	100.0%	10,680	100.0%
Worked at Home	398		297		436		248	
Total	19,455		14,925		7,185		10,928	

Means of Transportation	Lower Makefield		West Whiteland		Concord		Upper Merion	
	Number	Share*	Number	Share*	Number	Share*	Number	Share*
Drove Alone	1,514	88.4%	9,355	87.4%	3,085	87.2%	33,925	85.2%
2-Person Carpool	129	7.5%	974	9.1%	353	10.0%	3,347	8.4%
3-Person Carpool	10	0.6%	122	1.1%	55	1.6%	517	1.3%
4+ Person Carpool	17	1.0%	45	0.4%	29	0.8%	210	0.5%
Total Highway	1,670	97.5%	10,496	98.1%	3,522	99.5%	37,999	95.5%
Bus/Trolley	0	0.0%	94	0.9%	0	0.0%	977	2.5%
Subway/Elevated	0	0.0%	0	0.0%	0	0.0%	153	0.4%
Railroad	0	0.0%	7	0.1%	0	0.0%	151	0.4%
Total Public Transp.	0	0.0%	101	0.9%	0	0.0%	1,281	3.2%
Bicycle	8	0.5%	0	0.0%	0	0.0%	44	0.1%
Walked	34	2.0%	78	0.7%	11	0.3%	352	0.9%
Other Means	0	0.0%	26	0.2%	5	0.1%	127	0.3%
Total Commuters	1,712	100.0%	10,701	100.0%	3,538	100.0%	39,803	100.0%
Worked at Home	420		158		117		412	
Total	2,132		10,859		3,655		40,215	

*Does not include Worked at Home

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Table 7
1980 AND 1990 MODAL SHARE OF EMPLOYEES

Place of Residence	Drive Alone		Carpool		Public Trans.		Walk	
	1980	1990	1980	1990	1980	1990	1980	1990
Mount Laurel	76.5	86.3	17.6	10.7	0.7	1.4	0.9	1.6
Voorhees	76.2	86.6	18.0	9.5	2.6	1.8	0.8	2.2
Washington	74.9	87.1	17.5	8.4	-	0.8	4.4	3.7
East Windsor	68.4	81.7	21.9	14.6	0.8	0.7	4.6	3.0
Lower Makefield	71.4	88.4	22.2	9.1	-	-	0.9	2.5
West Whiteland	77.6	87.4	15.2	10.7	0.4	0.9	2.2	1.0
Concord	72.5	87.2	22.6	12.4	-	-	1.0	0.5
Upper Merion	72.7	85.2	22.4	10.2	1.9	3.2	1.8	1.3

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V. TRAVEL TIME

Mean travel times for the trip to work are tabulated in Appendices I (*resident workers*) and II (*employed workers*). Figure 6 also illustrates the average mean travel time of *resident workers* by means of transportation. Overall travel times, which largely reflect driving times and have not changed significantly since 1980, average between 15 and 30 minutes. In all the selected townships except Upper Merion, *employed workers* enjoyed shorter trip times than did *resident workers*. Upper Merion Township contains the largest employment complex found in the selected townships, and is able to provide local jobs for many residents, as well as being able to draw workers from greater distances.

Average highway travel times range from 21 minutes for residents in Upper Merion Township to 29 minutes for workers living in East Windsor Township, reflecting local employment opportunities in the former and long commutes to New York from the latter. *Carpool* trips take significantly longer than *drove alone* trips, partly due to the time needed to collect and distribute members and partly because ridesharing becomes more advantageous as trip length increases.

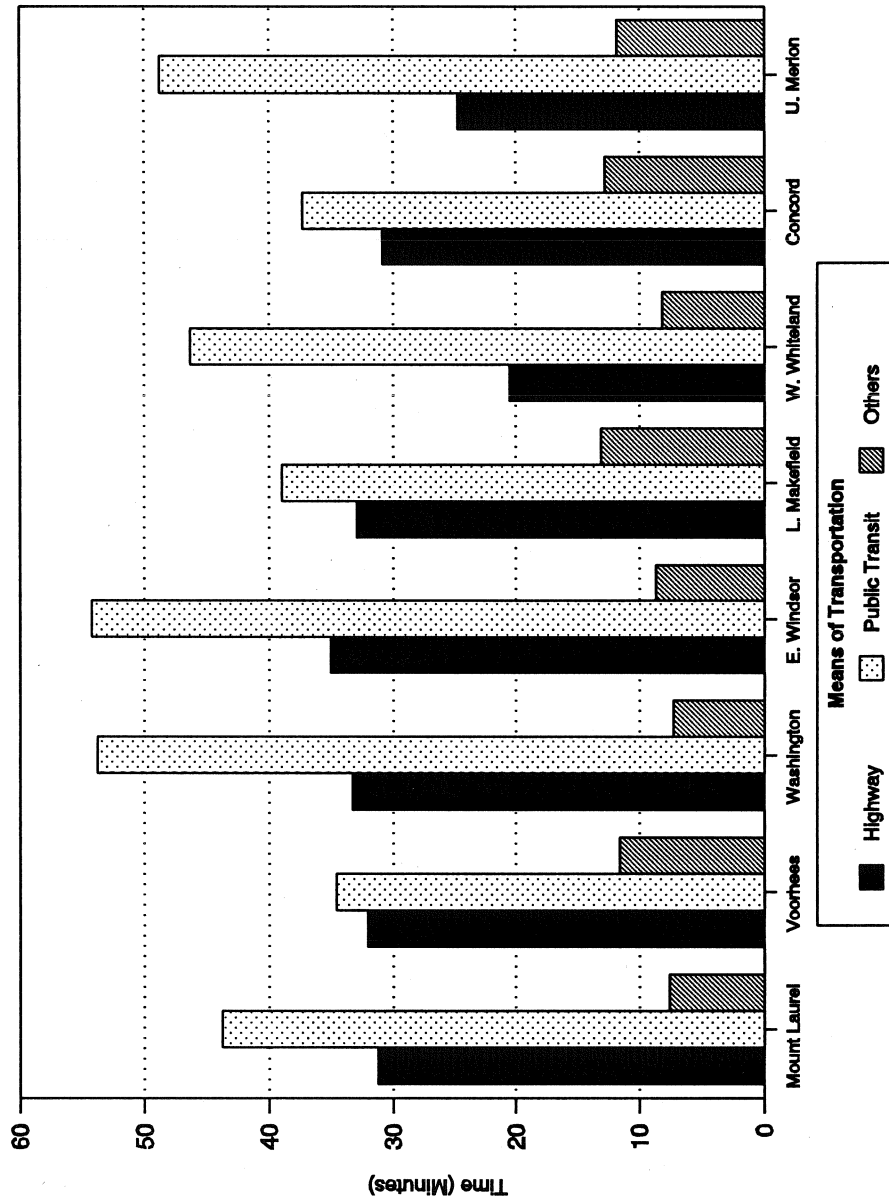
Travel times on public transportation show much greater variability, partly due to the smaller size of the sample, and usually take longer than comparable highway trips. Times range from 28 minutes for *employed workers* traveling to Voorhees Township to 61 minutes for *resident workers* commuting from Concord Township. [Dashes in table cells mean that no trips were taken.] With the exception of East Windsor Township, the shortest trips are taken by bus and the longest by rail. This is primarily a consequence of buses being used for local trips and rail for commutes to more distant cities. Turnpike bus service encourages residents of East Windsor to make longer commutes by bus. The quickest trips are made by workers who bicycle or walk to work, but these are also the workers who are most likely to live near their workplaces.

The *resident workers* travel time who use public transportation has increased slightly for some townships such as Mount Laurel, Washington, and Upper Merion. However, some townships such as East Windsor and Lower Makefield have experienced a significant decrease of the public transportation travel time. The frequency increase of the public transportation services may have caused the decrease in travel time for these townships.

Highway travel times have increased by a few minutes (none greater than 4.5 minutes) for all townships except Concord, probably a consequence of increased trip distances, although increased congestion may play a role. Completion of I-95 around the airport reduced the driving time to Philadelphia for residents of Concord Township.

Figure 6 illustrates the 1990 *resident workers* mean travel time by *drove alone*, *carpool*, *bus/trolley*, *subway/elevated*, *railroad*, and *bicycle/walked* modes.

Figure 6 : 1990 AVERAGE TRAVEL TIME OF RESIDENT WORKERS



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VI. TOWNSHIP PROFILES AND TRAVEL PATTERNS

Travel patterns for work trips for residents are tabulated in Appendix III and for *employed workers* in Appendix IV. Both sets of tabulations exclude persons who worked at home. The following describes the distribution of work trips taken by both residents and *employed workers*, and includes discussion on the share using public transportation. Except for local trips where walking comprises a significant share, it can be assumed that almost all of the remaining trips are in cars or vans.

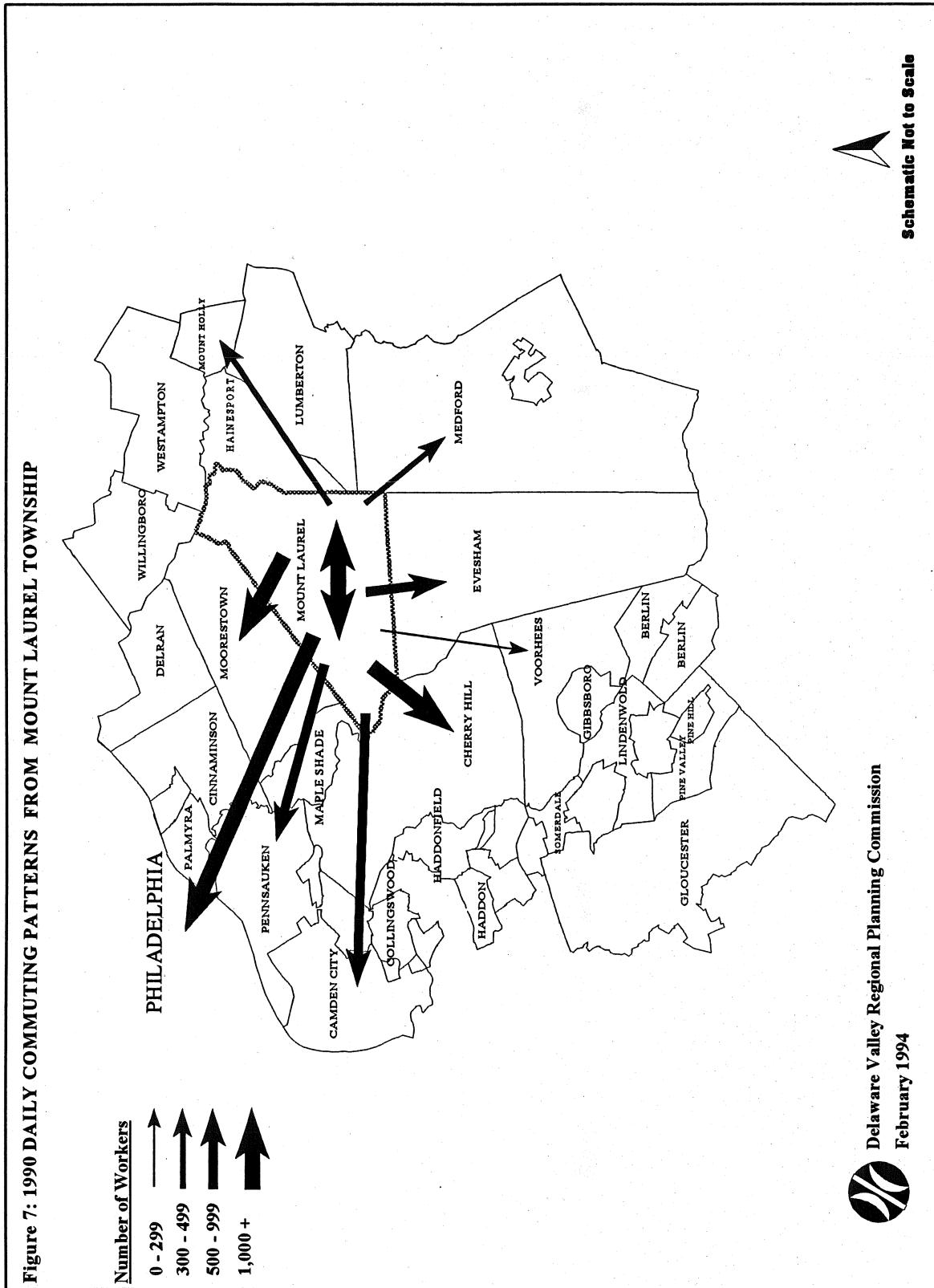
A. Mount Laurel

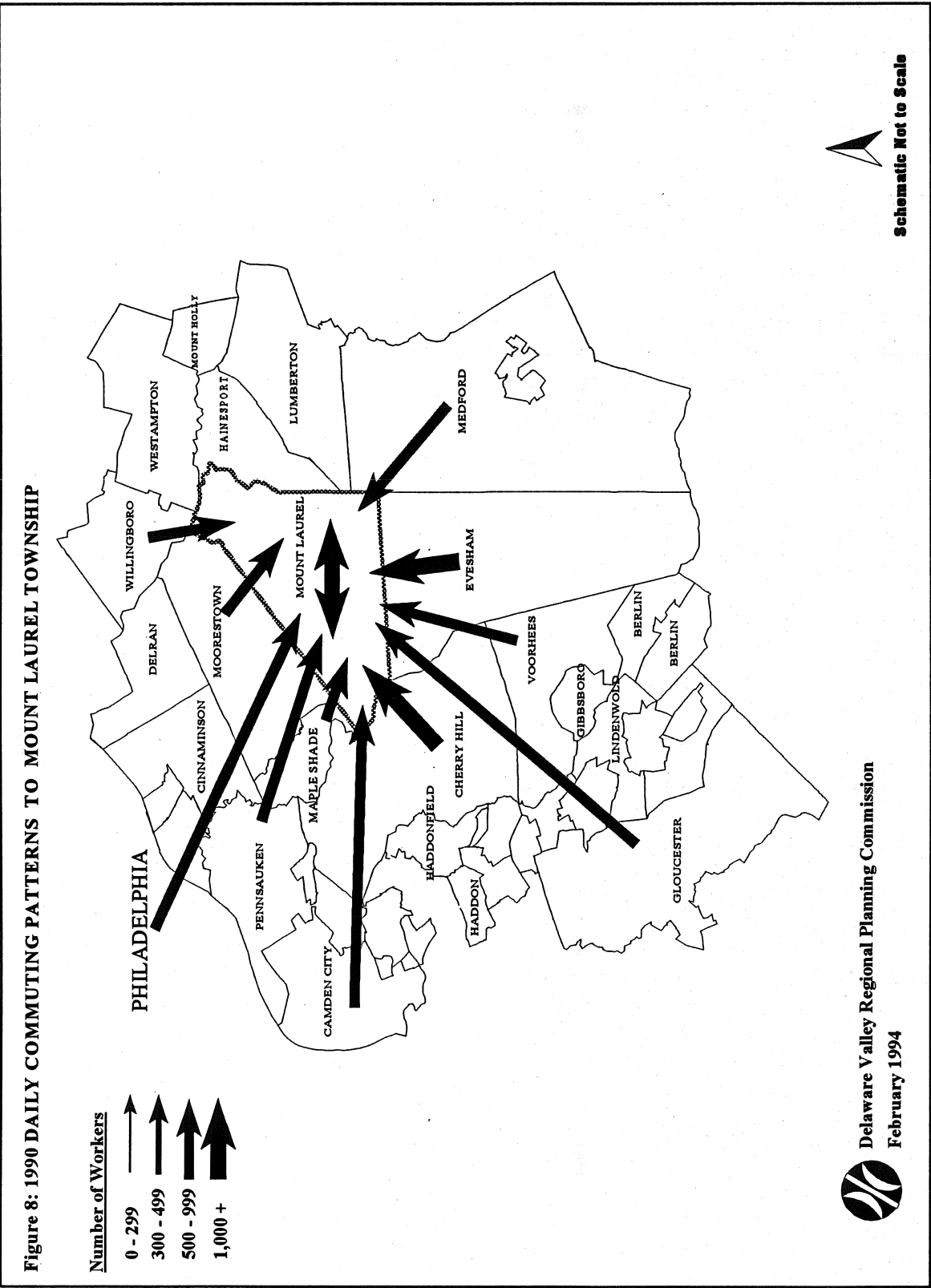
Mount Laurel Township is one of the fastest growing municipalities in Burlington County. The pace of development increased during the 1980s. Expansion of office parks, such as that exemplified by the East Gate Industrial Center, have boosted township employment to the highest in Burlington County. Located along the southwestern edge of the county, the township sits astride the New Jersey Turnpike, I-295, and NJ 73, and as a result enjoys convenient highway access to both Philadelphia and New York. NJ TRANSIT provides local bus service to Camden and Philadelphia.

Philadelphia is still the largest destination for commuters from Mount Laurel Township, although Mount Laurel itself has almost caught up as a place of employment. Each attracts approximately 14 percent of the work trips taken by the almost 17,000 *resident workers* who do not work at home. Nearby Cherry Hill and Moorestown townships attract 10 and 9 percent, respectively, of the workers. Almost one-half of the *resident workers* (44%) are *employed* within Burlington County and approximately 7 percent commute to jobs outside the nine-county DVRPC region.

Almost one-fourth (22%) of the residents working in Philadelphia use public transportation, but it is used little by residents commuting to other destinations (3.5% overall). Altogether 2.6 and 0.3 percent choose public transportation to commute to work to Gloucester County and within Burlington County, respectively. Figure 7 illustrates commuting patterns for *resident workers* of Mount Laurel Township.

Commutation patterns to jobs in Mount Laurel Township differ somewhat from that of *resident workers*. Mount Laurel itself is the largest source of workers *employed* in the township, supplying almost 12 percent of the work force. The next largest sources are adjacent Evesham and Cherry Hill townships, which send 7 and 6 percent, respectively. *employed workers* working in Mount Laurel Township make less use of public transportation than do *resident workers* (1.4% overall). The largest number of workers using transit come from Philadelphia and Camden, with modal shares of 11 and 14 percent, respectively. Figure 8 shows commuting patterns for *employed workers* of Mount Laurel Township.





B. Voorhees

Voorhees is another large suburban township undergoing rapid development. Growth in both population and employment has been strong since 1980 and is continuing. The township is located along the northeastern edge of Camden County and enjoys good transit service to Camden and Philadelphia. Highway access is less convenient, with only the arterial NJ 73 passing through the township.

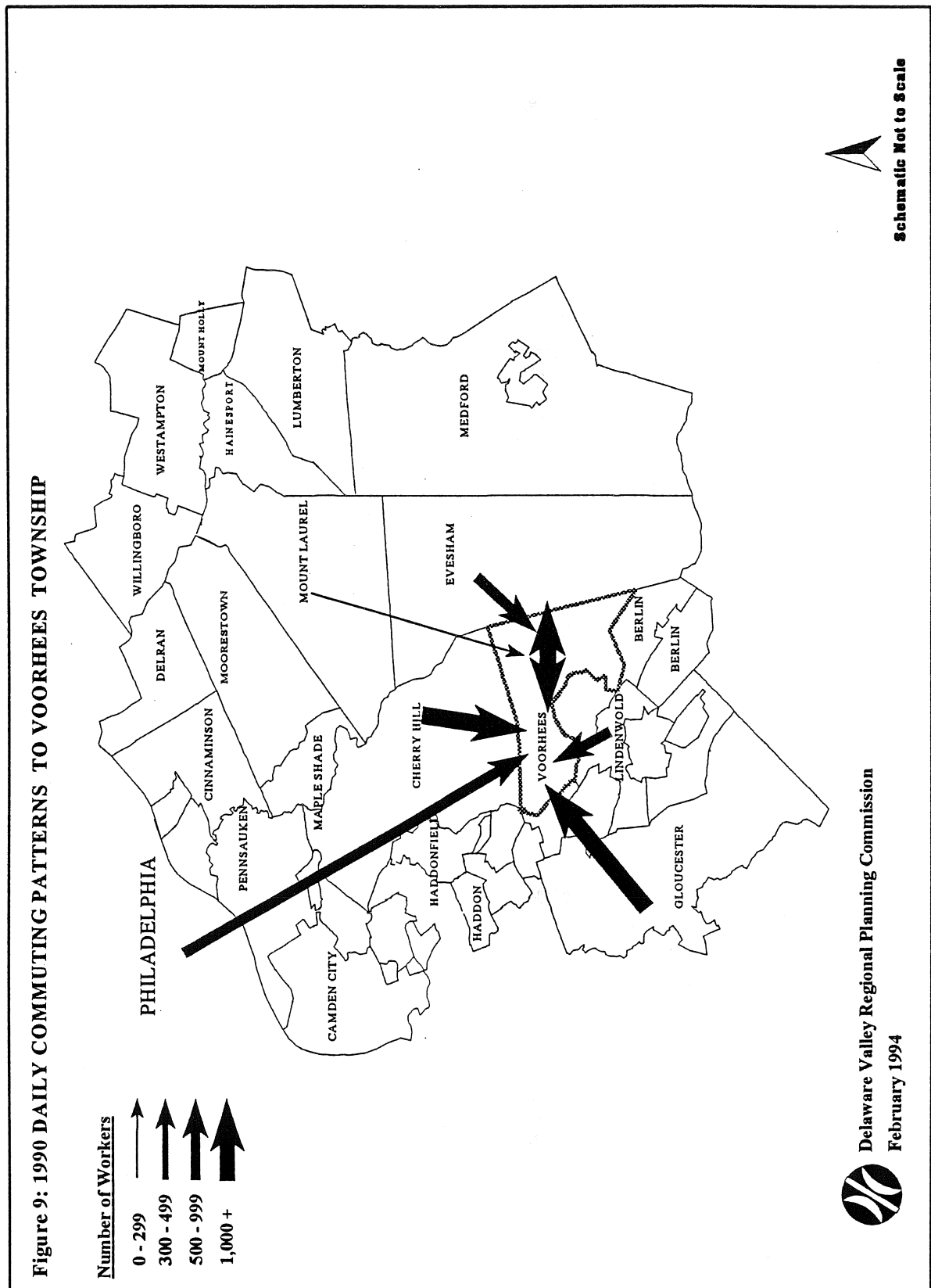
Philadelphia continues to attract the largest share of *resident workers* (24%). Almost 14 percent of the workers commute to jobs within Voorhees Township, and 11 percent commute to adjacent Cherry Hill Township. Less than one-half of the *resident workers* (44%) commute to work within Camden County, and approximately 6 percent commute to jobs outside the nine county DVRPC region. Public transportation is used by 11 percent of the *resident workers*, but this is almost all accounted for by residents commuting to Philadelphia or Camden (modal shares of 39% and 6%, respectively). Figure 9 illustrates Voorhees Township *resident workers* commuting patterns.

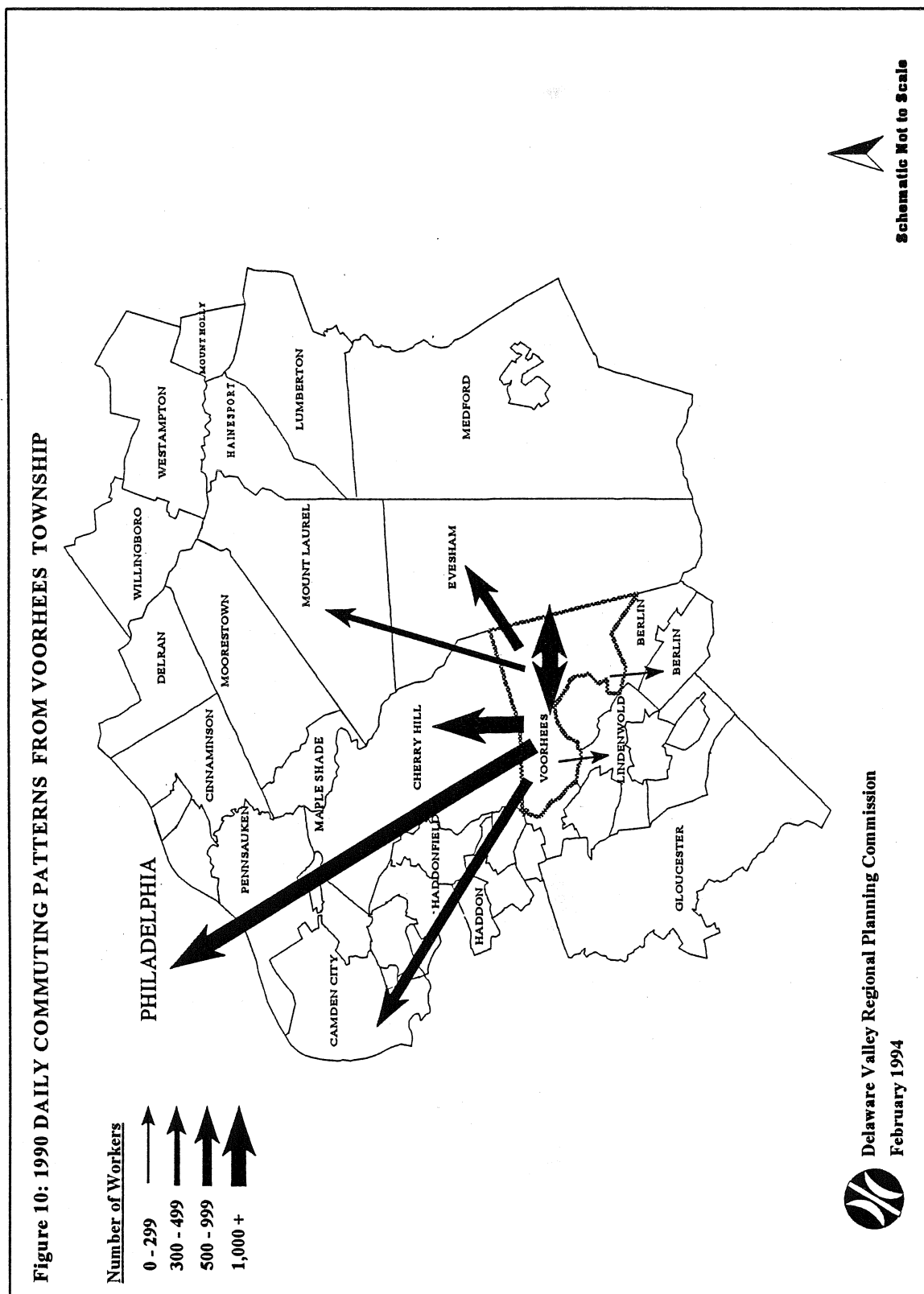
There are almost 15,000 workers who commute to jobs in Voorhees Township, and the majority (65%) come from Camden County, with Voorhees Township itself generating 12 percent. Other major sources include Gloucester (10%) and Cherry Hill (8%) townships. Approximately 4 percent of *employed workers* come from outside the nine-county DVRPC region. Figure 10 shows commuting patterns for *employed workers* in Voorhees Township.

C. Washington

Washington Township is primarily a residential township located along the northeastern edge of Gloucester County. Residential development has proceeded apace for the past two decades, and by 1990 the township had a population of over 21,000. Employment is now growing, but in 1990 the township still provided less than 7,000 jobs. Highway access to the township is good with the Atlantic City Expressway and NJ 55 serving the east and west sides, respectively. Major arterial highways, such as NJ 42, NJ 47, and NJ 168 also serve the township. NJ TRANSIT provides both local and express bus service to Camden and Philadelphia.

Approximately 20 percent of *resident workers* commute to work in Philadelphia and about 11 percent of these choose public transportation. Almost 12 percent of the *resident workers* are *employed* locally in Washington Township, and the next largest destination is adjacent Mantua Township, employing 5 percent. Except for the Philadelphia bound trips, little use is made of public transportation. Camden is the second largest destination drawing workers on transit, and there the modal share is only 2 percent.





About 32 percent of the township's *resident workers* are *employed* at sites within Gloucester County, and another 25 percent work in Camden County. About 10 percent work outside the DVRPC region.

More than one-third (36%) of the workers *employed* come locally from Washington Township. Other major sources include adjacent Monroe (10%) and Gloucester (8%) townships. More than two-thirds (69%) of the *employed workers* come from Gloucester County and another 22 percent from Camden County. Only 4 percent come from outside the region. Figures 11 and 12 show commuting patterns for resident and *employed workers* in Washington Township.

D. East Windsor

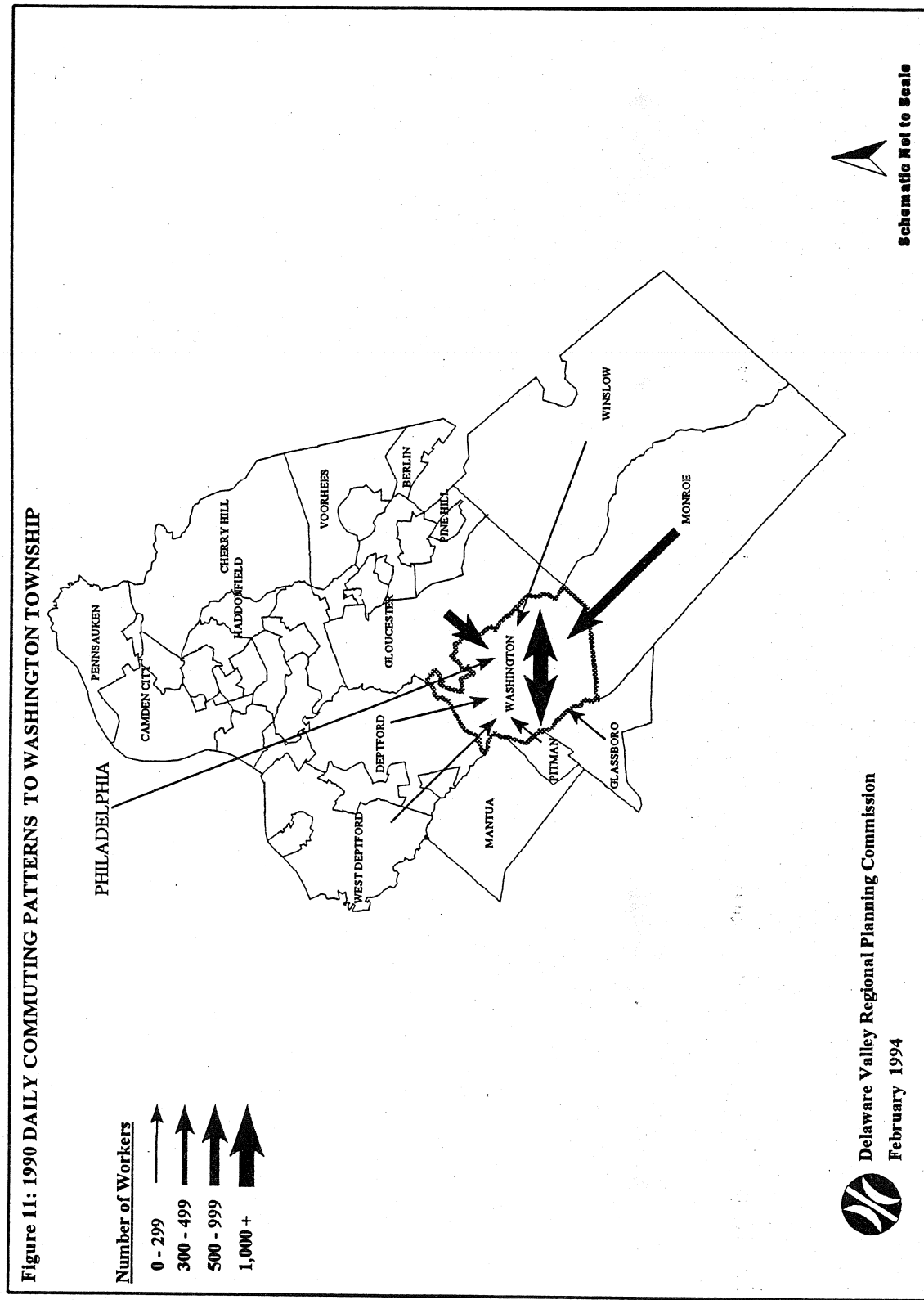
East Windsor Township surrounds the borough of Hightstown and is located at the northeastern corner of Mercer County. Population growth peaked during the 1970s and is now only growing slowly. Growth in employment has also slowed. The New Jersey Turnpike provides easy highway access to New York and Philadelphia. Arterial access to nearby destinations is provided by US 130 and NJ 33. The only transit service in the township is provided by the Suburban Transit Corporation, which operates buses that run locally between Princeton and Hightstown and then express to/from New York, but this is complemented by NJ TRANSIT rail service at Princeton Junction in adjacent West Windsor Township.

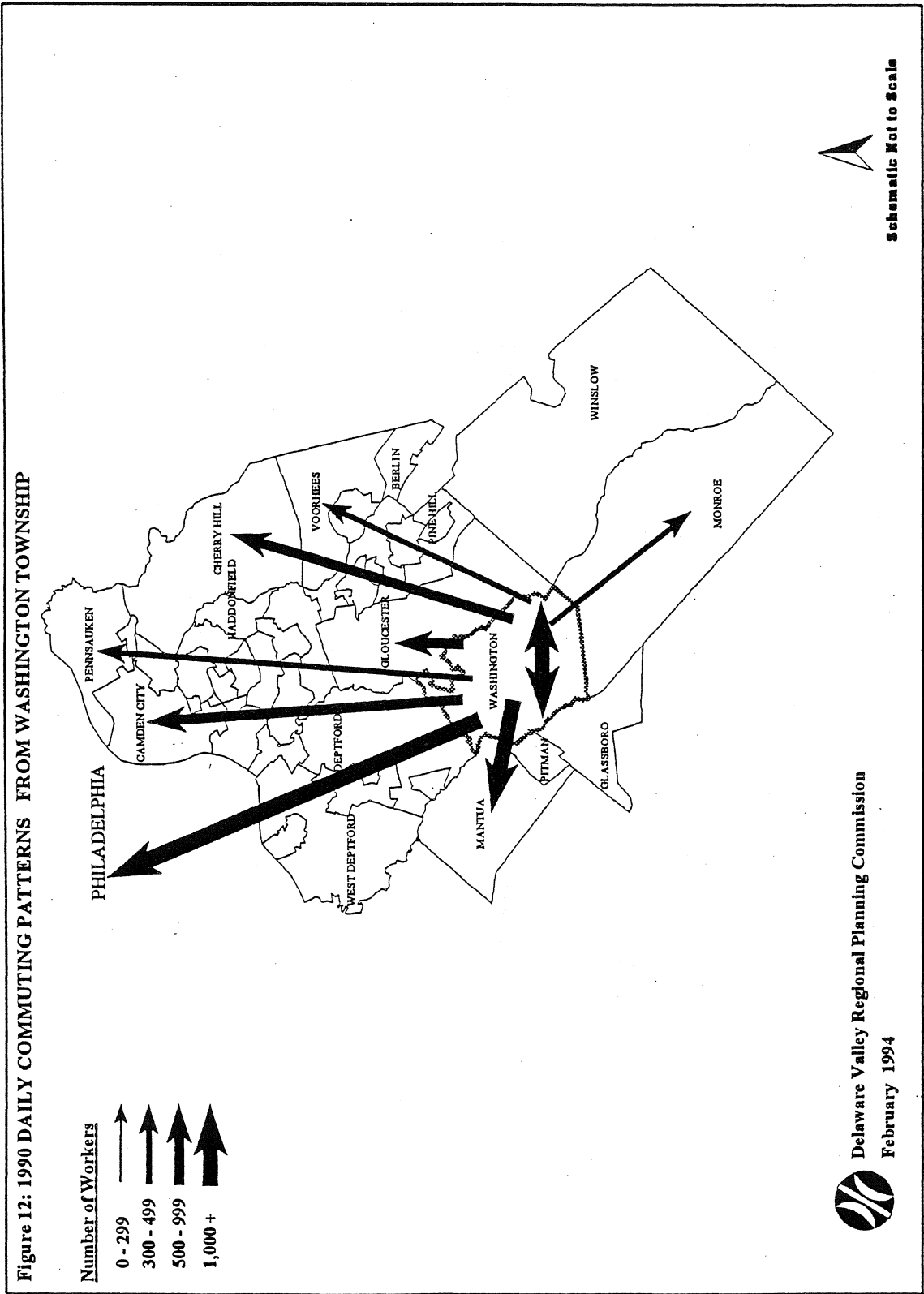
East Windsor Township itself is the largest source of jobs (15%) for township residents, and New York City is the second largest destination for township residents, attracting almost 10 percent of the workers. The boroughs of Princeton and Hightstown are also important, each attracting about 6 percent of the *resident workers*. An overwhelming majority (79%) of the commuters to New York City use public transportation. These are almost evenly split between bus and rail.

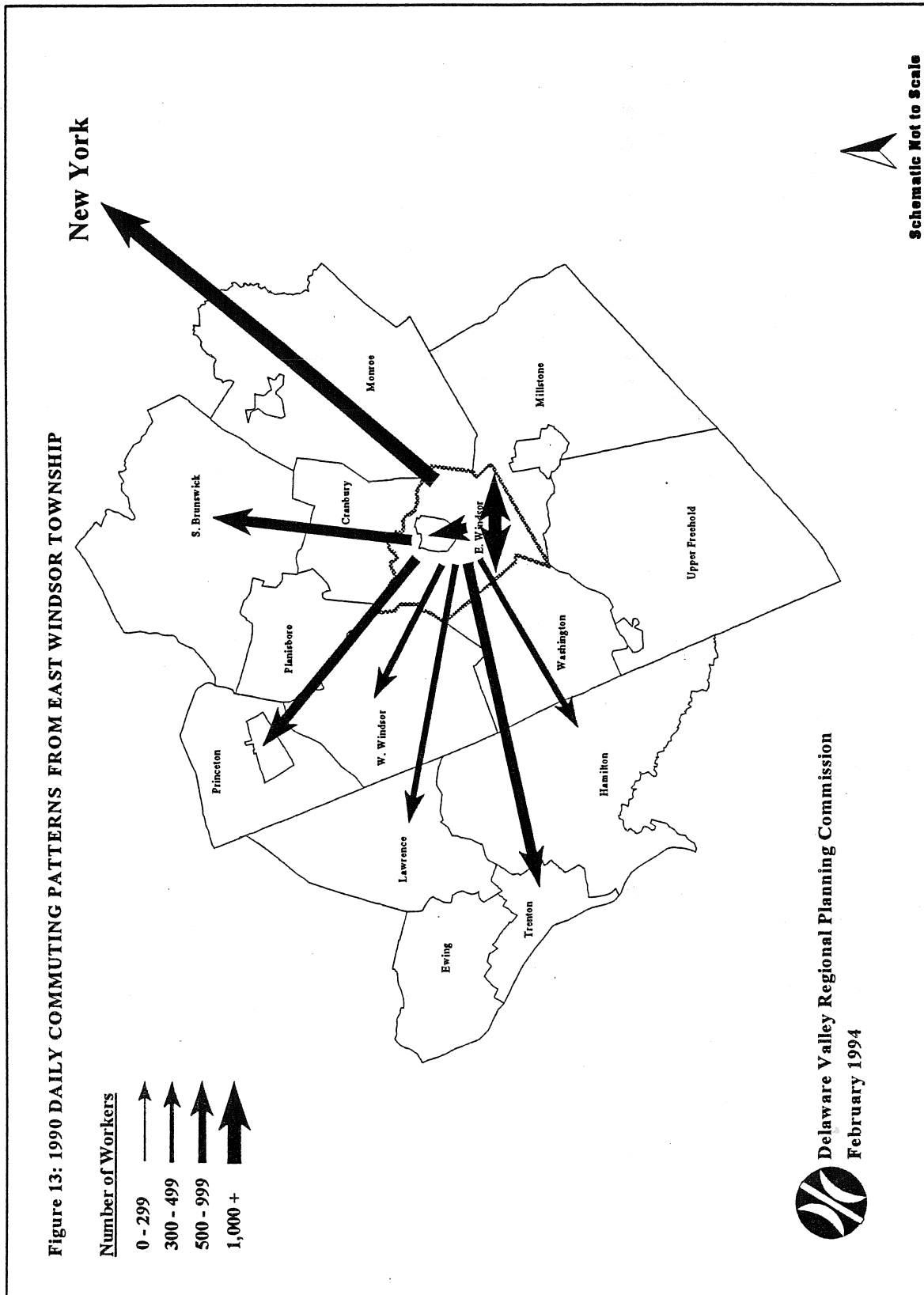
Generally, work trips to jobs in East Windsor Township are much shorter than trips starting from the township. About 17 percent of the local jobs are filled by local residents. The only other jurisdiction contributing as much as ten percent of the work force is Hamilton Township (12%). Figures 13 and 14 show resident and *employed workers* commuting patterns to jobs in East Windsor Township.

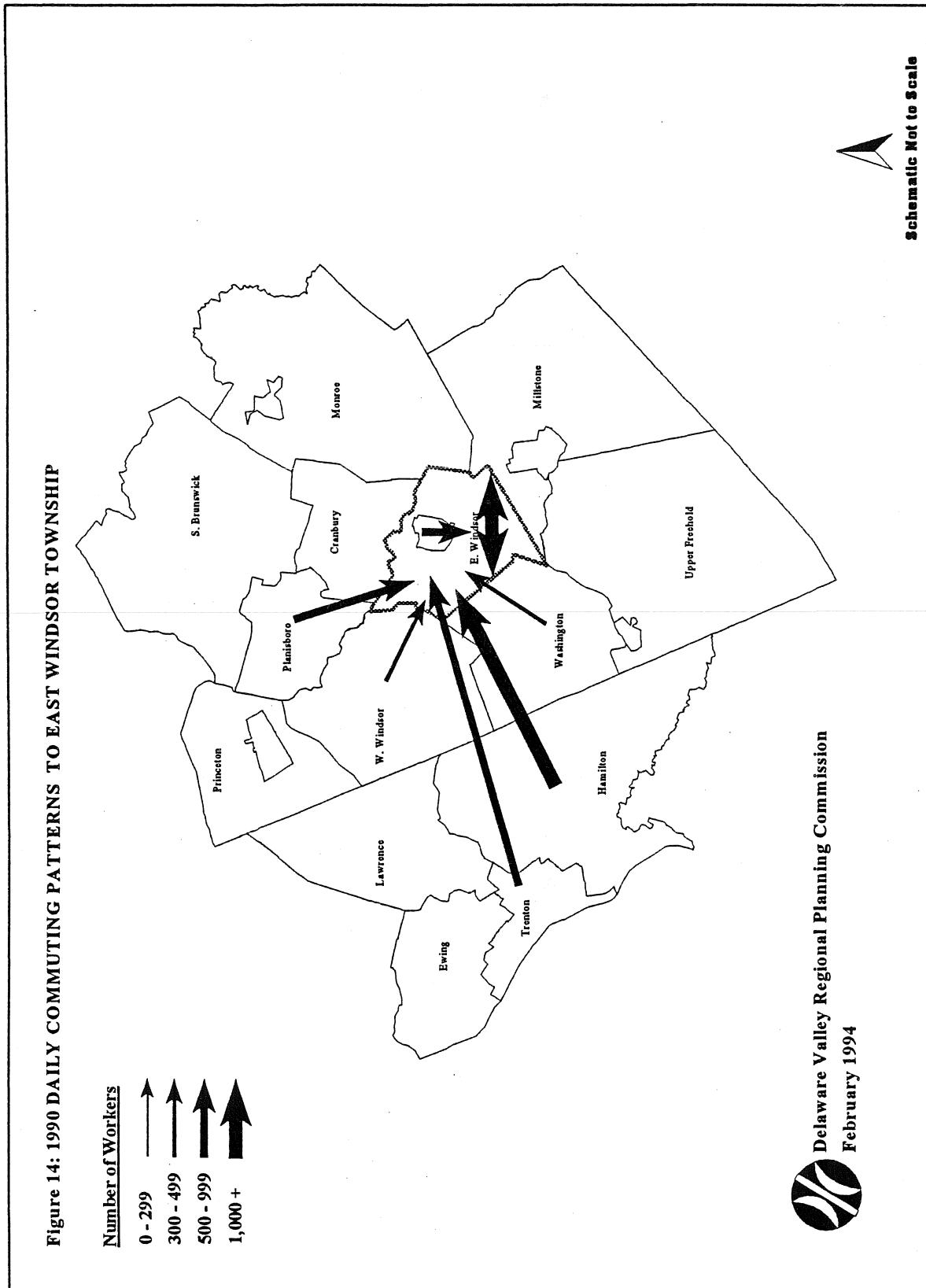
E. Lower Makefield

Lower Makefield Township's location along the Delaware River at the eastern edge of Bucks County, with good transportation to both Philadelphia and New York, attracted strong residential growth during the 1980s. Frequent fast rail service to New York is provided from rail stations in Mercer County that are easily accessible via I-95 or US 1. These highways also provide direct routings to Philadelphia, Trenton, and Princeton. PA 32 and PA 332 also









serve the township. SEPTA's R3 rail line provides direct service to Philadelphia. The township's *resident workers* take work trips to a wide variety of destinations. No single location attracts as much as 10 percent of the total. The largest share, at just under 10 percent, is attracted by Trenton, and this is followed closely by Philadelphia with 8 percent. Yardley, which is surrounded on three sides by Lower Makefield Township, and Ewing and Lawrence townships, across the river in New Jersey, each attract 6 percent of the total, and New York City, with 5 percent, round out the top six locations. At the county level, Bucks and Mercer each attract about one-third of the total, 34 and 32 percent, respectively. About 16 percent work outside the DVRPC region.

Almost all (95%) of the commuters to New York travel by train, and of those going to Philadelphia about 20 percent use rail. Very few traveling to other destinations use public transportation, but these two locations boost the overall share for the *resident workers* to almost 8 percent.

Employment in Lower Makefield Township is relatively small, *resident workers* outnumber *employed workers* by 7.5 to 1, and the largest share (21%) of jobs is filled by local residents. Other major contributors include nearby Bristol (17%), Falls (12%), and Middletown (9%) townships. More than 83 percent of the *employed workers* come from Bucks County, and only 1 percent from outside the region. None of the *employed workers* used public transportation. Figures 15 and 16 show resident and *employed workers* commuting patterns to jobs in Lower Makefield.

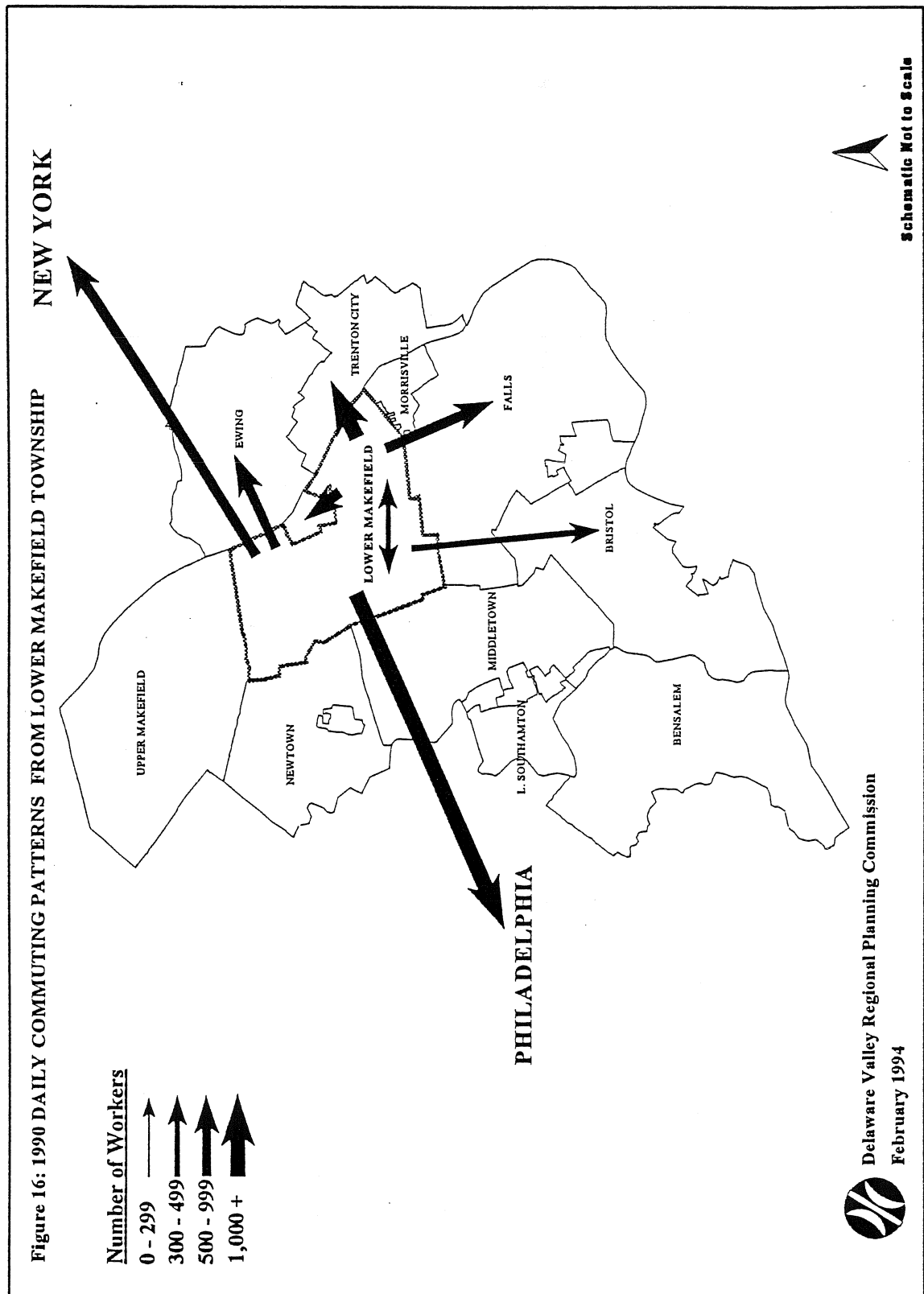
F. West Whiteland

While the population in West Whiteland continues to increase at a respectable pace, the township is rapidly becoming a major employment center, having added 6800 jobs during the 1980s. The number of jobs now exceeds the number of *resident workers*. The township is located close to the center of Chester County and is well served by highways and railroads. Major highways include the east-west US 30, and the north-south US 202 and PA 100, and SEPTA's R5 rail line provides frequent service to Main Line points and Philadelphia. Amtrak also serves two stations within the township.

West Whiteland itself attracts the largest share (11%) of the township's *resident workers*. The remainder are widely dispersed among mostly nearby destinations, Philadelphia constituting the major exception. Other major destinations include West Chester (10%), East Whiteland Township (9%), Philadelphia (8%), and West Goshen Township (6%). Only 4 percent of the *resident workers*, but most of these (89%) are going to Philadelphia. Chester County attracts 63 percent of the total, and Montgomery and Delaware counties attract 13 and 11 percent, respectively. Only 4 percent work outside the DVRPC region.

Workers filling jobs in West Whiteland Township come primarily from nearby areas. Uwchlan Township is the largest source sending 8 percent of the *employed workers*. This is





followed closely by West Whiteland Township with 7 percent. West Chester, West Goshen Township, and Caln Township round out the top five sources, each sending about 4 percent of the total. Almost three-fourths (73%) come from Chester County, and 7 percent come from outside the region. Less than 1 percent use public transportation. Figures 17 and 18 show resident and *employed workers* commuting patterns to jobs in West Whiteland.

G. Concord

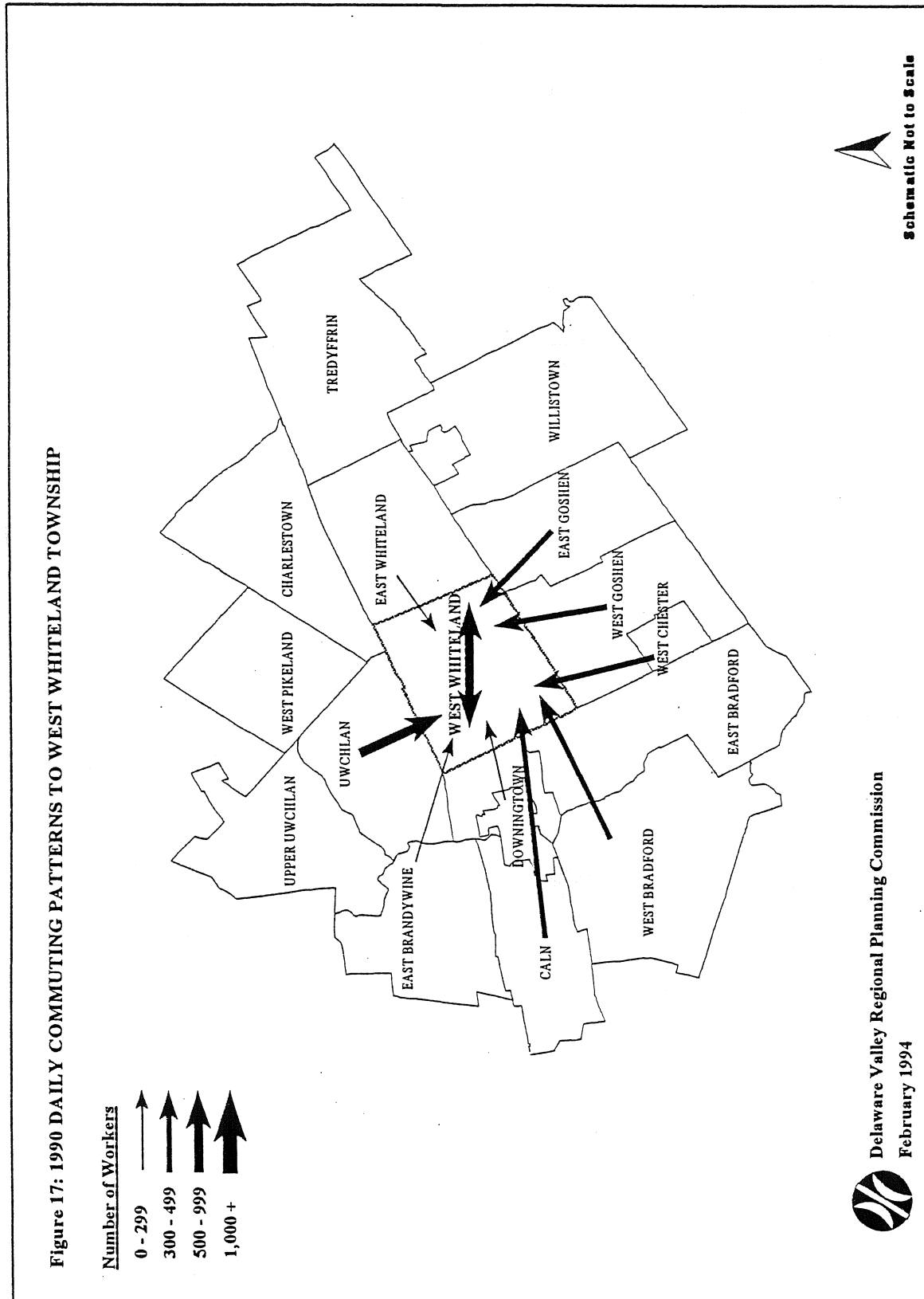
Concord Township, near the southwest corner of Delaware County, has the smallest population of the eight townships selected for this report. Growth accelerated during the 1970s, especially in employment, but during the 1980s growth slowed markedly. Highway access is provided by US 1, US 202, and US 322, all arterial routes subject to congestion. PA 261 and PA 491 serve the eastern and southern corners, respectively, of the township. The township has no public transportation, although rail and transit lines services are available in Media.

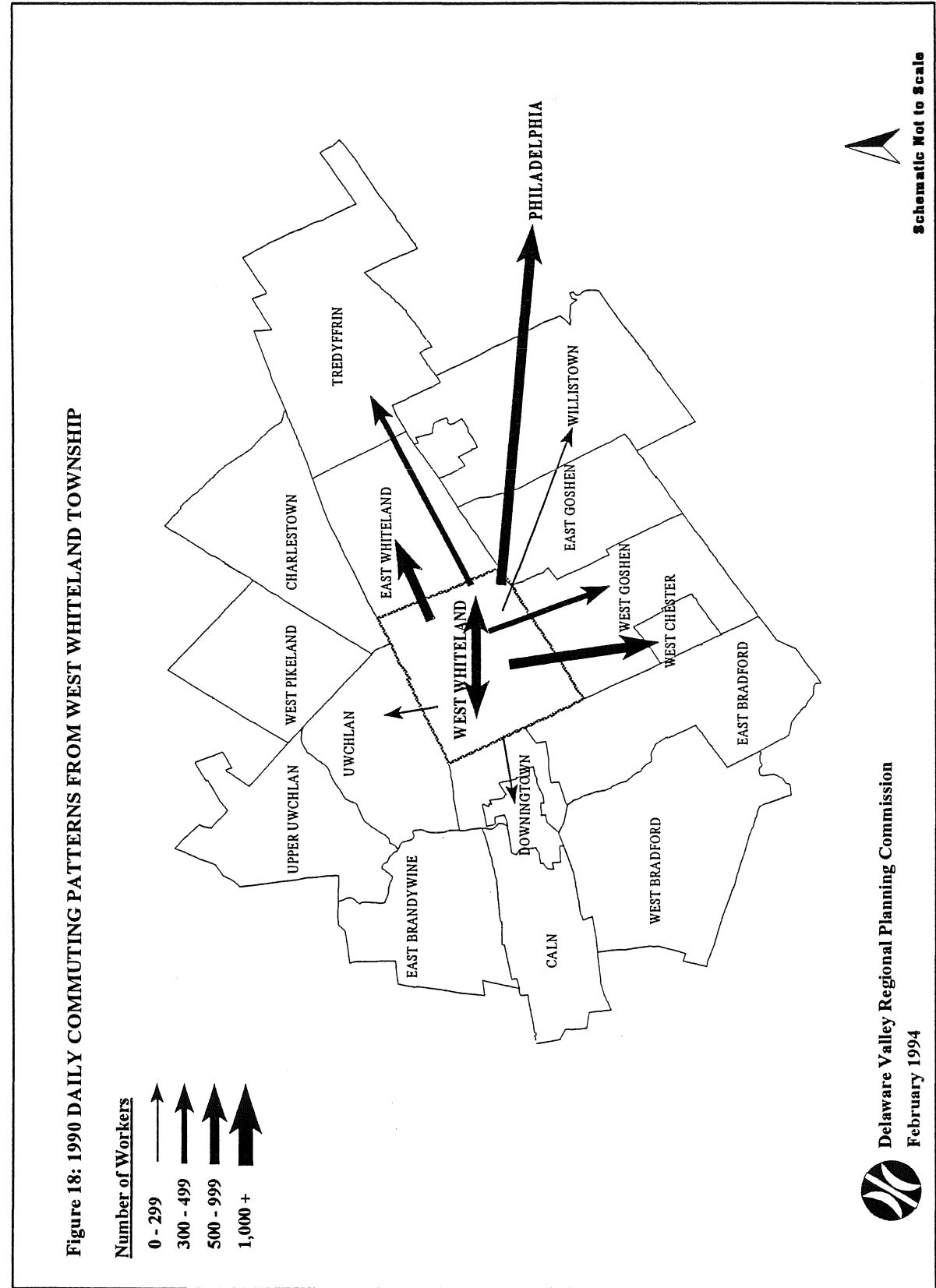
Philadelphia is the destination for 14 percent of the *resident workers*, but another 13 percent head in the opposite direction and hold jobs in New Castle County. Even though there is almost an even match between *resident workers* and jobs, only 7 percent of the workers are *employed* locally in Concord Township. Thornbury and Birmingham townships each attract 6 percent of the workers. The share of Philadelphia bound commuters on public transportation is 16 percent, but these are the only workers using rail or transit. A majority (54%) of *resident workers* hold jobs in Delaware County. About 15 percent hold jobs outside the DVRPC region, mostly in the state of Delaware.

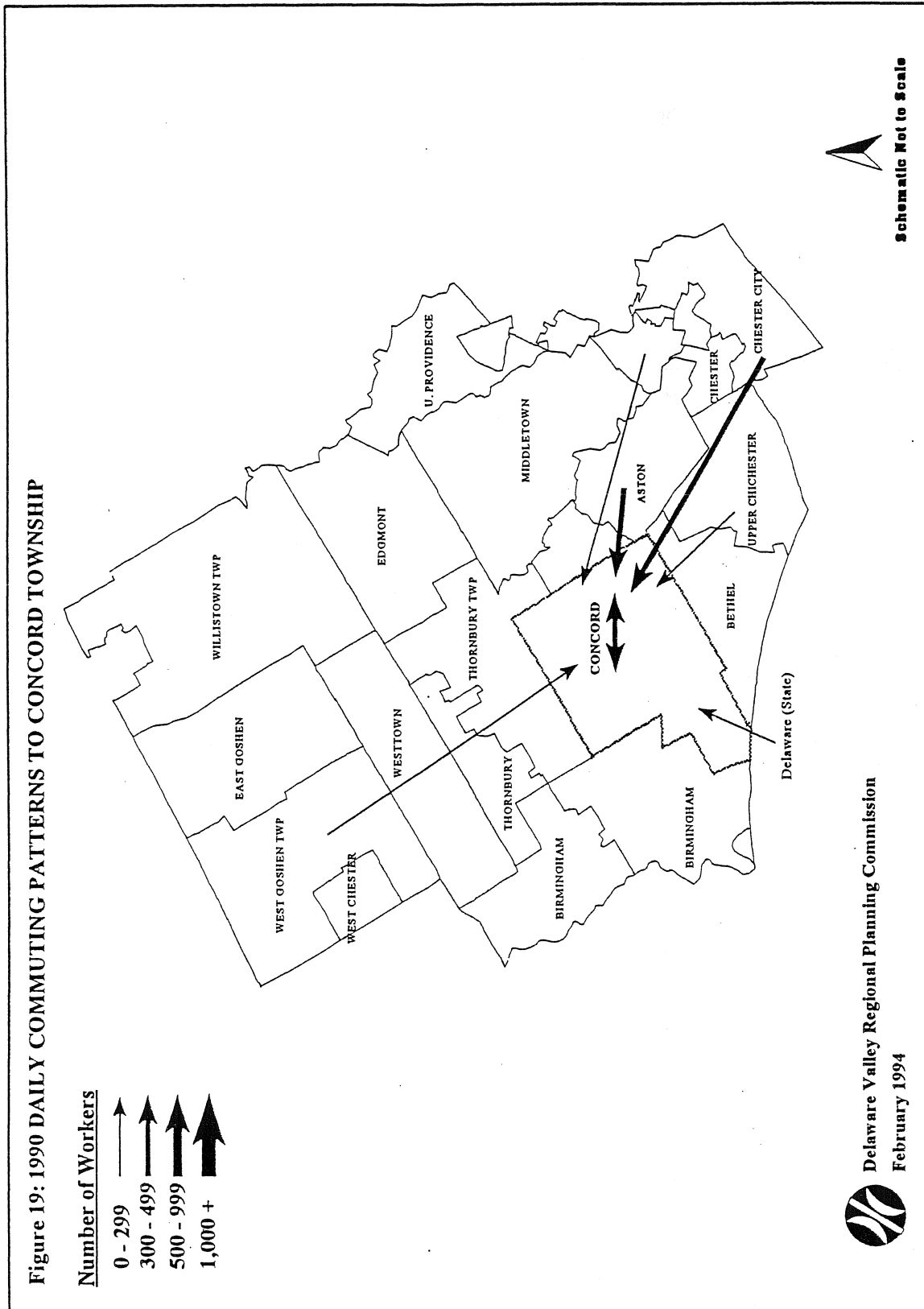
The commuting pattern for *employed workers* differs somewhat from those of *resident workers*. With 9 percent of the total Aston Township is the largest source of workers, but Concord Township itself is right behind with 7 percent. The city of Chester, New Castle County, and Upper Chichester Township each supply 6 percent. Almost two-thirds (64%) of the workers come from Delaware County, and another 18 percent come from Chester County. About 11 percent come from outside the region. Figures 19 and 20 show resident and *employed workers* commuting patterns to jobs in Concord.

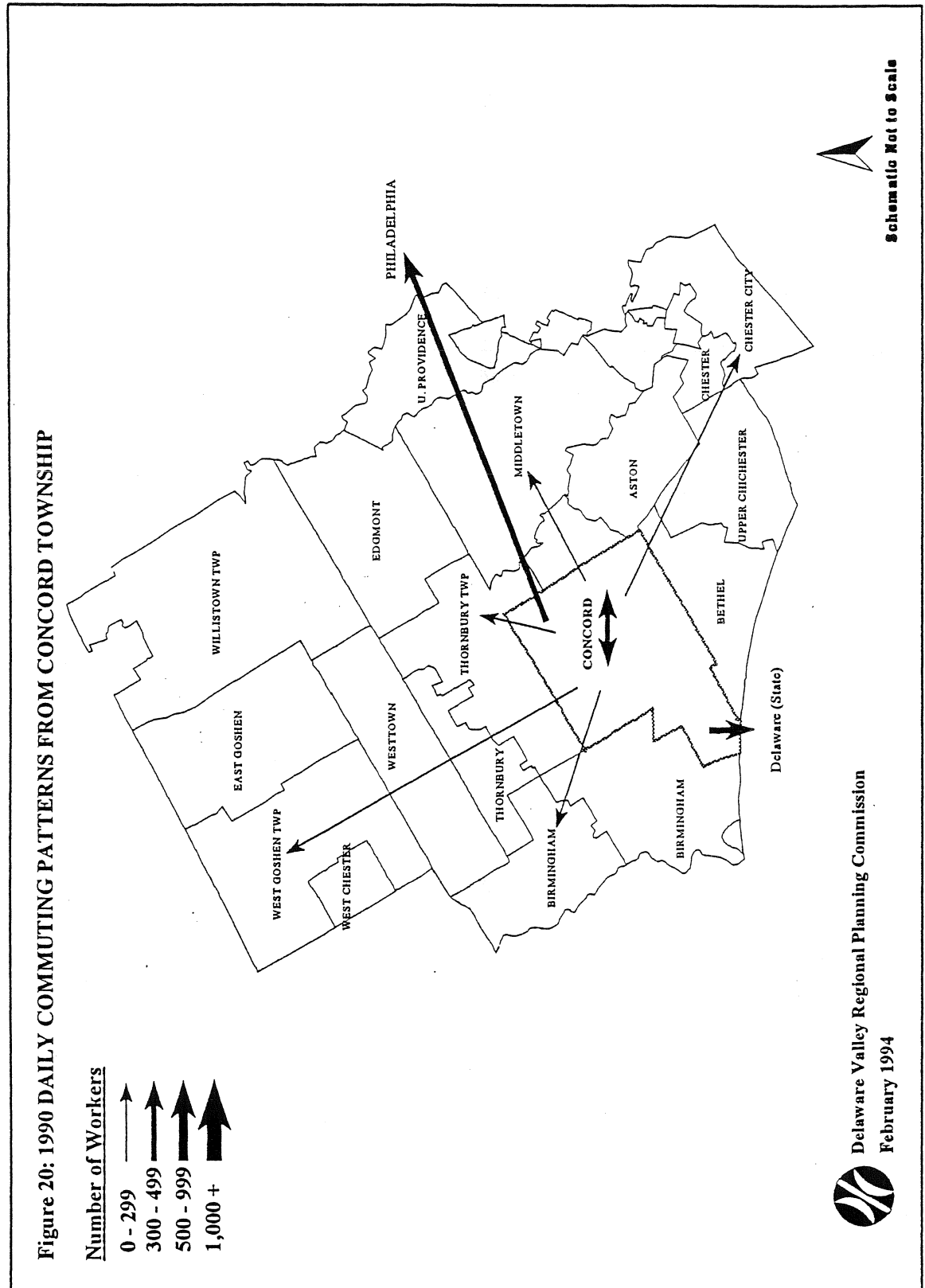
H. Upper Merion

With *employed workers* outnumbering residential workers by 2.6 to 1, Upper Merion Township is a net importer of labor. The township offers the largest number of jobs of the eight selected for study. Employment growth is still continuing, but residential growth peaked in the 1960s and is now static, even declining slightly as the population matures. Located in Montgomery County at the junction with Chester and Delaware counties, the township has long benefitted from the presence of major expressways, which include the Pennsylvania Turnpike (I-76/276), which in the early 1950s had its eastern terminus at Valley Forge, and the Schuylkill (I-76), Mid-County (I-476), and Pottstown (US 422) expressways. US 202, PA







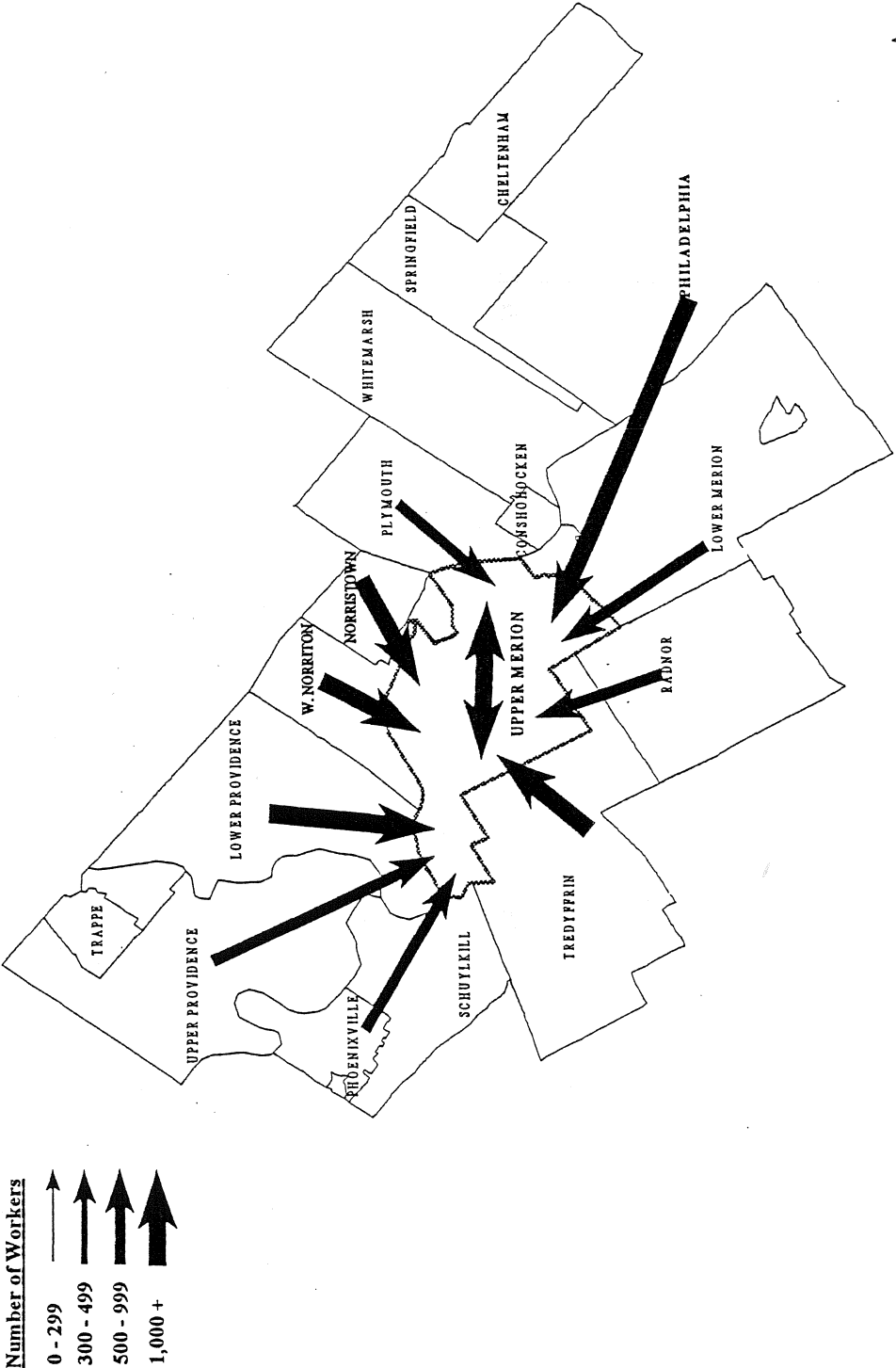


23, and PA 320 also serve the township. Public transportation is provided by a SEPTA rail transit line (Route 100) and numerous bus lines, including express service to Philadelphia via I-76.

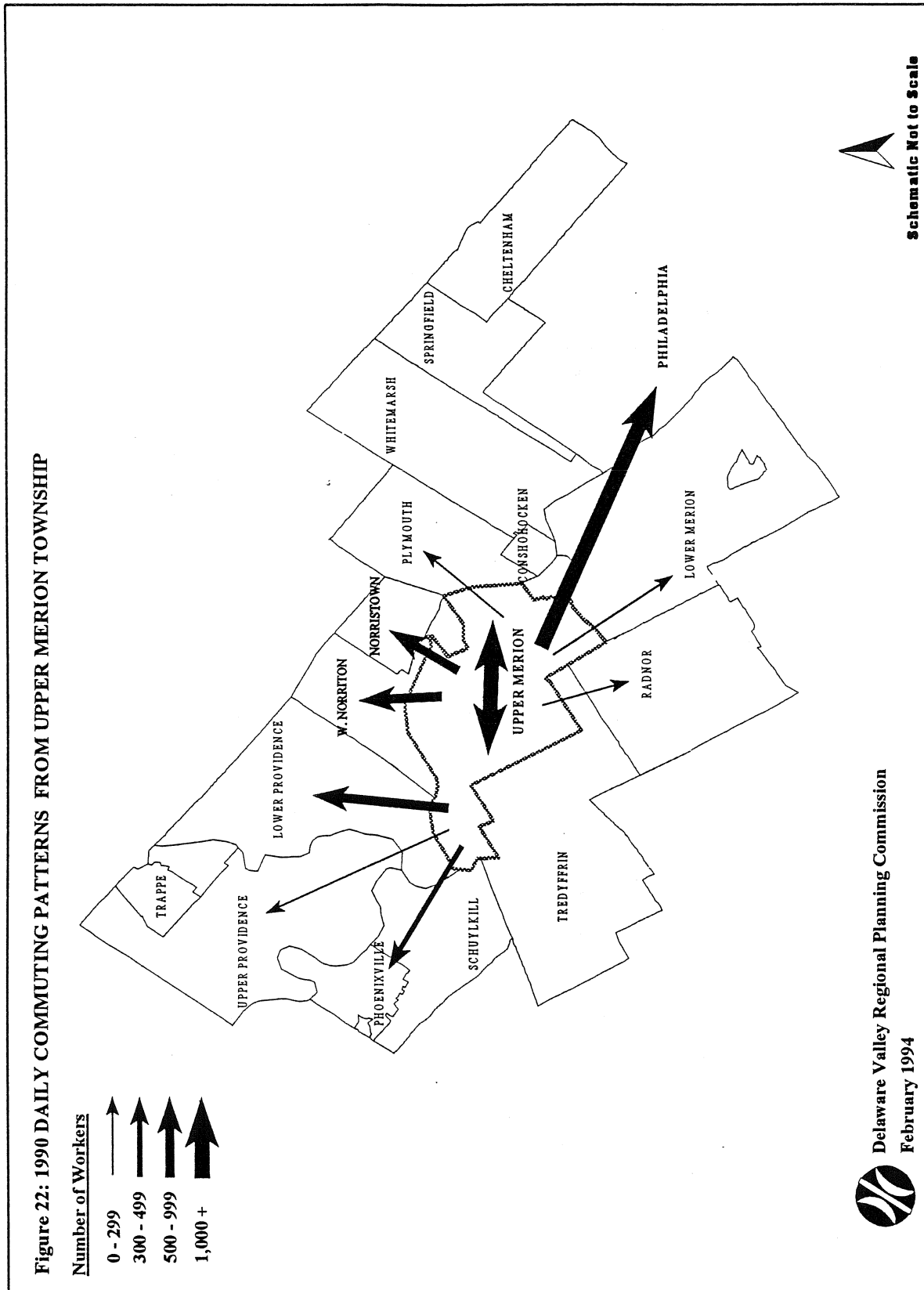
Almost one-third of the *resident workers* (32%) work locally in Upper Merion Township. Philadelphia is the next most important destination, drawing 12 percent of the workers. Radnor (6%), Tredyffrin (5%), and Lower Merion (4%) townships round out the top five. Overall usage of public transportation is 4 percent, but for those working in Philadelphia, the share jumps to 24 percent. A majority of *resident workers* (54%) keep their commutation trips within Montgomery County. Chester County is the next largest draw, attracting 14 percent of the workers. About 8 percent leave the region for work.

Upper Merion Township is the largest source (13%) of workers for jobs located in the township. Almost 4000 workers (10%) come from Philadelphia, constituting a strong reverse commutation flow. Tredyffrin and Lower Providence townships and Norristown each contribute 4 percent of the total. About 18 percent of the workers coming from Philadelphia use public transportation, mostly express buses. Above average use is seen by those coming from Norristown (11%) and Haverford Township (8%), Phoenixville (4%), and Lower Merion Township (3%). Montgomery County contributes the largest share of workers (47%), but this is followed by Chester (20%) and Delaware (10%) counties. About 5 percent of the *employed workers* come from outside the DVRPC region. Figures 21 and 22 show resident and *employed workers* commuting patterns to jobs in Upper Merion.

Figure 21: 1990 DAILY COMMUTING PATTERNS TO UPPER MERION TOWNSHIP




Schematic Not to Scale



APPENDICES

- I. 1990 Census Profiles of Resident Workers
- II. 1990 Census Profiles of Employed Workers
- III. 1990 Census Journey-to-Work Travel Patterns of Resident Workers
- IV. 1990 Census Journey-to-Work Travel Patterns of Employed Workers

Appendix I

Profiles from 1990 Census Workers Residing in Mount Laurel Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	2,276	1,275	3,551
Professional	1,693	1,635	3,328
Technical Support	367	326	693
Sales	1,836	1,096	2,932
Clerical	520	2,566	3,086
Service	429	681	1,110
Farming/Forestry/Fishing	123	30	153
Precision Prod./Craft/Repair	1,122	102	1,224
Machine Operators/Laborers	793	237	1,030
Armed Forces	142	16	158
Total	9,301	7,964	17,265

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	138	76	214
Mining	14	0	14
Construction	758	147	905
Manufacturing	1,657	810	2,467
Transp./Commun./Utilities	742	427	1,169
Wholesale Trade	852	347	1,199
Retail Trade	1,229	1,229	2,458
Finance/Insurance/Real Estate	765	1,042	1,807
Business/Repair	721	540	1,261
Personal Services	153	233	386
Entertainment/Recreation	119	117	236
Professional Services	1,528	2,609	4,137
Public Administration	483	371	854
Armed Forces	142	16	158
Total	9,301	7,964	17,265

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	7,487	6,536	14,023
Government	1,173	1,164	2,337
Self-Employed	621	232	853
Unpaid Family	20	32	52
Total	9,301	7,964	17,265

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male Number	Male Share	Female Number	Female Share
Highway	8,652	93.0%	7,373	92.6%
Public Transportation	298	3.2%	290	3.6%
Bicycle/Walked	85	0.9%	87	1.1%
Other Means	211	2.3%	187	2.3%
Worked at Home	55	0.6%	27	0.3%
Total	9,301	100.0%	7,964	100.0%

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD

BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicle	119	0	6
1 Vehicle	3,046	152	83
2 Vehicles	8,813	341	344
3 or More Vehicles	4,047	95	219
Total	16,025	588	652

Appendix I (cont.) Profiles from 1990 Census Workers Residing in Mount Laurel Township

WORKER EARNINGS AND HOUSEHOLD INCOME BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			Households with Earnings at Specified Level		
	Highway	Public Transp.	Total*	Highway	Public Transp.	Total*
< \$5,000	1,229	34	1,431	94	0	94
\$5,000 - \$9,999	1,053	44	1,183	61	0	69
\$10,000 - \$14,999	1,207	8	1,268	224	7	247
\$15,000 - \$19,999	1,432	25	1,480	329	0	335
\$20,000 - \$24,999	1,792	39	1,874	403	9	419
\$25,000 - \$34,999	3,013	133	3,224	1,482	42	1,520
\$35,000 - \$49,999	2,974	191	3,219	3,166	92	3,409
\$50,000 - \$74,999	2,051	88	2,196	4,938	266	5,417
\$75,000 or More	1,005	26	1,071	5,328	174	5,725
Total Workers	15,756	588	16,946	16,025	590	17,235
Median Income	\$28,818	\$33,217	\$28,713	\$59,835	\$64,050	\$60,118
Mean Income	\$35,016	\$37,188	\$34,821	\$67,951	\$69,108	\$68,391

*Total includes all workers with earnings or households with income

HOUSEHOLDS BY NUMBER OF WORKERS

Workers in HH	Number of HHs
No Workers	1,569
1 Worker	4,631
2 Workers	4,564
3 Workers	724
4+ Workers	296
Total	11,784
Mean	1.48

MOBILITY LIMITATION BY MEANS OF TRANSPORTATION

Means of Transportation	Number of Workers
Drove Alone	31
Carpool	14
Bus/Trolley Bus	16
Trolley/Subway	0
Railroad	0
Bicycle/Walked	7
Other Means	0
Worked at Home	7
Total	75

MOBILITY LIMITATION BY AGE

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	12	1,552
21 - 44	117	13,064
45 - 64	83	6,436
65 +	584	2,420
Total	796	23,472

CARPOOLING

Carpool Size	Number of Workers
2 Persons	1,211
3 Persons	182
4 Persons	65
5 Persons	7
6 Persons	0
7+ Persons	44
Total	1,509
Mean Size	2.19

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	24.7
Carpool	37.8
Bus/Trolley Bus	23.7
Trolley/Subway/Elevated	51.4
Railroad	56.2
Bicycle/Walked	7.6
All Modes	25.7

Appendix I (cont.)

Profiles from 1990 Census Workers Residing in Voorhees Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	1,952	1,195	3,147
Professional	1,453	1,413	2,866
Technical Support	226	333	559
Sales	1,391	945	2,336
Clerical	477	1,245	1,722
Service	378	557	935
Farming/Forestry/Fishing	86	10	96
Precision Prod./Craft/Repair	773	96	869
Machine Operators/Laborers	581	175	756
Armed Forces	28	0	28
Total	7,345	5,969	13,314

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	59	47	106
Mining	0	10	10
Construction	735	124	859
Manufacturing	1,293	543	1,836
Transp./Commun./Utilities	528	267	795
Wholesale Trade	702	210	912
Retail Trade	1,121	903	2,024
Finance/Insurance/Real Estate	641	876	1,517
Business/Repair	462	395	857
Personal Services	46	136	182
Entertainment/Recreation	117	93	210
Professional Services	1,370	2,083	3,453
Public Administration	243	282	525
Armed Forces	28	0	28
Total	7,345	5,969	13,314

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	5,982	4,785	10,767
Government	702	757	1,459
Self - Employed	637	385	1,022
Unpaid Family	24	42	66
Total	7,345	5,969	13,314

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	6,318	86.0%	4,913	82.3%
Public Transportation	787	10.7%	676	11.3%
Bicycle/Walked	90	1.2%	129	2.2%
Other Means	123	1.7%	174	2.9%
Worked at Home	27	0.4%	77	1.3%
Total	7,345	100.0%	5,969	100.0%

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicle	176	36	38
1 Vehicle	2,091	499	134
2 Vehicles	5,809	771	299
3 or More Vehicles	3,155	157	149
Total	11,231	1,463	620

Appendix I (cont.)
Profiles from 1990 Census
Workers Residing in Voorhees Township

**WORKER EARNINGS AND HOUSEHOLD INCOME
BY MEANS OF TRANSPORTATION**

Income Level	Workers with Earnings at Specified Level			Households with Earnings at Specified Level		
	Highway	Public Transp.	Total*	Highway	Public Transp.	Total*
< \$5,000	738	19	934	93	28	121
\$5,000 - \$9,999	782	36	857	50	14	64
\$10,000 - \$14,999	796	67	963	152	9	179
\$15,000 - \$19,999	998	101	1,116	285	18	313
\$20,000 - \$24,999	1,074	117	1,227	276	97	382
\$25,000 - \$34,999	1,892	367	2,337	1,154	111	1,321
\$35,000 - \$49,999	1,863	364	2,303	1,708	258	2,127
\$50,000 - \$74,999	1,505	224	1,764	3,138	377	3,711
\$75,000 or More	1,294	126	1,453	4,375	524	5,051
Total Workers	10,942	1,421	12,954	11,231	1,436	13,269
Median Income	\$30,603	\$35,327	\$30,751	\$64,064	\$56,707	\$63,159
Mean Income	\$42,282	\$43,320	\$42,016	\$82,061	\$66,343	\$80,167

*Total includes all workers with earnings or households with income

**HOUSEHOLDS
BY NUMBERS
OF WORKERS**

Workers in HH	Number of HHs
No Workers	1,033
1 Worker	3,882
2 Workers	3,418
3 Workers	549
4+ Workers	203
Total	9,085
Mean	1.47

**MOBILITY LIMITATION
BY MEANS
OF TRANSPORTATION**

Means of Transportation	Number of Workers
Drove Alone	16
Carpool	20
Bus/Trolley Bus	0
Trolley/Subway	0
Railroad	0
Bicycle/Walked	9
Other Means	10
Worked at Home	0
Total	55

**MOBILITY LIMITATION
BY AGE**

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	10	1,351
21 - 44	70	10,867
45 - 64	162	4,253
65 +	1,005	1,326
Total	1,247	17,797

CARPPOOLING

Carpool Size	Number of Workers
2 Persons	956
3 Persons	170
4 Persons	52
5 Persons	0
6 Persons	0
7+ Persons	40
Total	1,218
Mean Size	2.21

**MEAN TRAVEL TIME
TO WORK BY MEANS
OF TRANSPORTATION**

Means of Transportation	Mean Time (min)
Drove Alone	25.3
Carpool	38.8
Bus/Trolley Bus	15.1
Trolley/Subway/Elevated	44.4
Railroad	44.3
Bicycle/Walked	11.6
All Means	27.8

Appendix I (cont.)

Profiles from 1990 Census Workers Residing in Washington Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	2,478	1,284	3,762
Professional	2,056	2,172	4,228
Technical Support	468	457	925
Sales	2,002	1,371	3,373
Clerical	831	2,651	3,482
Service	799	1,019	1,818
Farming/Forestry/Fishing	148	5	153
Precision Prod./Craft/Repair	1,800	123	1,923
Machine Operators/Laborers	1,444	335	1,779
Armed Forces	123	7	130
Total	12,149	9,424	21,573

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	134	49	183
Mining	15	0	15
Construction	1,092	134	1,226
Manufacturing	2,248	708	2,956
Transp./Commun./Utilities	1,375	372	1,747
Wholesale Trade	898	349	1,247
Retail Trade	1,954	1,738	3,692
Finance/Insurance/Real Estate	855	919	1,774
Business/Repair	736	309	1,045
Personal Services	108	245	353
Entertainment/Recreation	166	160	326
Professional Services	1,825	4,185	6,010
Public Administration	620	249	869
Armed Forces	123	7	130
Total	12,149	9,424	21,573

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	9,615	7,485	17,100
Government	1,901	1,652	3,553
Self-Employed	633	245	878
Unpaid Family	0	42	42
Total	12,149	9,424	21,573

WORKERS BY MEANS OF TRANSPORTATION AND SEX

WORKERS BY MEANS OF TRANSPORTATION AND SEX				
Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	11,399	93.8%	8,701	92.3%
Public Transportation	286	2.4%	328	3.5%
Bicycle/Walked	187	1.5%	125	1.3%
Other Means	195	1.6%	241	2.6%
Worked at Home	82	0.7%	29	0.3%
Total	12,149	100.0%	9,424	100.0%

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD

BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicle	131	27	0
1 Vehicle	2,420	81	106
2 Vehicles	11,002	348	403
3 or More Vehicles	6,547	158	350
Total	20,100	614	859

Appendix I (cont.)

Resident Worker Profiles from 1990 Census Workers Residing in Washington Township

WORKER EARNINGS AND HOUSEHOLD INCOME BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			Households with Earnings at Specified Level		
	Highway	Public Transp.	Total*	Highway	Public Transp.	Total*
< \$5,000	1,672	58	1,974	46	0	46
\$5,000 - \$9,999	1,850	28	1,961	149	9	158
\$10,000 - \$14,999	1,830	58	1,938	250	7	267
\$15,000 - \$19,999	1,761	42	1,905	344	18	394
\$20,000 - \$24,999	1,947	90	2,099	541	0	569
\$25,000 - \$34,999	3,696	130	3,916	1,913	51	2,003
\$35,000 - \$49,999	3,996	101	4,180	3,797	87	4,037
\$50,000 - \$74,999	2,465	89	2,619	7,744	297	8,270
\$75,000 or More	594	8	633	5,316	161	5,740
Total Workers	19,811	604	21,225	20,100	630	21,484
Median Income	\$26,935	\$27,121	\$26,645	\$59,050	\$61,465	\$59,194
Mean Income	\$30,187	\$29,313	\$29,943	\$63,586	\$64,543	\$63,935

*Total includes all workers with earnings or households with income

HOUSEHOLDS BY NUMBER OF WORKERS

Workers in HH	Number of HHs
No Workers	1,292
1 Worker	4,735
2 Workers	5,445
3 Workers	1,234
4+ Workers	506
Total	13,212
Mean	1.65

MOBILITY LIMITATION BY MEANS OF TRANSPORTATION

Means of Transportation	Number of Workers
Drove Alone	34
Carpool	32
Bus/Trolley Bus	0
Trolley/Subway	0
Railroad	0
Bicycle/Walked	0
Other Means	0
Worked at Home	0
Total	66

MOBILITY LIMITATION BY AGE

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	19	2,905
21 - 44	122	17,734
45 - 64	175	6,880
65 +	610	1,973
Total	926	29,492

CARPOOLING

Carpool Size	Number of Workers
2 Persons	1,929
3 Persons	306
4 Persons	118
5 Persons	42
6 Persons	23
7+ Persons	85
Total	2,503
Mean Size	2.24

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	27.1
Carpool	39.5
Bus/Trolley Bus	47.4
Trolley/Subway/Elevated	60.4
Railroad	53.6
Bicycle/Walked	7.3
All Modes	28.6

Appendix I (cont.)

Profiles from 1990 Census Workers Residing in East Windsor Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	1,770	959	2,729
Professional	1,390	1,320	2,710
Technical Support	416	229	645
Sales	909	572	1,481
Clerical	632	1,724	2,356
Service	390	579	969
Farming/Forestry/Fishing	49	22	71
Precision Prod./Craft/Repair	573	97	670
Machine Operators/Laborers	625	236	861
Armed Forces	0	0	0
Total	6,754	5,738	12,492

WORKERS BY INDUSTRY AND SEX

Occupation	Male	Female	Total
Agriculture/Forestry/Fishing	66	40	106
Mining	23	0	23
Construction	307	76	383
Manufacturing	1,376	879	2,255
Transp./Commun./Utilities	657	154	811
Wholesale Trade	457	271	728
Retail Trade	832	707	1,539
Finance/Insurance/Real Estate	797	636	1,433
Business/Repair	363	266	629
Personal Services	102	154	256
Entertainment/Recreation	100	72	172
Professional Services	1,387	2,265	3,652
Public Administration	287	218	505
Armed Forces	0	0	0
Total	6,754	5,738	12,492

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	5,582	4,522	10,104
Government	853	1,068	1,921
Self-Employed	303	139	442
Unpaid Family	16	9	25
Total	6,754	5,738	12,492

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	5,452	80.7%	5,308	92.5%
Public Transportation	921	13.6%	229	4.0%
Bike/Walk	145	2.1%	83	1.4%
Other Means	175	2.6%	73	1.3%
Worked at Home	61	0.9%	45	0.8%
Total	6,754	100.0%	5,738	100.0%

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD

BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicle	73	26	58
1 Vehicle	2,412	387	174
2 Vehicles	5,686	576	223
3 or More Vehicles	2,589	161	127
Total	10,760	1,150	582

Appendix I (cont.)

Profiles from 1990 Census Workers Residing in East Windsor Township

WORKER EARNINGS AND HOUSEHOLD INCOME BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			Households with Earnings at Specified Level		
	Highway	Public Transp.	Total*	Highway	Public Transp.	Total*
< \$5,000	828	20	933	70	0	77
\$5,000 - \$9,999	755	16	839	47	0	47
\$10,000 - \$14,999	912	45	1,030	179	0	179
\$15,000 - \$19,999	1,012	47	1,152	239	15	315
\$20,000 - \$24,999	1,230	86	1,350	389	6	451
\$25,000 - \$34,999	2,027	112	2,196	1,051	63	1,159
\$35,000 - \$49,999	2,004	358	2,397	2,199	172	2,421
\$50,000 - \$74,999	1,367	288	1,685	3,302	475	3,964
\$75,000 or More	444	172	642	3,284	422	3,805
Total Workers	10,579	1,144	12,224	10,760	1,153	12,418
Median Income	\$27,007	\$45,559	\$28,037	\$59,161	\$65,242	\$59,768
Mean Income	\$31,145	\$50,031	\$32,509	\$62,276	\$73,315	\$62,732

*Total includes all workers with earnings or households with income

HOUSEHOLDS BY NUMBER OF WORKERS

Workers in HH	Number of HHs
No Workers	1,068
1 Worker	3,527
2 Workers	3,256
3 Workers	599
4+ Workers	141
Total	8,591
Mean	1.46

MOBILITY LIMITATION BY MEANS OF TRANSPORTATION

Means of Transportation	Number of Workers
Drove Alone	24
Carpool	0
Bus/Trolley Bus	0
Trolley/Subway	0
Railroad	0
Bicycle/Walked	0
Other Means	0
Worked at Home	8
Total	32

MOBILITY LIMITATION BY AGE

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	8	1,416
21 - 44	53	10,055
45 - 64	110	4,135
65 +	315	1,338
Total	486	16,944

CARPPOOLING

Carpool Size	Number of Workers
2 Persons	1,059
3 Persons	115
4 Persons	36
5 Persons	8
6 Persons	0
7+ Persons	173
Total	1,391
Mean Size	2.33

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	26.9
Carpool	43.2
Bus/Trolley Bus	57.1
Trolley/Subway/Elevated	51.4
Railroad	54.3
Bicycle/Walked	8.7
All Modes	30.0

Appendix I (cont.)

Profiles from 1990 Census Workers Residing in Lower Makefield Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	2,492	1,053	3,545
Professional	1,479	1,647	3,126
Technical Support	328	224	552
Sales	1,417	986	2,403
Clerical	357	1,304	1,661
Service	257	410	667
Farming/Forestry/Fishing	53	7	60
Precision Prod./Craft/Repair	697	21	718
Machine Operators/Laborers	464	89	553
Armed Forces	29	0	29
Total	7,573	5,741	13,314

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	88	51	139
Mining	19	0	19
Construction	390	57	447
Manufacturing	1,641	604	2,245
Transp./Commun./Utilities	411	285	696
Wholesale Trade	745	181	926
Retail Trade	1,105	923	2,028
Finance/Insurance/Real Estate	830	650	1,480
Business/Repair	363	198	561
Personal Services	61	152	213
Entertainment/Recreation	44	69	113
Professional Services	1,551	2,382	3,933
Public Administration	296	189	485
Armed Forces	29	0	29
Total	7,573	5,741	13,314

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	6,297	4,625	10,922
Government	696	772	1,468
Self-Employed	549	320	869
Unpaid Family	31	24	55
Total	7,573	5,741	13,314

WORKERS BY MEANS OF TRANSPORTATION AND SEX

WORKERS BY MEANS OF TRANSPORTATION AND SEX				
Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	6,442	85.3%	5,240	91.5%
Public Transportation	830	11.0%	161	2.8%
Bicycle/Walked	91	1.2%	95	1.7%
Other Means	190	2.5%	230	4.0%
Worked at Home	20	0.3%	15	0.3%
Total	7,553	100.0%	5,726	100.0%

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD

BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicle	42	0	10
1 Vehicle	1,034	100	98
2 Vehicles	5,974	635	320
3 or More Vehicles	4,651	256	194
Totals	11,701	991	622
			13,314

Appendix I (cont.)

Profiles from 1990 Census Workers Residing in Lower Makefield Township

WORKER EARNINGS AND HOUSEHOLD INCOME BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level		Households with Earnings at Specified Level	
	Highway	Public Transp.	Total*	Share
< \$5,000	1,027	19	1,257	9.6%
\$5,000 - \$9,999	810	0	894	6.8%
\$10,000 - \$14,999	849	29	933	7.1%
\$15,000 - \$19,999	825	33	883	6.8%
\$20,000 - \$24,999	1,006	33	1,070	8.2%
\$25,000 - \$34,999	1,601	60	1,730	13.2%
\$35,000 - \$49,999	1,656	155	1,839	14.1%
\$50,000 - \$74,999	2,119	258	2,409	18.4%
\$75,000 or More	1,575	404	2,044	15.7%
Total Workers	11,468	991	13,059	100.0%
Median Income	\$32,212	\$64,067	\$33,369	
Mean Income	\$44,650	\$73,626	\$45,920	

*Total includes all workers with earnings or households with income

HOUSEHOLDS BY NUMBER OF WORKERS

Workers in HH	Number of HHs
No Workers	925
1 Worker	3,152
2 Workers	3,549
3 Workers	728
4+ Workers	222
Total	8,576
Mean	1.58

MOBILITY LIMITATION BY MEANS

OF TRANSPORTATION

Means of Transportation	Number of Workers
Drove Alone	18
Carpool	22
Bus/Trolley Bus	0
Trolley/Subway	0
Railroad	0
Bicycle/Walked	8
Other Means	5
Worked at Home	9
Total	62

MOBILITY LIMITATION BY AGE

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	25	1,563
21 - 44	73	9,009
45 - 64	93	6,404
65 +	227	1,856
Total	418	18,832

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	25.0
Carpool	40.9
Bus/Trolley Bus	30.7
Trolley/Subway/Elevated	45.0
Railroad	41.2
Bicycle/Walked	13.1
All Modes	26.5

CARPPOOLING

Carpool Size	Number of Workers
2 Persons	651
3 Persons	96
4 Persons	21
5 Persons	0
6 Persons	7
7+ Persons	34
Total	809
Mean Size	2.20

Appendix I (cont.)

Profiles from 1990 Census Workers Residing in West Whiteland Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	919	585	1,504
Professional	759	885	1,644
Technical Support	232	116	348
Sales	591	407	998
Clerical	232	748	980
Service	140	261	401
Farming/Forestry/Fishing	75	0	75
Precision Prod./Craft/Repair	519	26	545
Machine Operators/Laborers	367	55	422
Armed Forces	0	0	0
Total	3,834	3,083	6,917

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	101	39	140
Mining	0	0	0
Construction	305	39	344
Manufacturing	947	357	1,304
Transp./Commun./Utilities	279	137	416
Wholesale Trade	313	127	440
Retail Trade	515	436	951
Finance/Insurance/Real Estate	309	325	634
Business/Repair	260	195	455
Personal Services	27	77	104
Entertainment/Recreation	29	15	44
Professional Services	709	1,290	1,999
Public Administration	40	46	86
Armed Forces	0	0	0
Total	3,834	3,083	6,917

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	3,332	2,677	6,009
Government	175	302	477
Self-Employed	327	90	417
Unpaid Family	0	14	14
Total	3,834	3,083	6,917

WORKERS BY CLASS OF WORKER AND SEX

Means of Transportation	Male Number	Male Share	Female Number	Female Share
Highway	3,509	91.5%	2,882	93.5%
Public Transportation	149	3.9%	123	4.0%
Bicycle/Walked	55	1.4%	33	1.1%
Other Means	113	2.9%	45	1.5%
Worked at Home	8	0.2%	0	0.0%
Total	3,834	100.0%	3,083	100.0%

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD

BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicle	18	0	0
1 Vehicle	1,024	56	31
2 Vehicles	3,566	182	128
3 or More Vehicles	1,780	37	95
Total	6,388	275	254

Appendix I (cont.)

Profiles from 1990 Census Workers Residing in West Whiteland Township

WORKER EARNINGS AND HOUSEHOLD INCOME BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			Households with Earnings at Specified Level		
	Highway	Public Transp.	Total*	Highway	Public Transp.	Total*
< \$5,000	399	7	493	35	0	35
\$5,000 - \$9,999	390	0	411	0	0	0
\$10,000 - \$14,999	540	0	575	33	0	42
\$15,000 - \$19,999	601	26	663	121	0	126
\$20,000 - \$24,999	641	17	679	171	0	179
\$25,000 - \$34,999	1,350	78	1,434	578	26	573
\$35,000 - \$49,999	1,351	50	1,413	1,382	27	1,497
\$50,000 - \$74,999	745	47	814	2,429	72	2,596
\$75,000 or More	275	47	336	0	0	0
Total Workers	6,292	272	6,818	4,749	125	5,048
Median Income	\$28,533	\$39,084	\$28,203	\$57,404	\$72,991	\$57,741
Mean Income	\$33,148	\$44,296	\$33,230	\$63,097	\$71,129	\$63,418

*Total includes all workers with earnings or households with income

HOUSEHOLDS BY NUMBER OF WORKERS

Workers in HH	Number of HHs
No Workers	509
1 Worker	1,895
2 Workers	1,842
3 Workers	320
4+ Workers	89
Total	4,655
Mean	1.50

MOBILITY LIMITATION BY MEANS OF TRANSPORTATION

Means of Transportation	Number of Workers
Drove Alone	17
Carpool	0
Bus/Trolley Bus	0
Trolley/Subway	0
Railroad	0
Bicycle/Walked	0
Other Means	0
Worked at Home	0
Total	17

MOBILITY LIMITATION BY AGE

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	130	679
21 - 44	78	5,902
45 - 64	33	2,056
65 +	125	749
Total	366	9,386

CARPPOOLING

Carpool Size	Number of Workers
2 Persons	378
3 Persons	52
4 Persons	38
5 Persons	3
6 Persons	0
7+ Persons	0
Total	471
Mean Size	2.18

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	24.1
Carpool	17.0
Bus/Trolley Bus	29.8
Trolley/Subway/Elevated	45.0
Railroad	64.2
Bicycle/Walked	8.9
All Modes	25.1

Appendix I (cont.)

Resident Worker Profiles from 1990 Census Workers Residing in Concord Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	519	230	749
Professional	325	389	714
Technical Support	67	53	120
Sales	237	215	452
Clerical	100	388	488
Service	128	164	292
Farming/Forestry/Fishing	45	13	58
Precision Prod./Craft/Repair	415	27	442
Machine Operators/Laborers	239	26	265
Armed Forces	0	0	0
Total	2,075	1,505	3,580

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	66	27	93
Mining	13	0	13
Construction	206	44	250
Manufacturing	510	171	681
Transp./Commun./Utilities	191	48	239
Wholesale Trade	149	47	196
Retail Trade	298	290	588
Finance/Insurance/Real Estate	92	116	208
Business/Repair	154	63	217
Personal Services	24	71	95
Entertainment/Recreation	37	38	75
Professional Services	276	575	851
Public Administration	59	15	74
Armed Forces	0	0	0
Total	2,075	1,505	3,580

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	1,751	1,266	3,017
Government	178	151	329
Self-Employed	140	76	216
Unpaid Family	6	12	18
Total	2,075	1,505	3,580

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male Number	Male Share	Female Number	Female Share
Highway	1,939	93.4%	1,372	91.2%
Public Transportation	28	1.3%	48	3.2%
Bicycle/Walked	36	1.7%	29	1.9%
Other Means	61	2.9%	56	3.7%
Worked at Home	11	0.5%	0	0.0%
Total	2,075	100.0%	1,505	100.0%

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD

BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicle	13	0	16
1 Vehicle	245	0	23
2 Vehicles	1,352	44	72
3 or More Vehicles	1,701	32	82
Totals	3,311	76	193
Total	3,580		

Appendix I (cont.)

Resident Worker Profiles from 1990 Census
Workers Residing in Concord Township

**WORKER EARNINGS AND HOUSEHOLD INCOME
BY MEANS OF TRANSPORTATION**

Income Level	Workers with Earnings at Specified Level			Households with Earnings at Specified Level		
	Highway	Public Transp.	Total*	Share	Highway	Public Transp.
< \$5,000	323	0	367	10.4%	15	0
\$5,000 - \$9,999	322	7	356	10.1%	14	0
\$10,000 - \$14,999	201	6	242	6.9%	0	6
\$15,000 - \$19,999	249	5	254	7.2%	47	0
\$20,000 - \$24,999	309	0	316	9.0%	53	0
\$25,000 - \$34,999	469	24	519	14.8%	178	13
\$35,000 - \$49,999	562	11	573	16.3%	445	5
\$50,000 - \$74,999	537	12	586	16.7%	858	12
\$75,000 or More	288	5	304	8.6%	1,701	40
Total Workers	3,260	70	3,517	100.0%	3,311	76
Median Income	\$30,600	\$31,674	\$29,911		\$75,728	\$81,167
Mean Income	\$36,103	\$37,625	\$35,865		\$85,310	\$104,793

*Total includes all workers with earnings or households with income

**HOUSEHOLDS
BY NUMBER
OF WORKERS**

Workers in HH	Number of HHs
No Workers	314
1 Worker	803
2 Workers	732
3 Workers	268
4+ Workers	122
Total	2,239
Mean	1.64

**MOBILITY LIMITATION
BY MEANS
OF TRANSPORTATION**

Means of Transportation	Number of Workers
Drove Alone	17
Carpool	0
Bus/Trolley Bus	0
Trolley/Subway	0
Railroad	0
Bicycle/Walked	0
Other Means	0
Worked at Home	0
Total	17

**MOBILITY LIMITATION
BY AGE**

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	0	510
21 - 44	11	2,406
45 - 64	35	1,806
65 +	60	562
Total	106	5,284

CARPOOLING

Carpool Size	Number of Workers
2 Persons	230
3 Persons	31
4 Persons	20
5 Persons	0
6 Persons	0
7+ Persons	11
Total	292
Mean Size	2.22

**MEAN TRAVEL TIME
TO WORK BY MEANS
OF TRANSPORTATION**

Means of Transportation	Mean Time (min)
Drove Alone	23.9
Carpool	37.8
Bus/Trolley Bus	0.0
Trolley/Subway/Elevated	50.0
Railroad	61.8
Bicycle/Walked	12.8
All Modes	25.0

Appendix I (cont.)

Profiles from 1990 Census Workers Residing in Upper Merion Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	2,010	984	2,994
Professional	1,683	1,778	3,461
Technical Support	382	327	709
Sales	1,220	1,106	2,326
Clerical	677	2,051	2,728
Service	575	501	1,076
Farming/Forestry/Fishing	42	8	50
Precision Prod./Craft/Repair	925	121	1,046
Machine Operators/Laborers	686	393	1,079
Armed Forces	17	0	17
Total	8,217	7,269	15,486

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	55	35	90
Mining	25	5	30
Construction	710	122	832
Manufacturing	1,949	1,033	2,982
Transp./Commun./Utilities	566	331	897
Wholesale Trade	622	328	950
Retail Trade	1,105	1,115	2,220
Finance/Insurance/Real Estate	696	747	1,443
Business/Repair	612	460	1,072
Personal Services	109	186	295
Entertainment/Recreation	40	88	128
Professional Services	1,458	2,708	4,166
Public Administration	253	111	364
Armed Forces	17	0	17
Total	8,217	7,269	15,486

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	6,976	6,199	13,175
Government	621	740	1,361
Self-Employed	608	286	894
Unpaid Family	12	44	56
Total	8,217	7,269	15,486

WORKERS BY MEANS OF TRANSPORTATION AND SEX

WORKERS BY MEANS OF TRANSPORTATION AND SEX				
Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	7,513	91.4%	6,561	90.3%
Public Transportation	280	3.4%	283	3.9%
Bicycle/Walked	183	2.2%	201	2.8%
Other Means	202	2.5%	210	2.9%
Worked at Home	39	0.5%	14	0.2%
Total	8,217	100.0%	7,269	100.0%

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD

BY MEANS OF TRANSPORTATION

Available Vehicles	Highway	Public Transp.	Other	Total
No Vehicle	163	23	64	250
1 Vehicles	2,624	141	213	2,978
2 Vehicles	7,042	284	396	7,722
3 or More Vehicles	4,245	115	176	4,536
Total	14,074	563	849	15,486

Appendix I (cont.)

Profiles from 1990 Census Workers Residing in Upper Merion Township

WORKER EARNINGS AND HOUSEHOLD INCOME BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			Households with Income at Specified Level		
	Highway	Public Transp.	Total*	Highway	Public Transp.	Total*
< \$5,000	993	26	1,263	82	0	82
\$5,000 - \$9,999	1,363	31	1,538	133	0	142
\$10,000 - \$14,999	1,074	46	1,203	113	11	161
\$15,000 - \$19,999	1,339	21	1,405	373	0	429
\$20,000 - \$24,999	1,480	44	1,561	388	25	474
\$25,000 - \$34,999	2,843	167	3,054	1,505	44	1,596
\$35,000 - \$49,999	2,371	100	2,559	3,005	92	3,272
\$50,000 - \$74,999	1,448	71	1,576	3,987	220	4,442
\$75,000 or More	858	43	948	4,488	156	4,875
Total Workers	13,769	549	15,107	14,074	548	15,473
Median Income	\$26,784	\$30,861	\$26,665	\$57,811	\$56,673	\$57,588
Mean Income	\$33,573	\$36,414	\$33,305	\$68,900	\$71,669	\$68,802

*Total includes all workers with earnings or households with income

HOUSEHOLDS BY NUMBER OR WORKERS

Workers in HH	Number of HHS
No Workers	1,565
1 Worker	4,094
2 Workers	3,704
3 Workers	909
4+ Workers	279
Total	10,551
Mean	1.48

MOBILITY LIMITATION BY MEANS OF TRANSPORTATION

Means of Transportation	Number of Workers
Drove Alone	35
Carpool	17
Bus/Trolley Bus	0
Trolley/Subway	0
Railroad	0
Bicycle/Walked	0
Other Means	9
Worked at Home	0
Total	61

MOBILITY LIMITATION BY AGE

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	13	1,367
21 - 44	91	10,284
45 - 64	88	6,484
65 +	403	2,780
Total	595	20,915

CARPPOOLING

Carpool Size	Number of Workers
2 Persons	1,175
3 Persons	156
4 Persons	63
5 Persons	7
6 Persons	7
7+ Persons	17
Total	1,425
Mean Size	2.16

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	20.2
Carpool	29.3
Bus/Trolley Bus	42.9
Trolley/Subway/Elevated	50.5
Railroad	52.9
Bicycle/Walked	11.8
All Modes	21.2

Appendix II

Profiles from 1990 Census Workers Employed in Mount Laurel Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	2,086	1,587	3,673
Professional	1,263	785	2,048
Technical Support	690	300	990
Sales	1,796	959	2,755
Clerical	1,042	3,602	4,644
Service	758	918	1,676
Farming/Forestry/Fishing	151	34	185
Precision Prod./Craft/Repair	1,246	173	1,419
Machine Operators/Laborers	1,340	705	2,045
Armed Forces	20	0	20
Total	10,392	9,063	19,455

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	9,357	8,410	17,767
Government	515	391	906
Self-Employed	510	246	756
Unpaid Family	10	16	26
Total	10,392	9,063	19,455

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	9,861	94.9%	8,622	95.1%
Public Transportation	110	1.1%	161	1.8%
Bike/Walk	106	1.0%	58	0.6%
Other Means	104	1.0%	35	0.4%
Worked at Home	211	2.0%	187	2.1%
Total	10,392	100.0%	9,063	100.0%

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	143	40	183
Mining	7	0	7
Construction	1,246	247	1,493
Manufacturing	1,587	1,232	2,819
Transp./Commun./Utilities	1,036	485	1,521
Wholesale Trade	1,181	570	1,751
Retail Trade	1,127	1,132	2,259
Finance/Insurance/Real Estate	1,207	2,309	3,516
Business/Repair	1,223	919	2,142
Personal Services	199	435	634
Entertainment/Recreation	164	117	281
Professional Services	1,047	1,462	2,509
Public Administration	205	115	320
Armed Forces	20	0	20
Total	10,392	9,063	19,455

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	218	140	25	383
1 Vehicle	3,768	53	142	3,963
2 Vehicles	9,425	44	319	9,788
3 or More Vehicles	5,038	34	215	5,287
Total	18,449	271	701	19,421

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	24.5
Carpool	26.4
Bus/Trolley Bus	54.2
Trolley/Subway/Elevated	23.3
Railroad	68.7
Bicycle/Walked	37.2
All Modes	24.9

WORKER EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
< \$5,000	1,081	27	1,242	6.5%
\$5,000 - \$9,999	1,602	40	1,740	9.2%
\$10,000 - \$14,999	1,790	76	1,939	10.2%
\$15,000 - \$19,999	2,457	24	2,536	13.3%
\$20,000 - \$24,999	2,626	28	2,716	14.3%
\$25,000 - \$34,999	3,428	28	3,552	18.7%
\$35,000 - \$49,999	2,692	0	2,751	14.5%
\$50,000 - \$74,999	1,577	14	1,631	8.6%
\$75,000 or More	861	7	900	4.7%
Total Workers	18,114	244	19,007	100.0%
Median Income	\$23,846	\$13,725	\$23,525	
Mean Income	\$30,070	\$19,183	\$29,716	

*Total includes all workers with earnings

Appendix II (cont.)

Profiles from 1990 Census Workers Employed in Voorhees Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	1,069	870	1,939
Professional	744	1,478	2,222
Technical Support	207	613	820
Sales	1,295	1,536	2,831
Clerical	488	2,786	3,274
Service	616	1,286	1,902
Farming/Forestry/Fishing	129	28	157
Precision Prod./Craft/Repair	935	113	1,048
Machine Operators/Laborers	521	202	723
Armed Forces	9	0	9
Total	6,013	8,912	14,925

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	5,279	7,920	13,199
Government	288	685	973
Self-Employed	429	307	736
Unpaid Family	17	0	17
Total	6,013	8,912	14,925

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	5,577	92.7%	8,467	95.0%
Public Transportation	123	2.0%	146	1.6%
Bike/Walk	151	2.5%	114	1.3%
Other Means	39	0.6%	11	0.1%
Worked at Home	123	2.0%	174	2.0%
Total	6,013	100.0%	8,912	100.0%

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	108	44	152
Mining	8	0	8
Construction	758	120	878
Manufacturing	223	197	420
Transp./Commun./Utilities	373	257	630
Wholesale Trade	164	121	285
Retail Trade	211	102	313
Finance/Insurance/Real Estate	356	105	461
Business/Repair	1,184	2,099	3,283
Personal Services	1,116	1,782	2,898
Entertainment/Recreation	1,449	3,975	5,424
Professional Services	54	110	164
Public Administration	9	0	9
Armed Forces	0	0	0
Total	6,013	8,912	14,925

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	307	79	44	430
1 Vehicle	2,580	91	137	2,808
2 Vehicles	6,726	58	306	7,090
3 or More Vehicles	4,369	41	125	4,535
Total	13,982	269	612	14,863

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	21.0
Carpool	27.2
Bus/Trolley Bus	24.2
Trolley/Subway/Elevated	37.0
Railroad	43.5
Bicycle/Walked	40.8
All Modes	21.5

WORKER EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
< \$5,000	1,533	72	1,771	12.2%
\$5,000 - \$9,999	1,922	31	2,027	13.9%
\$10,000 - \$14,999	1,509	15	1,585	10.9%
\$15,000 - \$19,999	1,878	33	1,934	13.3%
\$20,000 - \$24,999	1,735	24	1,800	12.4%
\$25,000 - \$34,999	2,268	50	2,386	16.4%
\$35,000 - \$49,999	1,600	21	1,690	11.6%
\$50,000 - \$74,999	775	6	822	5.7%
\$75,000 or More	491	9	533	3.7%
Total Workers	13,711	261	14,548	100.0%
Median Income	\$20,006	\$20,041	\$19,857	
Mean Income	\$25,795	\$19,412	\$26,060	

*Total includes all workers with earnings

Appendix II (cont.)

Profiles from 1990 Census Workers Employed in Washington Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	327	274	601
Professional	348	980	1,328
Technical Support	38	78	116
Sales	624	758	1,382
Clerical	143	953	1,096
Service	352	661	1,013
Farming/Forestry/Fishing	63	29	92
Precision Prod./Craft/Repair	575	81	656
Machine Operators/Laborers	630	266	896
Armed Forces	5	0	5
Total	3,105	4,080	7,185

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	2,270	2,986	5,256
Government	448	898	1,346
Self-Employed	379	167	546
Unpaid Family	8	29	37
Total	3,105	4,080	7,185

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	2,748	88.5%	3,695	90.6%
Public Transportation	19	0.6%	38	0.9%
Bike/Walk	89	2.9%	92	2.3%
Other Means	54	1.7%	14	0.3%
Worked at Home	195	6.3%	241	5.9%
Total	3,105	100.0%	4,080	100.0%

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	66	19	85
Mining	6	0	6
Construction	273	40	313
Manufacturing	267	165	432
Transp./Commun./Utilities	402	117	519
Wholesale Trade	89	202	291
Retail Trade	932	1,177	2,109
Finance/Insurance/Real Estate	173	300	473
Business/Repair	273	96	369
Personal Services	13	142	155
Entertainment/Recreation	28	39	67
Professional Services	510	1,697	2,207
Public Administration	68	86	154
Armed Forces	5	0	5
Total	3,105	4,080	7,185

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	67	0	0	67
1 Vehicle	1,078	31	92	1,201
2 Vehicles	2,948	14	331	3,293
3 or More Vehicles	2,320	12	262	2,594
Total	6,413	57	685	7,155

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	15.3
Carpool	20.2
Bus/Trolley Bus	27.5
Trolley/Subway/Elevated	-
Railroad	-
Bicycle/Walked	28.1
All Modes	15.3

WORKER EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
< \$5,000	1,004	9	1,195	17.1%
\$5,000 - \$9,999	805	7	899	12.9%
\$10,000 - \$14,999	857	14	921	13.2%
\$15,000 - \$19,999	864	15	958	13.7%
\$20,000 - \$24,999	667	0	720	10.3%
\$25,000 - \$34,999	1,138	8	1,218	17.5%
\$35,000 - \$49,999	608	0	669	9.6%
\$50,000 - \$74,999	228	0	258	3.7%
\$75,000 or More	112	0	134	1.9%
Total Workers	6,283	53	6,972	100.0%
Median Income	\$17,463	\$13,293	\$17,108	
Mean Income	\$21,599	\$14,360	\$21,629	

*Total includes all workers with earnings

Appendix II

Profiles from 1990 Census (cont.) Workers Employed in East Windsor Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	1,454	584	2,038
Professional	1,451	661	2,112
Technical Support	591	73	664
Sales	546	427	973
Clerical	500	1,642	2,142
Service	388	446	834
Farming/Forestry/Fishing	70	5	75
Precision Prod./Craft/Repair	825	164	989
Machine Operators/Laborers	792	309	1,101
Armed Forces	0	0	0
Total	6,617	4,311	10,928

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	5,911	3,762	9,673
Government	387	411	798
Self-Employed	293	129	422
Unpaid Family	26	9	35
Total	6,617	4,311	10,928

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	6,168	93.2%	4,113	95.4%
Public Transportation	42	0.6%	32	0.7%
Bike/Walk	157	2.4%	87	2.0%
Other Means	75	1.1%	6	0.1%
Worked at Home	175	2.6%	73	1.7%
Total	6,617	100.0%	4,311	100.0%

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	82	20	102
Mining	0	0	0
Construction	377	36	413
Manufacturing	3,221	1,554	4,775
Transp./Commun./Utilities	422	83	505
Wholesale Trade	261	153	414
Retail Trade	525	662	1,187
Finance/Insurance/Real Estate	522	581	1,103
Business/Repair	386	182	568
Personal Services	98	109	207
Entertainment/Recreation	88	8	96
Professional Services	475	853	1,328
Public Administration	160	70	230
Armed Forces	0	0	0
Total	6,617	4,311	10,928

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	129	11	52	192
1 Vehicle	1,811	9	182	2,002
2 Vehicles	5,194	45	226	5,465
3 or More Vehicles	3,136	9	113	3,258
Total	10,270	74	573	10,917

WORKER EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
< \$5,000	714	8	791	7.4%
\$5,000 - \$9,999	634	0	709	6.6%
\$10,000 - \$14,999	697	0	770	7.2%
\$15,000 - \$19,999	1,179	14	1,305	12.2%
\$20,000 - \$24,999	1,104	0	1,163	10.8%
\$25,000 - \$34,999	2,106	25	2,167	20.2%
\$35,000 - \$49,999	1,991	20	2,046	19.1%
\$50,000 - \$74,999	1,197	0	1,235	11.5%
\$75,000 or More	520	7	545	5.1%
Total Workers	10,142	74	10,731	100.0%
Median Income	\$28,236	\$30,816	\$27,440	
Mean Income	\$33,622	\$38,034	\$33,046	

*Total includes all workers with earnings

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	28.4
Carpool	39.9
Bus/Trolley Bus	37.3
Trolley/Subway/Elevated	-
Railroad	93.0
Bicycle/Walked	32.4
All Modes	28.9

Appendix II (cont.)

Profiles from 1990 Census Workers Employed in Lower Makefield Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	155	86	241
Professional	188	442	630
Technical Support	36	44	80
Sales	146	116	262
Clerical	27	228	255
Service	186	191	377
Farming/Forestry/Fishing	30	19	49
Precision Prod./Craft/Repair	77	17	94
Machine Operators/Laborers	103	41	144
Armed Forces	0	0	0
Total	948	1,184	2,132

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	640	814	1,454
Government	178	236	414
Self-Employed	124	127	251
Unpaid Family	6	7	13
Total	948	1,184	2,132

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	728	76.8%	942	79.6%
Public Transportation	0	0.0%	0	0.0%
Bike/Walk	30	3.2%	12	1.0%
Other Means	0	0.0%	0	0.0%
Worked at Home	190	20.0%	230	19.4%
Total	948	100.0%	1,184	100.0%

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	36	38	74
Mining	3	0	3
Construction	45	7	52
Manufacturing	136	52	188
Transp./Commun./Utilities	26	19	45
Wholesale Trade	47	31	78
Retail Trade	131	100	231
Finance/Insurance/Real Estate	86	19	105
Business/Repair	30	72	102
Personal Services	25	38	63
Entertainment/Recreation	33	31	64
Professional Services	231	703	934
Public Administration	119	74	193
Armed Forces	0	0	0
Total	948	1,184	2,132

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	0	0	0	0
1 Vehicle	309	0	64	373
2 Vehicles	769	0	273	1,042
3 or More Vehicles	592	0	106	698
Total	1,670	0	443	2,113

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	18.2
Carpool	52.1
Bus/Trolley Bus	-
Trolley/Subway/Elevated	-
Railroad	-
Bicycle/Walked	16.0
All Modes	18.0

WORKER EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
< \$5,000	150	0	296	14.4%
\$5,000 - \$9,999	150	0	206	10.1%
\$10,000 - \$14,999	228	0	283	13.8%
\$15,000 - \$19,999	208	0	222	10.8%
\$20,000 - \$24,999	194	0	214	10.4%
\$25,000 - \$34,999	384	0	424	20.7%
\$35,000 - \$49,999	177	0	197	9.6%
\$50,000 - \$74,999	80	0	112	5.5%
\$75,000 or More	57	0	95	4.6%
Total Workers	1,628	0	2,049	100.0%
Median Income	\$21,413	-	\$20,332	
Mean Income	\$27,162	-	\$26,242	

*Total includes all workers with earnings

Appendix II (cont.)

Profiles from 1990 Census Workers Employed in West Whiteland Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	1,054	743	1,797
Professional	909	729	1,638
Technical Support	329	121	450
Sales	997	1,348	2,345
Clerical	274	1,361	1,635
Service	383	485	868
Farming/Forestry/Fishing	96	14	110
Precision Prod./Craft/Repair	936	146	1,082
Machine Operators/Laborers	706	228	934
Armed Forces	0	0	0
Total	5,684	5,175	10,859

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	5,187	4,750	9,937
Government	148	257	405
Self-Employed	334	137	471
Unpaid Family	15	31	46
Total	5,684	5,175	10,859

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	5,457	96.0%	5,039	97.4%
Public Transportation	57	1.0%	44	0.9%
Bike/Walk	31	0.5%	47	0.9%
Other Means	26	0.5%	0	0.0%
Worked at Home	113	2.0%	45	0.9%
Total	5,684	100.0%	5,175	100.0%

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	92	21	113
Mining	6	19	25
Construction	547	60	607
Manufacturing	1,584	679	2,263
Transp./Commun./Utilities	111	63	174
Wholesale Trade	317	301	618
Retail Trade	1,210	1,514	2,724
Finance/Insurance/Real Estate	373	519	892
Business/Repair	336	177	513
Personal Services	43	212	255
Entertainment/Recreation	89	40	129
Professional Services	932	1,553	2,485
Public Administration	44	17	61
Armed Forces	0	0	0
Total	5,684	5,175	10,859

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	114	43	19	176
1 Vehicle	1,766	35	49	1,850
2 Vehicles	5,400	23	131	5,554
3 or More Vehicles	3,136	0	63	3,199
Total	10,416	101	262	10,779

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	23.8
Carpool	29.4
Bus/Trolley Bus	34.2
Trolley/Subway/Elevated	—
Railroad	90.0
Bicycle/Walked	44.2
All Modes	24.0

WORKER EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
< \$5,000	1,200	22	1,295	12.2%
\$5,000 - \$9,999	970	14	1,004	9.4%
\$10,000 - \$14,999	886	38	965	9.1%
\$15,000 - \$19,999	1,241	10	1,289	12.1%
\$20,000 - \$24,999	1,263	17	1,301	12.2%
\$25,000 - \$34,999	1,941	0	1,954	18.4%
\$35,000 - \$49,999	1,497	0	1,517	14.3%
\$50,000 - \$74,999	852	0	874	8.2%
\$75,000 or More	415	0	429	4.0%
Total Workers	10,265	101	10,628	100.0%
Median Income	\$23,154	\$11,501	\$22,639	
Mean Income	\$27,848	\$11,425	\$27,623	

*Total includes all workers with earnings

Appendix II (cont.)

Profiles from 1990 Census Workers Employed in Concord Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	335	214	549
Professional	186	164	350
Technical Support	52	22	74
Sales	307	169	476
Clerical	184	872	1,056
Service	104	229	333
Farming/Forestry/Fishing	89	17	106
Precision Prod./Craft/Repair	293	22	315
Machine Operators/Laborers	288	103	391
Armed Forces	0	5	5
Total	1,838	1,817	3,655

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	1,623	1,634	3,257
Government	117	157	274
Self-Employed	92	26	118
Unpaid Family	6	0	6
Total	1,838	1,817	3,655

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	1,766	96.1%	1,756	96.6%
Public Transportation	0	0.0%	0	0.0%
Bike/Walk	6	0.3%	5	0.3%
Other Means	5	0.3%	0	0.0%
Worked at Home	61	3.3%	56	3.1%
Total	1,838	100.0%	1,817	100.0%

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	81	38	119
Mining	0	0	0
Construction	116	11	127
Manufacturing	364	203	567
Transp./Commun./Utilities	85	48	133
Wholesale Trade	140	124	264
Retail Trade	261	164	425
Finance/Insurance/Real Estate	391	736	1,127
Business/Repair	77	26	103
Personal Services	35	101	136
Entertainment/Recreation	63	53	116
Professional Services	213	296	509
Public Administration	12	12	24
Armed Forces	0	5	5
Total	1,838	1,817	3,655

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	37	0	0	37
1 Vehicle	649	0	14	663
2 Vehicles	1,639	0	49	1,688
3 or More Vehicles	1,197	0	70	1,267
Total	3,522	0	133	3,655

WORKER EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
< \$5,000	280	0	309	8.6%
\$5,000 - \$9,999	274	0	295	8.2%
\$10,000 - \$14,999	363	0	385	10.7%
\$15,000 - \$19,999	551	0	551	15.3%
\$20,000 - \$24,999	473	0	480	13.3%
\$25,000 - \$34,999	807	0	807	22.4%
\$35,000 - \$49,999	442	0	442	12.3%
\$50,000 - \$74,999	190	0	227	6.3%
\$75,000 or More	89	0	100	2.8%
Total Workers	3,469	0	3,596	100.0%
Median Income	\$22,637	—	\$22,382	
Mean Income	\$26,179	—	\$26,601	

*Total includes all workers with earnings

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	22.9
Carpool	27.9
Bus/Trolley Bus	—
Trolley/Subway/Elevated	—
Railroad	—
Bicycle/Walked	19.1
All Modes	23.1

Appendix II (cont.)

Profiles from 1990 Census Workers Employed in Upper Merion Township

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Executive/Admin./Managerial	4,772	2,582	7,354
Professional	4,593	2,286	6,879
Technical Support	1,487	670	2,157
Sales	3,624	2,865	6,489
Clerical	2,066	5,404	7,470
Service	1,638	1,503	3,141
Farming/Forestry/Fishing	138	52	190
Precision Prod./Craft/Repair	3,123	324	3,447
Machine Operators/Laborers	2,382	666	3,048
Armed Forces	40	0	40
Total	23,863	16,352	40,215

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	21,797	15,066	36,863
Government	1,159	781	1,940
Self-Employed	873	449	1,322
Unpaid Family	34	56	90
Total	23,863	16,352	40,215

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	22,729	95.2%	15,270	93.4%
Public Transportation	651	2.7%	630	3.9%
Bike/Walk	204	0.9%	192	1.2%
Other Means	77	0.3%	50	0.3%
Worked at Home	202	0.8%	210	1.3%
Total	23,863	100.0%	16,352	100.0%

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	170	55	225
Mining	40	0	40
Construction	1,652	306	1,958
Manufacturing	7,921	3,381	11,302
Transp./Commun./Utilities	2,055	936	2,991
Wholesale Trade	2,114	791	2,905
Retail Trade	3,445	3,765	7,210
Finance/Insurance/Real Estate	1,278	1,910	3,188
Business/Repair	1,840	1,208	3,048
Personal Services	456	670	1,126
Entertainment/Recreation	141	188	329
Professional Services	2,202	2,947	5,149
Public Administration	509	195	704
Armed Forces	40	0	40
Total	23,863	16,352	40,215

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	669	430	78	1,177
1 Vehicle	6,967	480	257	7,704
2 Vehicles	18,994	267	391	19,652
3 or More Vehicles	11,215	61	204	11,480
Total	37,845	1,238	930	40,013

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	27.0
Carpool	35.5
Bus/Trolley Bus	41.4
Trolley/Subway/Elevated	45.9
Railroad	43.0
Bicycle/Walked	44.6
All Modes	27.6

WORKER EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
< \$5,000	2,362	163	2,762	7.0%
\$5,000 - \$9,999	2,771	260	3,178	8.1%
\$10,000 - \$14,999	2,868	247	3,190	8.1%
\$15,000 - \$19,999	4,201	178	4,432	11.3%
\$20,000 - \$24,999	3,968	161	4,166	10.6%
\$25,000 - \$34,999	7,197	133	7,396	18.8%
\$35,000 - \$49,999	7,562	31	7,718	19.6%
\$50,000 - \$74,999	4,511	17	4,584	11.6%
\$75,000 or More	1,917	0	1,965	5.0%
Total Workers	37,357	1,190	39,391	100.0%
Median Income	\$28,460	\$14,068	\$27,444	
Mean Income	\$33,136	\$14,994	\$32,456	

*Total includes all workers with earnings

Appendix III

1990 Census Journey-to-Work Travel Patterns Workers Residing in Mount Laurel Township

Place of Employment	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Philadelphia	2,278	13.5%	1,533	240	6	253	237	21.8%	0	0	9
Mount Laurel Twp.	2,273	13.5%	1,898	245	0	0	0	0.0%	0	96	34
Cherry Hill Twp.	1,697	10.1%	1,490	207	0	0	0	0.0%	0	0	0
Moorestown Twp.	1,480	8.8%	1,355	109	8	0	0	0.5%	0	0	8
Evesham Twp.	809	4.8%	747	53	0	0	0	0.0%	0	0	9
Camden	664	3.9%	639	25	0	0	0	0.0%	0	0	0
Pennsauken Twp.	516	3.1%	478	38	0	0	0	0.0%	0	0	0
Medford Twp.	338	2.0%	291	47	0	0	0	0.0%	0	0	0
Mount Holly Twp.	330	2.0%	322	8	0	0	0	0.0%	0	0	0
Voorhees Twp.	295	1.7%	295	0	0	0	0	0.0%	0	0	0
Trenton	286	1.7%	246	40	0	0	0	0.0%	0	0	0
Maple Shade Twp.	213	1.3%	196	17	0	0	0	0.0%	0	0	0
Total Burlington County	7,452	44.2%	6,701	582	22	0	0	0.3%	0	96	51
Total Camden County	3,839	22.8%	3,531	308	0	0	0	0.0%	0	0	0
Total Gloucester County	351	2.1%	311	31	9	0	0	2.6%	0	0	0
Total Mercer County	767	4.5%	592	150	0	0	0	0.0%	0	25	0
Total Bucks County	226	1.3%	217	9	0	0	0	0.0%	0	0	0
Total Chester County	56	0.3%	43	13	0	0	0	0.0%	0	0	0
Total Delaware County	270	1.6%	239	31	0	0	0	0.0%	0	0	0
Total Montgomery County	411	2.4%	389	22	0	0	0	0.0%	0	0	0
Total Philadelphia County	2,278	13.5%	1,533	240	6	253	237	21.8%	0	0	9
Regional Total	15,650	92.8%	13,556	1,386	37	253	237	3.4%	0	121	60
Rest of New Jersey	758	4.5%	635	83	9	0	0	1.2%	0	0	31
Rest of Pennsylvania	46	0.3%	35	0	0	0	0	0.0%	0	11	0
Delaware (State)	0	0.0%	0	0	0	0	0	0.0%	0	0	0
Elsewhere	413	2.4%	290	40	39	4	9	12.6%	0	6	25
Total	16,867	100.0%	14,516	1,509	85	257	246	3.5%	0	138	116

Note: Other Means includes ferryboat, taxicab, and motorcycle.

Appendix III (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Residing in Voorhees Township

Place of Employment	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Philadelphia	3,182	24.4%	1,567	322	0	561	669	38.7%	0	24	39
Voorhees Twp.	1,788	13.7%	1,493	113	0	0	10	0.6%	0	161	11
Cherry Hill Twp.	1,397	10.7%	1,319	70	0	0	8	0.6%	0	0	0
Camden	775	6.0%	641	78	0	40	6	5.9%	0	0	10
Evesham Twp.	507	3.9%	448	59	0	0	0	0.0%	0	0	0
Mount Laurel Twp.	422	3.2%	396	17	0	0	0	0.0%	9	0	0
Pennsauken Twp.	297	2.3%	246	51	0	0	0	0.0%	0	0	0
Moorestown Twp.	265	2.0%	236	9	0	0	0	0.0%	0	0	20
Maple Shade Twp.	187	1.4%	139	48	0	0	0	0.0%	0	0	0
Gibbsboro	151	1.2%	151	0	0	0	0	0.0%	0	0	0
Deptford Twp.	145	1.1%	135	10	0	0	0	0.0%	0	0	0
Berlin (borough)	133	1.0%	115	0	0	0	0	0.0%	0	0	18
Total Burlington County	1,903	14.6%	1,676	184	14	0	0	0.7%	9	0	20
Total Camden County	5,723	44.0%	4,995	409	0	58	61	2.1%	0	161	39
Total Gloucester County	525	4.0%	465	60	0	0	0	0.0%	0	0	0
Total Mercer County	153	1.2%	127	26	0	0	0	0.0%	0	0	0
Total Bucks County	185	1.4%	147	9	0	0	29	15.7%	0	0	0
Total Chester County	51	0.4%	35	8	0	0	8	15.7%	0	0	0
Total Delaware County	260	2.0%	198	36	0	19	0	7.3%	0	7	0
Total Montgomery County	241	1.9%	200	41	0	0	0	0.0%	0	0	0
Total Philadelphia County	3,182	24.4%	1,567	322	0	561	669	38.7%	0	24	39
Regional Total	12,223	93.9%	9,410	1,095	14	638	767	11.6%	9	192	98
Rest of New Jersey	522	4.0%	370	106	0	0	22	4.2%	0	6	18
Rest of Pennsylvania	34	0.3%	34	0	0	0	0	0.0%	0	0	0
Delaware (State)	86	0.7%	86	0	0	0	0	0.0%	0	0	0
Elsewhere	152	1.2%	113	17	22	0	0	14.5%	0	0	0
Total	13,017	100.0%	10,013	1,218	36	638	789	11.2%	9	198	125

Note: Other Means includes ferryboat, taxicab, and motorcycle.

Appendix III (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Residing in Washington Township

Place of Employment	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/ Vanpool	Bus/ Trolley	Subway/ Elevated	Railroad	Transit Share	Bicycle	Walked	
Philadelphia	4,339	20.5%	2,834	998	138	161	191	11.3%	0	12	5
Washington Twp.*	2,453	11.6%	2,088	179	12	0	0	0.5%	35	119	20
Mantua Twp.	1,037	4.9%	924	26	5	0	0	0.5%	11	66	5
Cherry Hill Twp.	944	4.5%	850	87	7	0	0	0.7%	0	0	0
Gloucester Twp.	868	4.1%	760	83	7	0	0	0.8%	0	10	8
Camden	863	4.1%	762	83	18	0	0	2.1%	0	0	0
Deptford Twp.	748	3.5%	661	77	0	0	0	0.0%	0	10	0
Glassboro	496	2.3%	474	0	0	0	0	0.0%	6	9	7
Woodbury	465	2.2%	436	12	6	0	0	1.3%	0	0	11
Voorhees Twp.	461	2.2%	443	18	0	0	0	0.0%	0	0	0
Pennsauken Twp.	443	2.1%	388	48	0	0	0	0.0%	0	0	7
Monroe Twp.	413	2.0%	353	53	7	0	0	1.7%	0	0	0
Total Burlington County	1,218	5.8%	1,108	103	0	0	0	0.0%	0	0	7
Total Camden County	5,235	24.8%	4,755	408	47	0	0	0.9%	0	10	15
Total Gloucester County	6,810	32.2%	6,045	436	30	0	0	0.4%	52	204	43
Total Mercer County	139	0.7%	117	22	0	0	0	0.0%	0	0	0
Total Bucks County	282	1.3%	225	57	0	0	0	0.0%	0	0	0
Total Chester County	177	0.8%	152	25	0	0	0	0.0%	0	0	0
Total Delaware County	543	2.6%	488	55	0	0	0	0.0%	0	0	0
Total Montgomery County	344	1.6%	288	45	0	5	0	1.5%	0	0	6
Total Philadelphia County	4,339	20.5%	2,834	998	138	161	191	11.3%	0	12	5
Regional Total	19,087	90.3%	16,012	2,149	215	166	191	3.0%	52	226	76
Rest of New Jersey	1,651	7.8%	1,322	294	23	0	6	1.8%	0	0	6
Rest of Pennsylvania	47	0.2%	33	8	0	0	0	0.0%	0	6	0
Delaware (State)	107	0.5%	70	37	0	0	0	0.0%	0	0	0
Elsewhere	245	1.2%	160	15	0	7	6	5.3%	0	28	29
Total	21,137	100.0%	17,597	2,503	238	173	203	2.9%	52	260	111

Note: Other Means includes ferryboat, taxicab, and motorcycle.

* Gloucester County

Appendix III (cont.)

1990 Census Journey-to-Work Travel Patterns
Workers Residing in East Windsor Township

Place of Work	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/ Vanpool	Bus/ Trolley	Subway/ Elevated	Railroad	Transit Share	Bicycle	Walked	
East Windsor Twp.	1,837	15.0%	1,406	186	0	0	0	0.0%	13	184	48
New York City (Manhattan)	1,167	9.5%	64	168	453	9	463	79.3%	0	0	10
Princeton (borough)	741	6.1%	675	53	13	0	0	1.8%	0	0	0
Hightstown	717	5.9%	580	114	0	0	0	0.0%	8	15	0
South Brunswick Twp.	625	5.1%	560	65	0	0	0	0.0%	0	0	0
Trenton	531	4.3%	416	96	0	0	6	1.1%	0	0	13
Hamilton Twp.	499	4.1%	456	43	0	0	0	0.0%	0	0	0
West Windsor Twp.	477	3.9%	407	34	36	0	0	7.5%	0	0	0
Lawrence Twp.	421	3.4%	350	63	0	0	0	0.0%	0	0	8
Edison Twp.	375	3.1%	317	58	0	0	0	0.0%	0	0	0
Cranbury Twp.	356	2.9%	344	12	0	0	0	0.0%	0	0	0
Princeton Twp.	348	2.8%	312	36	0	0	0	0.0%	0	0	0
Total Burlington County	156	1.3%	156	0	0	0	0	0.0%	0	0	0
Total Camden County	54	0.4%	23	19	0	12	0	22.2%	0	0	0
Total Gloucester County	0	0.0%	0	0	0	0	0	-	0	0	0
Total Mercer County	5,820	47.5%	4,834	642	49	0	6	0.9%	21	199	69
Total Bucks County	33	0.3%	33	0	0	0	0	0.0%	0	0	0
Total Chester County	0	0.0%	0	0	0	0	0	-	0	0	0
Total Delaware County	0	0.0%	0	0	0	0	0	-	0	0	0
Total Montgomery County	47	0.4%	47	0	0	0	0	0.0%	0	0	0
Total Philadelphia County	65	0.5%	47	8	0	0	10	15.4%	0	0	0
Regional Total	6,175	50.4%	5,140	669	49	12	16	1.2%	21	199	69
Rest of New Jersey	4,525	37.0%	3,963	475	13	0	63	1.7%	0	0	11
Rest of Pennsylvania	18	0.1%	18	0	0	0	0	0.0%	0	0	0
New York (State)	1,473	12.0%	219	247	493	9	495	67.7%	0	0	10
Elsewhere	53	0.4%	29	0	0	0	0	0.0%	0	8	16
Total	12,244	100.0%	9,369	1,391	555	21	574	9.4%	21	207	106

Note: Other Means includes ferryboat, taxicab, and motorcycle.

Appendix III (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Residing in Lower Makefield Township

Place of Employment	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Trenton	1,235	9.6%	1,111	114	0	0	0	0.0%	0	10	0
Philadelphia	1,076	8.3%	756	107	0	13	200	19.8%	0	0	0
Yardley	753	5.8%	667	32	0	0	0	0.0%	0	48	6
Ewing Twp.	739	5.7%	674	65	0	0	0	0.0%	0	0	0
Lawrence Twp.	735	5.7%	676	59	0	0	0	0.0%	0	0	0
New York City (Manhattan)	701	5.4%	23	12	0	0	666	95.0%	0	0	0
Falls Twp.	575	4.5%	536	20	6	0	0	1.0%	0	13	0
Middletown Twp.*	515	4.0%	465	31	0	0	0	0.0%	0	0	19
Princeton (borough)	432	3.4%	374	58	0	0	0	0.0%	0	0	0
Hamilton Twp.	402	3.1%	385	17	0	0	0	0.0%	0	0	0
Lower Makefield Twp.	362	2.8%	309	19	0	0	0	0.0%	0	34	0
Bristol Twp.	335	2.6%	330	0	0	0	0	0.0%	0	0	5
Total Burlington County	279	2.2%	273	6	0	0	0	0.0%	0	0	0
Total Camden County	142	1.1%	133	0	0	0	9	6.3%	0	0	0
Total Gloucester County	21	0.2%	21	0	0	0	0	0.0%	0	0	0
Total Mercer County	4,178	32.4%	3,822	346	0	0	0	0.0%	0	10	0
Total Bucks County	4,386	34.0%	4,067	170	12	0	0	0.3%	5	102	30
Total Chester County	75	0.6%	66	9	0	0	0	0.0%	0	0	0
Total Delaware County	60	0.5%	46	7	0	0	0	0.0%	0	7	0
Total Montgomery County	587	4.6%	542	30	0	0	0	0.0%	0	15	0
Total Philadelphia County	1,076	8.3%	756	107	0	13	200	19.8%	0	0	0
Regional Total	10,804	83.8%	9,726	675	12	13	209	2.2%	5	134	30
Rest of New Jersey	1,112	8.6%	955	102	0	0	42	3.8%	13	0	0
Rest of Pennsylvania	73	0.6%	73	0	0	0	0	0.0%	0	0	0
New York (State)	788	6.1%	38	26	0	0	706	89.6%	0	18	0
Elsewhere	117	0.9%	81	6	9	0	0	7.7%	0	16	5
Total	12,894	100.0%	10,873	809	21	13	957	7.7%	18	168	35

Note: Other Means includes ferryboat, taxicab, and motorcycle.

*Bucks County

Appendix III (cont.)

1990 Census Journey-to-Work Travel Patterns
Workers Residing in Concord Township

Place of Work	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Philadelphia	482	13.9%	370	36	0	5	71	15.8%	0	0	0
New Castle County	450	13.0%	403	40	0	0	0	0.0%	0	7	0
Concord Twp.	237	6.8%	208	18	0	0	0	0.0%	0	6	5
Thornbury Twp.	210	6.1%	188	16	0	0	0	0.0%	0	6	0
Birmingham Twp.*	204	5.9%	162	27	0	0	0	0.0%	0	15	0
Chester (city)	125	3.6%	107	18	0	0	0	0.0%	0	0	0
Marcus Hook	110	3.2%	97	13	0	0	0	0.0%	0	0	0
Middletown Twp.*	105	3.0%	105	0	0	0	0	0.0%	0	0	0
Tinicum Twp.*	89	2.6%	89	0	0	0	0	0.0%	0	0	0
West Goshen Twp.	77	2.2%	70	7	0	0	0	0.0%	0	0	0
Springfield Twp.*	73	2.1%	65	8	0	0	0	0.0%	0	0	0
Aston Twp.	72	2.1%	72	0	0	0	0	0.0%	0	0	0
Total Burlington County	18	0.5%	18	0	0	0	0	0.0%	0	0	0
Total Camden County	40	1.2%	35	5	0	0	0	0.0%	0	0	0
Total Gloucester County	36	1.0%	36	0	0	0	0	0.0%	0	0	0
Total Mercer County	14	0.4%	0	14	0	0	0	0.0%	0	0	0
Total Bucks County	20	0.6%	20	0	0	0	0	0.0%	0	0	0
Total Chester County	313	9.0%	282	25	0	0	0	0.0%	0	0	6
Total Delaware County	1,882	54.3%	1,688	131	0	0	0	0.0%	0	58	5
Total Montgomery County	141	4.1%	117	24	0	0	0	0.0%	0	0	0
Total Philadelphia County	482	13.9%	370	36	0	5	71	15.8%	0	0	0
Regional Total	2,946	85.1%	2,566	235	0	5	71	2.6%	0	58	11
Rest of New Jersey	23	0.7%	18	5	0	0	0	0.0%	0	0	0
Rest of Pennsylvania	30	0.9%	25	5	0	0	0	0.0%	0	0	0
Delaware (State)	450	13.0%	403	40	0	0	0	0.0%	0	7	0
Elsewhere	14	0.4%	7	7	0	0	0	0.0%	0	0	0
Total	3,463	100.0%	3,019	292	0	5	71	2.2%	0	65	11

Note: Other Means includes ferryboat, taxicab, and motorcycle.

*Delaware County

Appendix III (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Residing in West Whiteland Township

Place of Employment	Number of Workers	Percent of Total	Means of Transportation								Other Means	
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked		
West Whiteland Twp.	752	11.1%	637	80	0	0	0	0	0.0%	0	35	0
West Chester	667	9.9%	560	98	0	0	0	0	0.0%	0	9	0
East Whiteland Twp.	606	9.0%	566	40	0	0	0	0	0.0%	0	0	0
Philadelphia	559	8.3%	279	52	0	7	212	39.2%	0	9	0	0
West Goshen Twp.	472	7.0%	418	44	0	0	0	0	0.0%	0	10	0
Tredyffrin Twp.	355	5.3%	322	26	0	0	7	2.0%	0	0	0	0
Upper Merion Twp.	310	4.6%	295	15	0	0	0	0.0%	0	0	0	0
Willistown Twp.	274	4.1%	244	30	0	0	0	0.0%	0	0	0	0
Radnor Twp.	210	3.1%	186	7	7	0	0	3.3%	0	10	0	0
Downingtown	190	2.8%	182	8	0	0	0	0.0%	0	0	0	0
Uwchlan Twp.	167	2.5%	159	8	0	0	0	0.0%	0	0	0	0
Malvern	136	2.0%	128	0	0	0	0	0.0%	0	8	0	0
Total Burlington County	17	0.3%	17	0	0	0	0	0	0.0%	0	0	0
Total Camden County	41	0.6%	41	0	0	0	0	0	0.0%	0	0	0
Total Gloucester County	0	0.0%	0	0	0	0	0	0	0.0%	0	0	0
Total Mercer County	9	0.1%	9	0	0	0	0	0	0.0%	0	0	0
Total Bucks County	47	0.7%	34	6	7	0	0	14.9%	0	0	0	0
Total Chester County	4,227	62.5%	3,786	359	13	0	7	0.5%	0	62	0	0
Total Delaware County	717	10.6%	672	20	7	0	0	1.0%	0	18	0	0
Total Montgomery County	870	12.9%	824	27	0	0	19	2.2%	0	0	0	0
Total Philadelphia County	559	8.3%	279	52	0	7	212	39.2%	0	9	0	0
Regional Total	6,487	96.0%	5,662	464	27	7	238	4.2%	0	89	0	0
Rest of New Jersey	7	0.1%	7	0	0	0	0	0.0%	0	0	0	0
Rest of Pennsylvania	146	2.2%	146	0	0	0	0	0.0%	0	0	0	0
Delaware (State)	111	1.6%	97	7	0	0	0	0.0%	0	7	0	0
Elsewhere	8	0.1%	8	0	0	0	0	0.0%	0	0	0	0
Total	6,759	100.0%	5,920	471	27	7	238	4.0%	0	96	0	0

Note: Other Means includes ferryboat, taxicab, and motorcycle.

Appendix III (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Residing in Upper Merion Township

Place of Employment	Number of Workers	Percent of Total	Means of Transportation								
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	Other Means
Upper Merion Twp.	5,015	31.6%	4,124	550	36	0	0	0.7%	18	275	12
Philadelphia	1,921	12.1%	1,245	208	134	36	298	24.4%	0	0	0
Radnor Twp.	921	5.8%	802	106	6	0	0	0.7%	0	7	0
Tredyffrin Twp.	749	4.7%	690	59	0	0	0	0.0%	0	0	0
Lower Merion Twp.	582	3.7%	517	55	0	0	0	0.0%	0	0	10
Norristown	541	3.4%	441	63	15	0	4	3.5%	0	9	9
East Whiteland Twp.	365	2.3%	358	7	0	0	0	0.0%	0	0	0
Whitpain Twp.	272	1.7%	254	18	0	0	0	0.0%	0	0	0
Bridgeport	243	1.5%	157	48	0	0	0	0.0%	0	38	0
Plymouth Twp.	242	1.5%	193	49	0	0	0	0.0%	0	0	0
Conshohocken	187	1.2%	187	0	0	0	0	0.0%	0	0	0
Willistown Twp.	187	1.2%	187	0	0	0	0	0.0%	0	0	0
Total Burlington County	69	0.4%	62	0	0	0	7	10.1%	0	0	0
Total Camden County	169	1.1%	123	46	0	0	0	0.0%	0	0	0
Total Gloucester County	10	0.1%	10	0	0	0	0	0.0%	0	0	0
Total Mercer County	32	0.2%	32	0	0	0	0	0.0%	0	0	0
Total Bucks County	254	1.6%	225	29	0	0	0	0.0%	0	0	0
Total Chester County	2,164	13.6%	2,023	133	0	0	0	0.0%	0	8	0
Total Delaware County	1,335	8.4%	1,207	115	0	6	0	0.4%	0	7	0
Total Montgomery County	8,646	54.5%	7,355	859	51	0	4	0.6%	18	328	31
Total Philadelphia County	1,921	12.1%	1,245	208	113	57	298	24.4%	0	0	0
Regional Total	14,600	92.0%	12,282	1,390	164	63	309	3.7%	18	343	31
Rest of New Jersey	58	0.4%	37	21	0	0	0	0.0%	0	0	0
Rest of Pennsylvania	200	1.3%	177	5	0	0	0	0.0%	0	18	0
Delaware (State)	67	0.4%	58	9	0	0	0	0.0%	0	0	0
Elsewhere	949	6.0%	95	0	0	8	19	2.8%	0	5	822
Total	15,874	100.0%	12,649	1,425	164	71	328	3.5%	18	366	853

Note: Other Means includes ferryboat, taxicab, and motorcycle.

Appendix IV

1990 Census Journey-to-Work Travel Patterns Workers Employed in Mount Laurel Township

Place of Residence	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Mount Laurel Twp.	2,273	11.8%	1,898	245	0	0	0	0.0%	25	96	9
Evesham Twp.	1,393	7.2%	1,278	81	0	21	0	1.5%	0	0	13
Cherry Hill Twp.	1,169	6.1%	1,063	85	5	0	0	0.4%	11	5	0
Philadelphia	771	4.0%	651	37	67	7	9	10.8%	0	0	0
Gloucester Twp.	674	3.5%	622	42	10	0	0	1.5%	0	0	0
Camden	670	3.5%	322	222	94	0	0	14.0%	5	0	27
Maple Shade Twp.	610	3.2%	536	69	0	0	0	0.0%	0	0	5
Willingboro Twp.	496	2.6%	420	76	0	0	0	0.0%	0	0	0
Pennsauken Twp.	481	2.5%	382	93	6	0	0	1.2%	0	0	0
Moorestown Twp.	448	2.3%	413	35	0	0	0	0.0%	0	0	0
Voorhees Twp.	422	2.2%	396	17	0	0	0	0.0%	0	0	9
Medford Twp.	401	2.1%	389	12	0	0	0	0.0%	0	0	0
Total Burlington County	8,345	43.2%	7,299	819	9	21	0	0.4%	36	103	58
Total Camden County	6,425	33.3%	5,400	801	131	10	0	2.2%	20	5	58
Total Gloucester County	1,305	6.8%	1,144	161	0	0	0	0.0%	0	0	0
Total Mercer County	157	0.8%	157	0	0	0	0	0.0%	0	0	0
Total Bucks County	484	2.5%	462	22	0	0	0	0.0%	0	0	0
Total Chester County	157	0.8%	139	8	0	0	0	0.0%	0	0	10
Total Delaware County	410	2.1%	324	71	0	0	10	2.4%	0	0	5
Total Montgomery County	330	1.7%	294	36	0	0	0	0.0%	0	0	0
Total Philadelphia County	771	4.0%	651	37	67	7	9	10.8%	0	0	0
Regional Total	18,384	95.2%	15,870	1,955	207	38	19	1.4%	56	108	131
Rest of New Jersey	528	2.7%	461	60	7	0	0	1.3%	0	0	0
Rest of Pennsylvania	57	0.3%	55	2	0	0	0	0.0%	0	0	0
Delaware (State)	113	0.6%	104	9	0	0	0	0.0%	0	0	0
Elsewhere	228	1.2%	180	40	0	0	0	0.0%	0	0	8
Total	19,310	100.0%	16,670	2,066	214	38	19	1.4%	56	108	139

Note: Other Means includes ferryboat, taxicab, and motorcycle.

Appendix IV (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Employed in Voorhees Township

Place of Residence	Number of Workers	Percent of Total	Means of Transportation								
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	Other Means
Voorhees Twp.	1,788	12.2%	1,493	113	0	0	0	10	11	161	0
Gloucester Twp.	1,420	9.7%	1,215	190	7	0	0	0	0	8	0
Cherry Hill Twp.	1,220	8.3%	1,125	72	9	0	0	0	0	14	0
Lindenwald	789	5.4%	653	98	31	0	0	0	7	0	0
Evesham Twp.	646	4.4%	609	37	0	0	0	0	0	0	0
Winslow Twp.	551	3.8%	500	51	0	0	0	0	0	0	0
Philadelphia	530	3.6%	357	79	41	40	7	16.6%	0	0	6
Washington Twp.*	461	3.2%	443	18	0	0	0	0.0%	0	0	0
Stratford	398	2.7%	327	60	5	0	0	1.3%	0	6	0
Pine Hill	360	2.5%	306	45	3	0	0	0.8%	0	0	6
Waterford Twp.	299	2.0%	261	22	6	0	4	3.3%	0	0	6
Mount Laurel Twp.	295	2.0%	295	0	0	0	0	0.0%	0	0	0
Total Burlington County	2,178	14.9%	2,054	112	0	6	0	0.3%	6	0	0
Total Camden County	9,532	65.2%	8,151	930	119	31	14	1.7%	44	215	28
Total Gloucester County	1,338	9.1%	1,243	79	0	0	0	0.0%	0	0	16
Total Mercer County	64	0.4%	48	16	0	0	0	0.0%	0	0	0
Total Bucks County	111	0.8%	111	0	0	0	0	0.0%	0	0	0
Total Chester County	0	0.0%	0	0	0	0	0	—	0	0	0
Total Delaware County	123	0.8%	94	29	0	0	0	0.0%	0	0	0
Total Montgomery County	199	1.4%	171	28	0	0	0	0.0%	0	0	0
Total Philadelphia County	530	3.6%	357	79	41	40	7	16.6%	0	0	6
Regional Total	14,075	96.2%	12,229	1,273	160	77	21	1.8%	50	215	50
Rest of New Jersey	465	3.2%	350	104	11	0	0	2.4%	0	0	0
Rest of Pennsylvania	10	0.1%	10	0	0	0	0	0.0%	0	0	0
Delaware (State)	26	0.2%	26	0	0	0	0	0.0%	0	0	0
Elsewhere	52	0.4%	45	7	0	0	0	0.0%	0	0	0
Total	14,628	100.0%	12,660	1,384	171	77	21	1.8%	50	215	50

Note: Other Means includes ferryboat, taxicab, and motorcycle.

*Gloucester County

Appendix IV (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Employed in Washington Township

Place of Residence	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Washington Twp.*	2,453	36.3%	2,088	179	12	0	0	0.5%	35	119	20
Monroe Twp.	705	10.4%	601	63	7	0	0	1.0%	3	10	21
Gloucester Twp.	531	7.9%	472	31	8	0	0	1.5%	6	0	14
Glassboro	229	3.4%	197	32	0	0	0	0.0%	0	0	0
Pitman	219	3.2%	199	15	0	0	0	0.0%	0	0	5
Deptford Twp.	206	3.1%	180	26	0	0	0	0.0%	0	0	0
Franklin Twp.*	180	2.7%	145	35	0	0	0	0.0%	0	0	0
Winslow Twp.	180	2.7%	163	0	9	0	0	5.0%	0	0	8
Mantua Twp.	140	2.1%	132	8	0	0	0	0.0%	0	0	0
Camden	104	1.5%	83	6	15	0	0	14.4%	0	0	0
Lindenwold	97	1.4%	80	17	0	0	0	0.0%	0	0	0
West Deptford Twp.	95	1.4%	76	19	0	0	0	0.0%	0	0	0
Total Burlington County	156	2.3%	149	7	0	0	0	0.0%	0	0	0
Total Camden County	1,517	22.5%	1,347	105	37	0	0	2.4%	6	0	22
Total Gloucester County	4,656	69.0%	4,011	412	20	0	0	0.4%	38	129	46
Total Mercer County	0	0.0%	0	0	0	0	0	—	0	0	0
Total Bucks County	37	0.5%	27	10	0	0	0	0.0%	0	0	0
Total Chester County	0	0.0%	0	0	0	0	0	—	0	0	0
Total Delaware County	31	0.5%	31	0	0	0	0	0.0%	0	0	0
Total Montgomery County	15	0.2%	15	0	0	0	0	0.0%	0	0	0
Total Philadelphia County	61	0.9%	43	18	0	0	0	0.0%	0	0	0
Regional Total	6,473	95.9%	5,623	552	57	0	0	0.9%	44	129	68
Rest of New Jersey	256	3.8%	237	11	0	0	0	0.0%	0	8	0
Rest of Pennsylvania	16	0.2%	14	2	0	0	0	0.0%	0	0	0
Delaware (State)	0	0.0%	0	0	0	0	0	—	0	0	0
Elsewhere	4	0.1%	4	0	0	0	0	0.0%	0	0	0
Total	6,749	100.0%	5,878	565	57	0	0	0.8%	44	137	68

Note: Other Means includes ferryboat, taxicab, and motorcycle.

* Gloucester County

Appendix IV (cont.)

1990 Census Journey-to-Work Travel Patterns
Workers Employed in East Windsor Township

Place of Residence	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
East Windsor Twp.	1,837	17.2%	1,406	186	0	0	0	0.0%	13	184	48
Hamilton Twp.	1,241	11.6%	1,109	121	11	0	0	0.9%	0	0	0
Hightstown	467	4.4%	346	74	0	0	0	0.0%	14	33	0
Trenton	330	3.1%	233	72	18	0	0	5.5%	0	0	7
Plainsboro Twp.	329	3.1%	259	70	0	0	0	0.0%	0	0	0
West Windsor Twp.	296	2.8%	239	57	0	0	0	0.0%	0	0	0
Washington Twp.*	235	2.2%	235	0	0	0	0	0.0%	0	0	0
Ewing Twp.	212	2.0%	184	28	0	0	0	0.0%	0	0	0
Lawrence Twp.	192	1.8%	192	0	0	0	0	0.0%	0	0	0
Willingboro Twp.	161	1.5%	95	66	0	0	0	0.0%	0	0	0
Pemberton Twp.	154	1.4%	128	18	0	0	0	0.0%	0	0	8
Plumsted Twp.	153	1.4%	120	33	0	0	0	0.0%	0	0	0
Total Burlington County	1,132	10.6%	827	297	0	0	0	0.0%	0	0	8
Total Camden County	157	1.5%	124	33	0	0	0	0.0%	0	0	0
Total Gloucester County	33	0.3%	26	7	0	0	0	0.0%	0	0	0
Total Mercer County	4,981	46.6%	4,085	561	29	0	7	0.7%	27	217	55
Total Bucks County	668	6.3%	581	87	0	0	0	0.0%	0	0	0
Total Chester County	38	0.4%	31	7	0	0	0	0.0%	0	0	0
Total Delaware County	24	0.2%	19	0	0	0	5	20.8%	0	0	0
Total Montgomery County	115	1.1%	85	15	15	0	0	13.0%	0	0	0
Total Philadelphia County	51	0.5%	45	6	0	0	0	0.0%	0	0	0
Regional Total	7,199	67.4%	5,823	1,013	44	0	12	0.8%	27	217	63
Rest of New Jersey	3,384	31.7%	2,832	524	12	0	0	0.4%	0	0	16
Rest of Pennsylvania	10	0.1%	10	0	0	0	0	0.0%	0	0	0
New York (State)	55	0.5%	25	24	0	0	6	10.9%	0	0	0
Elsewhere	32	0.3%	30	0	0	0	0	0.0%	0	0	2
Total	10,680	100.0%	8,720	1,561	56	0	18	0.7%	27	217	81

Note: Other Means includes ferryboat, taxicab, and motorcycle.

*Mercer County

Appendix IV (cont.)

1990 Census Journey-to-Work Travel Patterns
Workers Employed in Lower Makefield Township

Place of Residence	Number of Workers	Percent of Total	Means of Transportation								Other Means	
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked		
Lower Makefield Twp.	362	21.1%	309	19	0	0	0	0	0.0%	0	34	0
Bristol Twp.	284	16.6%	243	41	0	0	0	0	0.0%	0	0	0
Falls Twp.	202	11.8%	182	20	0	0	0	0	0.0%	0	0	0
Middletown Twp.*	155	9.1%	140	7	0	0	0	0	0.0%	8	0	0
Philadelphia	96	5.6%	86	10	0	0	0	0	0.0%	0	0	0
Bensalem Twp.	87	5.1%	87	0	0	0	0	0	0.0%	0	0	0
Bristol (borough)	49	2.9%	49	0	0	0	0	0	0.0%	0	0	0
Morrisville	41	2.4%	29	12	0	0	0	0	0.0%	0	0	0
Northampton Twp.	37	2.2%	37	0	0	0	0	0	0.0%	0	0	0
Upper Makefield Twp.	35	2.0%	35	0	0	0	0	0	0.0%	0	0	0
Newtown Twp.	29	1.7%	29	0	0	0	0	0	0.0%	0	0	0
Warminster Twp.	24	1.4%	18	6	0	0	0	0	0.0%	0	0	0
Total Burlington County	32	1.9%	32	0	0	0	0	0	0.0%	0	0	0
Total Camden County	28	1.6%	21	7	0	0	0	0	0.0%	0	0	0
Total Gloucester County	0	0.0%	0	0	0	0	0	0	—	0	0	0
Total Mercer County	34	2.0%	23	11	0	0	0	0	0.0%	0	0	0
Total Bucks County	1,424	83.2%	1,260	122	0	0	0	0	0.0%	8	34	0
Total Chester County	43	2.5%	37	6	0	0	0	0	0.0%	0	0	0
Total Delaware County	0	0.0%	0	0	0	0	0	0	—	0	0	0
Total Montgomery County	36	2.1%	36	0	0	0	0	0	0.0%	0	0	0
Total Philadelphia County	96	5.6%	86	10	0	0	0	0	0.0%	0	0	0
Regional Total	1,693	98.9%	1,495	156	0	0	0	0	0.0%	8	34	0
Rest of New Jersey	0	0.0%	0	0	0	0	0	0	—	0	0	0
Rest of Pennsylvania	19	1.1%	19	0	0	0	0	0	0.0%	0	0	0
New York (State)	0	0.0%	0	0	0	0	0	0	—	0	0	0
Elsewhere	0	0.0%	0	0	0	0	0	0	—	0	0	0
Total	1,712	100.0%	1,514	156	0	0	0	0	0.0%	8	34	0

0

* Bucks County

Appendix IV (cont.)

1990 Census Journey-to-Work Travel Patterns
Workers Employed in Concord Township

Place of Residence	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Aston Twp.	315	8.9%	282	33	0	0	0	0.0%	0	0	0
Concord Twp.	237	6.7%	208	18	0	0	0	0.0%	0	6	5
Chester (city)	206	5.8%	129	72	0	0	0	0.0%	0	5	0
New Castle County	198	5.6%	171	27	0	0	0	0.0%	0	0	0
Upper Chichester Twp.	195	5.5%	170	25	0	0	0	0.0%	0	0	0
Brookhaven	167	4.7%	159	8	0	0	0	0.0%	0	0	0
West Goshen	101	2.9%	101	0	0	0	0	0.0%	0	0	0
Ridley Twp.	97	2.7%	87	10	0	0	0	0.0%	0	0	0
Upper Darby Twp.	97	2.7%	97	0	0	0	0	0.0%	0	0	0
Bethel Twp.	90	2.5%	67	23	0	0	0	0.0%	0	0	0
Philadelphia	83	2.3%	67	16	0	0	0	0.0%	0	0	0
Middletown Twp.*	71	2.0%	71	0	0	0	0	0.0%	0	0	0
Total Burlington County	9	0.3%	9	0	0	0	0	0.0%	0	0	0
Total Camden County	36	1.0%	36	0	0	0	0	0.0%	0	0	0
Total Gloucester County	23	0.7%	23	0	0	0	0	0.0%	0	0	0
Total Mercer County	0	0.0%	0	0	0	0	0	-	0	0	0
Total Bucks County	0	0.0%	0	0	0	0	0	-	0	0	0
Total Chester County	633	17.9%	593	40	0	0	0	0.0%	0	0	0
Total Delaware County	2,278	64.4%	1,972	290	0	0	0	0.0%	0	11	5
Total Montgomery County	80	2.3%	69	11	0	0	0	0.0%	0	0	0
Total Philadelphia County	83	2.3%	67	16	0	0	0	0.0%	0	0	0
Regional Total	3,142	88.8%	2,769	357	0	0	0	0.0%	0	11	5
Rest of New Jersey	0	0.0%	0	0	0	0	0	-	0	0	0
Rest of Pennsylvania	14	0.4%	2	12	0	0	0	0.0%	0	0	0
Delaware (State)	357	10.1%	292	65	0	0	0	0.0%	0	0	0
Elsewhere	25	0.7%	22	3	0	0	0	0.0%	0	0	0
Total	3,538	100.0%	3,085	437	0	0	0	0.0%	0	11	5

Note: Other Means includes ferryboat, taxicab, and motorcycle.

*Delaware County

Appendix IV (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Employed in West Whiteland Township

Place of Residence	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/ Vanpool	Bus/ Trolley	Subway/ Elevated	Railroad	Transit Share	Bicycle	Walked	
Uwchlan Twp.	829	7.7%	711	89	0	0	0	0.0%	0	29	0
West Whiteland Twp.	752	7.0%	637	80	0	0	0	0.0%	0	35	0
West Chester	481	4.5%	367	81	33	0	0	6.9%	0	0	0
West Goshen Twp.	478	4.5%	452	26	0	0	0	0.0%	0	0	0
Caln Twp.	407	3.8%	360	28	12	0	0	2.9%	0	0	7
East Goshen Twp.	344	3.2%	330	14	0	0	0	0.0%	0	0	0
West Bradford Twp.	321	3.0%	285	36	0	0	0	0.0%	0	0	0
Downingtown	296	2.8%	263	29	0	0	0	0.0%	0	4	0
West Brandywine Twp.	227	2.1%	197	30	0	0	0	0.0%	0	0	0
East Whiteland Twp.	225	2.1%	204	14	7	0	0	3.1%	0	0	0
West Caln Twp.	218	2.0%	176	36	0	0	0	0.0%	0	0	6
East Brandywine Twp.	216	2.0%	187	29	0	0	0	0.0%	0	0	0
Burlington County	7	0.1%	7	0	0	0	0	0.0%	0	0	0
Total Camden County	36	0.3%	36	0	0	0	0	0.0%	0	0	0
Total Gloucester County	27	0.3%	27	0	0	0	0	0.0%	0	0	0
Total Mercer County	0	0.0%	0	0	0	0	0	—	0	0	0
Total Bucks County	95	0.9%	70	16	0	0	7	7.4%	0	2	0
Total Chester County	7,836	73.2%	6,841	820	85	0	0	1.1%	0	68	22
Total Delaware County	680	6.4%	596	79	3	0	0	0.4%	0	0	2
Total Montgomery County	1,068	10.0%	991	77	0	0	0	0.0%	0	0	0
Total Philadelphia County	235	2.2%	188	33	6	0	0	—	0	8	0
Regional Total	9,984	93.3%	8,756	1,025	94	0	7	1.0%	0	78	24
Rest of New Jersey	27	0.3%	19	8	0	0	0	0.0%	0	0	0
Rest of Pennsylvania	419	3.9%	354	65	0	0	0	0.0%	0	0	0
Delaware (State)	175	1.6%	155	20	0	0	0	0.0%	0	0	0
Elsewhere	96	0.9%	71	23	0	0	0	0.0%	0	0	2
Total	10,701	100.0%	9,355	1,141	94	0	7	0.9%	0	78	26

Note: Other Means includes ferryboat, taxicab, and motorcycle.

Appendix IV (cont.)

1990 Census Journey-to-Work Travel Patterns
Workers Employed in Upper Merion Township

Place of Residence	Number of Workers	Percent of Total	Means of Transportation								Other Means
			Drove Alone	Carpool/Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Upper Merion Twp.	5,015	12.6%	4,124	550	36	0	0	0.7%	18	275	12
Philadelphia	3,905	9.8%	2,559	601	577	64	68	18.2%	0	22	14
Tredyffrin Twp.	1,600	4.0%	1,481	119	0	0	0	0.0%	0	0	0
Lower Providence Twp.	1,531	3.8%	1,401	108	11	0	0	0.7%	0	11	0
Norristown	1,463	3.7%	1,046	253	103	52	0	10.6%	0	0	9
West Norriton Twp.	1,142	2.9%	973	147	7	0	0	0.6%	0	5	10
Phoenixville	778	2.0%	632	107	32	0	0	4.1%	0	0	7
Lower Merion Twp.	751	1.9%	683	42	7	0	19	3.5%	0	0	0
Haverford Twp.	736	1.8%	655	21	40	0	20	8.2%	0	0	0
Plymouth Twp.	631	1.6%	580	45	6	0	0	1.0%	0	0	0
Upper Providence Twp.	612	1.5%	484	112	7	0	0	1.1%	0	9	0
Radnor Twp.	595	1.5%	544	26	10	8	0	3.0%	0	0	7
Total Burlington County	358	0.9%	329	26	0	0	0	0.0%	0	3	0
Total Camden County	398	1.0%	339	51	0	8	0	2.0%	0	0	0
Total Gloucester County	195	0.5%	159	36	0	0	0	0.0%	0	0	0
Total Mercer County	75	0.2%	59	16	0	0	0	0.0%	0	0	0
Total Bucks County	2,016	5.1%	1,842	174	0	0	0	0.0%	0	0	0
Total Chester County	8,137	20.4%	7,475	571	50	0	10	0.7%	19	0	12
Total Delaware County	4,134	10.4%	3,666	288	109	22	32	3.9%	0	0	17
Total Montgomery County	18,509	46.5%	15,809	2,005	239	54	25	1.7%	25	319	33
Total Philadelphia County	3,905	9.8%	2,559	601	577	64	68	18.2%	0	22	14
Regional Total	37,727	94.8%	32,237	3,768	975	148	135	3.3%	44	344	76
Rest of New Jersey	178	0.4%	139	31	0	0	0	0.0%	0	0	8
Rest of Pennsylvania	1,401	3.5%	1,145	235	0	0	16	1.1%	0	0	5
Delaware (State)	191	0.5%	177	12	2	0	0	1.0%	0	0	0
Elsewhere	306	0.8%	227	28	0	5	0	1.6%	0	8	38
Total	39,803	100.0%	33,925	4,074	977	153	151	3.2%	44	352	127

Note: Other Means includes ferryboat, taxicab, and motorcycle.