

**Journey-to-Work Trends
in Camden, Trenton, Chester, and Philadelphia
1970 - 1990**



DIRECTION 2020

A Region on the Rise

**JOURNEY-TO-WORK TRENDS
IN CAMDEN, TRENTON, CHESTER, AND PHILADELPHIA
1970 - 1990**

Direction 2020 Report #16



**DELAWARE VALLEY
REGIONAL PLANNING COMMISSION**

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

March 1994

This report is printed on recycled paper

This report, prepared by the Delaware Valley Regional Planning Commission, was financed by the Federal Highway Administration, the Federal Transit Administration, the Pennsylvania Department of Transportation, and the New Jersey Department of Transportation. The authors, however, are solely responsible for its finding and conclusions, which may not represent the official views or policies of the funding agencies.

Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency which provides continuing, comprehensive and coordinated planning for the orderly growth and development of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties as well as the City of Philadelphia in Pennsylvania and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. The Commission is an advisory agency which divides its planning and service functions between the Office of the Executive Director, the Office of Public Affairs, and three line Divisions: Transportation Planning, Regional Information Services Center, which includes Regional Planning Office, and Finance and Administration. DVRPC's mission for the 1990s is to emphasize technical assistance and services and to conduct high priority studies for member state and local governments, while determining and meeting the needs of the private sector.



The DVRPC logo is adapted from the official seal of the Commission and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the diagonal bar signifies the Delaware River flowing through it. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey. The logo combines these elements to depict the areas served by DVRPC.

DELAWARE VALLEY REGIONAL PLANNING COMMISSION

Publication Abstract

TITLE	Date Published: March 1994
JOURNEY-TO-WORK TRENDS IN CAMDEN, TRENTON, CHESTER, AND PHILADELPHIA 1970 - 1990	Publication No. 94002

Geographic Area Covered:

Cities of Camden, Trenton, Chester, and Philadelphia

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 the major cities 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

TABLE OF CONTENTS

	<u>Page</u>
Executive Summary	1
I. Introduction	3
II. Demographic and Employment Trends	7
III. 1990 Worker Profiles	13
IV. Means of Transportation	15
V. Travel Time	25
VI. City Profiles and Travel Patterns	27

Tables

1. Demographic and Employment Trends, 1970-1990	6
2. Trend in Automobile Ownership, 1970-1990	10
3. 1990 Census Worker Profiles	12
4. 1990 Means of Transportation of Resident Workers	16
5. Means of Transportation of Resident Workers, 1970-1990 Trend	17
6. 1970-1990 Trend in Means of Transportation of Resident Workers	19
7. 1990 Means of Transportation of Employees	20
8. Means of Transportation of Employees, 1970-1990 Trend	21
9. 1970-1990 Trend in Means of Transportation of Employees	23
10. Travel Time to Work, 1980-1990 Trend	24

Figures

1. Demographic and Employment Trends	8
2. Trend in Automobile Ownership	11
3. Means of Transportation of Resident Workers	18
4. Means of Transportation of Employees	22
5. Travel Time to Work	26

Maps

1. Location of Study Areas	4
2. 1990 Commuting Pattern from Camden	28
3. 1990 Commuting Pattern to Camden	29
4. 1990 Commuting Pattern from Trenton	31
5. 1990 Commuting Pattern to Trenton	32

TABLE OF CONTENTS (cont.)

<u>Maps (cont.)</u>	<u>Page</u>
6. 1990 Commuting Pattern from Chester	34
7. 1990 Commuting Pattern to Chester	35
8. 1990 Commuting Pattern from Philadelphia	36
9. 1990 Commuting Pattern to Philadelphia	38

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
-

EXECUTIVE SUMMARY

This report analyzes work trips made by workers who live or work in the major cities of the Delaware Valley region, and is based on the 1990 Journey-to-Work data collected by the U.S. Census Bureau. 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.

About 1.8 million people live in the four cities described herein, representing 35 percent of the region's population. Overall, this population is not growing; it has declined about six percent since 1980. However, the steep decline (about 14%) observed during the 1970s has been arrested. The cities hold about 875,000 jobs, also representing about 35 percent of the regional total. About 37 percent of the urban households own no automobile -- a ratio which has not changed significantly since 1980 -- and rely on public transportation for mobility.

The worker profiles constructed from the census data show that:

- Women have made steady gains in the workplace and now hold almost one-half of the jobs held by city residents; they are slightly less predominant among the employed workers.
- On average, resident workers earn less than employed workers, indicating that commuters from other municipalities are more likely to fill higher level jobs than local residents.
- *Service* is both the largest and fastest growing industrial sector. *Manufacturing* ranks second in Camden and Chester, but is declining in importance. In Trenton the second position is held by *government* and in Philadelphia by *retail trade*.
- Residents of Philadelphia are least likely to use an automobile to travel to work and most likely to use public transportation, but even in Philadelphia workers using automobiles outnumber transit riders by 2 to 1. In the other three cities the propensity to use an automobile is stronger. Modal shares have not changed significantly since 1980.
- The average commute by automobile takes about 20 minutes, while those on public transportation take 10 to 15 minutes longer. Mean travel times have changed little since 1980.

Analysis of 1990 commutation patterns show that work trips originating in the cities tend to be shorter than trips destined to jobs in them. Further, the inbound trips have a wider variety of origins than the destinations of outbound trips. Partly because of its size, four-fifths of the employed residents in Philadelphia work in the city, and two-thirds of the jobs are filled by residents.

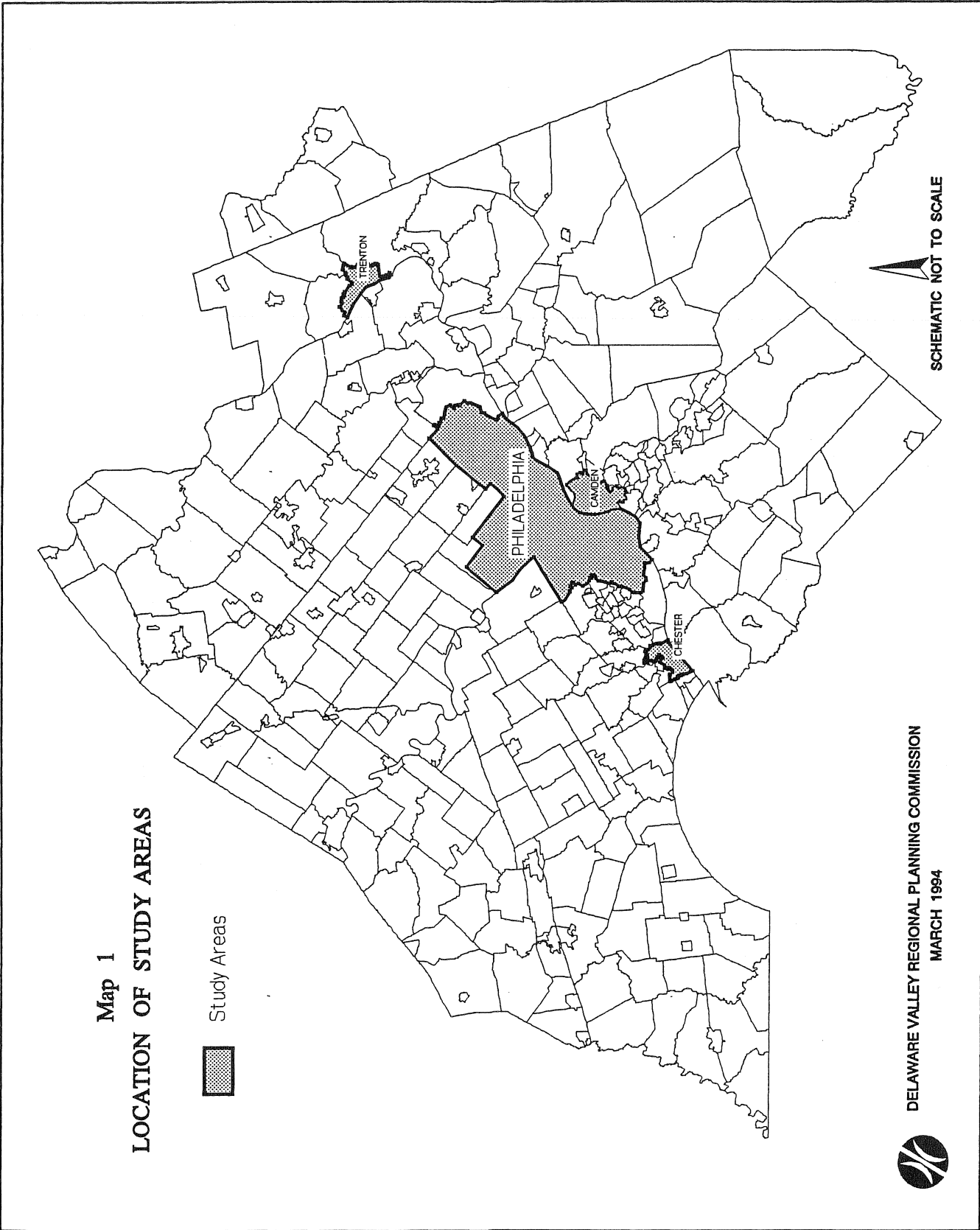
I. INTRODUCTION

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 the cities of Camden, Trenton, Chester, and Philadelphia (see Map 1). These cities contain the most urbanized portions of the region. The report supersedes an earlier report, Worker Profiles and Journey-to-Work Trends in Camden, Trenton, Chester, and Philadelphia, that was published by DVRPC in April 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.

All of the cities have depended on heavy industry for their past prosperity and have seen this economic base eroded as manufacturing declined in importance. Transportation has played a major role in their growth and development. All face the Delaware River and have enjoyed the benefits of waterborne commerce, although this too has declined over the years; and all are served by major railroads and interstate highways. These cities are also generally well served by public transportation. Although the last twenty years have seen a pronounced shift of residents and jobs from the cities to the suburbs, Philadelphia and Trenton have managed to maintain a central focus for employment. As the capital of New Jersey, Trenton has a strong government sector that helps pull jobs downtown. Philadelphia is the largest city in the region and, with its world-renown universities, medical facilities, museums, and other institutions, constitutes the region's commercial and cultural hub.

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 ten percent higher than the figures reported here.

Table 1
DEMOGRAPHIC AND EMPLOYMENT TRENDS
1970 – 1990

POPULATION

City	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Camden	102,551	84,910	87,492	-17.2	3.0
Trenton	104,638	92,124	88,675	-12.0	-3.7
Chester	56,210	45,794	41,856	-18.5	-8.6
Philadelphia	1,947,494	1,688,210	1,585,577	-13.3	-6.1

HOUSEHOLDS

City	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Camden	32,561	28,354	26,526	-12.9	-6.4
Trenton	33,530	32,455	30,673	-3.2	-5.5
Chester	17,826	15,824	14,424	-11.2	-8.8
Philadelphia	641,912	620,611	600,740	-3.3	-3.2

RESIDENT WORKERS

City	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Camden	37,481	22,585	26,515	-39.7	17.4
Trenton	41,520	33,211	36,560	-20.0	10.1
Chester	21,389	15,246	15,273	-28.7	0.2
Philadelphia	768,309	608,355	640,577	-20.8	5.3

EMPLOYMENT

City	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Camden	46,689	38,959	38,570	-16.6	-1.0
Trenton	64,728	61,896	58,227	-4.4	-5.9
Chester	25,740	17,619	15,923	-31.6	-9.6
Philadelphia	876,481	760,156	761,244	-13.3	0.1

Prepared by the Delaware Valley Regional Planning Commission

II. DEMOGRAPHIC AND EMPLOYMENT TRENDS

Changes in the number and pattern of work trips in the region are largely determined by shifts in population and employment. Other factors, such as automobile ownership, play a role in determining the mode used. Table 1 shows the changes in population, the number of households, the number of resident workers, and employment that have taken place since 1970. The trends are shown graphically in Figure 1.

A. Population

Philadelphia with almost 1.6 million people is by far the largest city within the Delaware Valley Region. The next largest cities are Trenton and Camden, each with fewer than 90,000 residents. Chester is the smallest of the four, with a population slightly above 40,000. The steep declines in population observed during the 1970s (ranging from 12 to more than 18 percent) have largely ameliorated. Although the population of all but Camden (which gained about 3%) still declined during the 1980s, the losses were smaller, with none exceeding 9 percent.

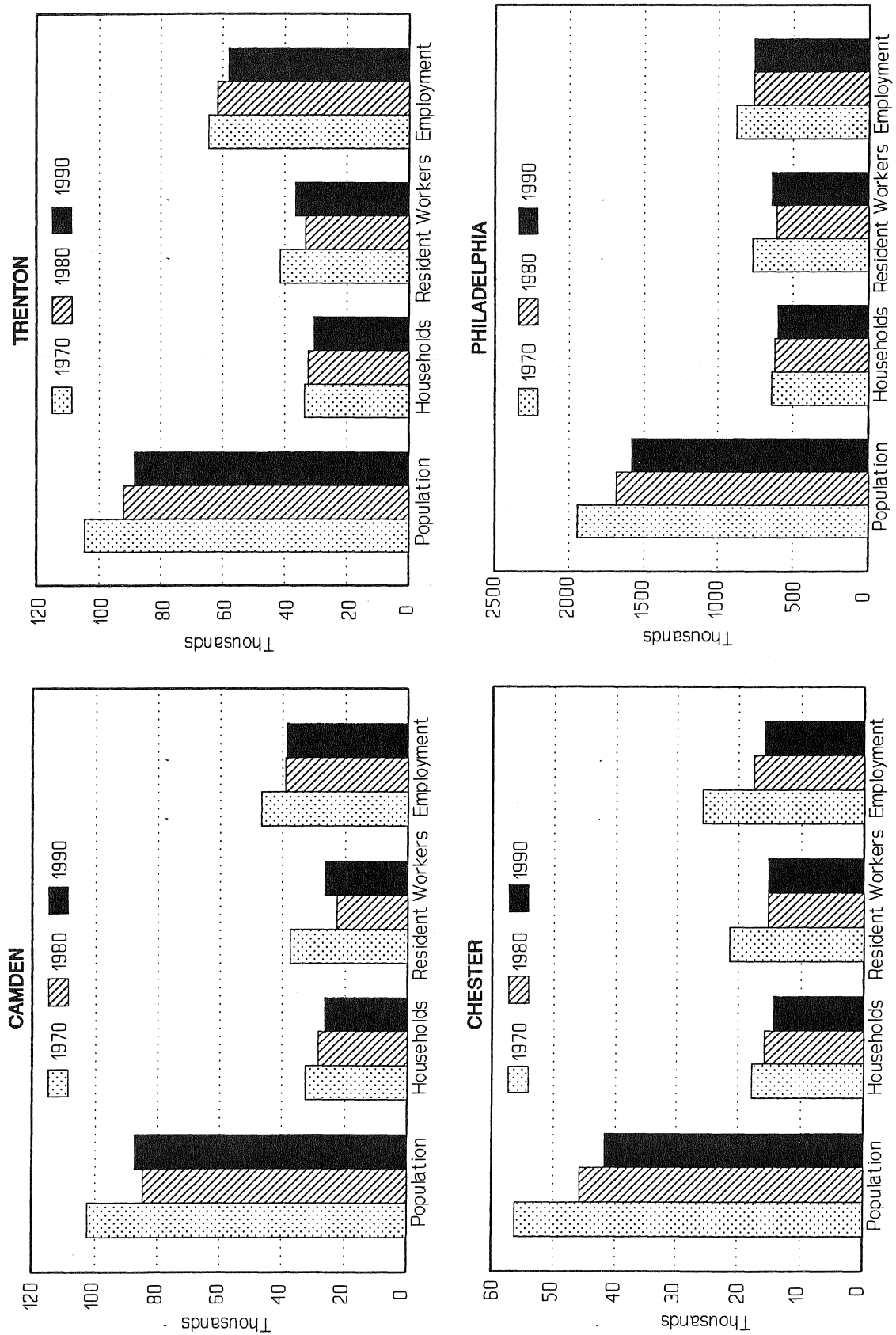
B. Households

During the 1970s the number of households declined by approximately 12 percent in Camden and Chester, but only by 3 percent in Trenton and Philadelphia. In each case, however, the percentage decline was less than that for population. During the 1980s all four cities showed losses, but the spread was much smaller (-3% to -9%), and in addition the number of households now declined faster than population. Changes in the number of households do not necessarily follow those of population for several reasons. If families moving to suburban locations are replaced by single persons attracted to Center City apartments, the number of households will increase as the average household size declines. Individuals living in group quarters, such as student dormitories, military barracks, or prisons, do not contribute to the number of households, nor do homeless persons living on the street. For example, the building of Riverfront State Prison early in the 1980s added to Camden's population without increasing the number of households.

C. Resident workers

Resident workers counts workers where they live, regardless of where they worked. The trends were negative for all four cities during the 1970s, but the trends turned positive during the 1980s. In percentage terms the biggest gains were registered in Camden, where the number of residents with jobs increased by 17 percent, and in Trenton, where the gain was 10 percent. In Philadelphia the gain was a more modest 5 percent, and in Chester the number of resident workers was essentially the same in 1990 as in 1970. However, the last result was mainly a consequence of declining population, as a larger percentage of Chester's residents held jobs in 1990 than ten years earlier.

Figure 1
DEMOGRAPHIC AND EMPLOYMENT TRENDS



D. Employment

Employment counts people where they work, i.e., it represents the number of primary jobs held in each jurisdiction. Although the steep declines in employment experienced during the 1970s have largely been arrested, the trends during the 1980s were still negative for all the cities except Philadelphia, where employment was flat. Chester showed the steepest drop, almost 10 percent, but this was still much less than the 32 percent loss experienced during the 1970s. Although the number of jobs exceeded the number of resident workers in each city, resident workers are increasing, whereas employment is still declining or static. This suggests that although the predominant commuting flow is still into the cities, there is an accelerating trend toward reverse commuting.

E. Automobile Ownership

In common with the region as a whole, automobile ownership in the cities has been steadily increasing as well (see Table 2 and Figure 2). Here *automobile* refers to any four-wheeled vehicle used for personal transportation, and includes vans and small trucks. The number of carless households, as well as single-car households, has declined in all four cities, whereas households with two or more vehicles have increased. In general, these trends became more pronounced during the 1980s. In spite of a declining population base, the number of automobiles owned by residents increased during the 1980s in every city but Chester. The largest percentage increase occurred in Trenton where the residents own 11% more automobiles than they did in 1980.

The share of households owning no vehicles ranged from 30 percent in Trenton to 42 percent in Camden. With the exception of Trenton this share has not changed substantively since 1980. The share owning two or more cars ranged from 20 percent in Camden to 31 percent in Trenton, but here the share did increase markedly over the last decade. In 1980 the share for two or more cars ranged from 14 percent (Camden) to 22 percent (Trenton). Principally, it is the purchase of additional automobiles by households who already own at least one that is producing the increase in the overall number of automobiles.

Table 2
TREND IN AUTOMOBILE OWNERSHIP
1970 - 1990

0-CAR HOUSEHOLDS

City	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Camden	12,693	12,268	11,216	-3.3	-8.6
Trenton	11,801	10,972	9,134	-7.0	-16.8
Chester	6,036	5,313	5,002	-12.0	-5.9
Philadelphia	254,898	239,248	222,901	-6.1	-6.8

1-CAR HOUSEHOLDS

City	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Camden	15,249	12,226	9,886	-19.8	-19.1
Trenton	15,280	14,215	12,144	-7.0	-14.6
Chester	8,171	7,302	5,578	-10.6	-23.6
Philadelphia	292,547	272,119	245,042	-7.0	-10.0

2-CAR HOUSEHOLDS

City	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Camden	4,051	3,420	4,151	-15.6	21.4
Trenton	5,462	5,969	7,353	9.3	23.2
Chester	3,214	2,736	3,116	-14.9	13.9
Philadelphia	83,302	93,650	109,120	12.4	16.5

3+ CAR HOUSEHOLDS

City	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Camden	572	440	1,273	-23.1	189.3
Trenton	1,012	1,299	2,042	28.4	57.2
Chester	451	473	728	4.9	53.9
Philadelphia	11,398	15,636	23,677	37.2	51.4

AUTOMOBILES

City	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Camden	25,151	20,475	22,343	-18.6	9.1
Trenton	29,395	30,311	33,645	3.1	11.0
Chester	15,949	14,288	14,153	-10.4	-0.9
Philadelphia	495,244	509,451	540,546	2.9	6.1

Figure 2
TREND IN AUTOMOBILE OWNERSHIP

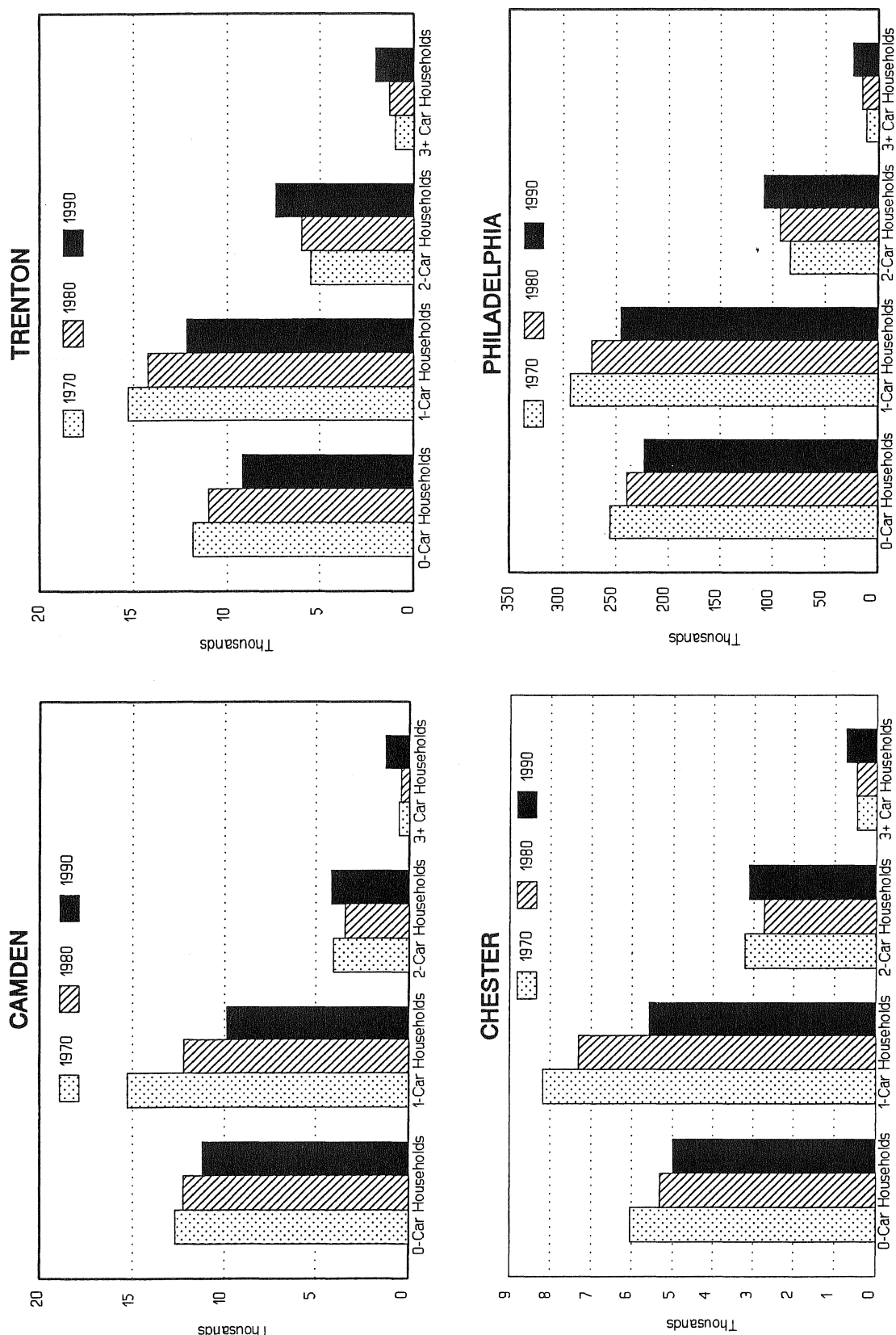


Table 3
1990 WORKER PROFILES

Characteristics	CAMDEN			TRENTON			CHESTER			PHILADELPHIA		
	Resident Workers	Employ- ment		Resident Workers	Employ- ment		Resident Workers	Employ- ment		Resident Workers	Employ- ment	
SEX												
Male	12,690	20,333		18,140	29,079		7,631	9,278		328,936	408,219	
Female	13,825	18,237		18,420	29,148		7,642	6,645		311,641	353,025	
Total	26,515	38,570		36,560	58,227		15,273	15,923		640,577	761,244	
OCCUPATION												
Executive	1,259	4,612		3,075	9,938		896	1,618		65,956	104,045	
Professional	2,444	8,965		3,401	9,246		1,652	2,979		92,597	133,771	
Clerical	4,805	6,475		8,099	14,242		3,328	2,640		138,615	153,439	
Service	6,317	5,874		7,842	7,878		3,583	1,997		103,055	98,032	
Laborer	6,280	4,383		6,711	6,054		2,732	2,679		88,433	87,988	
Other	5,410	8,261		7,432	10,869		3,082	4,010		151,921	183,969	
INDUSTRY												
Manufacturing	5,107	6,937		5,834	6,701		2,714	3,419		85,968	94,855	
Transp/Comm/Utility	1,861	2,091		2,208	2,735		1,082	1,035		47,533	65,276	
Retail Trade	3,702	3,303		4,544	4,719		1,944	1,441		98,374	101,489	
F.I.R.E.	1,359	1,273		1,412	2,374		1,022	766		52,290	66,800	
Services	10,023	16,526		12,596	18,314		6,418	6,598		244,939	297,150	
Government	1,731	4,314		6,646	19,160		724	771		48,214	58,223	
Other	2,732	4,126		3,320	4,224		1,369	1,893		63,259	77,451	
CLASS												
Private	19,865	26,238		22,762	27,772		12,180	12,914		496,579	585,873	
Government	5,843	10,801		12,653	28,492		2,714	2,293		115,398	137,972	
Self-Employed	759	1,470		1,056	1,832		367	668		26,671	35,102	
Unpaid family	48	61		89	131		12	48		1,929	2,297	
WORKER EARNINGS												
Median	\$15,275	\$23,365		\$19,153	\$23,607		\$16,225	\$22,156		\$18,950	\$22,101	
Mean	\$17,185	\$28,172		\$20,593	\$27,196		\$17,822	\$26,481		\$22,121	\$27,933	

Prepared by the Delaware Valley Regional Planning Commission

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 region's cities. These characteristics are summarized in Table 3, and shown with greater detail in Appendices I (resident workers) and II (employed workers).

A. Sex

The presence of women in the work force has continued to increase. In 1980 men outnumbered women in both resident workers and employed workers, but by 1990 this balance had been reversed for resident workers in all but Philadelphia, where women are just short of parity (49% in 1990, up from 45% in 1980). The shift was most pronounced in Camden where the proportion of the resident work force comprised of women jumped by 7 percentage points (from 45% in 1980 to 52% in 1990). With respect to employment, however, the balance is still on the side of men in all the cities but Trenton, where the employed work force is now split almost evenly.

B. Income

Median earnings of resident workers range from \$15,275 in Camden to \$19,153 in Trenton. Household income follows the same order, and is roughly twice as high as the earnings of individual workers. The spread in the median earnings of employed workers is less, ranging from about \$22,200 to \$23,600, but in each city it is higher than that of the residents. The difference is highest in Camden, where median earnings for employees is 53 percent greater than that for residents; and is lowest in Philadelphia, where it is 16 percent. This difference provides a measure of the tendency for higher level jobs to be held by workers commuting from other jurisdictions.

Mean earnings are generally about 10 to 20 percent higher than median earnings. This is caused by the skewness of the income distribution, in which a relatively few individuals (or households) earn incomes well above the median.

Worker earnings in 1990 were 62 to 94 percent higher than in 1980 for residents, and 81 to 107 percent higher for employees. In other words, workers commuting to city jobs from other municipalities fared better than did city residents regardless of where they worked. Generally, household income showed larger increases between 1980 and 1990 than did worker earnings, reflecting an increase in multi-earner households.

C. Occupation

Occupation characterizes workers by the type of work performed. Service jobs constituted the largest category among residents in Camden and Chester, but in Trenton and Philadelphia, with their concentrations of offices, more residents were employed in clerical jobs. Laborers,

but its share declined in all four cities. Professional specialties ranked relatively higher in Philadelphia than in the other cities.

The rankings are somewhat different when considered for employment. Although clerical jobs still rank first in Trenton and Philadelphia, professional jobs lead the list in Camden and Chester. For the latter two cities, this implies that while cities offer jobs requiring professional qualifications, they are not being filled by local residents. In contrast many of the city residents are filling service type jobs located elsewhere.

D. Industry

Industry characterizes workers by the principal activity at the work site. In each of the cities, the service sector employs from one-fourth to one-third of the resident workers. Not only is it the largest sector, it is the fastest growing. Manufacturing ranks second in Camden and Chester, but third in Trenton and Philadelphia. In Trenton the second position is held by government, befitting its role as capital of New Jersey, and in Philadelphia by retail trade. The data indicates that manufacturing jobs are rapidly disappearing. The order is largely the same for employees as for residents, the principal exception being Trenton, where government ranks ahead of services for employees.

E. Class

The private sector employs from 62 to 80 percent of workers resident in the cities, and in each city this share increased between 1980 and 1990. Not surprisingly, Trenton has the largest share (35%) in the public or government sector. In none of the other cities does the public sector exceed 22 percent, and in all cases this share is shrinking. Philadelphia has the largest share of self-employed workers, but at 4 percent it is relatively small.

IV. MEANS OF TRANSPORTATION

The means of transportation used by residents and employees to reach their jobs is tabulated in Tables 4 through 9. The modal share chosen by the resident workers and employees in each city are shown in Figures 3 and 4, respectively. 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.

Although their share is lower, city residents, in common with the rest of the region, most often choose to drive alone when traveling to work. The percent of *drove alone* ranged from 46 in Philadelphia to 62 in Trenton. Another 13 to 22 percent rides with other workers. Public transportation is used by 10 to 29 percent, and 8 to 10 percent walk to work. Except in Philadelphia, where the modal shares for resident and employed workers are similar, employed workers show a greater tendency than resident workers to drive alone and a lower propensity to carpool or use public transportation.

The best indication of longer term trends in the commutation habits of workers is obtained by looking at the percentage shares, shown in Table 6 for residents and Table 9 for employees. In this pair of tables the form of the available 1970 Census data dictated that the highway modes be subdivided into *auto driver* and *auto passenger*, rather than *drove alone* and *carpool*. Shifts in the absolute numbers, shown in Tables 5 and 8, tend to reflect overall changes in population and employment, rather than modal preferences. A steady increase in the *auto driver* share is indicated for both resident workers and employees, but *auto passenger* generally reveals an increase from 1970 to 1980 and then a decline. The share riding public transportation declined during the 1970s, but then held more or less even during the 1980s. The decline during the 1970s was steeper for employees than resident workers.

Approximately one percent of the resident work force works at home, and except in Philadelphia this number has not changed significantly since 1980. In Philadelphia the number of workers working at home increased by 60 percent during the 1980s, and now represents almost two percent of the work force.

Table 4
1990 MEANS OF TRANSPORTATION
OF RESIDENT WORKERS

Means of Transportation	CAMDEN		TRENTON		CHESTER		PHILADELPHIA	
	Number	Share	Number	Share	Number	Share	Number	Share
Drove Alone	12,609	47.9%	22,252	61.6%	8,630	57.0%	286,068	45.5%
2-Person Carpool	3,944	15.0%	5,126	14.2%	2,139	14.1%	64,515	10.3%
3-Person Carpool	1,024	3.9%	932	2.6%	355	2.3%	12,740	2.0%
4+ Person Carpool	814	3.1%	766	2.1%	610	4.0%	7,167	1.1%
Bus/Trolley	3,953	15.0%	3,200	8.9%	1,500	9.9%	126,591	20.1%
Subway/Elevated	644	2.4%	78	0.2%	26	0.2%	44,901	7.1%
Railroad	147	0.6%	366	1.0%	392	2.6%	11,386	1.8%
Bicycle	105	0.4%	177	0.5%	60	0.4%	3,637	0.6%
Walked	2,595	9.9%	2,704	7.5%	1,241	8.2%	66,446	10.6%
Other Means	479	1.8%	540	1.5%	185	1.2%	5,423	0.9%
Total*	26,314	100.0%	36,141	100.0%	15,138	100.0%	628,874	100.0%

* Does not include Worked at Home

Prepared by the Delaware Valley Regional Planning Commission

Table 5
MEANS OF TRANSPORTATION
OF RESIDENT WORKERS
1970 – 1990 TREND

CAMDEN

Means of Transportation	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Highway	23,138	16,224	18,391	-29.9	13.4
Public Transportation	9,057	3,721	4,744	-58.9	27.5
Walked	4,029	2,074	2,595	-48.5	25.1
Other Means	519	376	584	-27.6	55.3
Worked at Home	739	190	201	-74.3	5.8
Total	37,481	22,585	26,515	-39.7	17.4

TRENTON

Means of Transportation	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Highway	29,309	25,220	29,076	-14.0	15.3
Public Transportation	5,365	3,854	3,644	-28.2	-5.4
Walked	5,209	3,274	2,704	-37.1	-17.4
Other Means	656	423	717	-35.5	69.5
Worked at Home	982	440	419	-55.2	-4.8
Total	41,520	33,211	36,560	-20.0	10.1

CHESTER

Means of Transportation	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Highway	15,179	11,788	11,734	-22.3	-0.5
Public Transportation	2,651	1,567	1,918	-40.9	22.4
Walked	2,906	1,622	1,241	-44.2	-23.5
Other Means	279	98	245	-64.9	150.0
Worked at Home	373	171	135	-54.2	-21.1
Total	21,389	15,246	15,273	-28.7	0.2

PHILADELPHIA

Means of Transportation	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Highway	387,436	347,591	370,490	-10.3	6.6%
Public Transportation	284,112	182,950	182,878	-35.6	-0.0%
Walked	74,545	64,005	66,446	-14.1	3.8%
Other Means	7,845	6,551	9,060	-16.5	38.3%
Worked at Home	14,372	7,294	11,703	-49.2	60.4%
Total	768,309	608,391	640,577	-20.8	5.3%

Figure 3
1990 MEANS OF TRANSPORTATION OF RESIDENT WORKERS

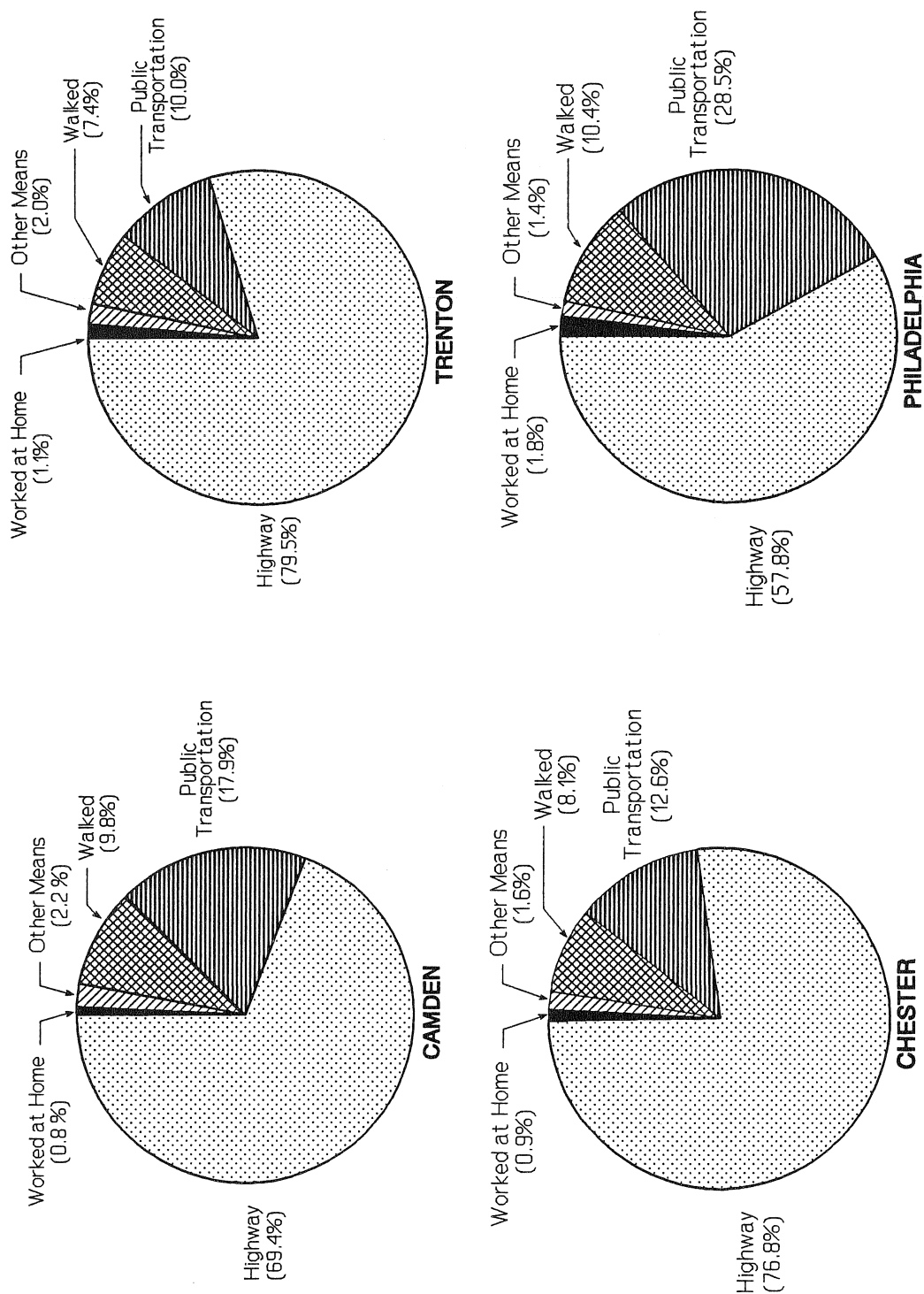


Table 6
 MODAL SHARE USED BY RESIDENT WORKERS
 1970 - 1990 TREND
 (Percent of Total Resident Workers Who Did Not Work at Home)

Means of Transportation	CAMDEN			TRENTON			CHESTER			PHILADELPHIA		
	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990
Auto Driver	50.6	53.9	57.4	53.0	60.2	69.9	56.8	63.2	65.6	41.2	47.1	51.5
Auto Passenger	13.0	16.1	12.5	14.7	11.6	10.5	11.9	14.0	11.9	8.1	9.2	7.4
Bus/Trolley	21.0	12.8	15.0	13.2	10.6	8.9	11.1	7.7	9.9	26.4	18.9	20.1
Subway/Elevated	2.6	2.8	2.4	0.0	0.0	0.2	0.0	0.0	0.2	8.7	8.0	7.1
Regional Rail	0.0	0.0	0.6	1.0	0.4	1.0	3.3	1.9	2.6	2.4	2.6	1.8
Walk	8.6	8.6	9.9	12.9	9.7	7.5	11.5	11.1	8.2	8.9	10.5	10.6
Other Means	4.2	5.8	2.2	5.2	7.5	2.0	5.4	2.1	1.6	4.3	3.7	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Prepared by the Delaware Valley Regional Planning Commission

Table 7
1990 MEANS OF TRANSPORTATION
OF EMPLOYEES

Means of Transportation	CAMDEN		TRENTON		CHESTER		PHILADELPHIA	
	Number	Share	Number	Share	Number	Share	Number	Share
Drove Alone	26,150	68.2%	41,515	71.8%	11,705	74.1%	358,883	47.9%
2 - Person Carpool	4,297	11.2%	7,724	13.4%	1,479	9.4%	73,959	9.9%
3 - Person Carpool	780	2.0%	1,366	2.4%	277	1.8%	13,126	1.8%
4+ Person Carpool	386	1.0%	916	1.6%	151	1.0%	7,824	1.0%
Bus/Trolley	2,505	6.5%	2,314	4.0%	603	3.8%	122,600	16.4%
Subway/Elevated	836	2.2%	28	0.0%	13	0.1%	57,621	7.7%
Railroad	355	0.9%	517	0.9%	63	0.4%	39,911	5.3%
Bicycle	81	0.2%	134	0.2%	94	0.6%	3,656	0.5%
Walked	2,573	6.7%	2,814	4.9%	1,282	8.1%	66,173	8.8%
Other Means	406	1.1%	480	0.8%	121	0.8%	5,788	0.8%
Total*	38,369	100.0%	57,808	100.0%	15,788	100.0%	749,541	100.0%

* Does not include Worked at Home

Prepared by the Delaware Valley Regional Planning Commission

Table 8
MEANS OF TRANSPORTATION
OF EMPLOYEES
1970 - 1990 TREND

CAMDEN

Means of Transportation	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Highway	34,019	30,201	31,613	-11.2%	4.7%
Public Transportation	7,310	4,517	3,696	-38.2%	-18.2%
Walked	2,988	1,778	2,573	-40.5%	44.7%
Other Means	1,655	540	487	-67.4%	-9.9%
Worked at Home	717	190	201	-73.5%	5.8%
Total	46,689	37,226	38,570	-20.3%	3.6%

TRENTON

Means of Transportation	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Highway	50,133	52,806	51,521	5.3%	-2.4%
Public Transportation	5,804	4,785	2,859	-17.6%	-40.3%
Walked	4,911	3,319	2,814	-32.4%	-15.2%
Other Means	2,934	546	614	-81.4%	12.4%
Worked at Home	946	440	419	-53.5%	-4.8%
Total	64,728	61,896	58,227	-4.4%	-5.9%

CHESTER

Means of Transportation	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Highway	16,146	14,153	13,612	-12.3%	-3.8%
Public Transportation	4,620	999	679	-78.4%	-32.0%
Walked	2,463	1,563	1,282	-36.5%	-18.0%
Other Means	2,158	456	215	-78.8%	-52.9%
Worked at Home	353	171	135	-51.6%	-21.1%
Total	25,740	17,342	15,923	-32.6%	-8.2%

PHILADELPHIA

Means of Transportation	1970	1980	1990	Percent Change	
				'70-'80	'80-'90
Highway	447,691	435,811	453,792	-2.7%	4.1%
Public Transportation	319,163	237,231	220,132	-25.7%	-7.2%
Walked	65,558	62,469	66,173	-4.7%	5.9%
Other Means	30,191	8,165	9,444	-73.0%	15.7%
Worked at Home	13,878	7,294	11,703	-47.4%	60.4%
Total	876,481	750,970	761,244	-14.3%	1.4%

Figure 4
1990 MEANS OF TRANSPORTATION OF EMPLOYEES

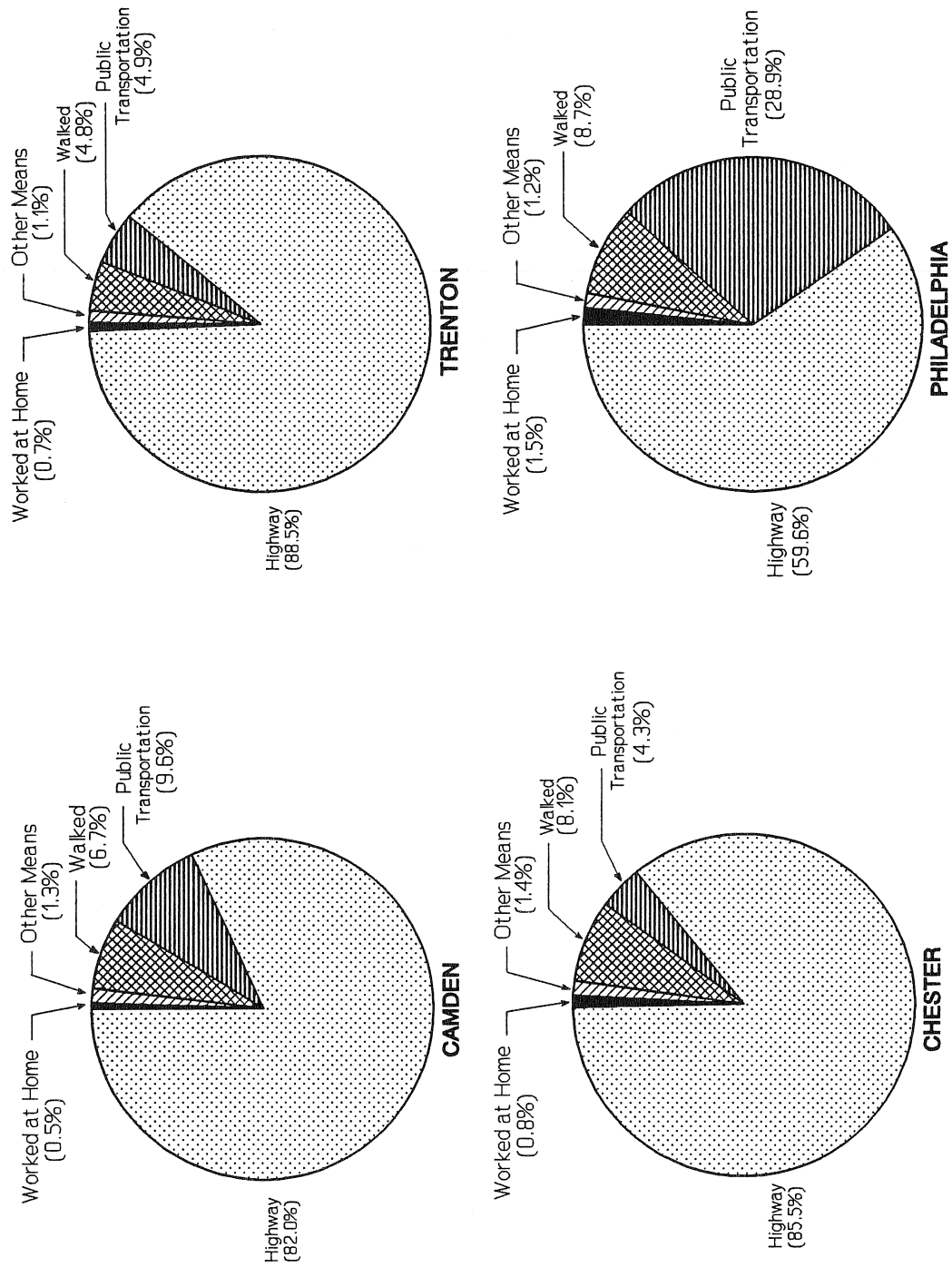


Table 9
MODAL SHARE USED BY EMPLOYEES
1970 - 1990 TREND
(Percent of Total Workers)

Means of Transportation	CAMDEN			TRENTON			CHESTER			PHILADELPHIA		
	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990
Auto Driver	61.9	61.4	74.7	64.8	72.8	79.6	53.9	70.8	79.6	43.8	48.4	53.6
Auto Passenger	12.1	15.9	7.7	13.8	12.6	9.5	9.7	12.3	6.6	8.1	8.9	6.9
Bus/Trolley	13.2	6.7	6.5	8.6	7.3	4.0	13.3	4.9	3.8	22.9	16.0	16.4
Subway/Elevated	2.7	4.9	2.2	0.0	0.0	0.0	0.0	0.0	0.1	8.5	8.1	7.7
Regional Rail	0.0	0.0	0.9	0.5	0.2	0.9	4.9	1.0	0.4	5.6	7.0	5.3
Walk	6.5	4.8	6.7	7.7	5.5	4.9	9.7	9.1	8.1	7.6	8.4	8.8
Other Means	3.6	6.3	1.3	4.6	1.6	1.1	8.5	1.9	1.4	3.5	3.2	1.3
Total*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Does not include Worked at Home

Prepared by the Delaware Valley Regional Planning Commission

Table 10

AVERAGE TRAVEL TIME TO WORK
1980 – 1990 TREND
(in minutes)

RESIDENT WORKERS

Place of Residence	Highway		Public Transp.		All Modes	
	1980	1990	1980	1990	1980	1990
Camden	21.6	19.6	34.1	34.6	22.9	21.7
Trenton	19.5	18.9	28.3	29.1	20.2	19.6
Chester	21.1	20.7	38.6	36.1	21.9	22.1
Philadelphia	26.6	24.9	42.2	37.7	29.8	27.4

EMPLOYED WORKERS

Place of Employment	Highway		Public Transp.		All Modes	
	1980	1990	1980	1990	1980	1990
Camden	23.0	23.9	34.6	31.3	24.0	23.8
Trenton	20.8	23.1	29.3	27.8	21.0	22.8
Chester	20.8	21.3	35.2	30.6	20.9	21.0
Philadelphia	28.4	27.5	43.4	39.8	31.8	29.8

Prepared by the Delaware Valley Regional Planning Commission

V. TRAVEL TIME

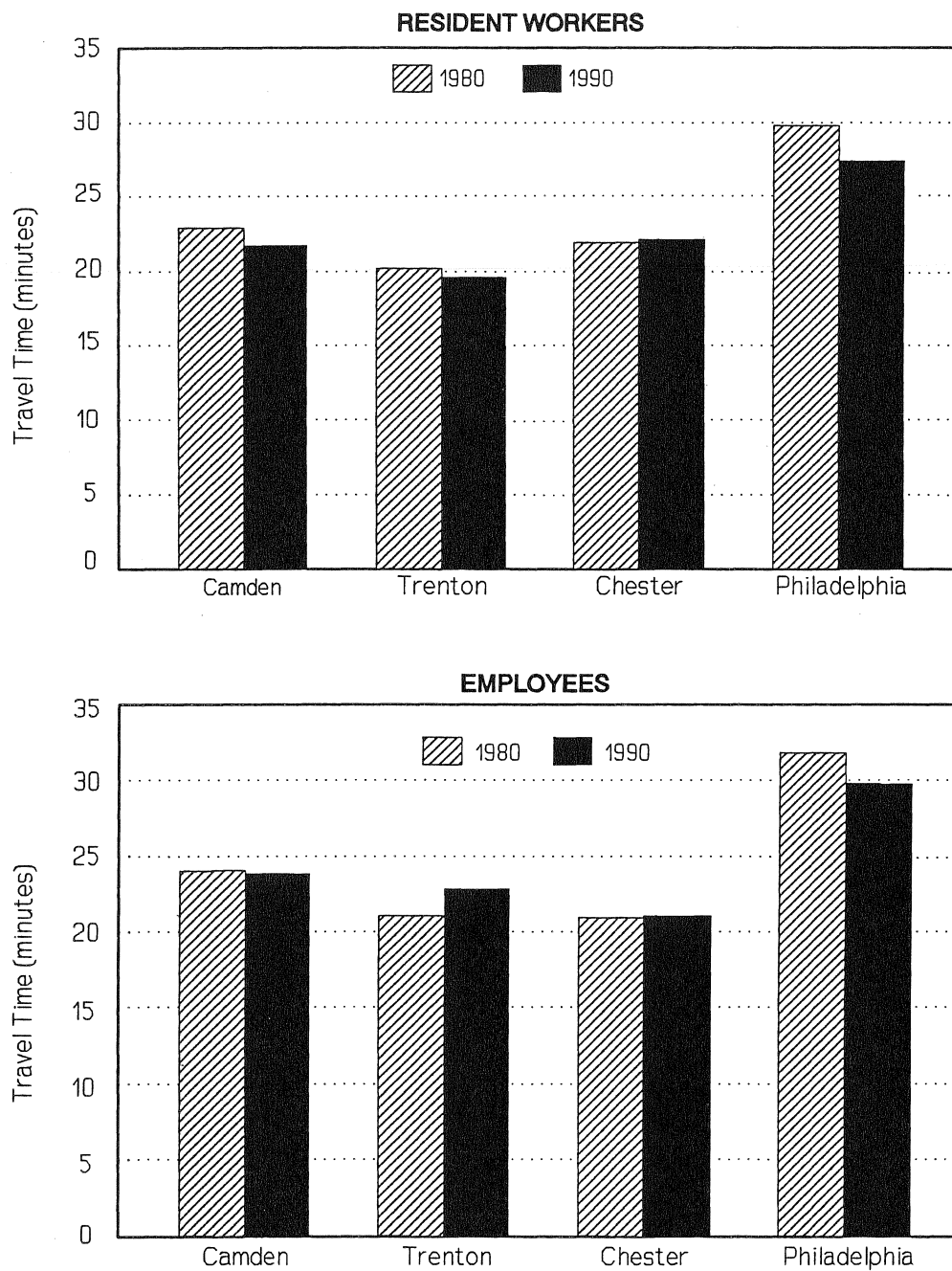
Mean travel times for the trip to work are tabulated in Table 10, as well as Appendices I (resident workers) and II (employees). Changes in travel times for both resident workers and employees are shown graphically in Figure 5. These times range from 20 to 30 minutes, with Philadelphia occupying the high end of the range and trips to or from the other cities all averaging less than 24 minutes. Employees tend to have longer travel times than the resident workers, but the differences are not large.

Workers who walk or bike to work experience the shortest travel times because these workers tend to have the shortest trip distances. Those driving alone or ridesharing average about 20 minutes for their trips. Although in aggregate the mean times for *drove alone* and *carpool* are similar, there is a direct correlation between the size of a carpool and the time required to travel to work. Commuters using public transportation have decidedly longer travel times, with mean times ranging from 25 to 50 minutes, depending on the submode used. Since those commuting by railroad are traveling the greatest distances, they tend to have the longest times. The need to travel to a bus stop or a station, wait for a scheduled vehicle, make other stops en route, possibly make a connection, and then walk to the work site all add to the time required.

Travel times correlate well with distance and whether or not public transportation is used. Workers in Philadelphia have longer travel times because of greater commute distances, street congestion, and greater use of public transportation. Employees working at city jobs tend to have longer commutes than do city residents who have a greater opportunity to work locally, but this is partly negated by the residents' increased reliance on public transportation.

Mean travel times have changed little since 1980, although if anything most have declined slightly. However, some interesting patterns have emerged. Highway travel times have declined for resident workers, but increased for commuters employed in the cities, the one notable exception to the latter being Philadelphia. The increased highway travel times for employees in the smaller cities may be a result of increased commuting distances. Except for residents of Camden and Trenton, mean commuting times on public transportation have declined.

Figure 5
AVERAGE TRAVEL TIME TO WORK



VI. CITY PROFILES AND TRAVEL PATTERNS

Travel patterns for work trips for residents are tabulated in Appendix III and for employees in Appendix IV. Both tabulations exclude persons who worked at home. The following describes the distribution of work trips taken by both residents and employees, 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. Camden

Camden has experienced considerable declines in population and employment over the past few decades as industries have closed or moved away. These declines appear to have bottomed and the 1990 population of 87,000 represents a three percent increase over 1980. Employment also appears to have stabilized, declining a modest one percent during the 1980s. In contrast, both population and employment had declined by 17 percent during the 1970s.

Approximately 39 percent of the work trips taken by the 26,000 employed residents who do not work at home are to destinations within the City of Camden, and another 12 percent go to work in adjacent Pennsauken Township. Other important destinations include Philadelphia and Cherry Hill Township, each attracting about 10 percent of Camden's resident workers. Altogether 72 percent work in Camden County, and only 3 percent commute to jobs outside the nine-county DVRPC region. (See Map 2.)

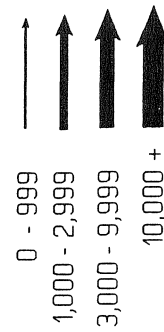
Use of public transportation for commutation is relatively high (18%). Destinations that attract higher than average use include Atlantic City (69%), Philadelphia (39%), Haddon Township (26%), and Cherry Hill Township (23%). New rail service initiated in 1989, combined with good bus service, has boosted ridership to Atlantic City; and the Lindenwold Line provides connections to work sites in Philadelphia and Camden County. Transit use falls markedly for destinations outside the Philadelphia-Atlantic City corridor. Approximately 21 percent of Camden's residents who also work in Camden walk to work.

Commutation patterns to jobs in the City of Camden are more dispersed than the trips originating in the city. Only about 27 percent of the work trips to Camden start from Camden. Other localities sending workers include Philadelphia (7%), Cherry Hill Township (6%), and Pennsauken Township (4%). About 63 percent of the city's employees come from Camden County, and only 3 percent live outside the region. (See Map 3.)

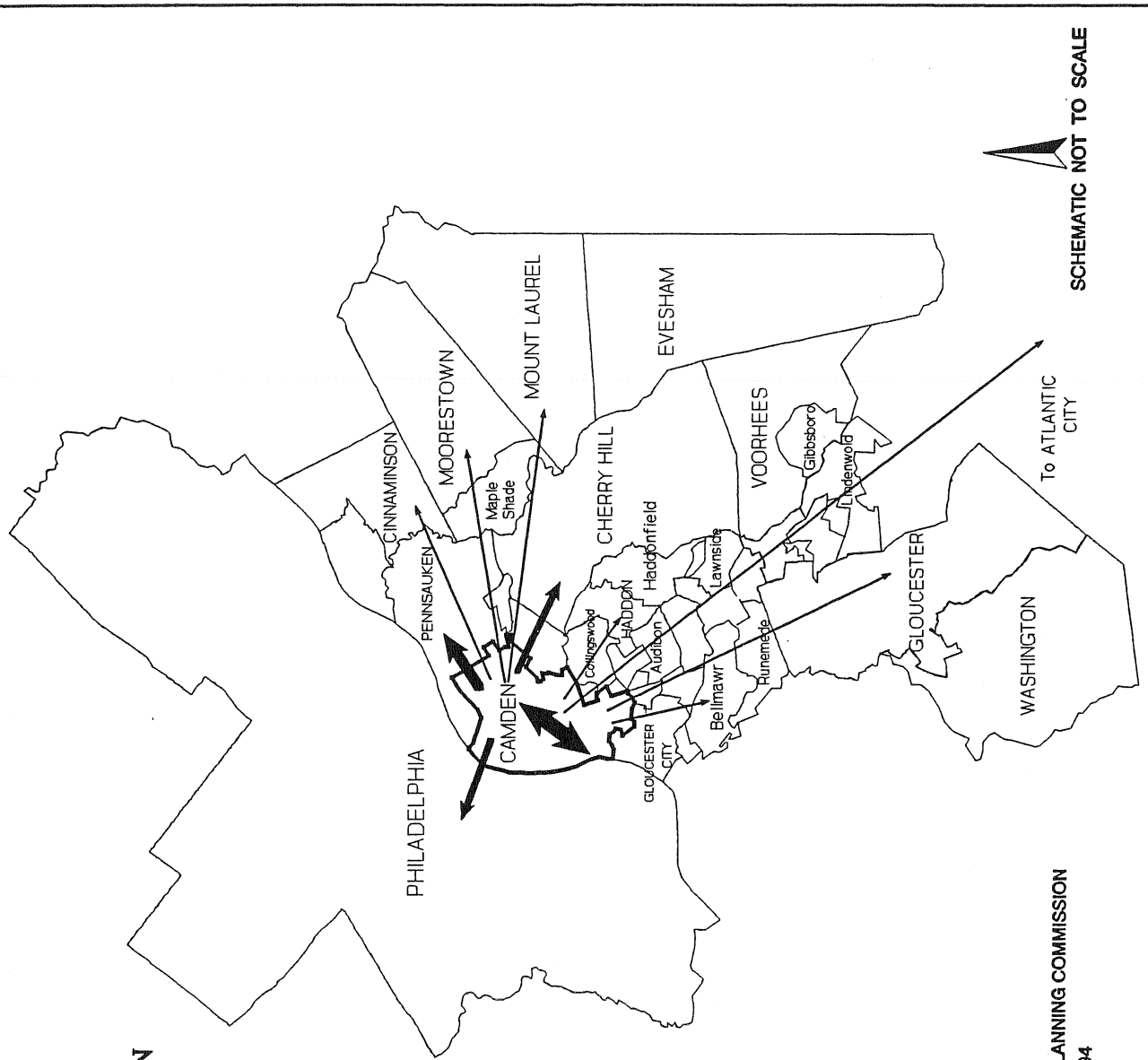
Employees working in Camden make less use of public transportation than do resident workers, but it is still significant at an overall rate of 10 percent. Greatest use was made by the residents of Philadelphia (24%), Haddon Township (17%), Camden (15%), and Lindenwold (15%).

Map 2
1990 COMMUTING PATTERN
FROM CAMDEN

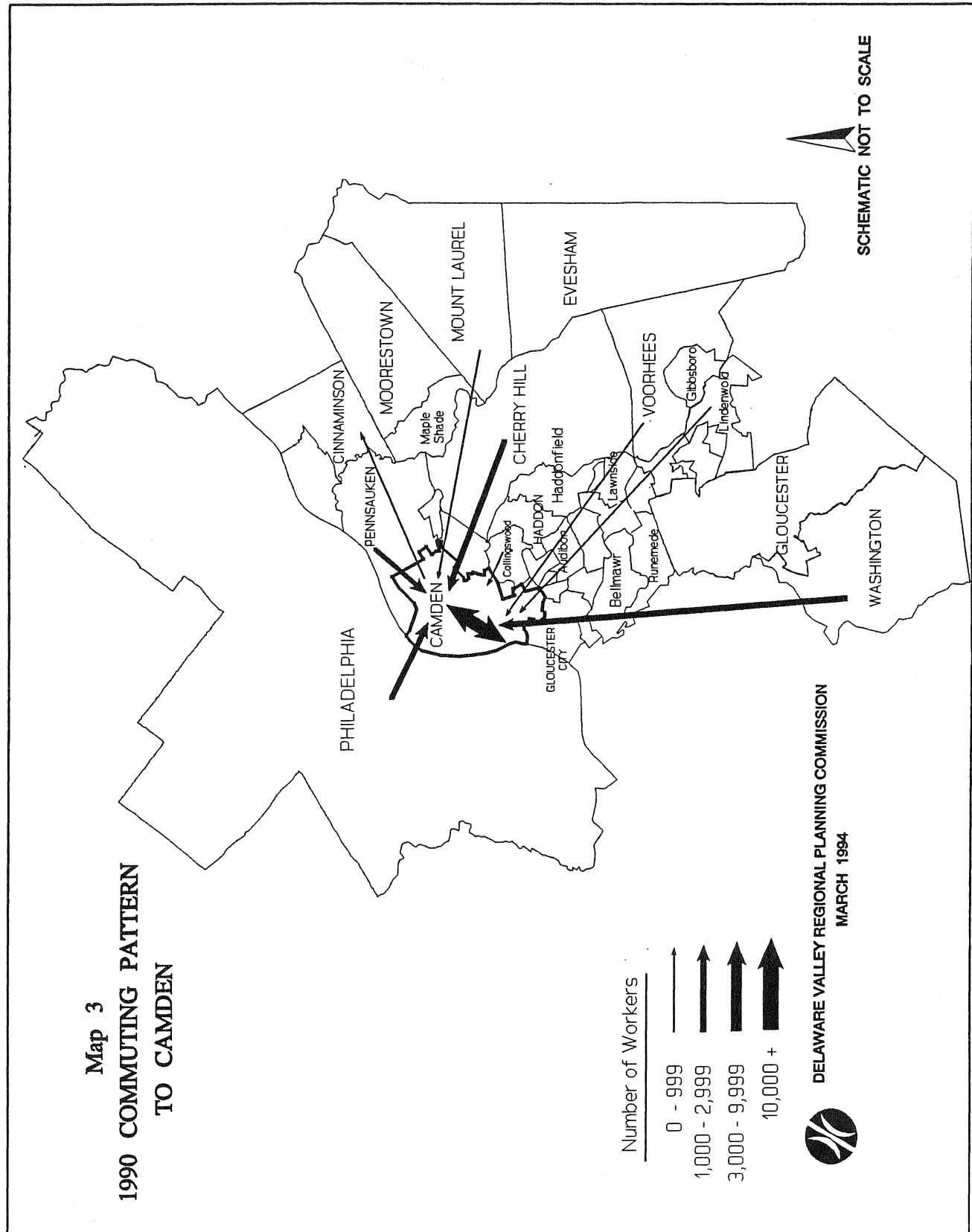
Number of Workers



DELAWARE VALLEY REGIONAL PLANNING COMMISSION
MARCH 1994



SCHEMATIC NOT TO SCALE



B. Trenton

Trenton is another city that has experienced a decline in manufacturing jobs, but it is also the state capital, a role that distinguishes it from the other cities in this report. Its population of 89,000 is still declining; albeit at a lower rate than in previous decades (-4% during the 1980s versus -12% during the 1970s). Its government role has allowed the city to avoid the drastic declines in employment experienced by the others, but its slower rate of decline has not bottomed and was actually greater during the 1980s than during the 1970s (-6% versus -4%). Use of public transportation for commutation by both resident and employed workers is generally less than in the other cities.

Almost one-half (49%) of the work trips taken by residents stay within the City of Trenton. The next largest destinations are Hamilton (11%), Ewing (9%), and Lawrence (7%) townships, all adjacent to the city. Almost 87 percent of the trips stay within Mercer County, but 7 percent extend outside the region, many to locations along the Trenton-New York corridor. (See Map 4.) About 14 percent of the work trips that stay within Trenton are walking trips.

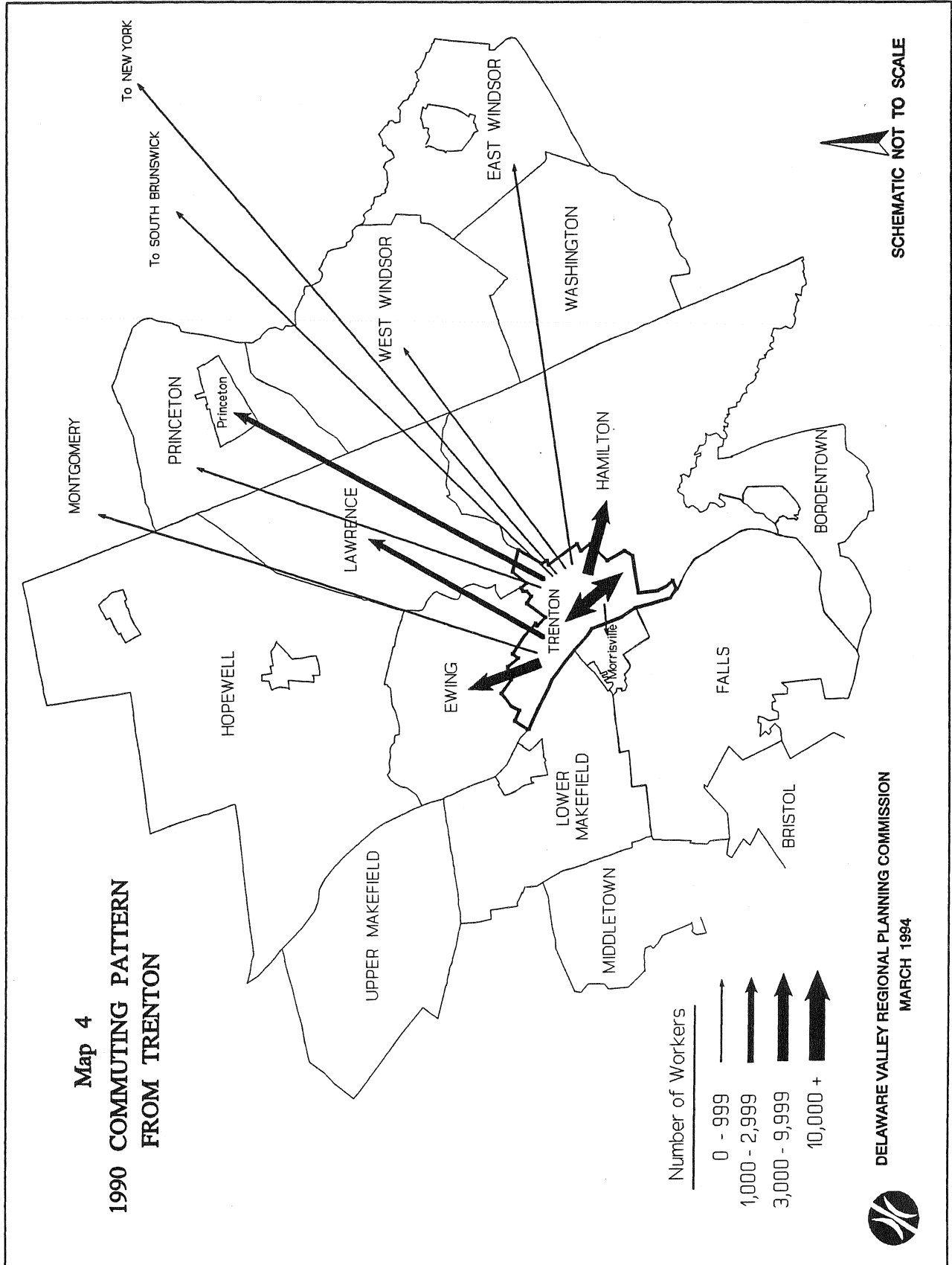
Only 10 percent of Trenton's residents commute on public transportation, which is the lowest of the region's major cities. However, excellent rail service along the Northeast Corridor attract far higher shares to destinations such as New York City. About 73 percent of the work trips to Manhattan are taken on public transportation. Other destinations with significant share include Lawrence (19%), West Windsor (16%), and Ewing (12%) townships.

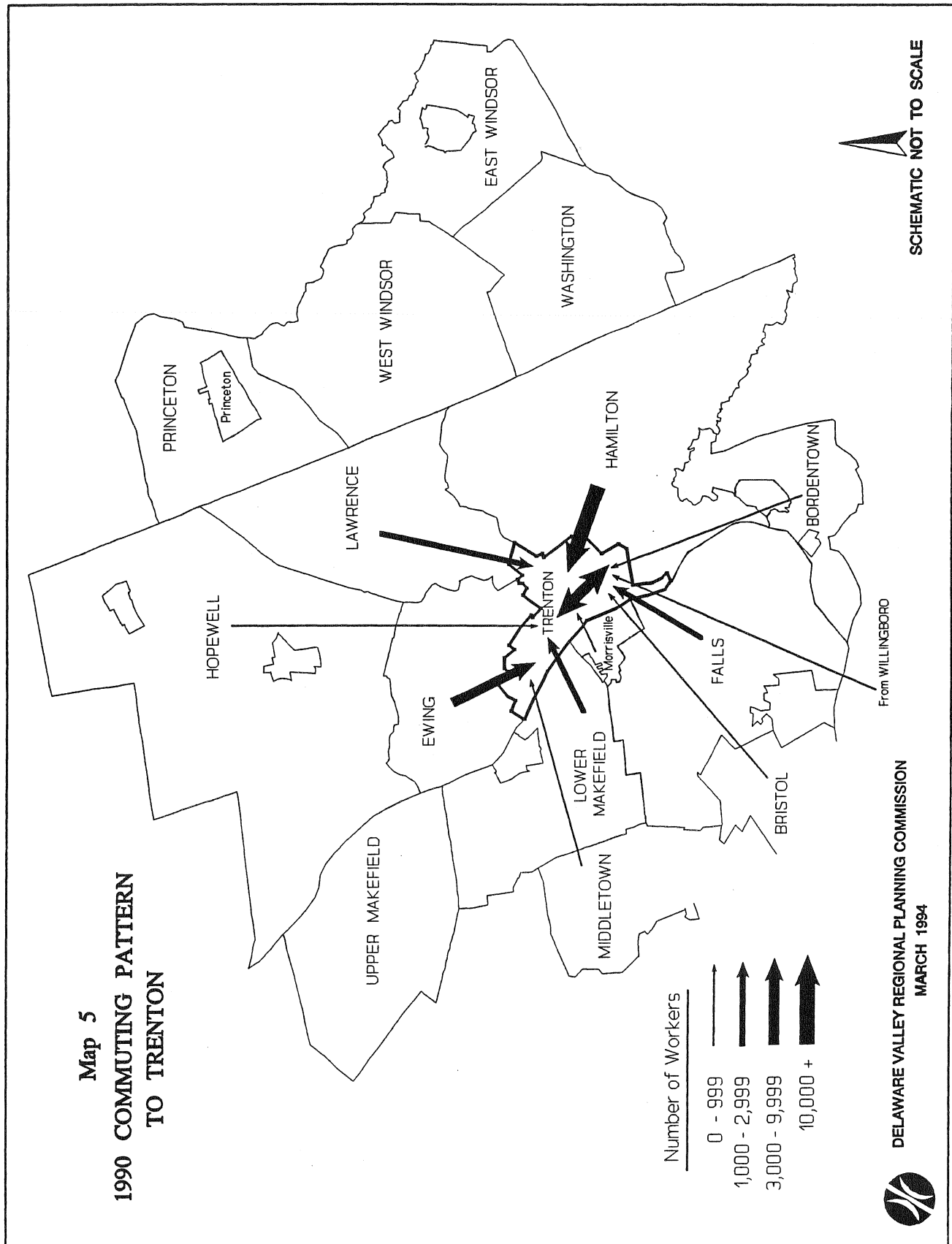
The 58,000 trips taken to jobs in Trenton far exceed the 36,000 work trips taken by workers who reside in the city. Only 31 percent of the employed workers live in Trenton, but more than one-third of the remainder come from Hamilton (19%) and Ewing (8%) townships. No other jurisdiction attracts as much as 3 percent of the inbound total. Only 5 percent of the employees commute by public transportation, and the only locations with shares above the average are Trenton (9%) and Willingboro Township (5%). (See Map 5.)

C. Chester

Chester is the oldest settlement in Pennsylvania and has long been a manufacturing and ship building center. Unfortunately, the maritime trades are in decline and many of the other industrial jobs have left. Although the rate of decline during the 1980s was only one-third of that experienced during the 1970s, the city is still losing population and jobs at rates faster than the other cities. The city is also the only one of the four to experience a decline in the number of automobiles owned by residents.

Less than 31 percent of the work trips taken by residents are to jobs in Chester. Approximately 11 percent of the employed residents who do not work at home commute to Philadelphia, 7 percent to Middletown Township, and the rest to widely dispersed locations, although most are nearby. Three-fourths of the trips are to work places in Delaware County. About five percent





of the residents travel to the State of Delaware, but only 2 percent cross the Delaware River to New Jersey. (See Map 6.)

Only 13 percent of the trips are on public transportation, although several destinations attract significantly higher shares. These include Swarthmore (33%), Philadelphia (30%), Media (28%), Nether Providence Township (19%), Marcus Hook (18%), Springfield Township (17%), and Middletown Township (15%). Walking is the means used by 24 percent of the residents employed locally.

About 29 percent of the jobs are filled by Chester residents, and the remainder come from dispersed locations. Only Philadelphia (6%) has a share higher than 5 percent. About 73 percent of the trips are completely contained within Delaware County, but 7 percent come from the State of Delaware, and 5 percent cross the river from New Jersey. (See Map 7.)

Overall public transportation is used for only 4 percent of the trips, but origins with higher shares include Philadelphia (11%), Chester (8%), Upper Darby Township (5%), and Ridley Township (5%).

D. Philadelphia

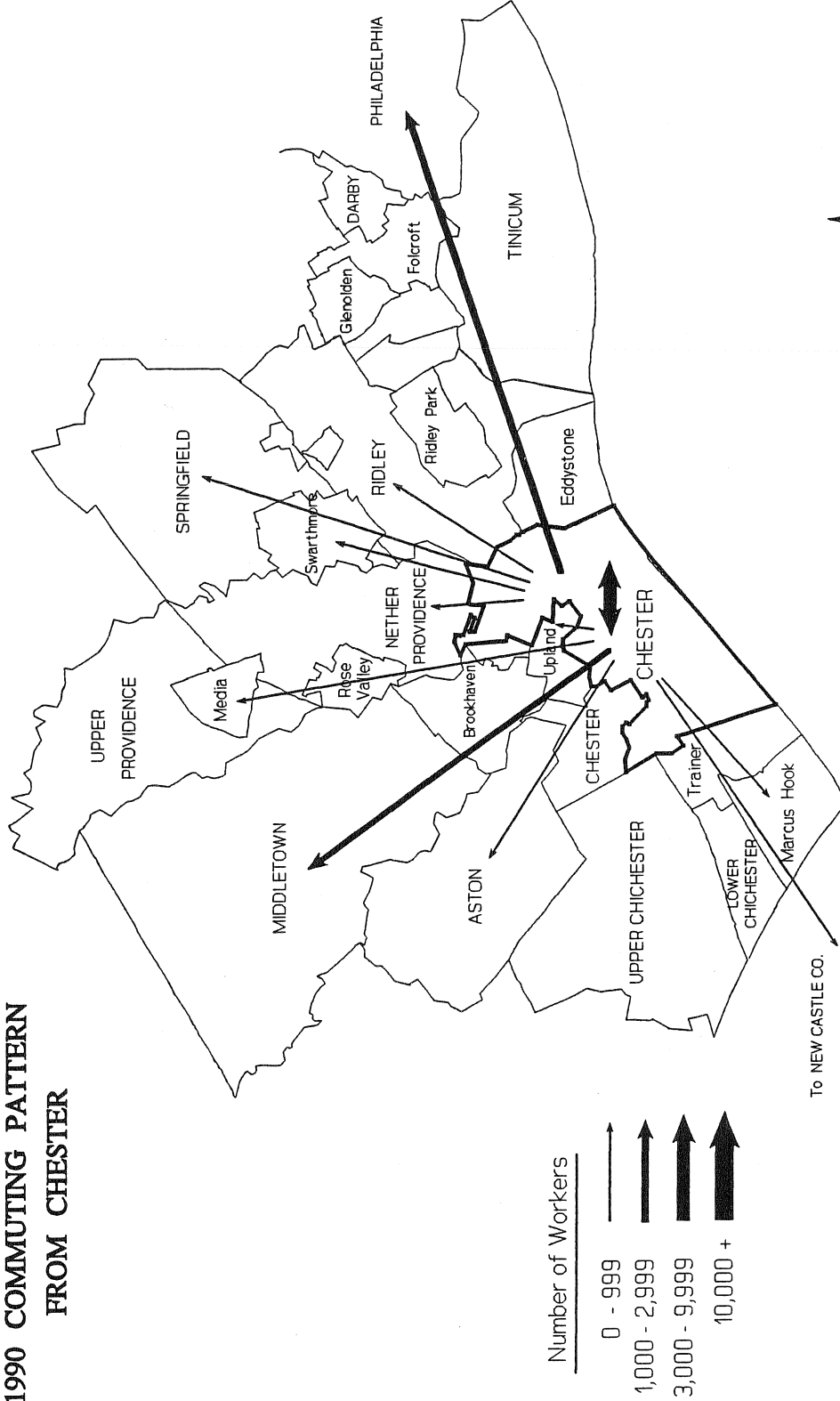
Population in the region's largest city still declined during the 1980s, but only by about one-half the rate experienced during the 1970s (6% versus 13%). Employment, declining during the 1970s, appears to have bottomed and during the 1980s remained essentially level. Growth in the services and trade sectors balanced the decline in manufacturing.

Because of its sheer size, both in area and in the number of jobs offered, Philadelphia employs a far larger share of its own residents (80%) than do the other cities covered in this report. The next three largest destinations are Lower Merion, Abington, and Bensalem townships, but each employs only about one percent of the total. More than 98 percent of the employed residents work within the nine-county region, a share that is also higher than that for the other cities. (See Map 8.)

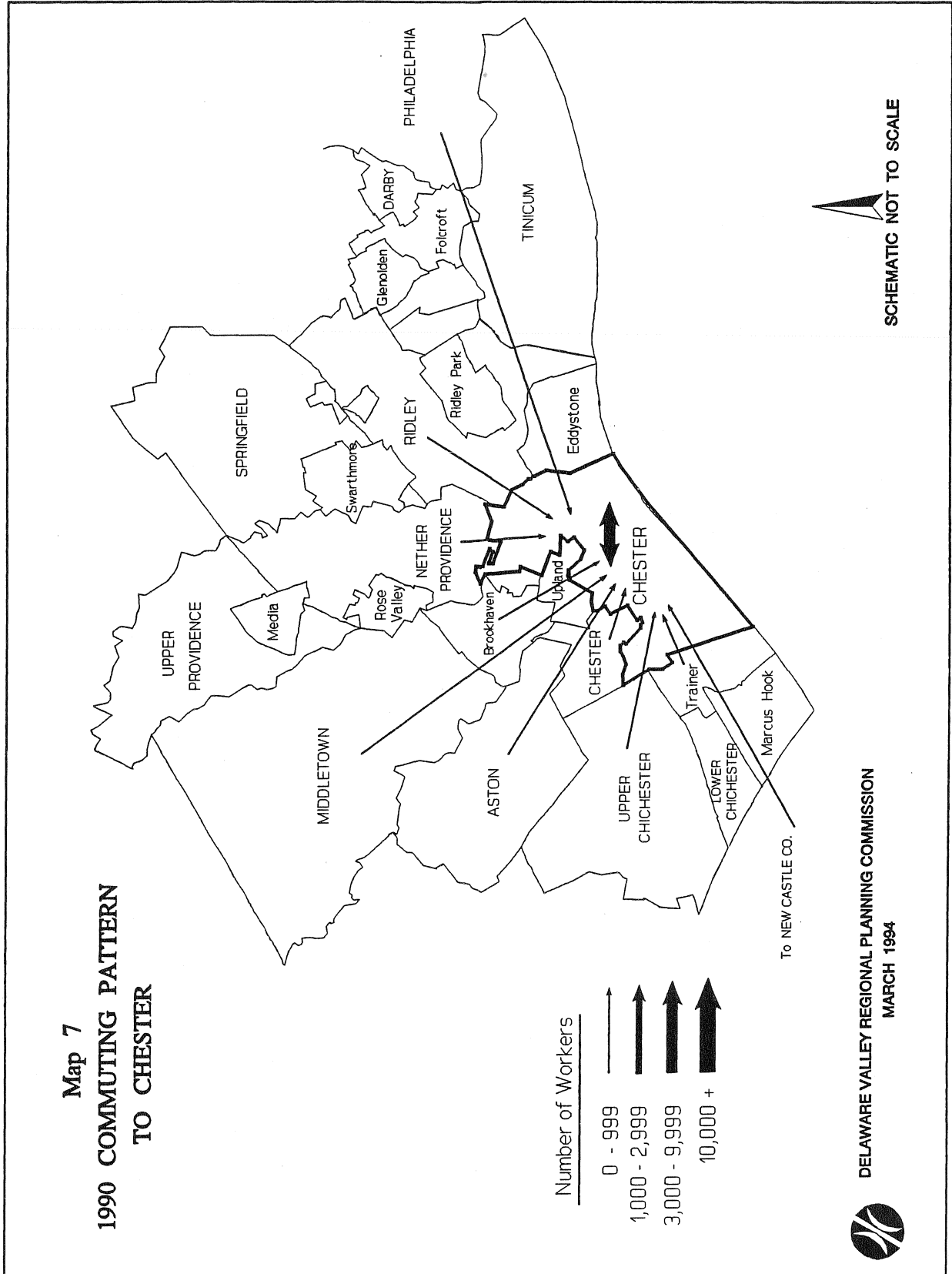
In addition Philadelphia has the highest share (29%) of its residents using public transportation for their work trips. The destinations with the highest shares are Upper Darby Township (39%), Philadelphia (33%), and Radnor Township (32%). The 69th Street Terminal in Upper Darby Township is a focal point for numerous bus and light rail lines, as well as serving as the western terminus for the Market/Frankford Subway/Elevated. A considerable reverse commute market has developed to the St. Davids Industrial Park in Radnor Township, which is served directly by regional rail and rail transit lines. Almost 13 percent of city residents working in the city walk to work.

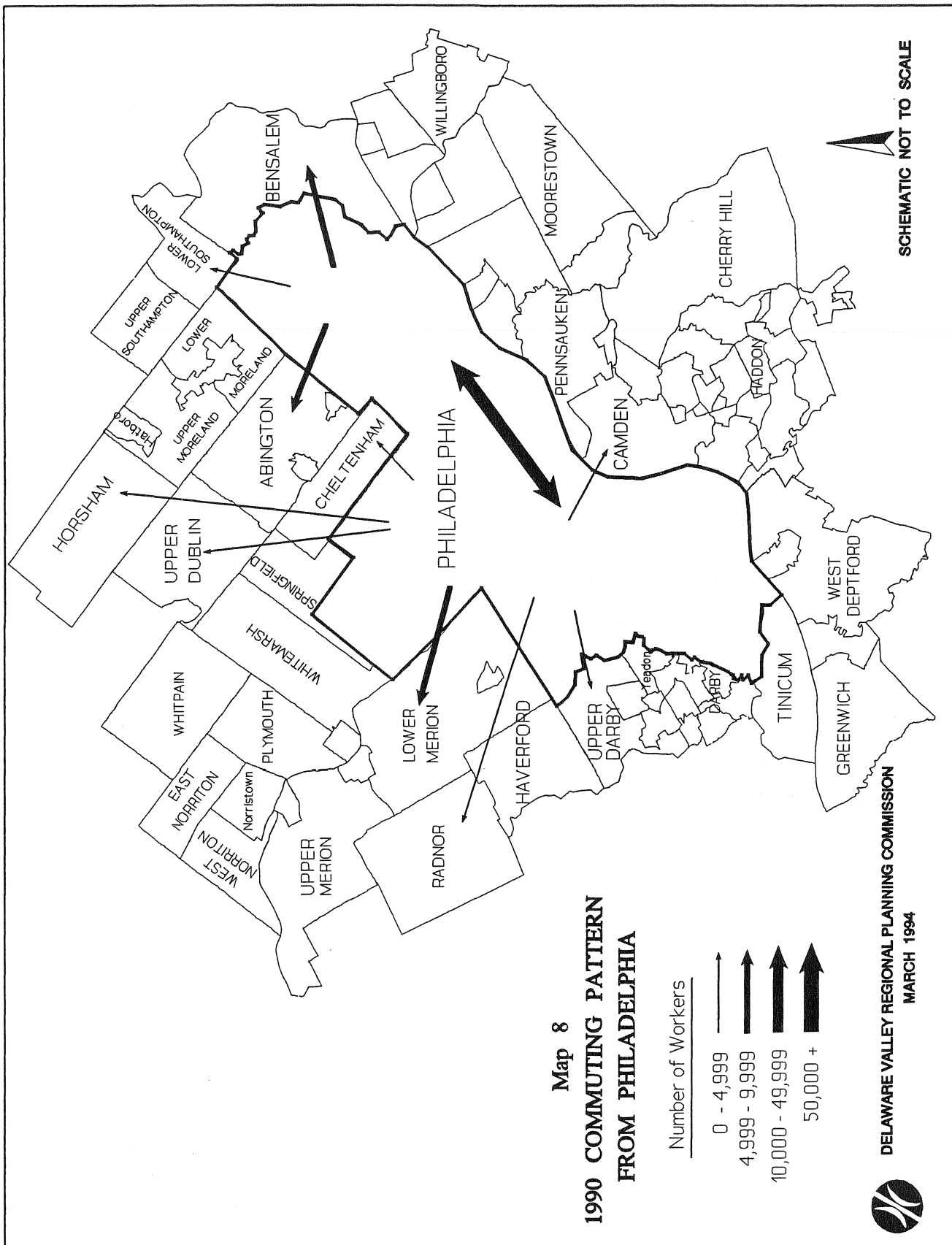
Two-thirds (67%) of the workers employed in Philadelphia are residents of the city. With a two percent share Upper Darby Township is the largest source of suburban commuters to the city. Lower Merion, Cheltenham, Bensalem, Abington, Cherry Hill, Haverford, Gloucester, and

Map 6
1990 COMMUTING PATTERN
FROM CHESTER



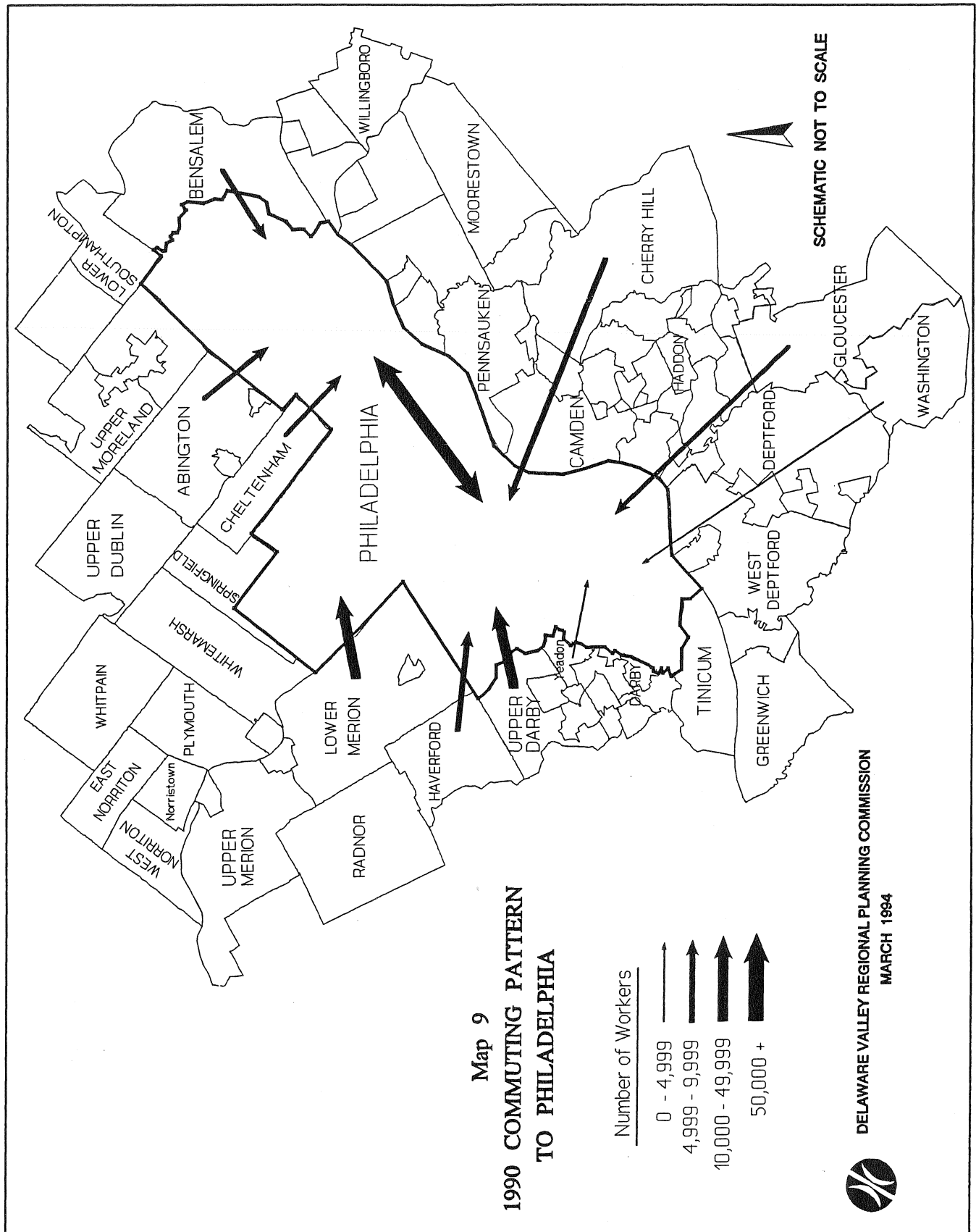
DELAWARE VALLEY REGIONAL PLANNING COMMISSION
MARCH 1994





Washington (Gloucester County) townships each contribute about one percent to the employee pool. (See Map 9.)

Unlike the other cities in which resident workers showed a greater propensity than employed workers to use public transportation, the share in Philadelphia was approximately the same for both groups, in each case 29 percent. Residential locations sending a higher than average share of commuters on public transportation include Upper Darby Township and Philadelphia, each with 33 percent, and Yeadon with 31 percent. Chester and Camden counties also send significant shares (35% and 33%, respectively) on public transportation, although no single municipality originates a large number of commuters to the city. Good service combines with disincentives to auto use in Center City to attract significant shares of inbound commuters to public transportation, whereas the sprawling dispersion of jobs in the suburbs encourages use of an automobile for outbound trips.



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

1990 Census Profile of Workers Residing in Camden

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Exec./Admin./Managerial	551	708	1,259
Professional	740	1,704	2,444
Technical Support	314	523	837
Sales	771	1,189	1,960
Clerical	1,123	3,682	4,805
Service	2,718	3,599	6,317
Farming/Forestry/Fishing	211	34	245
Precision Prod./Craft/Repair	1,936	334	2,270
Machine Operators/Laborers	4,270	2,010	6,280
Armed Forces	56	42	98
Total	12,690	13,825	26,515

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	184	43	227
Mining	0	3	3
Construction	1,072	149	1,221
Manufacturing	3,130	1,977	5,107
Transp./Commun./Utilities	1,207	654	1,861
Wholesale Trade	757	426	1,183
Retail Trade	1,805	1,897	3,702
Finan./Insurance/Real Estate	424	935	1,359
Business/Repair	632	567	1,199
Personal Services	445	633	1,078
Entertainment/Recreation	244	124	368
Professional Services	1,952	5,426	7,378
Public Administration	782	949	1,731
Armed Forces	56	42	98
Total	12,690	13,825	26,515

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	9,919	9,946	19,865
Government	2,224	3,619	5,843
Self-Employed	541	218	759
Unpaid Family	6	42	48
Total	12,690	13,825	26,515

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	9,300	73.3 %	9,091	65.8 %
Public Transportation	1,835	14.5 %	2,909	21.0 %
Bicycle/Walked	1,199	9.4 %	1,501	10.9 %
Other Means	245	1.9 %	234	1.7 %
Worked at Home	111	0.9 %	90	0.7 %
Total	12,690	100.0 %	13,825	100.0 %

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicle	2,407	2,576	1,351
1 Vehicle	7,613	1,381	1,268
2 Vehicles	5,543	591	484
3 or More Vehicles	2,550	176	158
Total	18,113	4,724	3,261

Appendix I (cont.)

1990 Census Profile of Workers Residing in Camden

EARNINGS OF WORKERS AND HOUSEHOLD INCOME BY MEANS OR TRANSPORTATION

Income Level	Number of Workers			Number of Households		
	Highway	Public Transp.	Total*	Highway	Public Transp.	Total*
Less than \$5,000	1,593	699	2,897	670	214	1,038
\$5,000 to \$9,999	2,177	910	3,791	699	524	1,476
\$10,000 to \$14,999	3,417	986	5,129	1,145	523	2,078
\$15,000 to \$19,999	3,615	703	4,746	1,631	484	2,503
\$20,000 to \$24,999	2,520	397	3,172	1,920	481	2,778
\$25,000 to \$34,999	2,529	451	3,212	3,938	943	5,523
\$35,000 to \$49,999	845	109	1,030	3,888	929	5,402
\$50,000 to \$74,999	198	20	256	3,146	521	4,001
\$75,000 or More	112	25	143	1,076	105	1,299
Total Workers	17,006	4,300	24,376	18,113	4,724	26,098
Median Income	\$16,515	\$12,546	\$15,275	\$32,673	\$25,926	\$30,672
Mean Income	\$18,018	\$16,713	\$17,185	\$36,456	\$31,067	\$34,625

*Totals includes all workers with earnings or households with income

HOUSEHOLDS BY NUMBERS OF WORKERS

Workers in HH	Number of HHs
No Workers	9,712
1 Worker	9,922
2 Workers	5,191
3 Workers	1,248
4+ Workers	453
Total	26,526
Mean	0.98

MOBILITY LIMITATION BY MEANS OF TRANSPORTATION

Means of Transportation	Workers
Drove Alone	232
Carpool	168
Bus/Trolley Bus	57
Trolley/Subway/Elevated	8
Railroad	11
Bicycle/Walked	20
Other Means	12
Worked at Home	0
Total	508

MOBILITY LIMITATION BY AGE

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	184	7,605
21 - 44	1,181	30,286
45 - 64	1,348	11,452
65 +	1,667	5,722
Total	4,380	55,065

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	19.3
Carpool	20.3
Bus/Trolley Bus	34.7
Trolley/Subway/Elevated	32.3
Railroad	42.5
Bicycle/Walked	13.2
All Modes	21.7

CARPPOOLING

Carpool Size	Number of Workers
2 Persons	3,944
3 Persons	1,024
4 Persons	589
5 Persons	72
6 Persons	25
7+ Persons	128
Total	5,782
Mean	2.32

Appendix I (cont.)

1990 Census Profile of Workers Residing in Trenton

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Exec./Admin./Managerial	1,442	1,633	3,075
Professional	1,391	2,010	3,401
Technical Support	636	617	1,253
Sales	1,074	1,385	2,459
Clerical	1,655	6,444	8,099
Service	3,501	4,341	7,842
Farming/Forestry/Fishing	355	59	414
Precision Prod./Craft/Repair	2,860	370	3,230
Machine Operators/Laborers	5,161	1,550	6,711
Armed Forces	65	11	76
Total	18,140	18,420	36,560

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	12,254	10,508	22,762
Government	5,215	7,438	12,653
Self-Employed	651	405	1,056
Unpaid Family	20	69	89
Total	18,140	18,420	36,560

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	14,756	81.3%	14,320	77.7%
Public Transportation	1,471	8.1%	2,173	11.8%
Bicycle/Walked	1,478	8.1%	1,403	7.6%
Other Means	302	1.7%	238	1.3%
Worked at Home	133	0.7%	286	1.6%
Total	18,140	100.0%	18,420	100.0%

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	270	83	353
Mining	52	13	65
Construction	1,694	80	1,774
Manufacturing	3,709	2,125	5,834
Transp./Commun./Utilities	1,647	561	2,208
Wholesale Trade	774	278	1,052
Retail Trade	2,378	2,166	4,544
Finan./Insurance/Real Estate	512	900	1,412
Business/Repair	1,215	957	2,172
Personal Services	311	618	929
Entertainment/Recreation	245	155	400
Professional Services	2,622	6,473	9,095
Public Administration	2,646	4,000	6,646
Armed Forces	65	11	76
Total	18,140	18,420	36,560

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicles	2,504	1,791	1,617
1 Vehicle	10,264	1,157	1,062
2 Vehicles	11,500	491	751
3 or More Vehicles	4,724	185	276
Total	28,992	3,624	3,706

Appendix I (cont.)
1990 Census Profile of
Workers Residing in Trenton

EARNINGS OF WORKERS AND HOUSEHOLD INCOME
BY MEANS OF TRANSPORTATION

Income Level	Number of Workers			Number of Households		
	Highway	Public Transp.	Total*	Highway	Public Transp.	Total*
Less than \$5,000	1,997	578	3,310	563	145	818
\$5,000 to \$9,999	2,294	577	3,560	480	285	1,026
\$10,000 to \$14,999	3,478	583	4,682	764	325	1,420
\$15,000 to \$19,999	5,572	603	6,808	1,765	395	2,514
\$20,000 to \$24,999	4,968	439	5,738	1,997	513	2,875
\$25,000 to \$34,999	5,898	318	6,532	4,969	534	6,283
\$35,000 to \$49,999	3,090	212	3,418	7,536	488	8,559
\$50,000 to \$74,999	630	59	718	7,173	611	8,464
\$75,000 or More	155	5	193	3,745	328	4,363
Total Workers	28,082	3,374	34,959	28,992	3,624	36,322
Median Income	\$20,454	\$14,900	\$19,153	\$43,082	\$28,665	\$40,729
Mean Income	\$21,916	\$16,092	\$20,593	\$46,468	\$36,001	\$44,469

*Totals includes all workers with earnings or households with income

HOUSEHOLDS
BY NUMBER
OF WORKERS

Workers in HH	Number of HHs
No Workers	8,996
1 Worker	11,324
2 Workers	7,761
3 Workers	1,832
4+ Workers	760
Total	30,673
Mean	1.18

MOBILITY LIMITATION
BY MEANS
OF TRANSPORTATION

Means of Transportation	Workers
Drove Alone	214
Carpool	81
Bus/Trolley Bus	101
Trolley/Subway/Elevated	17
Railroad	0
Bicycle/Walked	40
Other Means	12
Worked at Home	0
Total	465

MOBILITY LIMITATION
BY AGE

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	151	6,012
21 - 44	888	34,827
45 - 64	971	13,278
65 +	2,607	8,846
Total	4,617	62,963

CARPPOOLING

Carpool Size	Number of Workers
2 Persons	5,126
3 Persons	932
4 Persons	343
5 Persons	67
6 Persons	30
7+ Persons	326
Total	6,824
Mean	2.26

MEAN TRAVEL TIME
TO WORK BY MEANS
OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	18.7
Carpool	19.7
Bus	27.1
Trolley/Subway/Elevated	24.2
Railroad	47.6
Bicycle/Walked	14.0
All Modes	19.6

Appendix I (cont.)

1990 Census Profile of Workers Residing in Chester

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Exec./Admin./Managerial	466	430	896
Professional	718	934	1,652
Technical Support	188	337	525
Sales	473	540	1,013
Clerical	740	2,588	3,328
Service	1,494	2,089	3,583
Farming/Forestry/Fishing	55	17	72
Precision Prod./Craft/Repair	1,232	162	1,394
Machine Operators/Laborers	2,210	522	2,732
Armed Forces	55	23	78
Total	7,631	7,642	15,273

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	6,079	6,101	12,180
Government	1,309	1,405	2,714
Self-Employed	235	132	367
Unpaid Family	8	4	12
Total	7,631	7,642	15,273

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male Number	Male Share	Female Number	Female Share
Highway	5,805	76.1%	5,929	77.6%
Public Transportation	935	12.3%	983	12.9%
Bicycle/Walked	793	10.4%	508	6.6%
Other Means	61	0.8%	124	1.6%
Worked at Home	37	0.5%	98	1.3%
Total	7,631	100.0%	7,642	100.0%

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	51	41	92
Mining	0	0	0
Construction	666	44	710
Manufacturing	1,894	820	2,714
Transp./Commun./Utilities	698	384	1,082
Wholesale Trade	334	155	489
Retail Trade	992	952	1,944
Finan./Insurance/Real Estate	227	795	1,022
Business/Repair	523	211	734
Personal Services	159	308	467
Entertainment/Recreation	82	22	104
Professional Services	1,562	3,551	5,113
Public Administration	388	336	724
Armed Forces	55	23	78
Total	7,631	7,642	15,273

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD

BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicles	1,176	792	607
1 Vehicle	4,178	710	512
2 Vehicles	4,737	273	231
3 or More Vehicles	1,448	104	100
Total	11,539	1,879	1,450

Appendix I (cont.)
1990 Census Profile of
Workers Residing in Chester

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

Income Level	Number of Workers			Number of Households		
	Highway	Public Transp.	Total*	Highway	Public Transp.	Total*
Less than \$5,000	957	365	1,740	257	87	412
\$5,000 to \$9,999	1,231	398	2,036	265	172	651
\$10,000 to \$14,999	2,235	306	2,739	600	100	786
\$15,000 to \$19,999	1,882	419	2,581	762	251	1,135
\$20,000 to \$24,999	1,748	118	1,985	967	259	1,386
\$25,000 to \$34,999	2,123	115	2,276	2,664	366	3,320
\$35,000 to \$49,999	969	24	1,052	2,917	272	3,490
\$50,000 to \$74,999	118	55	191	2,365	252	2,751
\$75,000 or More	40	0	40	742	120	937
Total Workers	11,303	1,800	14,640	11,539	1,879	14,868
Median Income	\$18,255	\$11,941	\$16,225	\$35,933	\$26,635	\$33,984
Mean Income	\$19,357	\$13,344	\$17,822	\$39,378	\$35,277	\$38,032

*Totals includes all workers with earnings or households with income

**HOUSEHOLDS
BY NUMBER
OF WORKERS**

Workers in HH	Number of HHs
No Workers	5,351
1 Worker	5,029
2 Workers	3,147
3 Workers	644
4+ Workers	253
Total	14,424
Mean	1.03

**MOBILITY LIMITATION
BY MEANS**

OF TRANSPORTATION

Means of Transportation	Workers
Drove Alone	82
Carpool	34
Bus/Trolley Bus	14
Trolley/Subway/Elevated	0
Railroad	15
Bicycle/Walked	15
Other Means	12
Worked at Home	13
Total	185

**MOBILITY LIMITATION
BY AGE**

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	64	3,682
21 - 44	546	14,386
45 - 64	522	6,356
65 +	1,465	4,230
Total	2,597	28,654

CARPPOOLING

Carpool Size	Number of Workers
2 Persons	2,139
3 Persons	355
4 Persons	270
5 Persons	56
6 Persons	20
7+ Persons	264
Total	3,104
Mean	2.39

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

Means of Transportation	Mean Time (min)
Drove Alone	20.2
Carpool	22.1
Bus	32.7
Trolley/Subway/Elevated	34.0
Railroad	49.1
Bicycle/Walked	14.8
All Modes	22.1

Appendix I (cont.)

1990 Census Profile of Workers Residing in Philadelphia

WORKERS BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Exec./Admin./Managerial	33,075	32,881	65,956
Professional	40,073	52,524	92,597
Technical Support	11,004	13,236	24,240
Sales	29,315	32,161	61,476
Clerical	35,724	102,891	138,615
Service	53,420	49,635	103,055
Farming/Forestry/Fishing	2,786	533	3,319
Precision Prod./Craft/Repair	52,052	5,241	57,293
Machine Operators/Laborers	66,389	22,044	88,433
Armed Forces	5,098	495	5,593
Total	328,936	311,641	640,577

WORKERS BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	2,425	806	3,231
Mining	298	43	341
Construction	25,158	2,815	27,973
Manufacturing	55,605	30,363	85,968
Transp./Commun./Utilities	33,728	13,805	47,533
Wholesale Trade	17,622	8,499	26,121
Retail Trade	51,020	47,354	98,374
Finan./Insurance/Real Estate	19,463	32,827	52,290
Business/Repair	19,654	11,495	31,149
Personal Services	6,886	11,049	17,935
Entertainment/Recreation	4,869	2,905	7,774
Professional Services	61,571	126,510	188,081
Public Administration	25,539	22,675	48,214
Armed Forces	5,098	495	5,593
Total	328,936	311,641	640,577

WORKERS BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	249,024	247,555	496,579
Government	60,938	54,460	115,398
Self-Employed	18,145	8,526	26,671
Unpaid Family	829	1,100	1,929
Total	328,936	311,641	640,577

WORKERS BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	212,183	64.5%	158,307	50.8%
Public Transportation	72,903	22.2%	109,975	35.3%
Bicycle/Walked	34,182	10.4%	35,901	11.5%
Other Means	3,280	1.0%	2,143	0.7%
Worked at Home	6,388	1.9%	5,315	1.7%
Total	328,936	100.0%	311,641	100.0%

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers		
	Highway	Public Transp.	Other
No Vehicles	26,548	77,830	29,954
1 Vehicle	152,990	70,217	32,062
2 Vehicles	142,223	27,122	13,619
3 or More Vehicles	46,661	6,404	3,817
Total	368,422	181,573	79,452

Appendix I (cont.)

1990 Census Profile of Workers Residing in Philadelphia

EARNINGS OF WORKERS AND HOUSEHOLD INCOME BY MEANS OF TRANSPORTATION

Income Level	Number of Workers			Number of Households		
	Highway	Public Transp.	Total*	Highway	Public Transp.	Total*
Less than \$5,000	26,918	21,690	65,584	5,028	5,126	13,277
\$5,000 to \$9,999	34,683	25,244	74,704	6,940	7,100	18,276
\$10,000 to \$14,999	43,278	31,280	86,335	13,028	12,378	31,206
\$15,000 to \$19,999	53,359	33,016	96,758	19,273	15,482	41,477
\$20,000 to \$24,999	51,006	23,299	81,736	25,175	17,004	49,287
\$25,000 to \$34,999	79,314	24,792	113,539	61,184	33,478	107,629
\$35,000 to \$49,999	50,934	10,215	66,760	94,656	42,149	152,214
\$50,000 to \$74,999	14,170	2,963	20,450	94,018	34,332	142,554
\$75,000 or More	5,432	1,136	8,728	49,120	14,524	73,527
Total Workers	359,094	173,635	614,594	368,422	181,573	629,447
Median Income	\$21,874	\$16,288	\$18,950	\$42,747	\$34,969	\$39,997
Mean Income	\$24,471	\$18,145	\$22,121	\$49,047	\$40,132	\$45,932

*Totals includes all workers with earnings or households with income

HOUSEHOLDS BY NUMBER OF WORKERS

Workers in HH	Number of HHs
No Workers	207,069
1 Worker	219,611
2 Workers	132,842
3 Workers	30,295
4+ Workers	10,923
Total	600,740
Mean	1.05

MOBILITY LIMITATION BY MEANS OF TRANSPORTATION

Means of Transportation	Workers
Drove Alone	1,539
Carpool	1,043
Bus/Trolley Bus	1,448
Trolley/Subway/Elevated	495
Railroad	43
Bicycle/Walked	638
Other Means	130
Worked at Home	172
Total	5,508

MOBILITY LIMITATION BY AGE

Age	Number of Persons	
	With a Mobility Limitation	No Mobility Limitation
16 - 20	2,083	113,328
21 - 44	15,757	578,269
45 - 64	21,330	273,709
65 +	52,669	188,537
Total	91,839	1,153,843

CARPPOOLING

Carpool Size	Number of Workers
2 Persons	64,515
3 Persons	12,740
4 Persons	4,306
5 Persons	1,096
6 Persons	451
7+ Persons	1,314
Total	84,422
Mean	2.22

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	24.5
Carpool	26.3
Bus	37.2
Trolley/Subway/Elevated	38.1
Railroad	41.8
Bicycle/Walked	13.8
All Modes	27.4

Appendix II 1990 Census Profile of Workers Employed in Camden

EMPLOYMENT BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Exec./Admin./Managerial	2,925	1,687	4,612
Professional	3,482	5,483	8,965
Technical Support	846	1,001	1,847
Sales	1,641	1,028	2,669
Clerical	1,285	5,190	6,475
Service	3,130	2,744	5,874
Farming/Forestry/Fishing	130	23	153
Precision Prod./Craft/Repair	3,284	247	3,531
Machine Operators/Laborers	3,568	815	4,383
Armed Forces	42	19	61
Total	20,333	18,237	38,570

EMPLOYMENT BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	14,387	11,851	26,238
Government	4,884	5,917	10,801
Self-Employed	1,055	415	1,470
Unpaid Family	7	54	61
Total	20,333	18,237	38,570

EMPLOYEES BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	17,215	84.7%	14,398	78.9%
Public Transportation	1,609	7.9%	2,087	11.4%
Bicycle/Walked	1,163	5.7%	1,491	8.2%
Other Means	235	1.2%	171	0.9%
Worked at Home	111	0.5%	90	0.5%
Total	20,333	100.0%	18,237	100.0%

EMPLOYMENT BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	103	60	163
Mining	21	0	21
Construction	2,079	202	2,281
Manufacturing	4,928	2,009	6,937
Transp./Commun./Utilities	1,670	421	2,091
Wholesale Trade	1,189	411	1,600
Retail Trade	1,978	1,325	3,303
Finan./Insurance/Real Estate	459	814	1,273
Business/Repair	754	394	1,148
Personal Services	340	341	681
Entertainment/Recreation	147	77	224
Professional Services	4,161	10,312	14,473
Public Administration	2,462	1,852	4,314
Armed Forces	42	19	61
Total	20,333	18,237	38,570

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	1,375	1,327	1,269	3,971
1 Vehicle	8,052	1,205	1,207	10,464
2 Vehicles	14,405	874	466	15,745
3 or More Vehicles	7,691	290	183	8,164
Total	31,523	3,696	3,125	38,344

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	23.9
Carpool	23.8
Bus/Trolley Bus	29.7
Trolley/Subway/Elevated	31.9
Railroad	40.9
Bicycle/Walked	12.7
All Modes	23.8

EMPLOYEE EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
Less than \$5,000	1,375	453	2,425	6.5%
\$5,000 to \$9,999	2,262	434	3,334	9.0%
\$10,000 to \$14,999	2,963	568	4,181	11.3%
\$15,000 to \$19,999	3,921	505	4,854	13.1%
\$20,000 to \$24,999	4,440	483	5,134	13.9%
\$25,000 to \$34,999	6,816	600	7,647	20.7%
\$35,000 to \$49,999	5,594	276	6,011	16.2%
\$50,000 to \$74,999	2,158	107	2,331	6.3%
\$75,000 or More	1,046	47	1,106	3.0%
Total Workers	30,575	3,473	37,023	100.0%
Median Income	\$25,445	\$17,646	\$23,365	
Mean Income	\$30,123	\$22,882	\$28,172	

*Total includes all workers with earnings

Appendix II (cont.)

1990 Census Profile of Workers Employed in Trenton

EMPLOYMENT BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Exec./Admin./Managerial	5,728	4,210	9,938
Professional	3,801	5,445	9,246
Technical Support	1,074	1,432	2,506
Sales	1,898	1,387	3,285
Clerical	2,950	11,292	14,242
Service	4,114	3,764	7,878
Farming/Forestry/Fishing	243	54	297
Precision Prod./Craft/Repair	4,454	266	4,720
Machine Operators/Laborers	4,756	1,298	6,054
Armed Forces	61	0	61
Total	29,079	29,148	58,227

EMPLOYMENT BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	14,553	13,219	27,772
Government	13,198	15,294	28,492
Self-Employed	1,299	533	1,832
Unpaid Family	29	102	131
Total	29,079	29,148	58,227

EMPLOYEES BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	26,109	89.8%	25,412	87.2%
Public Transportation	1,056	3.6%	1,803	6.2%
Bicycle/Walked	1,476	5.1%	1,472	5.1%
Other Means	305	1.0%	175	0.6%
Worked at Home	133	0.5%	286	1.0%
Total	29,079	100.0%	29,148	100.0%

EMPLOYMENT BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	195	85	280
Mining	21	0	21
Construction	2,259	163	2,422
Manufacturing	4,558	2,143	6,701
Transp./Commun./Utilities	2,169	566	2,735
Wholesale Trade	1,076	364	1,440
Retail Trade	2,642	2,077	4,719
Finan./Insurance/Real Estate	923	1,451	2,374
Business/Repair	1,398	955	2,353
Personal Services	240	575	815
Entertainment/Recreation	293	189	482
Professional Services	4,079	10,585	14,664
Public Administration	9,165	9,995	19,160
Armed Forces	61	0	61
Total	29,079	29,148	58,227

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	1,885	1,136	1,515	4,536
1 Vehicle	11,852	904	990	13,746
2 Vehicles	23,826	502	812	25,140
3 or More Vehicles	13,764	294	304	14,362
Total	51,327	2,836	3,621	57,784

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	22.8
Carpool	24.2
Bus/Trolley Bus	24.4
Trolley/Subway/Elevated	63.5
Railroad	41.3
Bicycle/Walked	12.7
All Modes	22.8

EMPLOYEE EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
Less than \$5,000	2,576	392	3,821	6.7%
\$5,000 to \$9,999	3,215	346	4,198	7.4%
\$10,000 to \$14,999	4,436	358	5,427	9.6%
\$15,000 to \$19,999	7,602	587	8,760	15.5%
\$20,000 to \$24,999	7,323	342	7,952	14.0%
\$25,000 to \$34,999	10,885	336	11,542	20.4%
\$35,000 to \$49,999	9,301	221	9,659	17.1%
\$50,000 to \$74,999	3,997	46	4,086	7.2%
\$75,000 or More	1,109	41	1,174	2.1%
Total Workers	50,444	2,669	56,619	100.0%
Median Income	\$24,996	\$18,495	\$23,607	
Mean Income	\$28,525	\$19,306	\$27,196	

*Total includes all workers with earnings

Appendix II (cont.)

1990 Census Profile of Workers Employed in Chester

EMPLOYMENT BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Exec./Admin./Managerial	1,145	473	1,618
Professional	1,206	1,773	2,979
Technical Support	214	475	689
Sales	722	337	1,059
Clerical	614	2,026	2,640
Service	995	1,002	1,997
Farming/Forestry/Fishing	59	3	62
Precision Prod./Craft/Repair	2,049	113	2,162
Machine Operators/Laborers	2,247	432	2,679
Armed Forces	27	11	38
Total	9,278	6,645	15,923

EMPLOYMENT BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	7,554	5,360	12,914
Government	1,200	1,093	2,293
Self-Employed	501	167	668
Unpaid Family	23	25	48
Total	9,278	6,645	15,923

EMPLOYEES BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	8,078	87.1%	5,534	83.3%
Public Transportation	249	2.7%	430	6.5%
Bicycle/Walked	863	9.3%	513	7.7%
Other Means	51	0.5%	70	1.1%
Worked at Home	37	0.4%	98	1.5%
Total	9,278	100.0%	6,645	100.0%

EMPLOYMENT BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	49	39	88
Mining	2	5	7
Construction	1,034	74	1,108
Manufacturing	2,748	671	3,419
Transp./Commun./Utilities	833	202	1,035
Wholesale Trade	510	142	652
Retail Trade	832	609	1,441
Finan./Insurance/Real Estate	296	470	766
Business/Repair	386	170	556
Personal Services	71	184	255
Entertainment/Recreation	62	0	62
Professional Services	1,943	3,782	5,725
Public Administration	485	286	771
Armed Forces	27	11	38
Total	9,278	6,645	15,923

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	488	325	639	1,452
1 Vehicle	3,568	238	457	4,263
2 Vehicles	6,373	72	225	6,670
3 or More Vehicles	3,132	39	140	3,311
Total	13,561	674	1,461	15,696

EMPLOYEE EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
Less than \$5,000	691	148	1,266	8.2%
\$5,000 to \$9,999	969	140	1,511	9.8%
\$10,000 to \$14,999	1,713	134	2,024	13.1%
\$15,000 to \$19,999	1,718	97	2,088	13.5%
\$20,000 to \$24,999	1,589	55	1,756	11.3%
\$25,000 to \$34,999	2,805	40	2,903	18.7%
\$35,000 to \$49,999	2,375	34	2,496	16.1%
\$50,000 to \$74,999	1,024	7	1,049	6.8%
\$75,000 or More	396	0	396	2.6%
Total Workers	13,280	655	15,439	100.0%
Median Income	\$24,861	\$11,690	\$22,156	
Mean Income	\$28,792	\$13,165	\$26,481	

*Total includes all workers with earnings

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	21.2
Carpool	21.6
Bus/Trolley Bus	29.3
Trolley/Subway/Elevated	30.0
Railroad	43.4
Bicycle/Walked	14.3
All Modes	21.0

Appendix II (cont.)

1990 Census Profile of Workers Employed in Philadelphia

EMPLOYMENT BY OCCUPATION AND SEX

Occupation	Male	Female	Total
Exec./Admin./Managerial	58,898	45,147	104,045
Professional	63,003	70,768	133,771
Technical Support	14,531	17,061	31,592
Sales	39,766	33,712	73,478
Clerical	40,933	112,506	153,439
Service	51,187	46,845	98,032
Farming/Forestry/Fishing	2,339	501	2,840
Precision Prod./Craft/Repair	64,216	5,406	69,622
Machine Operators/Laborers	67,366	20,622	87,988
Armed Forces	5,980	457	6,437
Total	408,219	353,025	761,244

EMPLOYMENT BY CLASS OF WORKER AND SEX

Class of Worker	Male	Female	Total
Private Wage/Salary	306,843	279,030	585,873
Government	75,540	62,432	137,972
Self-Employed	24,891	10,211	35,102
Unpaid Family	945	1,352	2,297
Total	408,219	353,025	761,244

EMPLOYEES BY MEANS OF TRANSPORTATION AND SEX

Means of Transportation	Male		Female	
	Number	Share	Number	Share
Highway	269,699	66.1%	184,093	52.1%
Public Transportation	94,580	23.2%	125,552	35.6%
Bicycle/Walked	34,019	8.3%	35,810	10.1%
Other Means	3,533	0.9%	2,255	0.6%
Worked at Home	6,388	1.6%	5,315	1.5%
Total	408,219	100.0%	353,025	100.0%

EMPLOYMENT BY INDUSTRY AND SEX

Industry	Male	Female	Total
Agriculture/Forestry/Fishing	2,133	758	2,891
Mining	365	90	455
Construction	31,690	3,069	34,759
Manufacturing	64,191	30,664	94,855
Transp./Commun./Utilities	47,468	17,808	65,276
Wholesale Trade	23,298	9,611	32,909
Retail Trade	53,909	47,580	101,489
Finan./Insurance/Real Estate	29,213	37,587	66,800
Business/Repair	21,242	11,931	33,173
Personal Services	7,319	10,642	17,961
Entertainment/Recreation	4,900	3,075	7,975
Professional Services	84,944	153,097	238,041
Public Administration	31,567	26,656	58,223
Armed Forces	5,980	457	6,437
Total	408,219	353,025	761,244

VEHICLE AVAILABILITY IN WORKERS HOUSEHOLD BY MEANS OF TRANSPORTATION

Available Vehicles	Number of Workers			
	Highway	Public Transp.	Other	Total
No Vehicle	22,618	72,673	29,100	124,391
1 Vehicle	148,188	79,643	31,740	259,571
2 Vehicles	197,111	50,461	14,360	261,932
3 or More Vehicles	84,084	15,964	4,827	104,875
Total	452,001	218,741	80,027	750,769

MEAN TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION

Means of Transportation	Mean Time (min)
Drove Alone	27.2
Carpool	28.5
Bus/Trolley Bus	37.3
Trolley/Subway/Elevated	39.2
Railroad	47.9
Bicycle/Walked	13.7
All Modes	29.8

EMPLOYEE EARNINGS BY MEANS OF TRANSPORTATION

Income Level	Workers with Earnings at Specified Level			
	Highway	Public Transp.	Total*	Share
Less than \$5,000	27,445	21,092	65,366	8.9%
\$5,000 to \$9,999	35,021	24,701	74,356	10.1%
\$10,000 to \$14,999	41,995	30,940	84,613	11.5%
\$15,000 to \$19,999	53,857	35,781	99,775	13.6%
\$20,000 to \$24,999	55,418	28,453	91,274	12.4%
\$25,000 to \$34,999	97,884	35,024	142,636	19.4%
\$35,000 to \$49,999	78,644	19,732	104,194	14.2%
\$50,000 to \$74,999	31,956	10,232	45,711	6.2%
\$75,000 or More	19,693	5,566	27,675	3.8%
Total Workers	441,913	211,521	735,600	100.0%
Median	\$25,611	\$20,013	\$22,101	
Mean	\$31,246	\$23,770	\$27,933	

*Total includes all workers with earnings

Appendix III

1990 Census Journey-to-Work Travel Patterns Workers Residing in Camden

Place of Employment	Number of Workers	Share of Total	Means of Transportation								Other Means
			Drove Alone	Carpool Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Camden	10,349	39.3%	4,561	1,722	1,442	115	0	15.0%	51	2,211	247
Pennsauken Twp.	3,142	11.9%	1,573	893	381	26	11	13.3%	43	141	74
Philadelphia	2,601	9.9%	973	555	558	359	110	39.5%	0	37	9
Cherry Hill Twp.	2,533	9.6%	1,289	566	554	41	0	23.5%	0	62	21
Mount Laurel Twp.	670	2.5%	322	222	94	0	0	14.0%	0	0	32
Moorestown Twp.	535	2.0%	278	187	62	0	0	11.6%	0	0	8
Haddon Twp.	437	1.7%	176	123	94	20	0	26.1%	0	24	0
Gloucester Twp.	436	1.7%	276	125	35	0	0	8.0%	0	0	0
Bellmawr	335	1.3%	154	125	49	0	0	14.6%	0	0	7
Atlantic City	286	1.1%	64	6	173	23	0	68.5%	0	0	20
Collingswood	261	1.0%	193	11	34	5	0	14.9%	0	18	0
Cinnaminson Twp.	223	0.8%	140	71	0	0	0	0.0%	0	0	12
Total Burlington County	2,392	9.1%	1,296	787	248	0	0	10.4%	0	9	52
Total Camden County	18,920	71.9%	9,033	3,899	2,801	212	11	16.0%	105	2,489	370
Total Gloucester County	731	2.8%	407	205	105	0	0	14.4%	0	10	4
Total Mercer County	129	0.5%	97	32	0	0	0	0.0%	0	0	0
Total Bucks County	84	0.3%	43	27	10	0	0	11.9%	0	0	4
Total Chester County	74	0.3%	40	34	0	0	0	0.0%	0	0	0
Total Delaware County	141	0.5%	108	0	24	9	0	23.4%	0	0	0
Total Montgomery County	346	1.3%	172	94	17	35	11	18.2%	0	17	0
Total Philadelphia County	2,601	9.9%	973	555	558	359	110	39.5%	0	37	9
Regional Total	25,418	96.6%	12,169	5,633	3,763	615	132	17.7%	105	2,562	439
Rest of New Jersey	768	2.9%	360	124	182	23	15	28.6%	0	33	31
Rest of Pennsylvania	16	0.1%	7	9	0	0	0	0.0%	0	0	0
Delaware (State)	24	0.1%	13	11	0	0	0	0.0%	0	0	0
Elsewhere	88	0.3%	60	5	8	6	0	15.9%	0	0	9
Total	26,314	100.0%	12,609	5,782	3,953	644	147	18.0%	105	2,595	479

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

Appendix III (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Residing in Trenton

Place of Employment	Number of Workers	Share of Total	Means of Transportation								Other Means
			Drove Alone	Carpool Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Trenton	17,844	49.4%	9,953	3,460	1,560	0	6	8.8%	79	2,478	308
Hamilton Twp.	3,934	10.9%	2,698	684	335	24	0	9.1%	0	126	67
Ewing Twp.	3,433	9.5%	2,363	563	385	0	10	11.5%	28	59	25
Lawrence Twp.	2,678	7.4%	1,713	396	509	0	0	19.0%	13	6	41
Princeton (Borough)	1,564	4.3%	1,029	416	102	0	0	6.5%	0	0	17
West Windsor Twp.	451	1.2%	324	35	60	0	10	15.5%	9	13	0
Princeton Twp.	363	1.0%	288	45	30	0	0	8.3%	0	0	0
South Brunswick Twp.	350	1.0%	246	104	0	0	0	0.0%	0	0	0
East Windsor Twp.	330	0.9%	233	72	18	0	0	5.5%	0	0	7
Morrisville	248	0.7%	165	75	0	0	0	0.0%	0	0	8
New York City (Manhattan)	237	0.7%	43	9	6	6	162	73.4%	0	0	11
Montgomery Twp.*	228	0.6%	144	84	0	0	0	0.0%	0	0	0
Total Burlington County	548	1.5%	460	74	0	0	0	0.0%	6	0	8
Total Camden County	56	0.2%	25	0	15	0	16	55.4%	0	0	0
Total Gloucester County	7	0.0%	7	0	0	0	0	0.0%	0	0	0
Total Mercer County	31,407	86.9%	19,245	5,776	3,060	24	26	9.9%	129	2,682	465
Total Bucks County	1,082	3.0%	614	380	30	26	0	5.2%	0	9	23
Total Chester County	37	0.1%	14	23	0	0	0	0.0%	0	0	0
Total Delaware County	29	0.1%	29	0	0	0	0	0.0%	0	0	0
Total Montgomery County	85	0.2%	68	17	0	0	0	0.0%	0	0	0
Total Philadelphia County	197	0.5%	124	22	9	0	38	23.9%	0	4	0
Regional Total	33,448	92.5%	20,586	6,292	3,114	50	80	9.7%	135	2,695	496
Rest of New Jersey	2,247	6.2%	1,505	491	80	0	100	8.0%	42	9	20
Rest of Pennsylvania	108	0.3%	74	27	0	0	0	0.0%	0	0	7
New York (State)	312	0.9%	73	9	6	21	186	68.3%	0	0	17
Elsewhere	26	0.1%	14	5	0	7	0	26.9%	0	0	0
Total	36,141	100.0%	22,252	6,824	3,200	78	366	10.1%	177	2,704	540

*Somerset County

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

Appendix III (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Residing in Chester

Place of Employment	Number of Workers	Share of Total	Means of Transportation								Other Means
			Drove Alone	Carpool Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Chester	4,621	30.5%	2,386	652	339	0	23	7.8%	60	1,096	65
Philadelphia	1,620	10.7%	847	275	183	16	289	30.1%	0	0	10
Middletown Twp.*	1,111	7.3%	407	493	152	0	15	15.0%	0	0	44
New Castle County	713	4.7%	559	154	0	0	0	0.0%	0	0	0
Upland	653	4.3%	341	157	76	0	0	11.6%	0	79	0
Media	486	3.2%	246	96	134	0	0	27.6%	0	0	10
Aston Twp.	434	2.9%	270	134	16	0	0	3.7%	0	0	14
Marcus Hook	415	2.7%	266	75	64	10	0	17.8%	0	0	0
Springfield Twp.	392	2.6%	224	101	67	0	0	17.1%	0	0	0
Ridley Twp.	368	2.4%	280	43	45	0	0	12.2%	0	0	0
Nether Providence Twp.	250	1.7%	106	84	49	0	0	19.6%	0	0	11
Swarthmore	228	1.5%	109	43	76	0	0	33.3%	0	0	0
Total Burlington County	64	0.4%	50	4	0	0	10	15.6%	0	0	0
Total Camden County	171	1.1%	141	3	8	0	10	10.5%	0	0	9
Total Gloucester County	12	0.1%	12	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	86	0.6%	79	7	0	0	0	0.0%	0	0	0
Total Chester County	577	3.8%	452	113	0	0	0	0.0%	0	0	12
Total Delaware County	11,332	74.9%	6,095	2,488	1,258	10	50	11.6%	60	1,217	154
Total Montgomery County	410	2.7%	287	50	41	0	17	14.1%	0	15	0
Total Philadelphia County	1,620	10.7%	847	275	183	16	289	30.1%	0	0	10
Regional Total	14,272	94.3%	7,963	2,940	1,490	26	376	13.3%	60	1,232	185
Rest of New Jersey	85	0.6%	75	10	0	0	0	0.0%	0	0	0
Rest of Pennsylvania	43	0.3%	33	0	10	0	0	23.3%	0	0	0
Delaware (State)	713	4.7%	559	154	0	0	0	0.0%	0	0	0
Elsewhere	25	0.2%	0	0	0	0	16	64.0%	0	9	0
Total	15,138	100.0%	8,630	3,104	1,500	26	392	12.7%	60	1,241	185

*Delaware County

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

Appendix III (cont.)

1990 Census Journey-to-Work Travel Patterns
Workers Residing in Philadelphia

Place of Employment	Number of Workers	Share of Total	Means of Transportation								Other Means
			Drove Alone	Carpool Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Philadelphia	501,464	79.7%	203,722	63,373	112,315	42,249	8,486	32.5%	3,444	64,001	3,874
Lower Merion Twp.	8,354	1.3%	5,210	1,082	1,435	238	157	21.9%	26	172	34
Abington Twp.	8,207	1.3%	5,351	1,152	1,289	164	24	18.0%	0	130	97
Bensalem Twp.	8,054	1.3%	5,630	1,775	411	25	46	6.0%	0	103	64
Cheltenham Twp.	4,509	0.7%	2,596	776	719	70	22	18.0%	8	274	44
Upper Merion Twp.	3,905	0.6%	2,559	601	601	40	68	18.2%	0	22	14
Upper Dublin Twp.	3,370	0.5%	2,354	746	129	16	59	6.1%	0	12	54
Camden	2,583	0.4%	1,401	348	362	230	27	24.0%	13	197	5
Horsham Twp.	2,576	0.4%	1,843	593	117	0	0	4.5%	0	0	23
Radnor Twp.	2,511	0.4%	1,189	471	319	188	301	32.2%	0	21	22
Lower Southampton Twp.	2,509	0.4%	1,972	330	133	9	13	6.2%	0	32	20
Upper Darby Twp.	2,461	0.4%	1,158	312	724	223	20	39.3%	0	0	24
Total Burlington County	4,820	0.8%	3,526	690	334	136	32	10.4%	0	67	35
Total Camden County	10,083	1.6%	6,527	1,658	964	467	67	14.9%	39	254	107
Total Gloucester County	1,394	0.2%	929	279	137	22	0	11.4%	10	9	8
Total Mercer County	1,953	0.3%	1,472	263	54	0	151	10.5%	0	0	13
Total Bucks County	23,866	3.8%	16,807	4,530	1,173	193	225	6.7%	22	349	567
Total Chester County	5,303	0.8%	3,459	783	692	62	193	17.9%	0	74	40
Total Delaware County	15,161	2.4%	8,634	2,321	2,656	738	460	25.4%	20	192	140
Total Montgomery County	54,113	8.6%	35,211	8,942	7,013	832	821	16.0%	64	844	386
Total Philadelphia County	501,464	79.7%	203,722	63,373	112,315	42,249	8,486	32.5%	3,444	64,001	3,874
Regional Total	618,157	98.3%	280,287	82,839	125,338	44,699	10,435	29.2%	3,599	65,790	5,170
Rest of New Jersey	3,098	0.5%	1,944	478	442	21	151	19.8%	0	53	9
Rest of Pennsylvania	3,114	0.5%	1,799	518	503	32	117	20.9%	4	91	50
Delaware (State)	1,213	0.2%	860	161	77	0	68	12.0%	0	38	9
Elsewhere	3,292	0.5%	1,178	426	231	149	615	30.2%	34	474	3,822
Total	628,874	100.0%	286,068	84,422	126,591	44,901	11,386	29.1%	3,637	66,446	9,060

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

Appendix IV

1990 Census Journey – to – Work Travel Patterns Workers Employed in Camden

Place of Residence	Number of Workers	Share of Total	Means of Transportation								Other Means
			Drove Alone	Carpool Vanpool	Bus/ Trolley	Subway/ Elevated	Railroad	Transit Share	Bicycle	Walked	
Camden	10,349	27.0%	4,561	1,722	1,442	115	0	15.0%	51	2,211	247
Philadelphia	2,583	6.7%	1,401	348	362	230	27	24.0%	13	197	5
Cherry Hill Twp.	2,181	5.7%	1,864	237	50	23	7	3.7%	0	0	0
Pennsauken Twp.	1,667	4.3%	1,135	349	131	0	0	7.9%	0	36	16
Gloucester Twp.	1,393	3.6%	1,116	206	28	17	19	4.6%	0	0	7
Washington Twp.*	863	2.2%	762	83	18	0	0	2.1%	0	0	0
Collingswood	841	2.2%	681	93	12	38	0	5.9%	0	17	0
Voorhees Twp.	775	2.0%	641	78	0	40	6	5.9%	0	0	10
Mount Laurel Twp.	664	1.7%	639	25	0	0	0	0.0%	0	0	0
Lindenwold	628	1.6%	408	106	11	64	18	14.8%	0	17	4
Gloucester City	625	1.6%	453	100	52	0	0	8.3%	5	0	15
Haddon Twp.	619	1.6%	432	72	19	84	0	16.6%	12	0	0
Total Burlington County	4,302	11.2%	3,723	476	63	0	20	1.9%	0	9	11
Total Camden County	24,204	63.1%	15,197	3,792	1,864	545	106	10.4%	68	2,312	320
Total Gloucester County	3,750	9.8%	3,204	398	140	0	8	3.9%	0	0	0
Total Mercer County	117	0.3%	57	10	15	12	23	42.7%	0	0	0
Total Bucks County	417	1.1%	322	72	0	0	16	3.8%	0	0	7
Total Chester County	188	0.5%	139	18	0	0	18	9.6%	0	13	0
Total Delaware County	766	2.0%	560	105	0	40	26	8.6%	0	23	12
Total Montgomery County	752	2.0%	591	101	0	9	46	7.3%	0	0	5
Total Philadelphia County	2,583	6.7%	1,401	348	362	230	27	24.0%	13	197	5
Regional Total	37,079	96.6%	25,194	5,320	2,444	836	290	9.6%	81	2,554	360
Rest of New Jersey	815	2.1%	618	88	41	0	45	10.6%	0	13	10
Rest of Pennsylvania	143	0.4%	131	6	0	0	0	0.0%	0	6	0
Delaware (State)	159	0.4%	115	22	7	0	8	9.4%	0	0	7
Elsewhere	173	0.5%	92	27	13	0	12	14.5%	0	0	110
Total	38,369	100.0%	26,150	5,463	2,505	836	355	9.6%	81	2,573	487

* Gloucester County

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

Appendix IV (cont.)

1990 Census Journey – to – Work Travel Patterns Workers Employed in Trenton

Place of Residence	Number of Workers	Share of Total	Means of Transportation								Other Means
			Drove Alone	Carpool Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Trenton	17,844	30.9%	9,953	3,460	1,560	0	6	8.8%	79	2,478	308
Hamilton Twp.	10,899	18.9%	8,615	1,724	371	0	0	3.4%	22	100	67
Ewing Twp.	4,351	7.5%	3,296	754	116	0	0	2.7%	0	174	11
Lawrence Twp.	1,632	2.8%	1,380	226	17	0	0	1.0%	9	0	0
Falls Twp.	1,532	2.7%	1,181	351	0	0	0	0.0%	0	0	0
Lower Makefield Twp.	1,235	2.1%	1,111	114	0	0	0	0.0%	0	10	0
Bristol Twp.	992	1.7%	856	136	0	0	0	0.0%	0	0	0
Morrisville	886	1.5%	651	199	18	0	0	2.0%	13	5	0
Willingboro Twp.*	881	1.5%	589	244	48	0	0	5.4%	0	0	0
Middletown Twp.*	660	1.1%	595	56	0	0	0	0.0%	0	0	9
Bordentown Twp.	651	1.1%	560	76	7	0	0	1.1%	8	0	0
Hopewell Twp.	607	1.1%	549	58	0	0	0	0.0%	0	0	0
Total Burlington County	5,976	10.3%	4,660	1,148	132	0	5	2.3%	8	7	16
Total Camden County	604	1.0%	469	128	7	0	0	1.2%	0	0	0
Total Gloucester County	294	0.5%	231	63	0	0	0	0.0%	0	0	0
Total Mercer County	37,426	64.7%	25,398	6,621	2,088	0	19	5.6%	110	2,780	410
Total Bucks County	7,083	12.3%	6,000	1,007	18	0	21	0.6%	13	15	9
Total Chester County	47	0.1%	47	0	0	0	0	0.0%	0	0	0
Total Delaware County	60	0.1%	28	22	0	0	10	16.7%	0	0	0
Total Montgomery County	169	0.3%	139	30	0	0	0	0.0%	0	0	0
Total Philadelphia County	503	0.9%	334	86	15	0	55	13.9%	0	0	13
Regional Total	52,162	90.2%	37,306	9,105	2,260	0	110	4.5%	131	2,802	448
Rest of New Jersey	5,206	9.0%	3,974	849	23	0	337	6.9%	0	12	11
Rest of Pennsylvania	69	0.1%	27	33	6	0	0	8.7%	3	0	0
New York (State)	184	0.3%	62	9	19	19	70	58.7%	0	0	5
Elsewhere	187	0.3%	146	10	6	9	0	8.0%	8	0	150
Total	57,808	100.0%	41,515	10,006	2,314	28	517	4.9%	142	2,814	614

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

*Bucks County

Appendix IV (cont.)

1990 Census Journey-to-Work Travel Patterns Workers Employed in Chester

Place of Residence	Number of Workers	Share of Total	Means of Transportation								Other Means
			Drove Alone	Carpool Vanpool	Bus/Trolley	Subway/Elevated	Railroad	Transit Share	Bicycle	Walked	
Chester (city)	4,621	29.3%	2,386	652	339	0	23	7.8%	84	1,096	41
Philadelphia	923	5.8%	629	143	79	13	10	11.1%	0	41	8
Aston Twp.	700	4.4%	615	77	0	0	0	0.0%	0	0	8
Ridley Twp.	659	4.2%	579	47	33	0	0	5.0%	0	0	0
Upper Chichester Twp.	609	3.9%	522	73	5	0	0	0.8%	0	9	0
Northern New Castle Co.	556	3.5%	474	66	6	0	0	1.1%	10	0	0
Chester Twp.	424	2.7%	302	74	13	0	0	3.1%	0	23	12
Nether Providence Twp.	384	2.4%	374	0	0	0	0	0.0%	0	0	10
Upper Darby Twp.	308	2.0%	255	27	16	0	0	5.2%	0	10	0
Brookhaven	270	1.7%	248	22	0	0	0	0.0%	0	0	0
Middletown Twp.*	226	1.4%	218	8	0	0	0	0.0%	0	0	0
Trainer	196	1.2%	130	47	4	0	0	2.0%	0	10	5
Total Burlington County	60	0.4%	60	0	0	0	0	0.0%	0	0	0
Total Camden County	236	1.5%	186	43	0	0	0	0.0%	0	7	0
Total Gloucester County	294	1.9%	271	23	0	0	0	0.0%	0	0	0
Total Mercer County	42	0.3%	29	0	0	0	0	0.0%	0	13	0
Total Bucks County	71	0.4%	62	9	0	0	0	0.0%	0	0	0
Total Chester County	932	5.9%	770	145	0	0	0	0.0%	0	17	0
Total Delaware County	11,543	73.1%	8,223	1,382	518	0	53	4.9%	84	1,178	105
Total Montgomery County	288	1.8%	249	19	0	0	0	0.0%	0	12	8
Total Philadelphia County	923	5.8%	629	143	79	13	10	11.1%	0	41	8
Regional Total	14,389	91.1%	10,479	1,764	597	13	63	4.7%	84	1,268	121
Rest of New Jersey	113	0.7%	86	27	0	0	0	0.0%	0	0	0
Rest of Pennsylvania	128	0.8%	99	23	0	0	0	0.0%	0	6	0
Delaware (State)	1,058	6.7%	955	87	6	0	0	0.6%	10	0	0
Elsewhere	100	0.6%	86	6	0	0	0	0.0%	0	8	94
Total	15,788	100.0%	11,705	1,907	603	13	63	4.3%	94	1,282	215

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

*Delaware County

Appendix IV (cont.)

1990 Census Journey-to-work Travel Patterns Workers Employed in Philadelphia

Place of Residence	Number of Workers	Share of Total	Means of Transportation								Other Means
			Drove Alone	Carpool Vanpool	Bus/ Trolley	Subway/ Elevated	Railroad	Transit Share	Bicycle	Walked	
Philadelphia	501,464	66.9%	203,722	63,373	104,902	49,662	8,486	32.5%	3,444	64,001	3,874
Upper Darby Twp.	12,937	1.7%	6,620	1,873	927	2,833	519	33.1%	27	72	66
Lower Merion Twp.	10,980	1.5%	7,386	1,278	417	160	1,656	20.3%	0	50	33
Cheltenham Twp.	7,963	1.1%	5,377	870	324	371	903	20.1%	12	89	17
Bensalem Twp.	7,656	1.0%	5,501	1,213	179	77	648	11.8%	0	26	12
Abington Twp.	7,299	1.0%	5,302	650	88	223	969	17.5%	0	31	36
Cherry Hill Twp.	6,944	0.9%	4,139	804	187	1,030	744	28.2%	12	6	22
Haverford Twp.	6,201	0.8%	3,766	683	223	971	539	27.9%	6	13	0
Gloucester Twp.	5,221	0.7%	3,114	682	43	749	555	25.8%	0	0	78
Washington Twp.*	4,339	0.6%	2,834	998	138	161	191	11.3%	0	12	5
Yeadon	3,521	0.5%	1,968	375	651	331	123	31.4%	8	18	47
Northampton Twp.	3,474	0.5%	2,541	447	18	32	436	14.0%	0	0	0
Total Burlington County	17,142	2.3%	11,812	2,093	853	1,218	1,041	18.2%	8	57	60
Total Camden County	38,252	5.1%	20,216	5,104	1,664	6,524	4,292	32.6%	21	110	321
Total Gloucester County	13,501	1.8%	8,926	2,601	789	548	414	13.0%	0	34	189
Total Mercer County	1,229	0.2%	761	116	9	6	310	26.4%	0	27	0
Total Bucks County	30,692	4.1%	22,434	3,810	306	227	3,732	13.9%	6	125	52
Total Chester County	11,771	1.6%	6,531	965	170	137	3,846	35.3%	11	81	30
Total Delaware County	59,652	8.0%	33,966	7,709	3,162	6,479	7,805	29.2%	92	203	236
Total Montgomery County	55,956	7.5%	38,250	6,160	1,443	1,118	8,553	19.9%	28	263	141
Total Philadelphia County	501,464	66.9%	203,722	63,373	104,902	49,662	8,486	32.5%	3,444	64,001	3,874
Regional Total	729,659	97.3%	346,618	91,931	113,298	65,919	38,479	29.8%	3,610	64,901	4,903
Rest of New Jersey	4,682	0.6%	3,165	757	160	73	287	11.1%	0	185	55
Rest of Pennsylvania	3,966	0.5%	2,516	691	170	57	195	10.6%	7	270	60
Delaware (State)	4,912	0.7%	3,524	692	52	33	531	12.5%	6	39	35
Elsewhere	6,322	0.8%	3,060	838	346	113	419	13.9%	33	778	4,391
Total	749,541	100.0%	358,883	94,909	114,026	66,195	39,911	29.4%	3,656	66,173	9,444

* Gloucester County

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