

State Transportation Plan



Urban Transportation Supplement

City of Camden

New Jersey Department of Transportation

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**URBAN TRANSPORTATION
SUPPLEMENT**

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**FUTURE ECONOMIC CONDITIONS,
EMPLOYMENT GROWTH CENTERS, AND
PUBLIC TRANSPORTATION REQUIREMENTS**

New Jersey Department of Transportation

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CAMDEN
—
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SUPPLEMENT
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CAMDEN

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I. INTRODUCTION

State legislation (P.L. 1991 Chapter 481) approved January 18, 1992, mandates that the New Jersey Department of Transportation, in conjunction with NJ TRANSIT (NJT), prepare and submit to the Legislature an Urban Transportation Supplement to the State Transportation Plan. In order to address the transportation needs of New Jersey's major urban centers, the Plan is to identify and address transportation needs and issues of each of seven cities. In particular, the legislation places emphasis on "the transportation problems of the state's inner-city residents who are employed by or who are seeking employment with employers in suburban areas of the state." The seven cities named in the legislation are Atlantic City, Camden, Elizabeth, Jersey City, Newark, Paterson, and Trenton. The Urban Transportation Supplement is to be updated every five years.

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Camden, the largest city in the Delaware Valley, is the hub of a network of roads that carry the largest vehicular traffic in the eastern United States, giving direct access to the Port of Philadelphia and the Delaware River, connecting the Ports of Newark and Elizabeth with the Chesapeake Bay and Chicago on the west. Camden remains the largest port on the New Jersey side of the Delaware River. The port is not, however, a major employment center. Camden has gradually developed into a center for business and health services. These services have not been developed to the requisite degree to offset the city's economic decline. Unemployment remains far above the average for New Jersey, while most other economic indicators remain well below average. It is clear that recovery will be a slow and difficult process. Nevertheless, Camden still possesses a large amount of transportation infrastructure, which should aid the process of recovery.

Of the seven cities under review, the city of Camden has experienced the most precipitous economic decline in the post-war period. Jobs have been shed massively in the central city, while there has been some job growth in the city's hinterland. Absent the

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I. INTRODUCTION

State legislation (P.L. 1991 Chapter 481) approved January 18, 1992, mandates that the New Jersey Department of Transportation, in conjunction with NJ TRANSIT (NJT), prepare and submit to the Legislature an Urban Transportation Supplement to the State Transportation Plan. In order to improve access into and out of New Jersey's major urban centers, the Plan is to identify and address transportation needs and issues of each of seven cities. In particular, the legislation places emphasis on "the transportation problems of the state's inner-city residents who are employed by or who are seeking employment with employers located in suburban areas of the state." The seven cities included in the legislation are Atlantic City, Camden, Elizabeth, Jersey City, Newark, Paterson, and Trenton. The Urban Transportation Supplement is to be updated every five years.

Information on Camden for this report has been gathered from the U.S. Census, the New Jersey Transportation Plan, the NJ TRANSIT Capital Plan, county and local master and transportation plans, population and employment projections from the State Development and Redevelopment Plan, numerous other forms of published data, and from personal interviews with Camden city and county professionals working in planning, transportation, economic development, and job placement or training.

Camden, the seat of Camden County, is the hub of a network of roads that carry the largest vehicular traffic in the eastern United States, giving direct access to the Port of Philadelphia and the Delaware River Waterway, and connecting the Ports of Newark and Elizabeth and the Atlantic Seaboard to the east with Pittsburgh and Chicago to the west. Camden remains the largest port on the New Jersey side of the Delaware River. The port is not, however, a key employer in either the city or the region.

Camden, once one of the East Coast's leading industrial cities, now faces an uncertain future as do many other cities along the country's eastern seaboard that had developed a traditional manufacturing base. Over the years Camden has lost its importance as a manufacturing center in South Jersey. It still maintains its role as an important node for freight and vehicular traffic and is gradually developing into a center for business and health services. These activities have not, however, developed to the requisite degree to offset the city's economic decline. Unemployment remains far above the average for New Jersey, while most other economic indicators remain well below average. It is clear that recovery will be a slow and difficult process. Nevertheless, Camden still possesses a large amount of transportation infrastructure, which should aid the process of recovery.

Of the seven cities under review, the city of Camden has experienced the most precipitous economic decline in the post-war period. Jobs have been shed massively in the central city, while there has been some job growth in the city's hinterland. Absent the

effects of the State Plan redistribution of employment, it is unlikely that the number of jobs in Camden will increase significantly; it can therefore be assumed that commuting from the city to the suburbs is likely to increase. Given this assumption, the Urban Transportation Supplement will identify transportation-related problems that compound Camden residents' difficulty in accessing employment opportunities outside as well as inside the city. This section gives a brief overview of the changes in the city's economic fortune, demographic characteristics, and transportation network. It provides background information on Camden and allows insight into the factors that contribute to the unemployment of Camden residents.

The economic fortunes of the city of Camden have followed the same pattern as older cities in large metropolitan areas throughout the northeastern United States: growth through the 1950s followed by steady decline under the effects of deindustrialization and the movement of people and capital from the central cities. Since 1950, manufacturing, sales, employment, and population residing in the city have decreased continuously, while the population of the surrounding suburbs has grown. The population of the city of Camden has declined from a peak of 124,556 in 1950 to 87,492 in 1990; this equals a population loss of nearly 10,000 per decade beginning in 1950.

During the 1980s the city of Camden, in line with trends in New Jersey, experienced modest economic expansion, growing by almost 700 jobs, or 2.5 percent, between 1984 and 1988. This growth was uneven, occurring mostly in the services sector, primarily in health services. The decline in manufacturing employment was accelerated by the demise of the New York Shipbuilding Company, and most recently by the termination of manufacturing operations by the Campbell Soup Corporation. In lockstep with the deep U.S. economic recession since 1987, the unemployment rate in Camden has increased from 10.1 percent in 1986 to 15.4 percent in 1991. This is more than double the New Jersey and the U.S. average rates of unemployment, which in 1991 were 6.6 percent and 6.7 percent, respectively.

An extensive transportation network served the mobility needs of workers and residents in Camden during its period of growth. Radial highways converging on Camden allowed commuters from the suburbs access to jobs on the city's waterfronts and in the central business district while trains and ferries took commuters from Camden and South Jersey to their jobs in Philadelphia. Trolleys, abolished in 1950, were a convenient means for residents to traverse the city.

As commercial and manufacturing activities left, first for the inner suburbs and subsequently for outer suburban locations, Camden became less and less a final destination for traffic. While an increasing number of city residents have to commute to their suburban

jobs, a growing proportion of traffic in Camden is pass-through traffic en route to destinations in Pennsylvania. The existing transportation network, which suffers from undercapacity and deferred maintenance, falls short of serving the transportation needs of commuters and residents alike. The effectiveness of the bus service that provides transportation for commuters from the city to their suburban jobs is hampered by the lack of safe bus stops on highways and adequate entrances at work sites, as well as by the remote and scattered nature of suburban employment locations. Traffic on highways into or through Camden experiences congestion, especially at interchanges, while local roadway access to the Camden waterfront is poor.

II. DEMOGRAPHIC PROFILE OF THE CITY'S POPULATION

Population in Camden experienced a marked decline during the 1950–1980 period. Since then the city's population has been growing slightly, while the number of households has been falling, which indicates that average household size has increased. In addition, the composition of the population has changed; there are considerably fewer white and more Hispanic, Asian, and black residents. While there are more people in the prime working age, the proportions of adolescents and elderly have declined. The increase in the proportion of the working population has coincided with increased unemployment both regionally and nationally. Camden has been particularly hard hit by this, with both unemployment and poverty rates far in excess of the national and New Jersey averages. During this same period the economy of Camden has experienced marked contraction. This means that it is unlikely that many of the unemployed will find work in the city. The extreme poverty in Camden impacts on public transportation in that not only are the poor more reliant on public transportation, they are also unable to afford long distance (interzonal) commutes.

Camden's demographic structure is identified by an examination of the city's population, racial, and ethnic composition, and the age structure of its inhabitants. In the 1980–1990 period, Camden's population increased by 3 percent, from 84,910 to 87,492 (Table 1). Camden, therefore, lagged slightly behind the 5 percent average population increase for the state of New Jersey.

In the same period, the number of households in the city declined by nearly 6 percent, from 28,204 to 26,526. Camden's household decline was on a par with that observed for Paterson, Trenton, and Atlantic City. This contributed to an average household size increase of nearly 0.2 persons—from 2.98 in 1980 to 3.16 in 1990—a 6 percent gain. This contrasts markedly with the national trend toward decline in average

TABLE 1
POPULATION AND HOUSEHOLD
IN CAMDEN 1980-1990

Population Indices	1980	1990	Change	
			Number	Percent
Population	84,910	87,492	2,580	3.0
Household	28,204	26,526	(1,678)	(5.9)
Average Household Size	2.98	3.16	0.18	6.0

Source: U.S. Department of Commerce, Bureau of Census. *U.S. Census of Population and Housing 1980, 1990.*

TABLE 2
AGE PROFILE OF THE POPULATION
IN CAMDEN 1980-1990

Age Cohorts	1980	1990	Change
	Percent	Percent	Percent
<5 years	10.3	10.7	4.6
5 years to 19 years	30.5	28.5	(6.6)
20-64 years	49.1	52.4	6.7
Over 65 years	10.1	8.4	(16.8)
Median Age (years)	25	26.3	5.2

Source: U.S. Department of Commerce, Bureau of Census. *U.S. Census of Population and Housing 1980, 1990.*

TABLE 3
INCOME AND POVERTY
IN CAMDEN 1979-1989

Income Indices	1979	1989	Change	
			Number	Percent
Household Income	\$9,285	\$17,386	\$8,101	87.2
Per Capita Income	\$3,966	\$7,276	\$3,310	83.5
Percent Population Below Poverty Level	36.9	36.6	—	0.8

Source: U.S. Department of Commerce, Bureau of Census. *U.S. Census of Population and Housing 1980, 1990.*

household size, a pattern that has established itself over the past few decades with the growth of single-person households.

The racial and ethnic makeup of the city's population has changed considerably between 1980 and 1990. The proportion of white residents decreased sharply over the decade, from 37 percent to 19 percent. The proportion of blacks increased slightly, from 53 to 56 percent. The largest increase occurred in the proportion classified as "other," who increased from 16 percent in 1980 to 23 percent in 1990. Further, people of Hispanic origin have become the predominant ethnic group in Camden. In 1980 Hispanics made up 19 percent of the population; by 1990, they comprised 29 percent posting a change of more than 50 percent. The proportional increase of the Hispanic population and that of other minority groups mirrors national and regional trends that have witnessed rising concentrations of minorities in mature urban areas. As almost half of Hispanics in Camden are listed by the Census as white, the outmigration of non-Hispanic whites during the 1980s is even more pronounced than the percentage decline indicated above.

The age profile of the city's population changed only slightly. Table 2 shows that there are proportionately more residents aged 5 and younger and more people between ages 20 and 64. The former age group made up 10.3 percent of the total in 1980 and 10.7 percent in 1990. Over the same period, the 20- to 64-year age segment rose from 49.1 percent of the total in 1980 to 52.4 percent in 1990. The other age groups, 5 years to 19 years, and over 65 years, evidenced decreases in relative importance over the decade.

As indicated in Table 3, there has been an increase in nominal income among residents of Camden. Median household income rose from \$9,285 in 1979 to \$17,386 in 1989, or an increase of 8.7 percent annually for the ten-year period 1979-1989. While this rate of increase was roughly equivalent to that of the state as a whole, the city's median household income in 1989 was still 60 percent less than the median of the state (\$40,250) and 40 percent less than the median of the nation (\$27,225). The 1989 median household income in Camden was the lowest of all seven cities studied. City per capita income showed an increase from \$3,966 in 1979 to \$7,276 in 1989, or a rise of 8.3 percent annually. These low levels of median household and per capita income reflect the city's substantial unemployment rate as well as the change caused by reduced employment in the relatively high-skilled and well-paying manufacturing sector, and by increased employment in less-skilled and the less-remunerative services sector.

More than one-third of the population of Camden lived below the poverty line in 1989; this was also the case in 1979. Table 3 shows that 36.6 percent of the city population in 1989 and 36.9 percent in 1979 were in a poverty classification. This is the most severe case of poverty impaction of any of the cities studied. It is estimated that 65 percent of the

children in Camden live below the poverty line, which is the highest for any major United States city.

III. LABOR FORCE PROFILE

Between 1980 and 1990 the number of Camden residents who held jobs has shown a moderate increase. A growing proportion of the city labor force held jobs in service-producing sectors. The majority are still engaged in low-level, white-collar jobs or less-skilled blue-collar jobs. The two most common occupations of Camden residents are technical/sales and operators/laborers. The relative importance of technical/sales occupations has been growing, whereas that of operators/laborers has been declining. Managerial/executive and services jobs have also increased slightly in significance. While there has been a decline in resident unemployment in the 1980–1990 period the unemployment rate remains far above both the New Jersey and the national average. One of the contributing factors is the low level of skills of many of the local population.

The remainder of this section describes the specifics of Camden residents' participation in the labor force. Section IV describes the employment available within the city of Camden itself and in the surrounding area, whether the jobs are held by city residents or not.

A. Total Employed

During the 1980–1990 period, the number of Camden city residents who held jobs either in Camden or outside the city increased by 3,697, from 23,609 to 27,306. This represents a gain of 15.7 percent (Table 4). Of the seven cities studied this is one of the most significant increases noted and is on a par with gains evidenced by Jersey City, Paterson, and the state as a whole.

B. Employment by Industry

The majority of employed Camden residents held jobs in the services industry (Table 4). This sector grew in relative importance during the 1980–1990 period, constituting 33.1 percent of total resident employment in 1980, and 37.6 percent in 1990. Manufacturing remains the second largest source of employment for residents although its relative significance has declined from 25.5 percent of total resident employment in 1980 to 19.3 percent in 1990.

The growing sectors are retail trade—the third most important source of employment for Camden residents; wholesale trade; transportation; finance, insurance, and real estate (FIRE); and agriculture. Transportation posted the fastest growth rate during the

TABLE 4
RESIDENT EMPLOYMENT AND EMPLOYMENT
CHANGE BY SIC IN CAMDEN 1980-1990

Resident Employment	1980	1990	Change	
			Number	Percent
TOTAL EMPLOYMENT	23,609	27,306	3,697	15.7
	1980 Percent	1990 Percent	Change Percent	
STANDARD INDUSTRIAL CLASSIFICATION (SIC)				
Manufacturing	25.5	19.3		(24.3)
Wholesale Trade	4.2	4.4		4.8
Retail Trade	13.4	14.3		4.8
Transportation	4.9	5.6		14.3
Communications and Utilities	2.0	1.6		(20.0)
Services	33.1	37.6		13.6
Finance, Insurance, and Real Estate	4.6	5.1		10.9
Construction	4.6	4.6		0
Agriculture	0.5	1.0		100.0
Public Sector	7.2	6.5		(9.7)

Source: U.S. Department of Commerce, Bureau of Census. *U.S. Census of Population and Housing 1980, 1990.*

TABLE 5
RESIDENT EMPLOYMENT BY OCCUPATION AND
CHANGE IN CAMDEN 1980-1990

Resident Employment	1980	1990	Change	
			Number	Percent
TOTAL EMPLOYMENT	23,609	27,306	3,697	15.7
	1980 Percent	1990 Percent	Change Percent	
OCCUPATIONAL CATEGORY				
Managerial/Executive	13.0	13.9		6.9
Technical/Sales	25.7	28.8		12.1
Services	22.2	23.6		6.3
Farming	0.4	0.9		125.0
Precision Production/Crafts	11.0	8.8		(20.0)
Operators/Laborers	27.7	24.0		(13.4)

Source: U.S. Department of Commerce, Bureau of Census. *U.S. Census of Population and Housing 1980, 1990.*

1980-1990 period, rising from 4.9 percent of total resident employment to 5.6 percent in 1990 (a 14.3 percent change). This is followed by employment in fire, insurance, and real estate, which rose from 4.6 of total resident employment in 1980 to 5.1 percent in 1990 (a 10.9 percent change). The sectors whose relative importance has declined as a source of employment for city residents of Camden during the 1980-1990 period are manufacturing, communications and utilities, and public-sector employment. Construction employment was steady at 4.6 percent of total resident employment for Camden in both 1980 and 1990.

In 1991 the General Electric Corporation was the single largest employer in Camden, with 1,800 employees, followed by Campbell Soup with 1,435 employees.

C. Employment by Occupation

As indicated in Table 5, the majority of Camden residents hold low-level white-collar jobs or less-skilled blue-collar jobs. The three most important occupational groups are technical/sales, services, and operators/laborers. Managerial/executive occupations comprised less than 14 percent and precision production/craft occupations less than 12 percent of total resident employment in both 1980 and 1990.

Technical/sales and services occupations claimed an increasing share of total resident employment in 1990. The former rose from 25.7 percent of the total in 1980 to 28.8 percent in 1990 while the share of the latter in total resident employment rose from 22.2 to 23.6 percent. The increase in relative significance of managerial/executive occupations was modest, from 13.0 percent to 13.9 percent of the total. Precision production/crafts and operators/laborers are two occupational groups that showed a decline in relative importance over the 1980-1990 period. Precision production/crafts fell from 11.0 percent in 1980 to 8.8 percent in 1990, a drop of 20.0 percent. Operators/laborers fell from 27.7 percent in 1980 to 24.0 percent in 1990, a drop of 13.4 percent.

D. Unemployment Levels

There has been a decline in resident unemployment in Camden during the 1980-1990 period. Table 6 indicates that 17.9 percent of the labor force in the city was unemployed in 1980. By 1990, the unemployment level had fallen to 16.3 percent. While this represents a drop of over 1.5 percentage points, Camden's 1990 unemployment level was nevertheless more than double the New Jersey average of 6.6 percent and the United States average of 6.7 percent.

E. Households Having Wage and Salary Income

The percentage of Camden households with wage and salary income increased from 64.7 to 69.3 between 1979 and 1989, outpacing the percentage increase of households with this type of income in Camden County by a factor of four (Table 7).

F. Households Automobile Ownership

Slightly over half of the households in the city own a car (Table 8). The level of automobile ownership has declined in Camden, albeit not by much, from 56.7 percent in 1980 to 56.4 percent in 1990. These figures are substantially below the 1990 national average, which showed that 87.1 percent of all households owned at least one automobile. The automobile ownership rate in Camden is one of the lowest of the seven cities studied.

IV. "AT-PLACE" EMPLOYMENT PROFILE

The prior section presented Camden residents' labor profile; this section describes at-place employment in the city of Camden and in the Camden labor area.¹ At-place employment represents the number and types of jobs within the physical bounds of the geographic area. At-place employment is measured by the data source of covered employment, which is the number of jobs for which unemployment insurance exists. It includes most of the private- and public-sector jobs.

At-place employment in Camden, with few exceptions, mirrors the characteristics of resident employment. Manufacturing, while still important, has declined. Services, on the other hand, has grown to be the dominant source of employment. However, while the relative significance of retail trade and transportation has risen in resident employment, these sectors have lost ground as far as at-place employment is concerned. There is one other significant difference between the main characteristics of resident and at-place employment, i.e., that of the public sector. Public-sector employment is more prevalent in at-place employment than it is in resident employment. This indicates that commuters rather than Camden residents fill the majority of these public positions. It would also seem that a large number of skilled and managerial positions within the city of Camden are filled by commuters from outside the city. The implication of the above for reverse commuting is

¹ **Labor area or labor market area (LMA)** is a geographic area consisting of a central community and contiguous areas that are economically integrated into that community. Within a labor market area, workers can generally change jobs without relocating which makes jobs of a similar type mutually competitive. This is the definition of a labor market. The Bureau of Labor Statistics defines LMAs in terms of entire counties, except in New England where cities and towns are used. LMAs are categorized as either major, which are usually coterminous with a Metropolitan Statistical Area (MSA), or as small.

TABLE 6
RESIDENT UNEMPLOYMENT AND
CHANGE IN CAMDEN 1980-1990

<i>City</i>	<i>Unemployment Level</i>		<i>Change</i>
	<i>1980</i>	<i>1990</i>	
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
CAMDEN	17.9	16.3	(8.9)

Source: U.S. Department of Commerce, Bureau of Census. *U.S. Census of Population and Housing 1980, 1990.*

TABLE 7
PERCENT OF HOUSEHOLDS HAVING
WAGE AND SALARY INCOME AND
CHANGE IN CAMDEN 1979-1989

<i>Local Government</i>	<i>Households With</i>		<i>Change</i>
	<i>Wage or Salary Income</i>		
	<i>1979</i>	<i>1989</i>	<i>Percent</i>
	<i>Percent</i>	<i>Percent</i>	
CAMDEN	64.7	69.3	7.1
CAMDEN COUNTY	78.8	80.0	1.5

Source: U.S. Department of Commerce, Bureau of Census. *U.S. Census of Population and Housing 1980, 1990.*

TABLE 8
AUTOMOBILE OWNERSHIP AND
CHANGE IN CAMDEN 1980-1990

<i>City</i>	<i>Percent of Households</i>		<i>Change</i>
	<i>Having at Least One Automobile</i>		
	<i>1980</i>	<i>1990</i>	<i>Percent</i>
	<i>Percent</i>	<i>Percent</i>	
CAMDEN	56.7	56.4	(0.5)

Source: U.S. Department of Commerce, Bureau of Census. *U.S. Census of Population and Housing 1980, 1990.*

that public transportation is likely to be increasingly important as the means by which Camden residents access jobs.

A. In the City

This section provides an overview of covered employment data for the city of Camden, that is, jobs covered by unemployment compensation that are located within the city itself. At-place employment in Camden increased in the 1980–1990 period but very modestly. Camden reported 36,945 jobs in 1980 and 37,392 jobs in 1990. This represents a gain of 447 jobs, or a 1.2 percent increase for the 10-year period (Table 9). The interpretation of the magnitude of at place employment should, however, be treated with caution. First, the New Jersey Department of Labor excludes some types of public-sector jobs from covered employment data. Second, not all people finding work in the private sector are covered by unemployment compensation. There is no doubt, however, that Camden lags the New Jersey average in job creation and that unemployment levels remain at dangerously high levels. Given the severity of the economic recession that has continued past 1990, it is possible that even the small gain shown in the 1980–1990 period has since been wiped out. On the positive side, the 1980–1990 period is the first time in thirty years that the city has not lost employment, and it is one of only three of the seven cities studied that experienced any gains.

Manufacturing, though still a significant source of employment, has declined in importance, accounting for 31.0 percent of total employment in 1980 but only 26.9 percent in 1990 (Table 9). Other sectors that showed decline in relative importance are wholesale trade; retail trade; transportation; communications and utilities; and fire, insurance, and real estate. Services employment, on the other hand, has gained in significance as a source of employment, rising from 21.7 percent of total at-place employment in 1980 to 31.6 percent in 1990. Construction, agriculture, and public-sector employment evidenced gains in relative importance but these were relatively modest overall, with construction rising from 2.3 to 3.1 percent; public-sector employment increasing from 24.4 to 25.0 percent; and agriculture increasing from 0.03 to 0.05 percent during the 1980–1990 period.

The difference between employment of the Camden work force and the jobs available in the city may be seen by viewing Table 10. In 1990 a total of 27,306 Camden residents were employed. During the same year there were 37,392 covered employment jobs within the city. The ratio of at-place employment to resident employment indicates the minimum degree of in-commuting to jobs within the city. The most notable differences are found within the manufacturing sector and the public sector, both of which exhibit substantially more at-place than resident employment. In other words, job holders in

TABLE 9
 "AT-PLACE" EMPLOYMENT AND EMPLOYMENT
 CHANGE IN CAMDEN 1980-1990

Employment By Industry	Total		Change	
	1980	1990	Number	Percent
TOTAL	36,945	37,392	447	1.2
	1980 Percent	1990 Percent	Change Percent	
STANDARD INDUSTRIAL CLASSIFICATION (SIC)				
Manufacturing	31.0	26.9	(19.4)	
Wholesale Trade	6.5	4.4	(32.3)	
Retail Trade	7.3	6.5	(11.0)	
Transportation	2.6	1.9	(26.9)	
Communications and Utilities	1.6	0.6	(62.5)	
Services	21.7	31.6	45.6	
Finance, Insurance, and Real Estate	2.6	1.8	(30.8)	
Construction	2.3	3.1	34.8	
Agriculture	0.03	0.05	55.4	
Public Sector	24.4	25.0	2.5	

Source: New Jersey Department of Labor, *Covered Employment Trends*. 1980, 1990.

TABLE 10
 RESIDENT AND "AT-PLACE"
 EMPLOYMENT TOTAL AND BY SIC-1990
 CAMDEN

Employment By Industry	1990		Ratio of "At-Place" Employment to Resident Employment
	Resident Employment	"At-Place" Employment	
TOTAL	27,306	37,392	136.9
STANDARD INDUSTRIAL CLASSIFICATION (SIC)			
Manufacturing	5,270	10,058	190.0
Wholesale Trade	1,201	1,645	133.6
Retail Trade	3,905	2,430	62.2
Transportation	1,529	710	46.4
Communications and Utilities	437	224	51.3
Services	10,267	11,816	115.0
Finance, Insurance, and Real Estate	1,393	673	48.3
Construction	1,256	1,159	92.3
Agriculture	273	37	13.5
Public Sector	1,775	9,348	526.6

Note: "At-place" employment statistics include private-sector covered employment and city and federal government covered employment recorded in September 1990.

Source: New Jersey Department of Labor, *Covered Employment Trends*. 1990. U.S. Department of Commerce, Bureau of Census. *U.S. Census of Population and Housing 1980, 1990*.

manufacturing and public-sector employment are coming into Camden for these jobs while city residents in many cases go out of the city for other types of employment. In the case of public-sector employment, resident employment is only 1,775 compared to at-place employment of 9,348. In manufacturing, resident employment is 5,270 compared to 10,058 for at-place employment. Wholesale trade and services show smaller surpluses of at-place employment. In the other six Standard Industrial Classification (SIC) categories resident employment is *greater* than at-place employment, by small amounts even where the ratios are substantial. The most important difference is noted in retail trade, where resident employment is 3,905 compared to 2,430 for at-place employment. This indicates that many Camden residents have found work in the retail sector outside of the city.

B. In the Labor Area

Table 11 lists total at-place employment (covered employment), as well as employment change in the Camden labor area from 1980 to 1990. Total covered employment in the Camden labor area, which comprises Burlington, Camden, and Gloucester counties, rose by 22.7 percent in the 1980-1990 period from 326,720 to 401,013.

The changes in at-place employment by SIC in the Camden labor area between 1980 and 1990 are also detailed in Table 11. The major sources of employment remain in the services, retail, and manufacturing sectors. Manufacturing employment declined from 22.2 percent of total employment in 1980 to 16.2 percent in 1990 (a change of 27.0 percent). Retail employment increased from 19.7 percent to 21.3 percent (a change of 8.1 percent). Services grew from 18.4 percent in 1980 to 26.8 percent of the total in 1990 (an increase of 45.7 percent) over the period. Sectors that posted growth in their importance are wholesale trade, retail trade, transportation services, FIRE, construction, and agriculture. Employment in manufacturing, communications and utilities, and the public sector have become less significant in the period under review. This is especially true for the public sector, which posted a 41.8 percent decline from 1980 to 1990.

C. The Shift to the Services Sector—Implications for Income

Previous sections have shown that Camden has lost manufacturing jobs while gaining jobs in the services sector. These jobs are, however, not equivalent in terms of pay. Jobs in the manufacturing sector are usually higher paying than equivalent jobs in the services sector. To illustrate this, Table 12 shows annual wages for roughly equivalent jobs in the manufacturing and services sectors. This indicates that average pay is substantially lower in the services sector. This table does not, however, show the full picture, as in

TABLE 11
 "AT-PLACE" EMPLOYMENT AND EMPLOYMENT
 CHANGE BY SIC IN THE CAMDEN LABOR AREA 1980-1990

	Total		Change Percent
	1980	1990	
CAMDEN LABOR AREA	326,720	401,013	22.7
	1980 Percent	1990 Percent	Change Percent
STANDARD INDUSTRIAL CLASSIFICATION (SIC)			
Manufacturing	22.2	16.2	(27.0)
Wholesale Trade	6.0	7.3	21.6
Retail Trade	19.7	21.3	8.1
Transportation	2.6	3.2	23.0
Communications and Utilities	2.0	1.3	(33.5)
Services	18.4	26.8	45.7
Finance, Insurance, and Real Estate	5.1	5.9	15.7
Construction	3.7	5.5	48.6
Agriculture	1.0	1.3	33.0
Public Sector	19.4	11.3	(41.8)

Source: New Jersey Department of Labor Covered Employment Trends, 1980, 1990.

TABLE 12
 ANNUAL SALARIES FOR DEMAND OCCUPATIONS
 CAMDEN PMSA

Type of Employment	Annual Wage (\$)
MANUFACTURING OCCUPATIONS—EXAMPLES	
Drafter	26,052
Maintenance Worker	21,611
Material Handler	19,136
Truck Driver, Heavy	—
Warehouseman	21,923
SERVICE OCCUPATIONS—EXAMPLES	
Accounting Clerk	20,904
Receptionist	16,978
Computer Operator	23,088
Secretary	23,946
Word Processor	19,630

Note: These data do not take into account overtime, premium pay, or shift differential.

Source: Trenton, New Jersey, NJDOL. Regional Labor Market Review-Southern Region, July 1992.

many cases jobs in the services sector have few additional benefits and low rates of unionization, which further decreases the desirability of these jobs compared to those lost in manufacturing. Hence, replacing a manufacturing job with one in the services sector usually results in a net loss of income and associated benefits for both individual workers and the area in which this replacement is taking place.

V. EMPLOYMENT BASE AND EMPLOYMENT PROJECTIONS FOR THE CITY, COUNTY, AND LABOR AREA

The previous sections described the population of Camden, residents' participation in the labor force, and jobs located in the city of Camden and in the surrounding labor area. This section provides projections of future jobs for the Camden labor area, Camden County, the city of Camden, and municipalities within the labor area. All three geographical areas are projected to grow; however, since most jobs are located outside the city, there will be increased commuting, a share of which will have to be provided by public transportation.

The 1990 New Jersey State Development and Redevelopment Plan (State Plan) emphasizes the channeling of growth to already existing centers and to new centers while simultaneously decreasing growth in rural and environmentally sensitive areas and reducing suburban sprawl. CUPR has devised projections for at-place employment based on the assumption that the rate of future growth reflects recent rates of growth as well as the State Plan mandate. Tables 13, 14, and 15 display the CUPR at-place employment projections for the city of Camden, Camden County, and the Camden labor area. It should be noted that at-place employment and employment projections shown in Tables 13-15 include uncovered as well as covered employment, whereas Tables 12-14 include only covered employment.

In Tables 13-15, employment projections are discussed in terms of three categories. *Basic employment* includes the SIC categories for manufacturing, construction, transportation, mining, communications, and wholesale trade. *Services employment* includes finance, insurance, and real estate; professional services; business and repair services; personal services; entertainment; and public administration. *Retail employment* covers only retail trade.

A. City

Table 13 shows at-place employment in the city of Camden for 1990 with projections for 1995 and 2000. In 1990 total employment in Camden was 35,479. The services sector had the largest share of employment at 20,979 (59.1 percent), followed by

TABLE 13

**"AT-PLACE" EMPLOYMENT AND PROJECTIONS
IN CAMDEN CITY 1990-2000**
(New Jersey State Development and Redevelopment Plan)

	<i>Total Employment</i>	<i>Basic Employment</i>	<i>Services Employment</i>	<i>Retail Employment</i>
1990	35,479	12,163	20,979	2,315
1995	40,365	13,320	24,356	2,685
2000	47,601	15,669	28,758	3,173
CHANGE 1990-2000				
NUMBER	12,122	3,506	7,779	858
PERCENT	34.2	28.8	37.1	37.1

Source: CUPR Projections: 1990-2000

TABLE 14

**"AT-PLACE" EMPLOYMENT AND PROJECTIONS
IN CAMDEN COUNTY 1990-2000**
(New Jersey State Development and Redevelopment Plan)

	<i>Total Employment</i>	<i>Basic Employment</i>	<i>Services Employment</i>	<i>Retail Employment</i>
1990	216,966	69,011	103,574	44,379
1995	232,713	72,024	112,985	47,717
2000	255,266	79,593	124,149	51,537
CHANGE 1990-2000				
NUMBER	38,300	10,582	20,575	7,158
PERCENT	17.7	15.3	19.9	16.1

Source: CUPR Projections: 1990-2000.

employment in the basic sector, with 12,163 (34.1 percent) and the retail sector's 2,315 (6.5 percent).

Projections show a total gain of 12,122 jobs between 1990 and 2000, or an increase of 34.2 percent.² Employment projections for 1990–2000 by sector indicate the following trends. In basic employment an increase of 3,506 (28.8 percent) is projected; in services employment an increase of 7,779 (37.1 percent) is projected; and in retail employment there is a projected increase of 858 (37.1 percent).

B. County

Table 14 indicates at-place employment in Camden County for 1990 with projections for 1995 and 2000. In 1990 total employment in Camden County was 216,966. The services sector had the largest share of employment with 103,574 (47.7 percent), followed by employment in the basic sector of 69,011 (31.8 percent) and the retail sector of 44,379 (20.5 percent). For the 1990–2000 period, a gain of 38,300 is projected for total employment. This amounts to an increase of 17.7 percent. For sectors, gains of 10,582 jobs (15.3 percent) are projected for the basic sector, 20,575 (19.9 percent) for the services sector, and 7,158 (16.1 percent) for the retail sector. Essentially, gains in employment at the county level parallel the employment concentrations found in the city. This is true for both numerical and percentage increases.

C. Labor Area

Table 15 indicates at-place employment in the Camden labor area for 1990 with projections for 1995 and 2000. In 1990 total employment in the Camden labor area was 451,200. The services sector had the largest share of employment, with 203,677 (45 percent), followed by employment in the basic sector, at 151,278 (33.5 percent); and the retail sector's 96,244 (21.3 percent). For the 1990–2000 period, a gain of 83,697 (18.5 percent) is projected in terms of total employment. For sectors, gains of 21,877 jobs (14.5 percent) are projected for the basic sector; 43,889 (21.5 percent) for the services sector; and 17,945 (18.6 percent) for the retail sector.

² These projections reflect the State Development and Redevelopment Plan's objectives of redirecting some share of regional population and employment growth to central cities in the same region. When regions contain few central cities as is the case for the Camden region, the increase in population and employment growth for these central cities can be reasonably significant.

TABLE 15

**"AT-PLACE" EMPLOYMENT AND PROJECTIONS
IN THE CAMDEN LABOR AREA 1990-2000**
(New Jersey State Development and Redevelopment Plan)

	<i>Total Employment</i>	<i>Basic Employment</i>	<i>Services Employment</i>	<i>Retail Employment</i>
1990	451,200	151,278	203,677	96,244
1995	486,485	157,640	224,153	104,705
2000	534,897	173,155	247,566	114,189
CHANGE 1990-2000				
NUMBER	83,697	21,877	43,889	17,945
PERCENT	18.5	14.5	21.5	18.6

Source: CUPR Projections: 1990-2000

These projections reflect the State Development and Redevelopment Plan's objectives of reflecting some share of regional population and employment growth to certain cities in the same region. While regions contain few central cities as is the case for the Camden region, the increase in population and employment growth for these central cities can be reasonably significant.

D. Job Growth and Employment Separations in the Camden Labor Area 1993-2000 by Municipality

Another indication of potential employment change affecting Camden residents is employment change by occupational category as determined by the New Jersey Department of Labor, Division of Labor Market and Demographic Research. These are annual jobs added through both growth in new jobs and separation of others from the labor force.³ This is a particularly good set of data in that it partitions job growth by occupational category so that one can project the growth in less-skilled new jobs and job separations. Less-skilled jobs include nonprofessional services, electrical, sales, operations, and laborers from all SIC groupings.

Combining this information with other data sets on job growth by municipality (the job growth portion of the labor area data) as well as incidence of job location by municipality (for the job separation portion of the data) allows the projection of less-skilled new jobs and job separations by type for municipalities in the labor area. The municipalities are shown in Table 16; the methodology is described in a note at the end of the report.

Total job change in the Camden labor area shows a gain of 41,031 less-skilled jobs for the period 1993 to 2000; this increases to 96,261 if less-skilled job separations are included. These figures reflect job change in Burlington, Camden and Gloucester counties and indicate a gain in employment in all three industrial classification groupings included in the analysis—basic, retail and services. It is projected that the basic sector will grow by 13,408 new jobs (17,049 in jobs and separations), the retail sector by 11,193 new jobs (33,122 in jobs and separations) and the services sector by 16,430 new jobs (46,090 in jobs and separations).

As a county, Camden has the greatest role in job growth and job separations in the labor area. The labor area total job growth and job separation employment opportunities of just under 96,300 is comprised of Camden County at 44,352, followed by Burlington at 36,680, and Gloucester at 15,230. These will take place over the period 1993 to 2000. It is significant that all three counties in the labor area show an increase in less-skilled employment growth and job separations, given that other counties in New Jersey are evidencing declines—Essex and Union counties, for example.

For municipal locations of significant new job change, the city of Camden will experience a gain of 5,574 less-skilled jobs. Cherry Hill will observe a gain of 1,867, and Pennsauken 4,859. Mount Laurel in Burlington County will gain 3,573 and Evesham 2,837. Woodbury in Gloucester County will gain 1,493 new less-skilled jobs.

³ Job separations involve those leaving the labor force due to death, health, child raising, or other reasons, but do not include movement from one job to another.

TABLE 16
LESS-SKILLED JOB GROWTH AND JOB OPPORTUNITIES THROUGH SEPARATIONS—1993-2000
CAMDEN LABOR AREA¹

COUNTY	New Less-Skilled Jobs			Less-Skilled Separations ²			Total Less-Skilled Jobs and Separations ²		
	1993-2000			1993-2000			1993-2000		
	Basic	Retail	Services	Basic	Retail	Services	Basic	Retail	Services
			Total ³			Total ³			Total ³
BURLINGTON COUNTY									
Bass River township	141	28	26	195	10	14	14	42	41
Beverly city	-12	-1	-8	-21	4	47	57	5	39
Bordentown city	106	88	62	256	16	95	182	183	132
Bordentown township	74	109	103	286	31	259	546	368	359
Burlington city	283	213	118	613	61	318	186	531	304
Burlington township	361	391	221	973	110	726	432	1,117	653
Chesterfield township	8	2	11	21	3	21	27	5	32
Cinnaminson township	562	456	277	1,295	90	534	342	989	619
Delanco township	147	4	37	189	28	6	52	175	89
Delran township	448	447	308	1,203	48	352	255	496	563
Eastampton township	7	2	12	21	1	2	10	8	21
Edgewater Park township	17	121	47	185	5	179	74	22	121
Evesham township	596	988	1,253	2,837	87	1,015	1,359	683	2,612
Fieldsboro borough	-10	-1	0	-11	2	3	2	-8	1
Florence township	-25	10	7	-9	30	105	79	4	86
Hainesport township	50	19	24	93	26	53	71	76	95
Lumberton township	12	47	23	82	7	120	62	19	85
Mansfield township	19	19	35	73	4	28	54	23	90
Maple Shade township	128	229	169	525	43	448	349	171	517
Medford township	253	410	460	1,123	47	502	595	300	1,056
Medford Lakes borough	8	3	25	36	1	2	22	9	47
Moorestown township	523	328	428	1,279	259	799	1,100	781	1,528
Mount Holly township	148	250	603	1,000	43	393	998	191	1,600
Mount Laurel township	1,534	496	1,543	3,573	211	514	1,691	1,745	3,234
New Hanover township	-4	44	96	137	1	63	144	-3	240

TABLE 16
LESS-SKILLED JOB GROWTH AND JOB OPPORTUNITIES THROUGH SEPARATIONS—1993-2000
CAMDEN LABOR AREA ¹
 (continued)

COUNTY	New Less-Skilled Jobs			Less-Skilled Separations ²			Total Less-Skilled Jobs and Separations ²			
	1993-2000			1993-2000			1993-2000			
	Basic	Retail	Services	Basic	Retail	Services	Basic	Retail	Services	Total ³
BURLINGTON CONTINUED										
North Hanover township	36	48	23	6	56	28	41	105	51	196
Palmyra borough	172	79	306	28	90	65	200	169	120	489
Pemberton borough	23	50	36	3	43	32	26	93	68	186
Pemberton township	58	61	255	15	89	388	73	150	643	866
Riverside township	32	21	40	39	81	160	71	103	199	373
Riverton borough	65	15	47	25	28	93	90	43	140	273
Shamong township	58	16	40	6	12	31	64	28	70	162
Southampton township	106	55	67	26	91	116	132	146	183	461
Springfield township	12	9	9	4	18	21	16	27	30	73
Tabernacle township	43	19	40	6	19	44	49	38	84	171
Washington township	6	5	4	2	13	10	8	19	14	40
Westampton township	64	34	86	16	51	136	81	85	222	388
Willingboro township	25	84	110	38	333	457	62	417	567	1,047
Woodland township	-1	0	14	0	1	26	-1	1	40	40
Wrightstown borough	-49	-110	-15	6	124	18	-43	14	3	-27
TOTAL FOR BURLINGTON	6,023	5,089	6,685	1,388	7,586	9,910	7,411	12,675	16,595	36,680

TABLE 16
LESS-SKILLED JOB GROWTH AND JOB OPPORTUNITIES THROUGH SEPARATIONS—1993-2000
CAMDEN LABOR AREA¹

(continued)

COUNTY	New Less-Skilled Jobs 1993-2000			Less-Skilled Separations ² 1993-2000			Total Less-Skilled Jobs and Separations ² 1993-2000					
	Basic	Retail	Services	Total ³	Basic	Retail	Services	Total ³	Basic	Retail	Services	Total ³
CAMDEN COUNTY												
Audubon borough	81	162	88	331	16	219	126	360	97	381	213	691
Audubon Park borough	0	0	0	0	0	0	3	3	0	0	3	4
Barrington borough	-149	-46	-47	-242	19	66	70	156	-130	20	24	-86
Bellmawr borough	97	54	47	198	69	190	178	437	166	244	225	635
Berlin borough	134	223	121	477	48	466	267	781	182	689	388	1,258
Berlin township	114	58	40	211	45	142	103	289	158	200	142	500
Brooklawn borough	14	170	28	213	3	182	32	217	17	353	60	429
Camden city	2,208	536	2,829	5,574	319	541	3,017	3,877	2,527	1,077	5,846	9,451
Cherry Hill township	163	756	948	1,867	318	3,018	3,996	7,333	481	3,774	4,945	9,200
Chesilhurst borough	1	2	3	6	0	5	6	11	1	7	8	17
Clementon borough	8	82	24	114	10	293	90	393	18	375	114	507
Collingswood borough	81	72	170	323	20	114	284	418	101	187	453	741
Gibbsboro borough	55	42	178	276	13	62	275	350	69	104	454	626
Gloucester township	95	79	161	335	59	227	491	776	154	306	652	1,111
Gloucester City city	155	49	66	270	39	86	122	246	194	135	188	517
Haddon township	75	342	300	718	16	410	380	807	91	753	680	1,524
Haddonfield borough	21	61	299	382	14	124	637	775	35	185	937	1,156
Haddon Heights borough	125	66	163	354	14	58	150	222	139	124	313	576
Hi-Nella borough	-3	-1	-1	-4	1	5	5	11	-2	4	4	7
Laurel Springs borough	15	33	12	60	7	86	34	127	22	118	47	187
Lawnside borough	146	53	11	210	43	125	26	194	189	179	37	404
Lindenwold borough	-33	-16	-11	-60	14	135	96	245	-19	119	85	185
Magnolia borough	-12	-5	-3	-20	5	39	23	67	-7	34	20	48
Merchantville borough	65	24	61	150	13	33	88	134	78	57	149	285
Mount Ephraim borough	19	139	57	215	4	160	69	232	23	299	126	447

TABLE 16
LESS-SKILLED JOB GROWTH AND JOB OPPORTUNITIES THROUGH SEPARATIONS—1993-2000
CAMDEN LABOR AREA
 (continued)

COUNTY	New Less-Skilled Jobs 1993-2000			Less-Skilled Separations ² 1993-2000			Total Less-Skilled Jobs and Separations ² 1993-2000			
	Basic	Retail	Services	Basic	Retail	Services	Basic	Retail	Services	Total ³
CAMDEN CONTINUED										
Oaklyn borough	8	73	20	4	143	42	12	215	62	289
Pennsauken township	2,964	799	1,096	473	938	1,358	3,437	1,736	2,454	7,628
Pine Hill borough	13	25	18	4	39	30	17	64	49	130
Pine Valley borough	1	0	4	0	0	15	1	0	19	19
Runnemede borough	3	23	22	16	107	108	19	129	130	278
Somerdale borough	46	115	164	14	182	273	61	297	438	796
Stratford borough	-9	87	115	6	253	353	-2	340	468	805
Tavistock borough	2	-12	0	0	49	9	2	37	9	47
Voorhees township	35	346	245	54	1,122	838	90	1,468	1,083	2,640
Waterford township	63	25	115	27	54	261	90	79	375	544
Winslow township	60	44	133	33	106	336	94	150	469	712
Woodlynne borough	4	8	8	1	11	12	5	19	19	43
TOTAL FOR CAMDEN	6,666	4,468	7,484	1,742	9,789	14,202	8,409	14,257	21,686	44,352
GLOUCESTER COUNTY										
Clayton borough	2	12	19	12	53	88	14	65	106	185
Deptford township	15	357	115	27	1,318	438	42	1,675	554	2,271
East Greenwich township	18	8	25	10	23	77	28	31	102	161
Elk township	10	0	14	5	1	44	15	1	58	74
Franklin township	36	39	73	14	79	153	50	118	226	395
Glassboro borough	-7	46	63	21	334	471	13	379	533	926
Greenwich township	46	35	53	28	76	120	74	112	173	359
Harrison township	18	16	64	6	33	133	24	50	197	271
Logan township	257	103	91	35	111	101	292	214	192	698
Mannua township	101	147	111	33	306	239	134	453	351	938

TABLE 16
LESS-SKILLED JOB GROWTH AND JOB OPPORTUNITIES THROUGH SEPARATIONS—1993-2000
CAMDEN LABOR AREA¹

(continued)

COUNTY	New Less-Skilled Jobs 1993-2000			Less-Skilled Separations ² 1993-2000			Total Less-Skilled Jobs and Separations 1993-2000			
	Basic	Retail	Services	Basic	Retail	Services	Basic	Retail	Services	Total ³
GLOUCESTER CONTINUED										
Monroe township	83	156	127	39	392	330	122	548	457	1,127
National Park borough	2	4	8	1	12	22	3	17	30	49
Newfield borough	50	19	48	18	39	100	68	58	148	274
Paulsboro borough	-241	-87	-102	32	120	146	-209	33	44	-132
Pitman borough	-93	-4	-8	40	88	181	-52	84	173	205
South Harrison township	0	0	3	0	2	14	1	2	17	20
Swedesboro borough	49	36	36	22	97	99	70	133	135	338
Washington township	58	273	309	29	666	778	87	938	1,087	2,113
Wenonah borough	4	6	8	4	23	32	8	29	40	77
West Deptford township	15	17	47	54	110	308	69	128	355	551
Westville borough	151	49	88	40	84	154	191	133	242	566
Woodbury city	125	361	1,007	26	452	1,301	150	812	2,308	3,271
Woodbury Heights borough	22	40	61	14	129	201	36	169	262	467
Woolwich township	-2	0	-1	2	6	20	0	6	19	25
TOTAL FOR GLOUCESTER	719	1,636	2,261	511	4,553	5,549	1,230	6,189	7,810	15,230
LABOR AREA TOTAL	13,408	11,193	16,430	3,641	21,928	29,661	17,049	33,122	46,090	96,261

Notes: 1. Labor area is a geographic area consisting of a central community and contiguous areas that are economically integrated into that community. Within a labor area, workers can generally change jobs without relocating. See discussion in text.

2. Separations are openings created when people leave the labor force for reasons such as death, retirement, pregnancy, or other family reasons. Separations do not include movement from one job to another. See discussion in text.

3. Numbers may not total exactly due to rounding.

Source: CUPR Projections: 1993-2000.

With regard to separations, the largest job opportunities relative to separations from 1993 to 2000 will be the locations of highest existing employment. This is particularly true in Camden County. Cherry Hill will evidence 7,333 separations, followed by the city of Camden with 3,877, Pennsauken with 2,768, and Voorhees with 2,014. In Burlington County the largest separations will be in Burlington Township with 1,268, Evesham Township with 2,461, Moorestown with 2,158, and Mount Laurel with 2,416. The largest number of less-skilled job separations in Gloucester County from 1993 to 2000 will be in Woodbury City with 1,778.

Table 16 lists the number of less-skilled job opportunities by municipality within the Camden labor area. From a transportation point of view, the density of these opportunities is important. Therefore, Map A displays the new less-skilled employment opportunities in terms of density per square mile, while Map B displays the less-skilled separations in terms of the number of jobs per square mile. Rather than showing all the municipalities in the labor area, these maps show those within 7–15 miles of Camden.

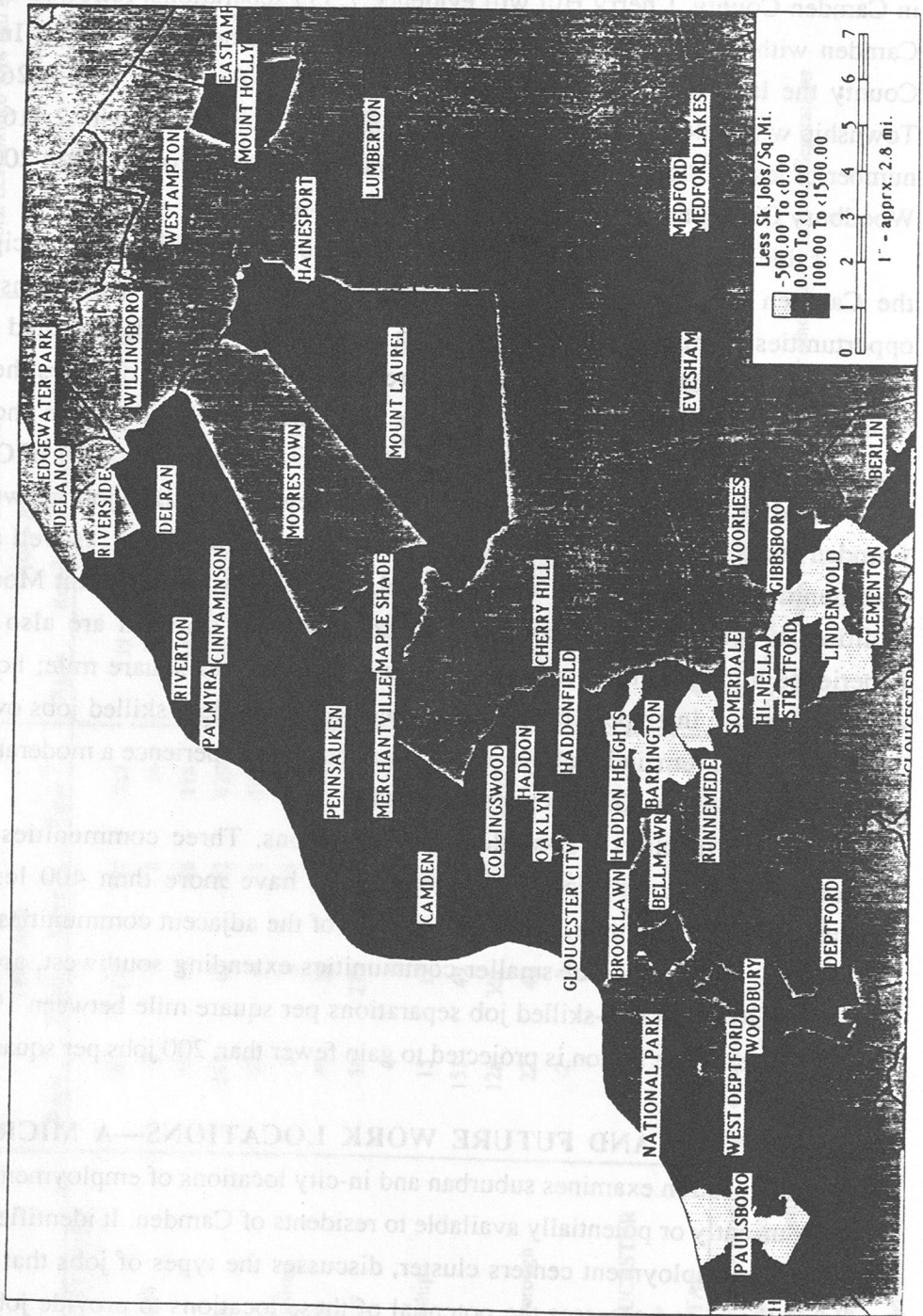
Map A shows that the highest rates of new less-skilled job growth will be in Camden and a band of communities extending northeast to Delran, as well as the nearby communities of Mapleshade, Mount Laurel, and slightly more distant Mount Holly. In addition, a string of small communities southwest of Camden are also projected to experience high growth, a rate of more than 100 jobs per square mile; however, these communities are interspersed with ones projected to lose less-skilled jobs over the period 1993–2000. The remainder of the region is projected to experience a moderate rate of less-skilled job growth, 0–100 jobs per square mile.

Map B displays less-skilled job separations. Three communities, Brooklawn, Woodbury, and Mount Holly, are projected to have more than 400 less-skilled job separations per square mile. Camden and most of the adjacent communities as far east as Cherry Hill, and a string of smaller communities extending southwest, are projected to experience 200–400 less-skilled job separations per square mile between 1993 and 2000. The remainder of the region is projected to gain fewer than 200 jobs per square mile.

VI. PRESENT AND FUTURE WORK LOCATIONS—A MICRO VIEW

This section examines suburban and in-city locations of employment opportunities that are currently or potentially available to residents of Camden. It identifies the corridors along which employment centers cluster, discusses the types of jobs that are or will be available there, and assesses the potential of these locations to provide jobs for Camden residents.

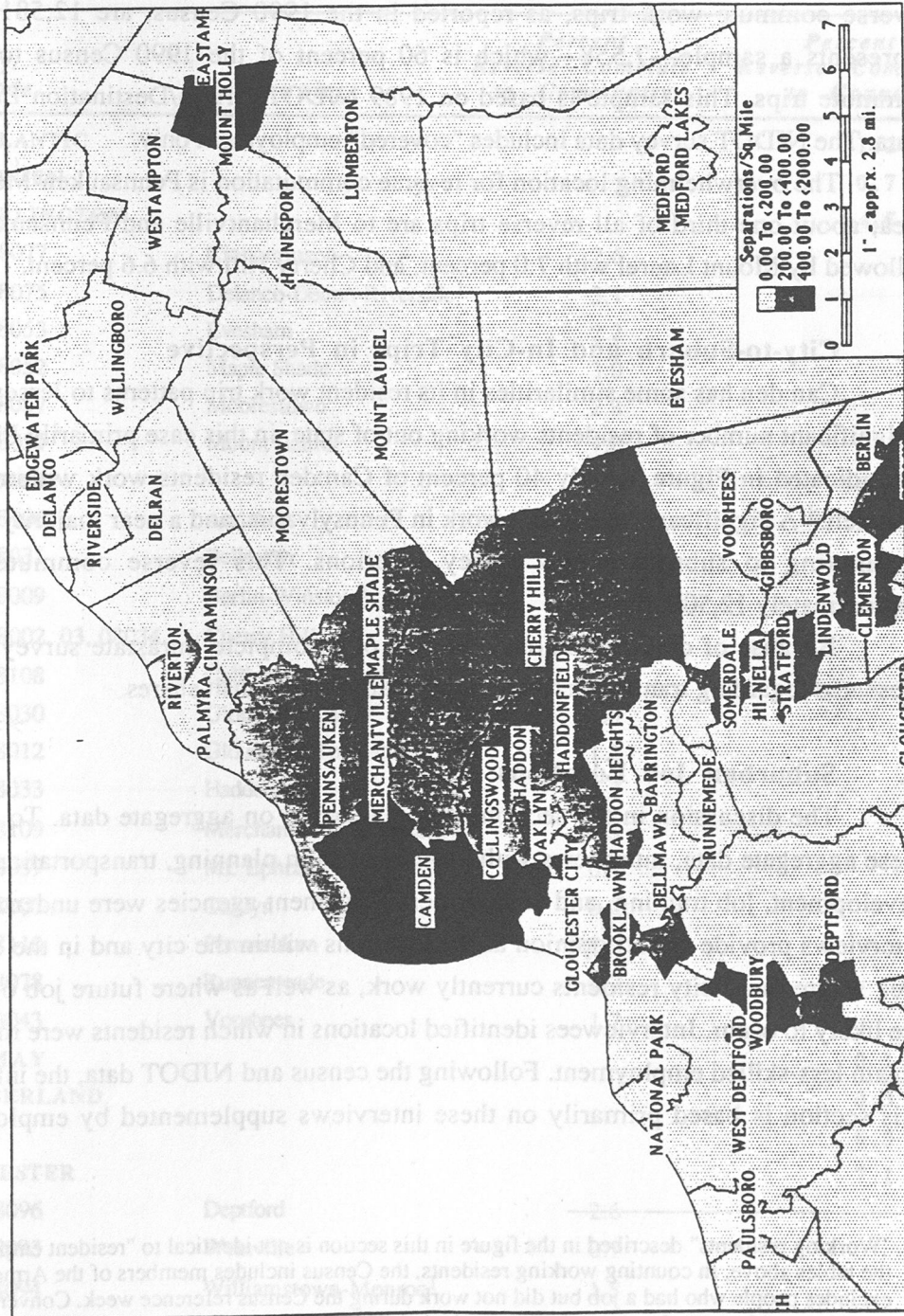
MAP A
DENSITY OF NEW LESS-SKILLED EMPLOYMENT GROWTH
IN THE CAMDEN METROPOLITAN AREA, 1993-2000



Source: Projections by Center for Urban Policy Research, Rutgers University, Spring 1993

MAP B

DENSITY OF LESS-SKILLED EMPLOYMENT SEPARATIONS IN THE CAMDEN METROPOLITAN AREA, 1993-2000



Source: Projections by Center for Urban Policy Research, Rutgers University, Spring 1993

Municipalities outside the city of Camden that provide employment for 50 or more city of Camden residents are shown in Table 17. The following zip codes define the city of Camden for the purposes of this study: 08101, 08102, 08103, 08104, and 08105. Total reverse commute work trips, as reported in the 1990 Census, are 12,581. Table 17 represents a sample—7,558—which is 60 percent of the 1990 Census total reverse commute trips. This sample is based on 1989 NJDOT Origin/Destination Employment Data. The NJDOT survey data includes "covered" employment only.

The overwhelming location for reverse commutation is Pennsauken-Merchantville area; about one-third of all reverse trips are to Merchantville and Pennsauken. This is followed by Mount Laurel with 7.0 percent, and Cherry Hill with 6.6 percent.

A. City-to-Suburb and In-City Trips in Perspective

Camden has some similarities in its resident work trip patterns to Jersey City, with a significant number of residents working out of state, in this case primarily Philadelphia. As indicated in Figure 1, only 40 percent of Camden residents work within the city of Camden.⁴ A significant 13 percent work in Pennsylvania, and a near majority are reverse commuting to suburban New Jersey locations. This reverse commute flow has approximately 12,500 trips.

Because of data limitations and lack of a complete intrastate survey, no data is presented regarding transit ridership by destination and transit shares.

B. Suburban Job Locations

The discussion in the sections above is based on aggregate data. To supplement these aggregate data, interviews with professionals in planning, transportation, economic development, job training, and employment placement agencies were undertaken. These interviews provide expert opinion about locations within the city and in the surrounding area where inner-city residents currently work, as well as where future job opportunities are likely to occur. Interviewees identified locations in which residents were most likely to obtain less-skilled employment. Following the census and NJDOT data, the information in this section is based primarily on these interviews supplemented by employment data

⁴ "Working residents" described in the figure in this section is not identical to "resident employment" in the tables above. In counting working residents, the Census includes members of the Armed Forces, but excludes people who had a job but did not work during the Census reference week. Conversely, in counting resident employment, the Census includes those with a job who were not at work during the reference week, but excludes members of the Armed Forces. For more complete descriptions, see the Census definitions of "Employment Status" and "Journey to Work."

TABLE 17

WORK LOCATIONS OF CAMDEN RESIDENTS
IN CITY AND REVERSE COMMUTES
1989

County/ Zip Code	Community	Percent Reverse Commute to Community	Percent Reverse Commute to County
ATLANTIC			1.2
BERGEN			0.7
BURLINGTON			24.5
08077	Cinnaminson	2.6	
08075	Delanco-Delran-Riverside ¹	3.1	
08053	Evesham	2.2	
08052	Maple Shade	3.0	
08057	Moorestown	2.8	
08054	Mount Laurel	7.0	
CAMDEN			58.9
08106	Audubon	1.0	
08031	Bellmawr	2.0	
08009	Berlin-Winslow ¹	1.1	
08002, 03, 08034	Cherry Hill	6.6 ²	
08108	Collingswood-Haddon ¹	2.7	
08030	Gloucester City	1.0	
08012	Gloucester Township	1.2	
08033	Haddonfield	2.2	
08109	Merchantville-Pennsauken ¹	17.3	
08059	Mt. Ephram	0.7	
08107	Oaklyn	0.7	
08110	Pennsauken	16.9	
08078	Runnemeade	0.7	
08043	Voorhees	1.7	
CAPE MAY			0.1
CLUMBERLAND			0.3
ESSEX			0.3
GLOUCESTER			7.1
08096	Deptford	2.6	
08093	Westville	0.7	
08094	Williamstown-Monroe ¹	1.5	

TABLE 17 (continued)

**WORK LOCATIONS OF CAMDEN RESIDENTS
IN CITY AND REVERSE COMMUTES
1989**

<i>County/ Zip Code</i>	<i>Community</i>	<i>Percent Reverse Commute to Community</i>	<i>Percent Reverse Commute to County</i>
GLOUCESTER-CAMDEN			
08012	Washington-Gloucester Township ¹		3.6
HUDSON			0.0 ³
HUNTERDON			0.1
MERCER			1.1
08610	White Horse-Hamilton Township ¹	0.7	
MIDDLESEX			0.3
MONMOUTH			0.9
07728	Freehold-Millstone ¹	0.8	
MORRIS			0.1
OCEAN			0.2
PASSAIC			0.0 ³
SALEM			0.2
SOMERSET			0.1
SUSSEX			0.4
UNION			0.1
WARREN			0.0 ³

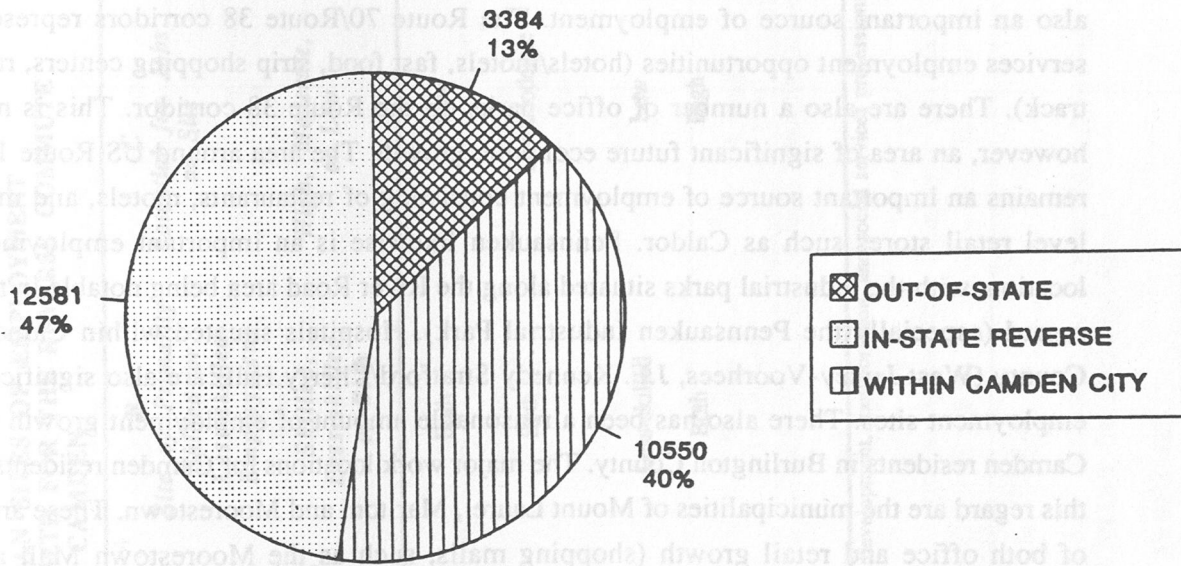
- Notes:**
1. These jurisdictions, or portions of these jurisdictions, are included within this zip code.
 2. Employment survey data from Camden to Cherry Hill contains erroneous value. Figure shown is estimated.
 3. 0.0 Reported reverse commute is less than 0.1%.

Source: NJDOT 1989 ZIP Code Origin/Destination Data.

FIGURE 1

WORKSITE DESTINATIONS OF CAMDEN RESIDENTS

(Total Camden City Working Residents—26,515)



Source: 1990 U.S. Census Data STF-3.

researched by CUPR staff as well as data provided by individual companies (a list of information resources is provided in the reference section).

Specific suburban centers of employment and growth and their potential in providing jobs for Camden residents are listed in Table 18A. Camden County remains the largest employer of Camden residents. The following are the most significant employment locations. The Route 38 corridor moving towards Cherry Hill is a major employment area. This corridor consists primarily of office parks and retail/service development (the Cherry Hill Mall, various size retailers and fast food outlets). The Cherry Hill Industrial Park is also an important source of employment. The Route 70/Route 38 corridors represent services employment opportunities (hotels/motels, fast food, strip shopping centers, race track). There are also a number of office parks on the Route 38 corridor. This is not, however, an area of significant future economic growth. The area around US Route 130 remains an important source of employment consisting of restaurants, motels, and mid-level retail stores such as Caldor. Pennsauken likewise is an important employment location, with the industrial parks situated along the River Road area being notable in this regard (especially the Pennsauken Industrial Park). Hospitals situated within Camden County (West Jersey-Voorhees, J.F. Kennedy Stratford/Cherry Hill) are also significant employment sites. There also has been a reasonable amount of employment growth for Camden residents in Burlington County. The major work locations for Camden residents in this regard are the municipalities of Mount Laurel, Marlton, and Moorestown. These areas of both office and retail growth (shopping malls, such as the Moorestown Mall and Burlington Center Mall) provide a combination of skilled and unskilled employment. The Burlington Coat Factory is a major employer of the area, while the factory outlet shops in the city of Burlington are also significant job sites. There are also employment opportunities in hotels and industries in the Fellowship Road area. Employment in the Route 73 corridor (Mount Laurel/Marlton and Tacony Bridge to the Berlin Circle) has been growing in recent years and has further potential for economic expansion. There has also been some job growth for Camden residents in Gloucester County; the cities of Woodbury and Gloucester are specific areas of employment. It is expected that as this county grows it will be an important source of future employment for Camden residents.

C. In-City Job Locations

Table 18B displays specific city sites of employment and growth, and their potential in providing jobs for Camden residents. The most significant destinations for work within Camden are jobs in the county, city, state, and federal governments; jobs within Rutgers University and Camden County College; Cooper Hospital, Our Lady of Lourdes Hospital,

TABLE 18A

SPECIFIC SUBURBAN SITES OF EMPLOYMENT
AND EMPLOYMENT GROWTH FOR THE REVERSE COMMUTE
CAMDEN

	A Existing or Employment or Growth Node	B Site of Primarily Skilled or Less-skilled Employment	C Potential for Jobs at Site	D Potential for Center City Residents at Site
<i>Corridors and Specific Locations</i>	Existing, Growth, or Both	Skilled, Less-skilled, or Both	High, Moderate, or Low	High, Moderate, or Low
Route 70 Corridor (Marlton/Pennsauken)	Both	Both	Low	Low
Route 38 Corridor (Moorestown Mall/Cherry Hill Mall North Burlington County)	Both	Both	Low/Moderate	Low
Route 130 Corridor	Existing	Less-skilled	Low	Low
Route 73 Corridor (Tacony Bridge to Berlin Circle)	Both	Both	High	Moderate

Source: CUPR interviews with city and county planning, economic development, transportation, and social services professionals, Summer 1992.

TABLE 18B
SPECIFIC CITY SITES OF EMPLOYMENT
AND EMPLOYMENT GROWTH FOR THE IN-CITY JOURNEY TO WORK

CAMDEN			
A	B	C	D
<i>Existing Employment or Growth Node</i>	<i>Site of Primarily Skilled or Less-skilled Employment</i>	<i>Potential for Jobs at Site</i>	<i>Potential for Center City Residents at Site</i>
<i>Corridors and Specific Locations</i>			
Downtown			
Campbell Soup Worldwide Headquarters	Both	Moderate	Moderate
Retail			
Small Retailing	Less-skilled	Moderate	Moderate
Hospitals			
Cooper Hospital	Both	Low	Low
County/City/State/Federal Government			
Camden City Government	Both	Low	Low
Camden County Government	Both	Low	Low
New Jersey State Office	Both	Low	Low
Colleges/Schools			
Rutgers-Camden	Both	Moderate	Low
Camden County College	Both	Moderate	Moderate

TABLE 18B
(continued)

**SPECIFIC CITY SITES OF EMPLOYMENT
AND EMPLOYMENT GROWTH FOR THE IN-CITY JOURNEY TO WORK**

CAMDEN	A <i>Existing or Employment or Growth Node</i>	B <i>Site of Primarily Skilled or Less-skilled Employment</i>	C <i>Potential for Jobs at Site</i>	D <i>Potential for Center City Residents at Site</i>
<i>Corridors and Specific Locations</i>	<i>Existing, Growth, or Both</i>	<i>Skilled, Less-skilled, or Both</i>	<i>High, Moderate, or Low</i>	<i>High, Moderate, or Low</i>
Industrial Parks	Both	Both	Moderate	Moderate
General Electric Industrial Plant	Existing	Both	Moderate	Moderate
Food Processing Industry				
Ports/Airports				
NA				
Other				
Aquarium	Existing	Both	Moderate	Moderate

Source: CUPR interviews with city and county planning, economic development, transportation, and social services professionals, Summer 1992.

and Plaza Medical Nursing; Quality Foods, Lambersky Poultry, Campbell Soup; NJ TRANSIT, General Electric, MacAndrews & Forbes; and the numerous small-scale retailing firms within the downtown area. The above sites of employment have seen only modest gains during the period 1980-1990. Both Rutgers University and Cooper Hospital have recently expanded their facilities in the area. This has been offset by increasing store closings in the downtown area. Woolworths, for example, has closed as has a major discount drug store. At present there are neither supermarkets nor department stores in the downtown. Retail employment in the area is dominated by "mom and pop" stores that provide only small amounts of non-family employment. Table 18B shows that no existing firm, government office, or institution (hospital, university) in the city has more than moderate potential for generating future employment growth. There is also the problem that much of the work that is likely to be generated locally will be in technical and managerial occupations, which do not fit the skill profile of Camden city residents. The growth of the waterfront area (an extension of the downtown) has opened up a new and growing site for employment. The New Jersey State Aquarium is a new employer in this area. The Campbell Soup Company is building its world headquarters also in the waterfront area. The bulk of employment there will be transferred from its current city location, however.

The four largest private employers in the city of Camden in 1991 were General Electric, with 1,800 employees; Campbell Soup, with 1,435 employees; Plaza Medical Nursing, with 300 employees; and Quality Foods, with 238 employees. The fact that the fourteenth largest employer, Domtar Gypsum, has only 100 employees testifies to the reduced and small-scale nature of most employers in Camden.

Two industrial parks are planned for the city. The first is Poets Row, situated in North Camden and initiated by the Black Peoples Unity Movement (BPUM). The approximately 80-acre park is under construction. This should provide at least some employment possibilities for residents of North Camden. Another industrial park is also planned for South Camden (Broadway/Atlantic), the building of which is yet to be scheduled.

VII. THE EXISTING TRANSPORTATION NETWORK

The city of Camden benefits from its past history as a major city within New Jersey and also from its close proximity to Philadelphia. It therefore possesses an extensive transportation network, which provides its population with convenient access to most important employment markets within New Jersey and Pennsylvania. Numerous interstate highways, federal highways, and major state roads traverse Camden County and the fringes of the city.

The city of Camden possesses an extensive road system that allows relatively easy automobile movement in all directions. The city is also well served by both rail and bus transit. The high-speed PATCO line provides quick and safe access to Philadelphia and to areas within the city. The bus service within the Camden area is extensive and services most of the employment markets both within the city and beyond. Camden County is also served by county-provided alternatives to public transport. These are "Dial-a-Ride," subscription bus, and fixed-route transit. In the city of Camden the only major public alternative to public transportation is unlicensed cabs. Transportation problems with regard to these services will be looked at in the next section.

A. Roadways—City to Suburb

Table 19A refers to the existing transportation network of interstate, state, and county roads. The major roads are also portrayed on Map C.

1. Major Arterials

The major interstate roads are I-295, I-76, and I-676. I-295 runs on an axis south and east from the city of Camden, linking it to its suburbs. Although its width is considered adequate, particular choke points prevent the steady flow of traffic during the morning and afternoon peaks. I-76 runs in a north-south direction to the south of the city, linking the city to Philadelphia and the southern suburbs. This roadway suffers from the same problems as I-295. I-676 is a major regional corridor that runs in a north-south orientation directly through the city. It experiences significant congestion during the morning and afternoon peaks.

The main regional highways that traverse Camden County and have a significant effect on the city of Camden are the New Jersey Turnpike, US Routes 30 and 130, and Routes 38, 42, 44, 45, 47, 70, and 168. Most routes suffer congestion during the morning and afternoon peak. Several of these routes also suffer lower levels of congestion for the duration of the day.

The New Jersey Turnpike is a major through route running in a north-south direction east of the city.

US Route 30 is a major regional corridor that runs in a east-west direction through the city of Camden. This road is heavily congested during both the morning and afternoon peaks (typically between 7 and 9 AM and 4 and 6 PM) The road width is considered inadequate for current volumes of traffic.

US Route 130 runs in a north-south direction to the east of the city linking US Route 30 and Route 38. It suffers from the same problems as US Route 30. In certain

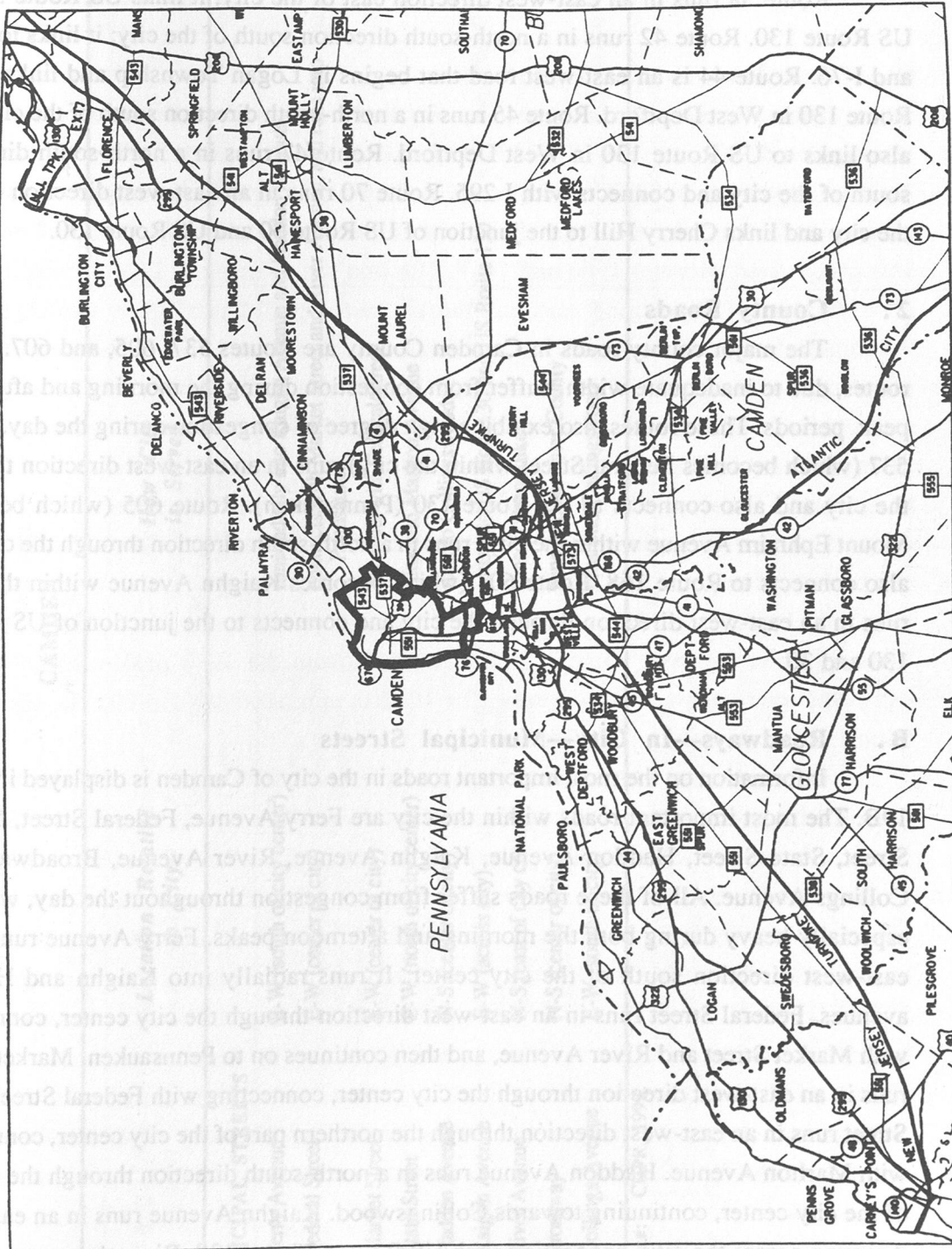
TABLE 19A
THE EXISTING TRANSPORTATION NETWORK—ROADWAYS
CITY TO SUBURB
CAMDEN

	<i>Location Relative to City</i>	<i>How City is Served</i>
STATE HIGHWAYS		
I-295	N-S (south and east of city)	links eastern suburbs
I-76	N-S (south of city)	links to Philadelphia via Walt Whitman Bridge and southern suburbs
I-676	N-S (through city)	major corridor to Camden and Ben Franklin Bridge
NJ Turnpike	N-S (east and south of city)	links to major through routes
US Route 30	E-W (through city)	major corridor to city and Ben Franklin Bridge
US Route 130	N-S (east of city)	links US Route 30, and Routes 38, 70, 73, and 168
Route 38	E-W (east of city)	links US Route 30 and US Route 130
Route 42	N-S (south of city)	links to Route I-295, and I-76
Route 44	E-W (west of city)	links to US Route 130
Route 45	N-S (south of city)	links to US Route 130
Route 47	N-S (south of city)	links to Route I-295
Route 70	E-W (east of city)	links Cherry Hill to US Route 30 and US Route 130
Route 168	N-S (south of city)	links southern suburbs to city
COUNTY ROADS		
Route 537	E-W (through city)	connects to US Route 130 (Pennsauken)
Route 605	N-S (through city)	connects to Route 168
Route 607	E-W (through city)	connects to US Route 30 and US Route 130 junction

Source: CUPR, 1992.

MAP C

REGIONAL ROAD SYSTEM IN THE VICINITY OF CAMDEN



Source: New Jersey Department of Transportation

areas, especially during the morning and afternoon peaks, choke points prevent the steady flow of traffic.

Route 38 runs in an east-west direction east of the city; it links US Route 30 and US Route 130. Route 42 runs in a north-south direction south of the city; it links to I-295 and I-76. Route 44 is an east-west road that begins in Logan Township and links to US Route 130 in West Deptford. Route 45 runs in a north-south direction south of the city, and also links to US Route 130 in West Deptford. Route 47 runs in a north-south direction south of the city and connects with I-295. Route 70 runs in an east-west direction east of the city and links Cherry Hill to the junction of US Route 30 and US Route 130.

2. County Roads

The major county roads in Camden County are Routes 537, 605, and 607. These routes, due to inadequate width, suffer from congestion during the morning and afternoon peak periods. These routes also exhibit a high degree of congestion during the day. Route 537 (which becomes Federal Street within the city) runs in an east-west direction through the city and also connects to US Route 130 (Pennsauken). Route 605 (which becomes Mount Ephraim Avenue within the city) runs in a north-south direction through the city and also connects to Route 168. Route 607 (which becomes Kaighn Avenue within the city) runs in an east-west direction through the city and connects to the junction of US Routes 130 and 30.

B. Roadways—In City—Municipal Streets

Information on the most important roads in the city of Camden is displayed in Table 19B. The most important roads within the city are Ferry Avenue, Federal Street, Market Street, State Street, Haddon Avenue, Kaighn Avenue, River Avenue, Broadway, and Collings Avenue. All of these roads suffer from congestion throughout the day, which is especially heavy during both the morning and afternoon peaks. Ferry Avenue runs in an east-west direction south of the city center. It runs radially into Kaighn and Haddon avenues. Federal Street runs in an east-west direction through the city center, connecting with Market Street and River Avenue, and then continues on to Pennsauken. Market Street runs in an east-west direction through the city center, connecting with Federal Street. State Street runs in an east-west direction through the northern part of the city center, connecting with Marlton Avenue. Haddon Avenue runs in a north-south direction through the middle of the city center, continuing towards Collingswood. Kaighn Avenue runs in an east-west direction across the city, connecting with US Routes 30 and 130. River Avenue runs in a north-south direction east of the city center, continuing towards Pennsauken. Broadway

TABLE 19B
THE EXISTING TRANSPORTATION NETWORK—ROADWAYS
IN CITY
CAMDEN

	<i>Location Relative to City</i>	<i>How City is Served</i>
MUNICIPAL STREETS		
Ferry Avenue	E-W (south of city center)	runs radially into Kaighn Avenue and Haddon Avenue
Federal Street	E-W (center of city)	connects with Market Street and River Avenue, and runs into Pennsauken
Market Street	E-W (center of city)	connects with Federal Street
State Street	E-W (north of city center)	runs into Marlton Avenue
Haddon Avenue	N-S (center of city)	runs to Collingswood
Kaighn Avenue	E-W (across city)	runs into US Route 30 and US Route 130
River Avenue	N-S (east of city center)	runs to Pennsauken
Broadway	N-S (center of city)	runs to Gloucester County
Collings Avenue	E-W (south of city)	runs into Collingswood

Source: CUPR, 1992.

runs in a north-south direction through the center of the city, continuing towards Gloucester County. Collings Avenue runs in an east-west direction south of the city, continuing to Collingswood.

C. Rail Transit—City to Suburb

Table 20A refers to rail transit serving the Camden region. There are two rail lines serving Camden County; the NJ TRANSIT line is displayed on Map D. The Port Authority Transit Corporation (PATCO) operates the Lindenwold Hi-Speed Line, connecting suburbs in Camden County with center city Philadelphia (not shown on Map D). The 14.2 mile line was constructed between 1966 and 1969. The line has 13 stations, nine of which are in New Jersey. Of these nine stations, the six outside of Camden are Collingswood, Westmont, Haddonfield, Woodcrest, Ashland, and Lindenwold. The parking capacity for all of the stations in New Jersey is 12,570 spaces, with an average weekday parking utilization rate of 90 percent. The PATCO fleet consists of 121 electric self-propelled rapid transit cars, providing service 24 hours a day, seven days a week. During weekday peak hours, headways are 4 minutes. During the rest of the day, headways range from 10 to 12 minutes, except from midnight to 5 AM when trains run every 30 minutes. On Saturdays, the peak headway ranges from 9-11 minutes, and the off-peak headway extends to 40 minutes. On Sundays, the headways range from 12 to 40 minutes. In 1988 the average weekday ridership was 39,481. This was down from the 1980 peak of 40,666. The estimated average weekday ridership for 1992 is approximately 35,000. In 1988 total annual ridership was 11,102,478.

Given the large number of weekday riders, PATCO clearly does not fulfill its potential for reverse commuting by Camden residents. On a typical weekday in 1990, the last year for which data is available, the total number of riders from Camden using PATCO to go to work was only 467. (Note: This includes all work commuting from Camden County, not only the reverse commutes.) Of this number, only 96 used PATCO to commute to stops within New Jersey, the remaining 371 commuters going to stops within Philadelphia. This would indicate both that the line is underutilized with regard to the reverse commute and that the line serves primarily as a direct commuter line for Philadelphia. The main reason for the lack of reverse commutation seems to be the lack of employment markets outside the city served by the line. The only major employer along this line is the Echelon Mall; it is not directly served by PATCO, but requires a bus connection.

The second line serving Camden County is the Lindenwold to Atlantic City Rail Line, run by NJ TRANSIT. The Lindenwold/Atlantic City Rail Line is not an important

TABLE 20A

THE EXISTING TRANSPORTATION NETWORK: RAIL TRANSIT
CITY TO SUBURB

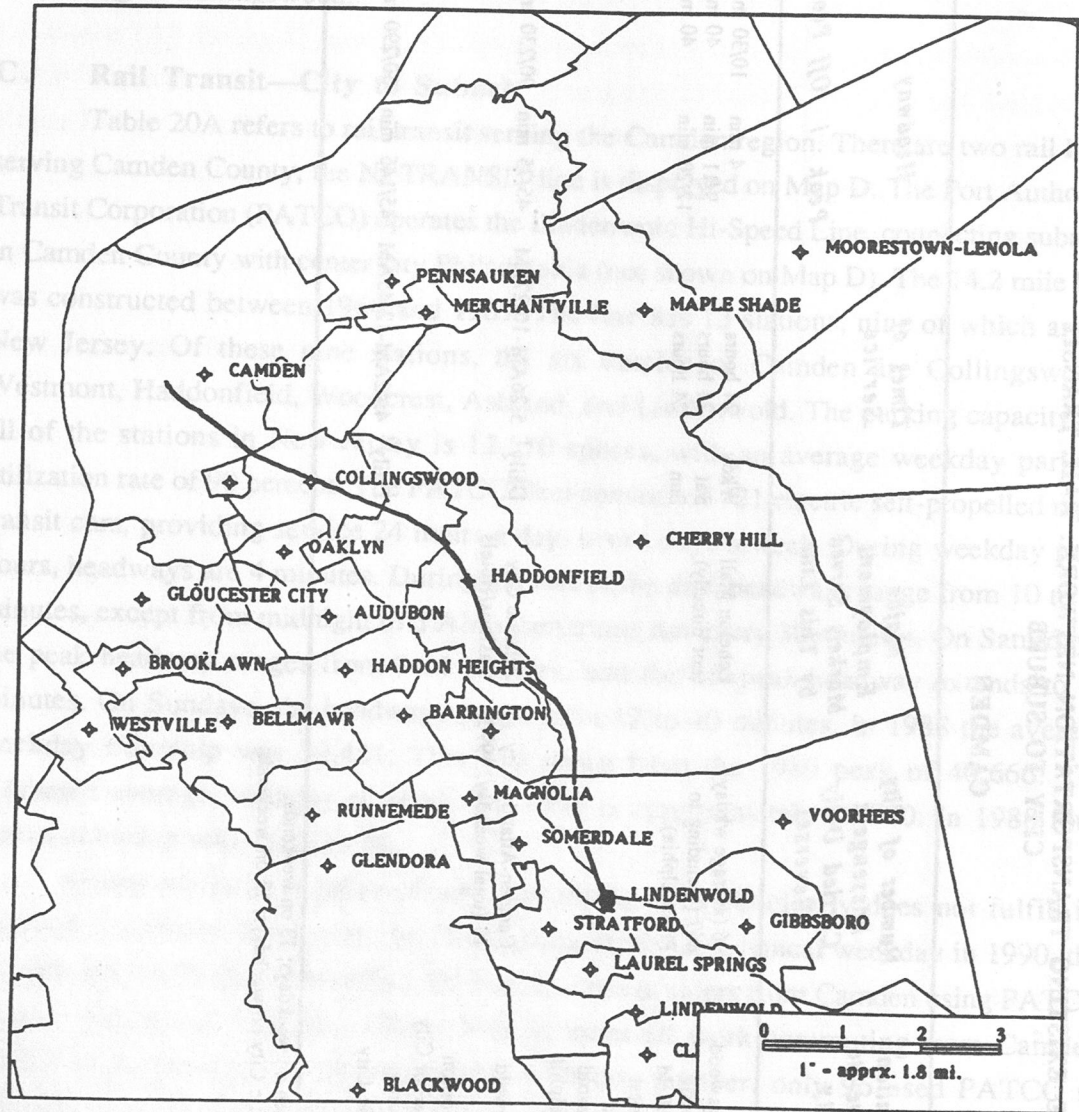
CAMDEN

Rail Lines (List)	Destination Relative to City	Number of City Passengers Carried Daily (Reverse)	Major Employment Markets Served by This Line	Wkdy Sat Sun	Times of Service	Headway Peak / Off Peak
PATCO	Collingswood Westmont Haddonfield Woodcrest Ashland Lindenwold Philadelphia	96 (average wkday) 467 (including to Philadelphia)	Echelon Mall (not directly)	Wkdy Sat Sun	24 hours 24 hours 24 hours	4 min 10/30 min 9/11 min 40 min 12/20 min 40 min
NJT Lindenwold/ Atlantic City	Lindenwold Atco Hammonon Egg Harbor City Absecon Atlantic City	Camden-Atlantic City 15 (total weekday, 1990)	Atlantic City Casinos/Hotels	Daily ¹ Daily ²	5:26AM-10:27PM 4:42AM-12:45AM	45/75 min 90/230 min 45/145 min 50/290 min

Notes: 1. Twelve trains from Camden on weekdays; 13 on weekends.
2. Twelve trains from Atlantic City on weekdays; 13 on weekends.
Source: New Jersey Transit.

MAP D

NJ TRANSIT COMMUTER RAIL LINES
IN THE CAMDEN METROPOLITAN AREA



Source: NJ TRANSIT

source of reverse commutation for Camden residents; few reverse job markets are served by this line. The line begins in Lindenwold, across from the PATCO station. It stops at Atco, Hammonton, Egg Harbor City, and Absecon before arriving in Atlantic City. Trains on the line run seven days a week. From Lindenwold to Atlantic City, trains run from 5:26 AM until 10:27 PM, with headways varying from 45 to 230 minutes. From Atlantic City to Lindenwold trains run from 4:42 AM until 12:45 AM, with headways varying between 45 and 290 minutes. In 1990 the average number of city passengers carried to Atlantic City for work purposes was only 15. This figure has almost doubled since then, due to the free shuttle buses from the Atlantic City Rail Station to the casinos. (In 1990 it cost \$5 from the train station to the casinos by bus; this decreased the attractiveness of commuting to work by train.)

D. Rail Transit—In City

PATCO stops at three stations within the city of Camden: Ferry Avenue, Broadway and City Hall (Table 20B). The main areas of employment served by the stations in the city are General Electric, Campbell Soup, and state, city, county, and federal government offices. Headways are identical to those specified above for the regional commute. It is impossible to disaggregate them from regional trips on the reverse commute.

E. Bus Service—City to Suburb

On an average weekday, approximately 13,280 passengers board NJ TRANSIT buses within the city of Camden. NJ TRANSIT operates 26 bus routes that link the city of Camden to points in Camden, Burlington, Gloucester, Mercer, Atlantic, Cape May, Cumberland, Salem, Ocean, and Monmouth counties. Eighteen of these routes also connect Camden with Philadelphia. NJ TRANSIT operates commuter routes to suburban points in Camden, Burlington and Gloucester counties, as well as express service to the Atlantic City casino/hotel employment market and downtown Trenton. NJ TRANSIT's longer distance routes connect the southern New Jersey shore communities and seasonal special services to area racetracks and Great Adventure.

NJ TRANSIT Camden bus routes serve most major employment, shopping, educational, and medical passenger generators throughout South Jersey. The following is a highlight list of major places served by bus routes from Camden:

Malls/Shopping

Cherry Hill Mall, Echelon Mall, Deptford Mall, Burlington Center Mall, Quaker Bridge Mall (Saturdays only), Route 70 Corridor shopping centers, Ellisburg Shopping

TABLE 20B
THE EXISTING TRANSPORTATION NETWORK: RAIL OR LIGHT-RAIL TRANSIT (WITHIN CITY SYSTEMS)
IN CITY
CAMDEN

<i>Rail Lines (List)</i>	<i>Major Location in City</i>	<i>No. of City Passengers Carried Daily</i>	<i>Daily Typical Destinations in City</i>	<i>Times of Service</i>	<i>Frequency of Service</i>
PATCO	Ferry Ave Broadway City Hall	NA Worker Total 39,481*	General Electric Campbell Soup State/City/Federal Offices	Wkdy Sat Sun	4 min 9/11 min 12-20 min 10/30 min 40 min 40 min

Notes: *Total daily, 1988.

NA = Not available

Source: New Jersey Transit.

Center, Marlton Crossing, Southwood Shopping Center, Black Horse Center, US Route 130 shopping centers, White Horse Pike shopping centers.

Hospitals

Cooper Hospital, Our Lady of Lourdes, West Jersey Hospital (Camden, Marlton, Voorhees, Berlin [via transfer]), J.F. Kennedy Hospital (Cherry Hill, Stratford [via transfer]), Burlington Memorial Hospital (Mount Holly), Zurbrugg Rancocas Valley Hospital (Willingboro).

Colleges

Rutgers-Camden, Rowan College, Camden County College, Burlington County College.

Employment

Pennsauken Industrial Park (River Road Area), Airport Industrial Park, Pennsauken, hotels/motels on Route 70 in Cherry Hill, hotels/office parks in the Route 38 corridor, Pureland Industrial Park, Logan Twp., Route 73 Corridor (Marlton), Burlington Coat Factory, US Route 130, Cherry Hill Industrial Park, East Gate Park, Mount Laurel, Fellowship Road hotels/industries, Mount Laurel.

Table 21A refers to the reverse commute bus service. The bus routes are displayed on Map E. Of the 24 bus routes shown in Table 21A, 16 originate outside of the city of Camden, then pass through the city, and terminate outside of Camden. Within the city all stop at the Camden Transportation Center, located at Broadway and Mickle Boulevard. Camden residents use bus routes for both journey to work and other purposes. The most important routes for work and non-work trips are discussed below.

Route 400

Bus Route 400 runs from Sicklerville to Philadelphia, primarily along the Black Horse Pike. It runs 7 days per week and approximately 20 hours per day and has the following headways: 12 minutes during weekday peaks, 20 minutes during weekday off-peak, 20 minutes on Saturday, and 60 minutes on Sunday. The bus carries 54 reverse commuters. The main areas of employment are the Black Horse Pike corridor and the Deptford Mall.

TABLE 21A
 THE EXISTING TRANSPORTATION NETWORK: BUS SERVICE
 CITY TO SUBURB
 CAMDEN

Bus Routes (List Major) Indicate where Private	Spoke Served	Number of Passengers Carried Daily		Employment Markets Served	Times of Service	Headway		
		Workers ¹	Total			Peak	Off Peak	
313/315		NA	NA	NA	IRR	IRR	IRR	
317	NJ 38	NA	NA	Pennsauken; Cherry Hill; Moorestown	Daily	No late-night service	120 min	120 min
318	NJ 38	NA	NA	NA	IRR	IRR	IRR	
400	Mt. Ephraim Ave. Black Horse Pike	54	NA	Black Horse Pike corridor; Deptford Mall	Wkdy Sat Sun	4:00AM-12:46AM 4:08AM-12:24AM 4:46AM-12:40AM	12 min 20 min 60 min	20 min 20 min 60 min
401	Broadway	NA	NA	Deptford Mall	Wkdy Sat Sun	4:43AM-9:56PM 4:45AM-9:55PM 6:22AM-10:49PM	20/60 min 40/80 min 60 min	40/80min 40/80 min 120 min
402	Broadway	NA	NA	Pureland Industrial Park	Wkdy Sat Sun	4:51AM-10:45PM 4:47AM-9:06PM 8:00AM-8:02PM	15 min IRR 1 R/T	IRR 120 min 1 R/T
403	Haddon Avenue, White Horse Pike	18	NA	Collingswood; White Horse Pike corridor; Echelon Mall; ² Lindenwold PATCO 2	Wkdy Sat Sun	4:34AM-12:19AM 5:07AM-11:52PM 6:10AM-11:56PM	30 min 40 min 60 min	30 min 40 min 60 min
404	Westfield Ave., Federal Street	184	NA	Pennsauken; Cherry Hill Mall; Pennsauken Industrial Park	Wkdy Sat Sun	5:00AM-11:30PM 5:18AM-11:30PM 8:30AM-10:30PM	30 min 40 min 60 min	40/60 min 60 min 60 min
405	Federal Street, Chapel Avenue, Route 537	54	NA	Cherry Hill Mall Garden State Park	Wkdy Sat Sun	6:35AM-9:30PM 8:40AM-9:50PM 11:23AM-6:23PM	40 min 40 min 60 min	40 min 40 min 60 min

TABLE 21A (continued)
 THE EXISTING TRANSPORTATION NETWORK: BUS SERVICE
 CITY TO SUBURB

CAMDEN

Bus Routes (List Major Private)	Spoke Served	Number of Passengers Carried Daily	Employment Markets Served	Times of Service	Peak	Off Peak	Headway
406	Route 70	136	Route 70 Corridor; Pennsauken; Cherry Hill; Route 70 hotels; Cherry Hill Industrial Park; Marlton; Marlton Crossing Shopping Center	Wkdy 5:20AM-12:20AM Sat 5:26AM-12:15AM Sun 5:58AM-9:45PM	10 min 60 min 120 min	35 min 60 min 120 min	
407	Main St./ Route 537	72	Pennsauken; Moorestown Mall	Wkdy 6:37AM-10:40PM Sat 6:40AM-11:15PM Sun 8:30AM-7:30PM	15 min 40 min 60 min	40 min 40 min 60 min	
408	Broadway, Route 47	NA	Gloucester City, Route 47	Wkdy 5:12AM-10:20PM Sat 7:10AM-10:15PM Sun 8:33AM-9:55PM	10/15 min 100 min 60/120 min	60/90 min 100 min IRR	
409	US Route 130	70	US Route 130 corridor, Burlington Coat Factory	Wkdy 5:40AM-12:20AM Sat 5:45AM-12:05AM Sun 5:17AM-11:06PM	15/20 min 60 min 70 min	30 min 60 min 90 min	
410	Broadway, Route 77, Route 45	5	Gloucester City, Route 45 shopping centers	Wkdy 6:50AM-10:30PM Sat 6:50AM-9:30PM Sun 7:20AM-9:40PM	30 min 40/80 min 40/80 min	40/80 min 40/80 min 120 min	
412	Broadway, Route 553, Route 45	NA	Gloucester City Rowan College of NJ	Wkdy 6:10AM-8:10PM Sat 8:10AM-8:10PM Sun No service	30 min 180 min	60 min 180 min	
413	Route 38, Route 541	8	Pennsauken Airport Industrial Park; Cherry Hill; Moorestown Mall; Burlington Memorial Hospital; Burlington Mall	Wkdy 6:10AM-12:14AM Sat 7:56AM-8:55PM Sun No service	30 min 90 min	60 min 90 min	

TABLE 21A (continued)
 THE EXISTING TRANSPORTATION NETWORK: BUS SERVICE
 CITY TO SUBURB
 CAMDEN

Bus Routes (List Major) Indicate where Private	Spoke Served	Number of Passengers Carried Daily	Employment Markets Served	Times of Service	Headway	
					Peak	Off Peak
419	Route 541; River Road	43	Pennsauken; Pennsauken Industrial Park (River Rd) Burlington Mall ³	Wkdy 5:30AM-12:59AM Sat 5:50AM-12:50AM Sun 6:15AM-10:45PM	20 min 60 min 120 min	60 min 60 min 120 min
450	Broadway, Cuthbert Blvd.	NA	Black Horse Center; Cherry Hill Mall	Wkdy 5:30AM-8:35PM Sat 8:10AM-8:40PM Sun 8:40AM-8:40PM	30 min 60 min 120 min	45 min 60 min 120 min
451	Haddon Avenue, Haddonfield- Berlin Road	15	Cherry Hill; Village of St. Mary's; West Jersey Hospital- Voorhees; Echelon Mall	Wkdy 6:20AM-5:30PM Sat No service Sun No service	30 min	60 min
452	River Road, Broadway	238	Pennsauken	Wkdy 6:10AM-6:40PM Sat 6:10AM-6:10PM Sun 8:38AM-6:15PM	30 min 60 min 90 min	30 min 60 min 90 min
453	Broadway, Mt. Ephraim Avenue; Ferry Avenue	NA	NA	Wkdy 6:06AM-6:06PM Sat 6:13AM-6:13PM Sun No service	30 min 60 min	30 min 60 min
457	Kings Highway, Broadway	4	Gloucester City; Cherry Hill; JFK Hospital; Mt. Laurel; Fellowship Rd; East Gate Industrial Park; Moorestown Mall	Wkdy 6:10AM-8:10PM Sat 7:10AM-8:10PM Sun No service	30 min 60 min	60 min 60 min

CITY TO SUBURB
 THE EXISTING TRANSPORTATION NETWORK: BUS SERVICE
 TABLE 21A (continued)

TABLE 21A (continued)
 THE EXISTING TRANSPORTATION NETWORK: BUS SERVICE
 CITY TO SUBURB

Bus Routes (List Major) Indicate where Private	Spoke Served	Number of Passengers Carried Daily Workers ¹ Total	Employment Markets Served	Times of Service	Headway	
					Peak	Off Peak
459	Laurel Road	4 NA	Camden County College; Echelon Mall	Wkdy Sat Sun	6:15AM-8:15PM No service No service	30 min 60 min
551	AC Expressway	NA NA	Atlantic City Casino/Hotels	Wkdy Sat Sun	NA NA NA	30 min 30 min 30 min

Notes: 1. Reverse—"To Work" passenger trips by Camden residents to reverse commute destinations (excluding Camden and Philadelphia). Trip counts referenced from DVRPC Bus Ridership Survey—1990. Quantities are approximate and do not necessarily reflect current ridership counts in 1992. The survey was conducted between the hours of 5:00AM and 1:30PM and reflects peak and mid-day ridership counts only. Total passenger trips for all purposes throughout the day on each route are not available. This is not a complete listing of all motor bus routes serving Camden.

2. Service on Saturday only.

3. Limited service to Burlington Mall.

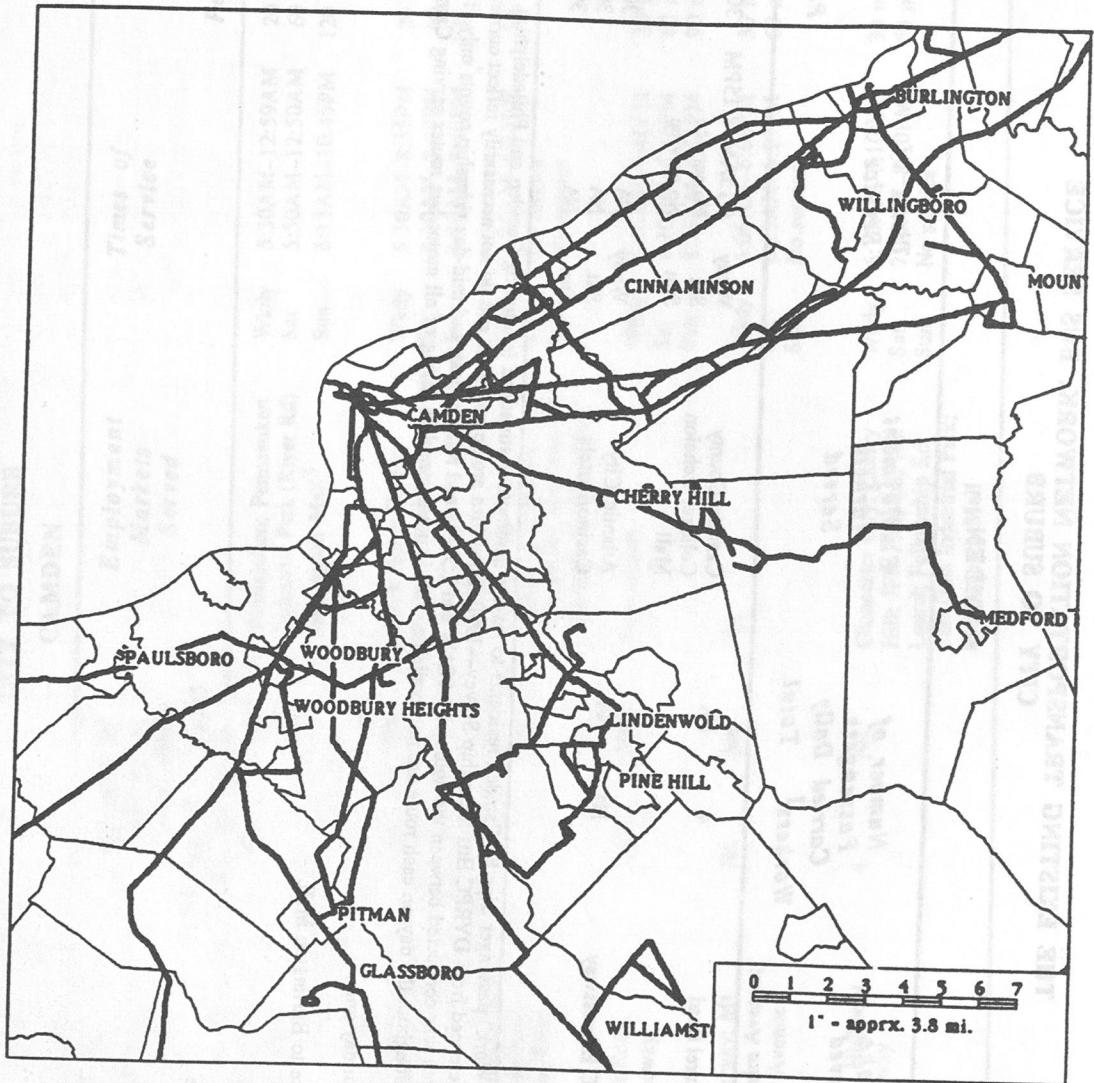
IRR = irregular

NA = Not available

RT = round-trip

Source: New Jersey Transit.

MAP E
NJ TRANSIT BUS ROUTES IN THE CAMDEN METROPOLITAN AREA



Source: NJ TRANSIT

Route 404

Bus Route 404 runs from Philadelphia to the Cherry Hill Mall, primarily along Westfield Avenue and Federal Street. It runs 7 days per week and approximately 18 hours per day. The bus has the following headways: 30 minutes during weekday peak, 40-60 minutes during weekdays off-peak, 40-60 minutes on Saturday, and 60 minutes on Sunday. The bus carries 184 reverse commuters. The main areas of employment that it serves are Pennsauken, the Pennsauken Industrial Park, Cherry Hill, and the Cherry Hill Mall.

Route 405

Bus Route 405 runs from Philadelphia, through Camden to the Cherry Hill Mall, primarily along Route 537 and Chapel Avenue. It runs 7 days per week, approximately 15 hours per day (7 hours on Sundays) and has the following headways: 40 minutes during weekday, 40 minutes on Saturday, and 60 minutes on Sunday. The bus carries 54 reverse commuters. The main areas of employment that it serves are Cherry Hill and the Cherry Hill Mall.

Route 406

Bus Route 406 runs from Medford Lakes to Philadelphia, primarily along Route 70. It runs 7 days per week and approximately 18 hours per day (14 hours on Sundays). The bus has the following headways: 10 minutes during weekday peak, 35 minutes during weekday off-peak, 60 minutes on Saturday, and 120 minutes on Sunday. The bus carries 136 reverse commuters. The main areas of employment that it serves are the Route 70 corridor, Pennsauken, Cherry Hill, the Cherry Hill Industrial Park, Marlton, and the Marlton Crossing Shopping Center.

Route 407

Bus Route 407 runs from the Moorestown Mall to Philadelphia, primarily along Main Street, the Route 537 corridor. The bus carries 72 reverse commuters. The main areas of employment that it serves are Pennsauken and the Moorestown Mall. It runs 7 days per week, approximately 16 hours weekdays, 17 hours on Saturdays, and 11 hours on Sundays. It has the following headways: 15 minutes during weekday peak, 40 minutes during weekday off-peak, 40 minutes on Saturday, and 60 minutes on Sunday.

TABLE 21B
THE EXISTING TRANSPORTATION NETWORK: BUS SERVICE (WITHIN CITY ROUTES)
IN CITY
CAMDEN

<i>Bus Routes (List Major) Indicate where Private</i>	<i>Avenue or Street Served</i>	<i>Number of Passengers Carried Daily In City¹ Total</i>	<i>Employment Markets Served</i>	<i>Times of Service</i>	<i>Headway</i>
400	Mt. Ephraim Ave.; Broadway	27	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
401	Broadway	NA	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
402	Broadway	NA	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
403	Haddon Avenue	NA	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
404	Federal Street, Westfield Avenue	216	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
405	Federal Street	51	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
406	Federal Street, Marlton Pike	57	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
407	Federal Street	14	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
408	Broadway	NA	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—

TABLE 21B (continued)
 THE EXISTING TRANSPORTATION NETWORK: BUS SERVICE (WITHIN CITY ROUTES)
 IN CITY
 CAMDEN

Bus Routes (List Major) Indicate where Private	Avenue or Street Served	Number of Passengers Carried Daily In City ¹ Total	Employment Markets Served	Times of Service	Headway
409	Transportation Center, US 30	14	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
410	Broadway	7	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
412	Broadway	NA	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
413	Admiral Wilson; Broadway	NA	Cooper Hospital; Rutgers Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
419	Broadway, River Road, State St.	NA	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
450	Cooper; Broadway; Morgan	NA	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
451	Haddon Ave.	21	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	—SEE TABLE 21A—
452	Kaighn; River Road; Broadway; Market; Cooper	437	Cooper Hospital, Rutgers, Government Offices, General Electric, Aquarium	—SEE TABLE 21A—	—SEE TABLE 21A—

TABLE 21B (continued)
 THE EXISTING TRANSPORTATION NETWORK: BUS SERVICE (WITHIN CITY ROUTES)
 IN CITY

CAMDEN					
Bus Routes (List Major) Indicate where Private	Avenue or Street Served	Number of Passengers Carried Daily In City ¹ Total	Employment Markets Served	Times of Service	Headway
453	Broadway, Van Hook	NA	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	
457	Broadway	6	Cooper Hospital, Rutgers, Government Offices	—SEE TABLE 21A—	
461	Transportation Center to Aquarium	NA	Cooper Hospital, Rutgers, Government Offices ²	—SEE TABLE 21A—	

Notes: 1. In City—"To Work" passenger trips by Camden residents to destinations within Camden. Trip counts referenced from DVRPC Bus Ridership Survey—1990. Quantities are approximate and do not necessarily reflect current ridership counts in 1992. The survey was conducted between the hours of 5:00 AM and 1:30 PM and reflect peak and mid-day ridership counts only. This is not a complete listing of all motor bus routes serving Camden.

2. Weekend only.

NA = not available

Source: New Jersey Transit.

Route 409

Bus Route 409 runs from Trenton to Philadelphia, primarily along US Route 130. It runs 7 days per week and approximately 19 hours per day. The bus has the following headways: 15–20 minutes during weekday peak, 30–60 minutes during weekdays off-peak, 60 minutes on Saturday, and 120 minutes on Sunday. The bus carries 70 reverse commuters. The main area of employment that it serves is most of the US Route 130 corridor.

Route 419

Bus Route 419 runs from Burlington to Philadelphia, primarily along the River Road riverfront corridor. It runs 7 days per week, approximately 19 hours per day, and has the following headways: 20 minutes during weekday peak, 60 minutes during weekdays off-peak, 60 minutes on Saturday, and 120 minutes on Sunday. The bus carries 43 reverse commuters. The main areas of employment that it serves are Pennsauken, Pennsauken Industrial Park, the entire River Road Area, and the Burlington Center Mall.

Route 452

Bus Route 452 runs from Camden to Pennsauken, primarily along River Road. It runs 7 days per week, approximately 24 hours per day, and has the following headways: 30 minutes on weekdays, 60 minutes on Saturday, and 90 minutes on Sunday. The bus carries 238 reverse commuters. The main area of employment that it serves is the River Road Area, Pennsauken.

F. Bus Service—In City

Table 21B refers to the bus service within the city. As indicated in the last section, many bus lines that serve the city of Camden originate outside of the city. Most of these were discussed in the previous section. The following routes originate within the city: Routes 450, 451, 452, 453, 457, and 461. (It should be noted that the primary roads served refer only to the in-city portion of the trip; this should be combined with Table 21A in order to obtain a more complete understanding of the route).

Route 450

Bus Route 450 runs from Camden to the Cherry Hill Mall, primarily along Broadway and the Fairview section of Camden. The main areas of employment that it serves are Rutgers University–Camden, Cooper Hospital, numerous small local retailers, and government offices. The bus runs 7 days per week, 12 hours per day and has the

following headways: 30 minutes during weekday peak, 45 minutes during weekday off-peak, 60 minutes on Saturday, and 120 minutes on Sunday.

Route 451

Bus Route 451 runs from Camden to the Echelon Mall, primarily along Haddon Avenue. It serves the small retail and service sectors in the local area, and Our Lady of Lourdes Hospital. The bus runs only on weekdays for approximately 11 hours per day and has the following headways: 30 minutes during peak and 60 minutes during off-peak.

Route 452

Bus Route 452 runs from Camden to Pennsauken, primarily along Kaighn, Broadway, Market, and Cooper. The main areas of employment that it serves are Rutgers University, Cooper Hospital, the NJ State Aquarium, and local retailers. It will also serve the Campbell Soup Headquarters when it occupies its new office building. The bus runs 7 days per week and approximately 24 hours per day. It has the following headways: 30 minutes on weekdays, 60 minutes on Saturday, and 90 minutes on Sunday.

Route 453

Bus Route 453 runs from Camden to Woodlynne, primarily along Cooper, Federal, Broadway and Van Hook. Areas of employment served are: Rutgers University, Cooper Hospital, and small retailers and government offices in the center of the city. The bus runs 6 days per week, and 12 hours per day. It has the following headways: 30 minutes during weekdays and 60 minutes on Saturday.

Route 405

Bus Route 405 runs from Philadelphia, through Camden to the Cherry Hill Mall, primarily along Federal Street. The main areas of employment that it serves are Rutgers University, Cooper Hospital, local retailers, and government offices. The bus runs 7 days per week and approximately 15 hours per day (7 hours on Sundays). It has the following headways: 40 minutes during weekday peak, 40 minutes during weekday off-peak, 40 minutes on Saturday, and 60 minutes on Sunday.

Route 457

Bus Route 457 runs from Camden to the Moorestown Mall, primarily along Broadway in Camden. The main areas of employment that it serves are Rutgers University and Cooper Hospital. The bus runs 6 days per week and approximately 14 hours per day.

It has the following headways: 30 minutes during weekday peak, 60 minutes during weekday off-peak, and 60 minutes on Saturday.

Route 461

Bus Route 461 (the so-called Aqualink) runs between the Transportation Center and the New Jersey State Aquarium. It runs only on weekends and public holidays, between 9:30 AM and 5:30 PM, with 15 minute headways.

G. Alternatives to Bus and Rail—City to Suburb

Table 22A refers to alternatives to public transport within the region. Camden County provides three basic types of transportation service: Dial-a-Ride, subscription bus, and fixed route. The Dial-a-Ride service is a demand-responsive system where individuals are collected at their homes and taken to specific destinations. Reservations are generally required 24 to 48 hours in advance. This service is provided for all trip purposes.

The subscription bus services act as a collection system going from numerous designated pick-up points to a limited number of destinations. Subscription services mainly serve shopping malls, medical centers, and adult day care or senior citizen centers. If riders' homes are distant from a designated stop, they can usually arrange to be picked up at their place of residence. Advance notice is often required for these services.

Fixed-route services are usually for the general public, unlike the Dial-a-Ride and subscription services, which are primarily (though not exclusively) for elderly and disabled individuals. These services operate as a traditional bus route. County transportation is most often provided five days a week but varies by area of location. Generally, the systems operate only during the daytime and often follow the county workday of 8:30 AM–4:30 PM. Given the schedules and type of service offered, these county-provided transportation systems are not useful for commuting to work and are, therefore, not a real alternative to public transportation for the working population.

Another alternative form of transportation is taxis. They provide flexible, on-demand service. However, the cost of taxis to work locations in distant parts of the county is so prohibitive that they are not practical for reverse commuting.

H. Alternatives to Rail and Bus—In City

Table 22B refers to alternatives to public transport within the city. In Camden the only major public alternatives to public transportation are the unlicensed taxis. These are privately owned vehicles that operate as taxis but without an official license; they are therefore classified as illegal operators. They operate throughout the city in the same

TABLE 22A
THE EXISTING TRANSPORTATION NETWORK—ALTERNATIVES TO PUBLIC RAIL AND BUS
CITY TO SUBURB
CAMDEN

	Who is Served	Approximate Number	Employment Markets Served	Times of Service	Frequency of Service
DIAL-A-RIDE, JTPA, etc.					
Dial-A-Ride	Elderly/Handicapped	NA	Not Applicable	Wkdy 8:30AM-4:30PM	IRR
Subscription bus	Elderly/Handicapped	NA	Not Applicable	Wkdy 8:30AM-4:30PM	IRR
Fixed route	General Public	NA	Not Applicable	Wkdy 8:30AM-4:30PM	IRR

Notes: IRR = irregular

NA = not available

Source: CUPR interviews with city and county planning, economic development, transportation, and social services professionals, Summer 1992.

TABLE 22B
THE EXISTING TRANSPORTATION NETWORK—ALTERNATIVES TO PUBLIC RAIL AND BUS
IN CITY
CAMDEN

	Who is Served	Approximate Number	Employment Markets Served	Times of Service	Frequency of Service
JITNEYS, UNLICENSED CABS, ELDERLY PICK-UP, etc.					
Gypsy cabs	Camden Residents	NA	Whole Camden Area	IRR	
Campbell Soup Transportation Center	Employees	NA	Campbell Soup	Wkdy 6:00AM-9:00AM 9:00AM-3:30PM 3:30PM-6:00PM	5/10 min 15 min 5/10 min
The Joint Connection	Relatives, family, and friends of New Jersey prisoners	NA	Not applicable	IRR	IRR

Notes: IRR = irregular

NA = not available

Source: CUPR interviews with city and county planning, economic development, transportation, and social services professionals, Summer 1992.

fashion as regular taxis. Due to the nature of these operations it is difficult to determine exactly how many are in service within the city. (A local taxi company estimated that not less than 15 are in service at any given time, but there is no way to verify this figure.) As these unlicensed cabs charge more than regular taxis or public transportation it is fair to assume that they operate in areas that are considered dangerous by regular taxis and at times when other forms of service may not be available to city residents. In this respect they are fulfilling a certain need. Similarly, licensed taxis are available and provide demand service; however, because taxi service is expensive, reverse commuters are not likely to use it as a regular form of transportation.

The Campbell Soup Company operates a van service for its employees. The van, which carries approximately 10 passengers at a time, runs between the Transportation Center and the Campbell Soup headquarters. It operates between 6:00 AM-6:00 PM. During the morning and evening rush hours, 6:00 AM-9:00 AM and 3:30 PM-6:00 PM, two vans provide service every 5-10 minutes. During the middle of the day, one van provides service every 15 minutes.

One social service agency, The Joint Connection, provides transportation to New Jersey prisons because there is no mass transit service available. This service operates primarily on weekends.

VIII. SYNTHESIS OF JOB GROWTH DATA AND EXISTING PUBLIC TRANSIT NETWORK.

Before turning to the challenges that confront NJ TRANSIT and NJDOT, it is helpful to merge the job opportunities data with the existing bus route network to help illustrate the information collected. Generally, a reasonable commute can be defined as anywhere in the vicinity of a city that can be reached in an hour. Using the job growth data contained in Section VI, municipalities with the greatest job growth potential within the 'reasonable commute' distance were mapped. These locations were then overlaid upon the existing bus route network detailed in Section VII. The criterion used to assess the existence of transit service is whether there is direct service. Table 23 and Map F illustrate where service appears to be rich and point out places where service opportunities exist. This illustration is a useful tool to help visualize the public transit route networks and locations where job growth is projected, helping to define an agenda for further study.

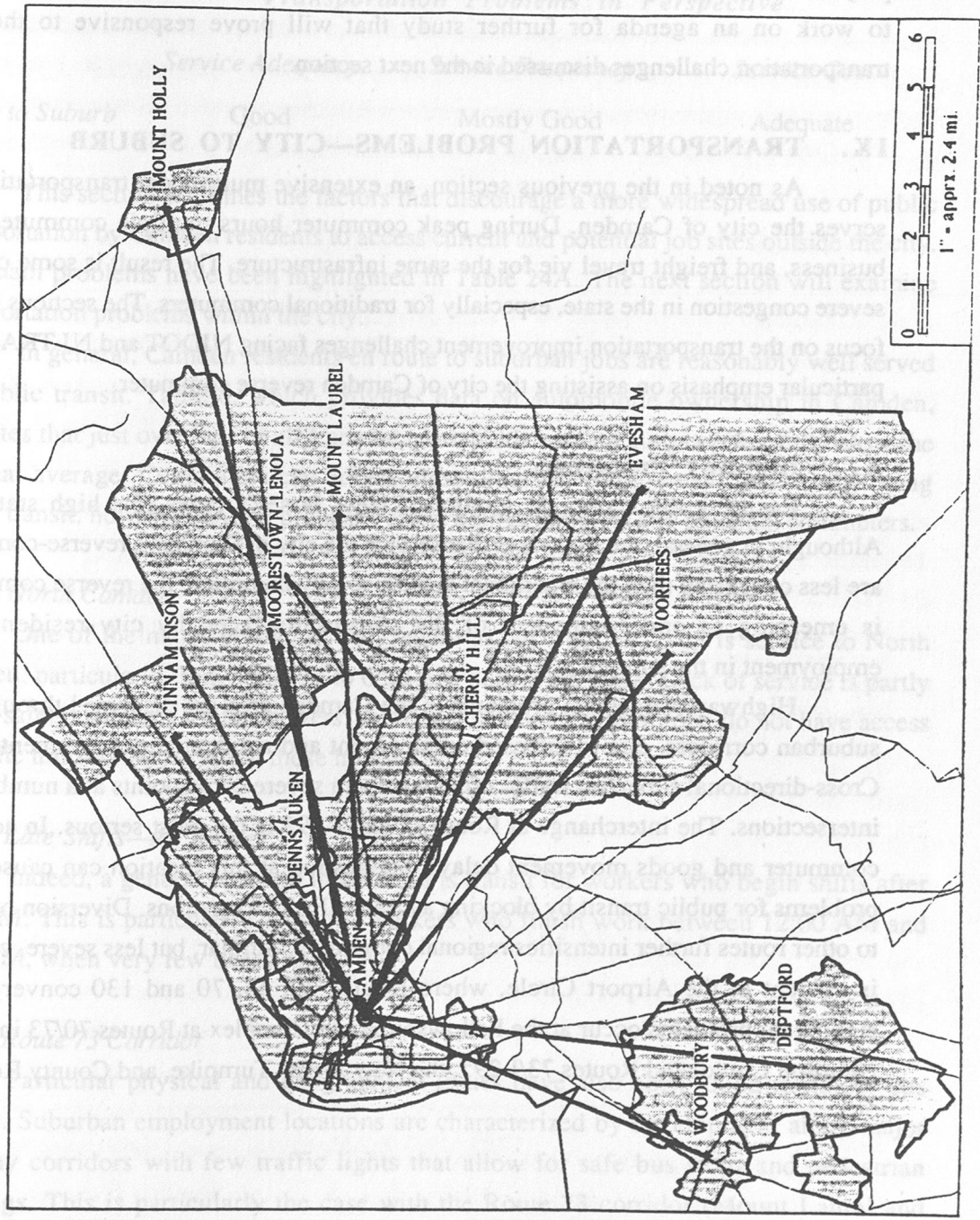
While these are locations where job growth is expected, the true potential for transit demand requires detailed study of specific employment locations, availability of existing services, and the potential for new services.

TABLE 23
MUNICIPALITIES WITH
GREATEST JOB GROWTH POTENTIAL
IN THE CAMDEN AREA

Location	New Jobs	Job Separations	Total	Transit Service Yes/No
Cherry Hill	1,867	7,333	9,200	Yes
Pennsauken	4,859	2,768	7,627	Yes
Mount Laurel	3,573	2,416	5,989	Yes
Evesham	2,837	2,461	5,298	No
Moorestown	1,279	2,158	3,437	Yes
Woodbury	1,493	1,778	3,271	Yes
Voorhees	626	2,014	2,640	Yes
Mount Holly	1,000	1,434	2,434	Yes
Deptford	488	1,783	2,271	Yes
Cinnaminson	1,295	966	2,260	Yes

Note: Rows may not total exactly due to rounding.
Source: CUPR and NJ TRANSIT.

MAP F
EMPLOYMENT DESTINATION DESIRE LINES FOR CENTRAL CITY RESIDENTS
IN THE VICINITY OF CAMDEN
 (Overlaid on Existing Bus Routes)



Source: Projections of Less-Skilled Job Growth 1993-2000 by the Center for Urban Policy Research, Rutgers University, Spring 1993

In addition to the job growth data, the interview data collected generally corroborate that these locations are identified as key for growth. The connection between economic projections and perceptions gathered through interviews allows NJ TRANSIT and NJDOT to work on an agenda for further study that will prove responsive to the specific transportation challenges discussed in the next section.

IX. TRANSPORTATION PROBLEMS—CITY TO SUBURB

As noted in the previous section, an extensive multimodal transportation system serves the city of Camden. During peak commuter hours multiple commuter markets, business, and freight travel vie for the same infrastructure. The result is some of the most severe congestion in the state, especially for traditional commuters. The sections that follow focus on the transportation improvement challenges facing NJDOT and NJ TRANSIT with particular emphasis on assisting the city of Camden reverse commuter.

A. Highway Problems

Ensuring the economic vitality of New Jersey's cities is a high state priority. Although, in general, the highways that service the city of Camden's reverse-commute trips are less congested than the traditional suburb-to-city commute, the reverse commute issue is emerging as one component of the constraints faced by city residents seeking employment in the suburbs.

Highway congestion problems in the Camden area are dispersed throughout the suburban corridors, due to diffused employment and residential development patterns. Cross-directional suburban traffic often results in severe chokepoints at a number of key intersections. The interchange at Route 42 and I-295 is the most serious. In addition to commuter and goods movement delays, congestion at this location can cause indirect problems for public transit by blocking access to PATCO stations. Diversion of vehicles to other routes further intensifies regional congestion. Similar, but less severe, congestion is evident at the Airport Circle, where Routes 30, 38, 70 and 130 converge. Other significant problems occur at the Fellowship Road Complex at Routes 70/73 intersection (Marlton Circle) and Routes 73/I-295, the New Jersey Turnpike, and County Route 673.

B. Public Transit Problems

Transportation Problems in Perspective

	<i>Service Adequacy</i>	<i>Service Frequency</i>	<i>Service Cost</i>
<i>City to Suburb</i>	Good	Mostly Good	Adequate

This section examines the factors that discourage a more widespread use of public transportation by Camden residents to access current and potential job sites outside the city. The main problems have been highlighted in Table 24A. The next section will examine transportation problems within the city.

In general, Camden residents en route to suburban jobs are reasonably well served by public transit. Table 8, which provides data on automobile ownership in Camden, indicates that just over half of all Camden households own an automobile, well below the national average. Commuters can access most suburban employment markets by using public transit; however, several problems affect both commuters and potential commuters.

North Camden

One of the major problems with regard to bus transportation is service to North Camden, particularly from 6:00 PM to 6:00 AM during the week. Lack of service is partly due to safety concerns for bus drivers. Residents in that area, therefore, do not have access to public transportation during those hours.

Late Shifts—All Routes

Indeed, a general problem in all areas is transit for workers who begin shifts after 6:00 PM. This is particularly acute for workers who finish work between 12:00 AM and 4:00 AM, when very few buses run.

Route 73 Corridor

Particular physical and geographical issues have also been found to hinder bus service. Suburban employment locations are characterized by development along major highway corridors with few traffic lights that allow for safe bus stops and pedestrian crossings. This is particularly the case with the Route 73 corridor (Mount Laurel and Marlton), which is not well served by public transport even though it is an area of employment growth. In cases such as this, development is often set back from the highway with entrances located at the end of circuitous access roads, making pedestrian access

TABLE 24A
LOCATIONS OF PROBLEMATIC
TRANSPORTATION SERVICE—CITY TO SUBURB
CAMDEN—1992
CITY TO SUBURB

<i>Location</i>	<i>Service Problems or Times</i>	<i>Population Affected</i>
North Camden Bus Routes	6:00 PM-5:00 AM Safety	Local Residents, Shift Workers
All Bus Routes	12:00 AM-5:00 AM Shift	Employees, Shift Workers
NJ 73 Corridor	Difficult access Cost of commute	Employees, Potential employees
PATCO	Lack of service to employment areas	Employees Potential employees
Congestion on state highways and capacity problems/spot congestion on specific routes, e.g., Glassboro	Peak hours	Commuters in bound and out bound, Employees
Zones 3 and 4 employment locations: Cherry Hill, Deptford Mall, Echelon Mall, Marlton, Voorhees, Glassboro, Mount Laurel	Cost	Unskilled workers, Semi-skilled workers

Source: CUPR interviews with city and county planning, economic development, transportation, and social services professionals, Summer 1992.

TABLE 24B
LOCATIONS OF PROBLEMATIC
TRANSPORTATION SERVICE—CITY
CAMDEN—1992
IN CITY

<i>Location</i>	<i>Service Problems or Times</i>	<i>Population Affected</i>
Some bus routes within Camden, North Camden	12:00 AM-5:00 AM shift	Local residents, shift workers

Source: CUPR interviews with city and county planning, economic development, transportation, and social services professionals, Summer 1992.

difficult. Traditional full-size transit vehicles have difficulty serving such areas due to the time-consuming nature of attempting to wind through development access roads and parking lots to reach work site entrances. Many of the major roadways in the area of these employment clusters have median barriers, further compounding the problem of pedestrian access and stops serving both sides of the street. The expansion of work sites to fairly remote areas with little or no residential housing concentrations has meant that trip densities are too light for two-way passenger movements. The result is that workers in some of the growing employment areas have poor access via public transit.

Congestion

The problem of congestion and the number of stops on state highways tend to lengthen the bus commute, making this an unattractive option for some workers. For example, it can take up to one hour to get to Glassboro by bus, a trip which is normally 25 minutes by car. With regard to congestion, there is no single geographic problem area—problems are dispersed throughout most suburban corridors due to the limited number of radial transportation axes available. This is most true for state highways that traverse the Camden area. The following roads have major congestion/capacity problems: Route 41, 42, 45, 70, 73, and 130/30. These problems, which are particularly acute during the morning and evening peak hours, affect all commuters travelling to and from Camden (inbound and outbound). Spot congestion at system crossroads and/or deficient intersection capacity also occur throughout the region's road system. Primary examples include the Route 42/I-295 interchange, the Route 30/130/70/38 interchange (Airport Circle), Route 70/73 intersection (Marlton Circle), Route 70/County Route 673 (Springdale Road) intersection (under construction), and Route 73/I-295/NJ Turnpike/County Route 673 (Fellowship Road) complex. These problems affect both inbound and outbound traffic. All of the above problems increase the time for reverse commuting, especially with regard to bus transit. Rail transit, while not suffering from the problems outlined above, serves few major suburban employment markets, a factor that hinders this mode's usefulness to the reverse commute.

Zones 3 and 4—Cost

A further problem, especially given Camden's poor economic position, is the high cost of interzonal commuting, which is a possible deterrent to job seekers with little disposable income. The monthly cost of commuting is also a problem for those employed in low-paying jobs in the services sector. This is a serious problem, given that this sector is the most likely source of employment for many Camden residents. The cost of a one-way

ticket from Camden to Zone 1 (Camden, Woodlynne) is \$1.00; to Zone 2 (which includes the following major employment sites: Cherry Hill [west of NJTP], Collingswood, Deptford, Gloucester City, Haddonfield, Pennsauken and Woodbury) is \$1.40; to Zone 3 (which includes Cherry Hill [east of NJTP], Cinnaminson, Deptford Mall, Echelon Mall, Lindenwold, Marlton, Moorestown, Runnemede, Voorhees and West Deptford) is \$1.70; for Zone 4 (which includes Edgewater Park, Glassboro, Mount Laurel, Sicklerville, Willingboro) is \$2.05, and for Zone 5 (Burlington) is \$2.30. Monthly and 10-trip passes that lower the cost of commute somewhat are available; it can nevertheless be seen that cost is a factor for those employed in distant, low-paying jobs (especially in the growing employment centers situated in Zones 3 and 4).

In sum, while the area is generally well served by public transit, the specific problems highlighted above adversely affect the number of reverse commuters.

X. TRANSPORTATION PROBLEMS—IN CITY

A. Highway Problems

Significant highway problems that affect both residents and the movement of goods through the city include the following:

- Severe congestion on state highways providing access to the city of Camden during morning and evening peak hours.
- Poor local roadway access to the Camden waterfront for both autos and trucks, especially along Delaware Avenue and Front Street.
- Lack of signs to direct visitors to major destinations.
- Heavy congestion on I-676 northbound during morning peak commuter hours from the Ben Franklin Bridge toll plaza to Mickle Boulevard and south to Atlantic Avenue.
- Heavy congestion at Mickle Boulevard.
- Congestion at I-295 and Route 42 and 76.
- Truck traffic through local streets from Delaware Avenue to Seventh Street.

B. Public Transit Problems

Transportation Problems in Perspective

	<i>Service Adequacy</i>	<i>Service Frequency</i>	<i>Service Cost</i>
<i>In City</i>	Very Good	Mostly Good	Good

Table 24B refers to locations within the city of Camden where transportation problems currently exist.

In general, public transportation within Camden is good. The bus system connects residential neighborhoods with all the major employment centers in the central business district as well as most outlying areas of the city. Most of the well patronized buses run regularly, at ten- to fifteen-minute intervals during peak hours. As none of the buses run before 5:00 AM and few run after 12:00 AM, Camden residents who work shifts during these hours are unable to use public transportation. Residents in North Camden also are inconvenienced due to a less frequent bus service, especially after 6:00 PM. Generally, roadways within the city suffer from congestion, which often slows down commuting times within the city (examples being I-676 northbound during the morning commuter hours, from the Ben Franklin Bridge toll plaza to Mickle Boulevard, and even as far south as Atlantic Avenue; additionally, on I-295 where it meets Routes 42 and 76).

XI. PROBLEMS OTHER THAN TRANSPORTATION

In addition to the various transportation problems that were outlined in the previous sections, there are a number of other impediments that limit people from securing jobs. Based on interviews conducted with professionals from both the city of Camden and Camden County, this section identifies the most important obstacles facing unemployed or underemployed Camden residents. In general, the most serious problems cited (besides the nature of the economy) were a lack of adequate skills, the poor work history or lack of prior work experience, and lack of information about possible job sources. Transportation insufficiency is not perceived as a serious issue in Camden residents' search for employment. This is particularly true for jobs within the city. However, for jobs offered outside the city, cost rather than the availability of transportation is indeed an issue.

Table 25A rates the problems unemployed people encounter in securing work. Table 25B describes in more detail the various problems city residents face in their job search. Both of these issues will be discussed below.

TABLE 25A
 TRANSPORTATION IN THE
 CONTEXT OF OTHER PROBLEMS
 CAMDEN—1992

<i>Type of Problem</i>	<i>Importance</i>
Inadequate Skills	High
Prior Work History	High
Communication of Work Opportunities	Moderate
Child Care	Moderate
Transportation Insufficiency	Moderate

Source: CUPR interviews with city and county planning, economic development, transportation, and social services professionals, Summer 1992.

TABLE 25B
 SPECIFIC PROBLEMS OTHER THAN TRANSPORTATION
 CAMDEN—1992

<i>Type of Problem</i>	<i>Description</i>
Skills Training	Lack of basic skills, i.e., simple math and communication; also, a lack of vocational skills.
Work Histories	May have been on welfare or had a bad work history; or have been without a job for a considerable length of time.
Communication or Knowledge of Job	Lack of knowledge of many of the outlying jobs as they are not always advertised.
Child Care	Insufficient, affordable, reliable, and conveniently located child care is available.
Other	Lack of proper dress and a degree of racial discrimination.

Source: CUPR interviews with city and county planning, economic development, transportation, and social services professionals, Summer 1992.

It appears that the most serious obstacle to Camden residents acquiring jobs is a lack of adequate skills. Many residents lack basic education skills; in addition to this, most workers lack occupational skills. Businesses are not particularly interested in training new employees, especially given the current competition for jobs. This means that only low-paying less-skilled jobs are open to most of Camden's unemployed. Unfortunately, these few available jobs are subject to extensive competition.

The second most important problem confronting job seekers is poor work history or lack of prior work experience. Employers seek experienced workers who understand the schedule and demands of regular employment. Workers who have been on welfare, or who have not been employed for a considerable period of time, experience difficulty in finding employment. Potential employers seem to react particularly negatively to those who have been on welfare, with claims that this group of people has the most difficulty adapting to a work regimen. In addition, bad work history or criminal records also tend to foreclose their chances of employment.

A further impediment confronting those looking for work is poor information about where jobs exist. Job seekers are unaware of available jobs, particularly those that are offered outside the city. This is compounded by the fact that many jobs are not advertised at all, or are advertised only via signboards in the windows of individual stores. Lack of affordable and conveniently situated child care facilities is also an important issue preventing many of Camden's residents from seeking work. This is especially true for the large number of working, single mothers in Camden.

Transportation insufficiency is not perceived as a serious issue in Camden residents' search for employment. This is particularly true for jobs within the city. However, for jobs offered outside the city, cost rather than the availability of transport is an issue. Given that many jobs are not advertised, cost is an issue if work seekers want to scout various outlying areas for a job. Lack of transit could also prevent a job seeker from accepting a job offer for a shift that has no public transportation, or when the cost of the commute is too high relative to salary.

XII. TRANSPORTATION STRATEGIES

Over the past three years NJDOT, NJ TRANSIT, Camden County, and the city of Camden have been working together to structure a transportation improvement strategy to upgrade substandard facilities and relieve congestion. The strategies and planned improvements presented in this section represent achievement of the following NJDOT and NJ TRANSIT investment objectives for the city of Camden and the region.

1. Improve and preserve the existing system and enhance safety.
2. Improve access to the regional transportation network.
3. Improve highway operations and alleviate congestion.
4. Encourage Greater Use of Public and Nonstandard Transportation
5. Continue the TEC Outreach Program.
6. Implement traditional transit service strategies.
7. Advance nontraditional transit service strategies.
8. Implement major new transit initiatives.

A. Highways

By statute, the focus of this report is on reverse-commuting problems and opportunities. This relates primarily to public transportation (bus and rail) services. However, Sections IX, X, and XII on existing highway problems and strategies, respectively, have been included to provide a view of the comprehensive approach being advanced to improve transportation in and around New Jersey's largest cities. The Urban Transportation Supplement report is not intended to be a comprehensive detailed analysis and assessment of all cities' transportation infrastructure needs.

1. Improve and Preserve the Existing System and Enhance Safety

Rehabilitation and replacement of deficient bridges and roads, including safety improvements, will continue to be a top priority for state transportation investments. NJDOT will also continue to give a very high priority to resurfacing, rehabilitating, and reconstructing state highways. These improvements, which often include shoulder widenings and drainage work, prolong the life of the facility and provide a smoother, safer, and often quicker journey. Examples of bridge investments for the Camden region are:

- The US Route 30 Bridge replacement over Cooper River
- The Morgan Boulevard Bridge over Newton Creek
- Baird Boulevard Bridge over Cooper River

The movement of freight is vital to the state's economy. While the manufacturing sector has declined in the past two decades, it still remains an important element of the economy. The Port of Camden moves vast amounts of import and export freight and must rely on an efficient transportation system to maintain its competitiveness. Investment in rebuilding and maintaining routes providing access to ports and railheads is a key element in NJDOT's strategy to maintain the competitiveness of Port Camden.

Examples of projects that will improve highway connections and facilitate goods movement to the waterfront include:

- The Delaware Avenue extension to Clinton Street
- Pearl Street improvements to I-676
- US Route 30 improvements from Baird Boulevard to Federal Street

2. Improve Access to the Regional Transportation Network

State policy is to deemphasize investment in major capacity increases in favor of investment in system preservation and system management. However, as the state's transportation system developed over the decades, certain connections between segments in the system were not made. These "gaps" in the system detract from its efficient operation and hinder its ability to move people and goods as effectively as possible. Perhaps the most obvious of these gaps is the missing links in the state's Interstate System, which are being addressed by the following initiatives.

- A study by NJDOT of the Route 42 Freeway, Interstate Route 295, and Interstate Route 76 corridor.
- A study by the NJ Turnpike to explore, design and construct a complete US Route 130/Turnpike interchange. This will allow greater diversion to the Turnpike bridge and I-95.
- A study by the NJ Turnpike Authority of I-295/NJ Turnpike to Atlantic City Expressway.

3. Improve Highway Operations and Alleviate Congestion

Several strategies to address congestion will be pursued through investments to use existing highways more efficiently. The traditional means of addressing congestion include building highways on new alignment, widening existing highways by adding new through lanes, and building new interchanges to replace at-grade intersections. Within the past few years, however, this type of improvement has been increasingly difficult to build, due to rapidly increasing costs, increasingly more stringent environmental restrictions, and congestion. The strategies outlined below represent NJDOT's broad program for improving highway operations.

Highway Operational Improvements

Since it is not possible to build our way out of congestion, given the density and environmental constraints cities face, the Department is focusing on improving the operation of existing highways to reduce the need for physical capacity expansions, and to invest in system management.

The term "system management" is given to investments that improve the operational sufficiency of existing transportation systems to move people and goods with little or no physical construction. Improvements in this broad category are typically much more "doable" than major capacity increases in terms of cost, environmental restrictions, right-of-way needs, community opposition, and time and money required for design. Highway operational improvements consist of relatively low-cost, small-scale improvements made to relieve spot congestion problems. The following improvements, classified as operational improvements, are under study and development by NJDOT:

- Marlton Circle
- Route 73, Fellowship Road to Church Road

Traffic Management

In recent years there have been significant advances in the application of new technologies to ease traffic congestion. Incident management and motorist advisory/diversion systems are under evaluation for their effectiveness in easing major congestion due to accidents on key roadway segments. The Department is currently developing the Metropolitan Area Guidance Information Control (MAGIC) system, which will be implemented as part of the newly created South Jersey Traffic Management program.

In the future, the Department will investigate the feasibility of installing intelligent vehicle/highway systems (IVHS) technology in which sensors in the highway or along the highway right-of-way can interact with complementary receptors in vehicles, advising motorists of any congestion or problems ahead and suggesting alternate routes.

Traffic flow can be substantially improved with the implementation of computerized traffic signal control systems. Traffic engineers have found that improving the efficiency of signal systems can stretch a road's capacity by up to 25 percent without widening, thus yielding significant congestion relief and air quality benefits for a modest cost. The Department has plans to computerize traffic signals on the major segments of Routes 30, 38, 70 and 73.

Invest in Selective Capacity Improvements

Although capacity construction projects are being deemphasized as congestion relief measures, the Department is making investments in capacity expansion where they are carefully targeted to shape growth and leverage economic opportunities in strategic locations. Major capacity investments under consideration include:

- Route 42 widening from Route 55 to I-295
- I-295/42/76 Complex design
- Routes 70/38 lane addition and jughandles

4. Encourage Greater Use of Public and Nonstandard Transportation

The New Jersey Traffic Congestion and Air Pollution Control Act—the state response to the 1990 Federal Clean Air Act Amendments (CAAA)—is lending impetus to the efforts undertaken by the city of Camden to reduce automobile traffic in and through the city. A major component of these efforts is the encouragement of greater use of public transit and van and car pooling through the following strategies:

- Legislation that will mandate large employers statewide to increase ridesharing;
- Legislation that will allow employers to give employees using transit a \$60 per month rebate;
- The establishment of transportation management associations (TMAs) that will assist businesses in promoting and coordinating employee ridesharing programs. The Cross-County TMA serves Camden and Burlington counties.

5. Continue the TEC Local Outreach Program

NJDOT and NJ TRANSIT staff will continue the annual outreach effort that began three years ago. This program affords Camden County and the city of Camden officials the opportunity to submit their top transportation needs and current project priorities to the NJDOT for possible project development and state funding. The process includes annual meetings with NJDOT management and is considered a major opportunity for Camden County and the city of Camden officials to gain direct access to the NJDOT project pipeline.

B. Public Transit

Agenda Setting

Focusing attention on one transportation market, the reverse commute, helps set an agenda that targets improvements. The transportation problems discussed in Sections IX and X were reported in interviews with city officials, social service agencies, and practitioners in the employment search field. The interview sessions did identify some transportation problems in each of the cities: one common problem was the lack of adequate information about transit. However, it is important to note that interviewees in each city did not rate "transportation insufficiency" as the major problem relative to gaining and keeping employment for city residents. In fact "inadequate skills" was consistently noted as more critical, along with other factors such as current economic conditions, lack of adequate child care, and communication of work opportunities.

Before detailing the strategies that can best serve Camden, it is important to respond to the issue of cost and fares. The comparative costs between public transit and autos is predicated upon the cost of driving and the availability of an auto. Provided that a worker drives a car, suburban commuting rarely incurs major toll or parking costs; therefore, the perceived out-of-pocket driving costs are low. Interviews raised the issue that transit fares seemed high in comparison. However, the recent Comprehensive Energy Policy Act provides tax incentives to employers who subsidize employee fares. Employers can provide a tax-free benefit to their workers worth up to \$60 per month towards the purchase of a transit ticket. This benefit can significantly reduce, if not completely offset, the fare on NJ TRANSIT bus services. For example, NJ TRANSIT's one-zone and two-zone monthly bus fares in South Jersey are \$37 and \$49, respectively. Many of the major suburban employment clusters outside the urban areas examined in the Urban Transportation Supplement can be reached by a one- or two-zone bus trip.

The issue of bus stop signs and shelters was also raised. Both in urban and suburban areas, bus stop signs and shelters are controlled by the local government and NJDOT (for code conformance). Another local responsibility is parking enforcement. When bus stops are designated but parking restrictions are not enforced, buses cannot exit traffic flow and use the bus stop zone, effectively undermining one of the important purposes of bus stops as a congestion-management tool. With greater movement for buses, traffic flows more smoothly and air quality is improved. Another purpose served by bus stop signs and shelters, also reported by interviewees, is in the promotion of transit for both the regular rider as well as the non-user. This is an effective form of public communication about where routes go. Bus stops need to be designated and parking

enforced so that buses can exit and enter the traffic flow, easing congestion, ensuring curbside access for passenger safety and accessibility, and providing an important promotion and visible reference for public transit, thereby improving communication about services.

Implementation of improvements to the existing service network and infrastructure described below requires that they be evaluated and subjected to rigorous review to prepare them for inclusion in NJ TRANSIT's operating and/or capital budgets. Annually, NJ TRANSIT seeks appropriations to meet its operating budget. Although recent pressures for NJ TRANSIT to reduce expense growth and cut costs are not central to this Urban Transportation Supplement, they are a limiting factor on the ability of NJ TRANSIT to implement projects.

Targeted Strategies

Tables 24A and 24B note locations or corridors and transportation problems reported through the interview process. The following project descriptions are organized into either traditional or nontraditional service strategies and major new initiatives.

6. Implement Traditional Transit Service Strategies

Traditional service strategies refer to those projects, large or small, that are designed to enhance the existing bus, rail and light rail transportation network. Traditional service strategies concentrate on the basic building blocks used by all public transit providers. Schedule improvements and service modifications are the result of a constant process that culminates in quarterly schedule changes. Traditional service strategies, in many cases, reflect service modifications through schedule changes—adjusting running time to meet worksite hours, extending service to meet closing hours at shopping malls, and so forth.

Traditional Service Project Descriptions

Bus Route Revisions and Scheduling Changes. NJ TRANSIT recently completed a study of the reverse commute options for South Jersey, and the result of that focus was the implementation of a number of reverse commute bus services. In the Camden area, NJ TRANSIT implemented new service to the Route 73 corridor in Marlton (Evesham Township, Burlington County). This reverse commute service connects Camden with the growing employment area of Route 73 between Lincoln Drive and the Marlton Circle. Service is operated on an approximate 30-minute peak hour frequency and an hourly frequency during midday on weekdays. NJ TRANSIT also implemented new service to the Airport Industrial Park in Pennsauken (Camden County). Two round-trips during each

peak hour period on weekdays operate between Center City, Philadelphia, Camden, and the Industrial Park, geared to the work-shift times of the area. On a route that historically served reverse commuters from the Camden area to Cherry Hill, additional trips were added to serve the second and third shifts. These modifications were made at little or no extra operating cost and are the sort of service improvement that NJ TRANSIT continually seeks. Sunday service on Routes 413 and 457 would be added if funding is available. Also, late night and weekend service would be added on Route 451.

Late night and evening service in the Camden area remains problematic with security the major concern. This serves to limit ridership even on those routes that do operate and makes any growth in the system unlikely. Two programs have been implemented that are targeted to improve safety on the system. To improve the safety of commuters traveling on the existing system at night, NJ TRANSIT has implemented "Request a Stop," where a rider can request that the driver stop closer to their destination. Another recent program targeting passenger and community safety is the TOP program—Transit on Patrol. Using the NJ TRANSIT bus radio system, all bus operators, supervisors, and other personnel are asked to use the radio system to report suspicious behavior they may see on their buses or along their routes. The dispatch center calls the community police and relays the information. The program has been successful in reporting 390 incidents between start up in June and October 1992.

7. Advance Nontraditional Transit Service Strategies

Nontraditional service strategies refers to a newly developed Suburban Initiatives program that is seeking new ways for transit to serve suburban travel needs without the constraints of standard bus and rail service alternatives. With the Federal Clean Air Act Amendments (CAAA) of 1990, the Suburban Initiatives program becomes an important component of compliance. The urban centers in the state of New Jersey are all in non-attainment zones. The requirement of the CAAA that employers of more than 100 employees must reduce single-occupant vehicle trips magnifies the importance of looking for transportation solutions for the work commute—traditional or nontraditional, peak direction or reverse commute. NJ TRANSIT, as an integral part of the solution, has made a commitment to a leadership role in defining nontraditional service strategies to help the state meet these mandates. In this role, NJ TRANSIT has a working approach that in fact is pertinent to many of the issues raised in this first Urban Transportation Supplement.

A. NJ TRANSIT's Service Development team has begun a joint partnership with NJDOT to support the suburban transportation management associations (TMAs). This special Suburban Initiatives program is now identifying the potential for nontraditional services within the service area of the TMAs. The TMA service areas include Burlington-Camden, Greater Princeton, the Meadowlands, Middlesex, Monmouth, Morris, and Somerset and comprise a base of approximately 1,800 employees.

B. The Business Transit Alliance (BTA) is an outreach program to businesses through the state. The BTA assists companies located in areas where there is not a TMA. In addition to the traditional BTA services, such as Transit Days and Resources Centers, companies will be able to conduct ridesharing programs for car and van pools. With the help of the BTA, employers will be able to develop their compliance plans and implement Employee Trip Reduction (ETR) programs. There are approximately 2,700 private-sector companies with 100 or more employees in non-TMA service areas, and equally as many local, state and federal agencies that will require special assistance for compliance with the Clean Air Act Amendments, for a total of more than 5,000 potential clients.

Nontraditional Service Project Descriptions

Implement Nontraditional Transit Service in Cherry Hill Township. The Cross County TMA and Cherry Hill have identified opportunities for improved transit service to employment sites including Kings Highway, Cherry Hill Industrial Sites, and Executive Campus. In addition, service to the Cherry Hill Mall and PATCO Hi-Speed Line stations could be expanded if funds were available.

Cross County Connection TMA. Prior to Fiscal Year 1993, NJDOT funded and supported the TMA program for the state of New Jersey. For Fiscal Year 1993 and beyond, NJDOT and NJ TRANSIT have formed a partnership with the TMAs to develop and support an entirely new type of TMA program. The combined new TMA program includes the following:

Projects Required for all TMAs:

- Transit development and promotion
- Business planning
- Computerized ridematching

Projects Optional for TMAs:

- Suburban transit initiatives:
 - Operations, marketing/system assessments
 - Market research, traffic mitigation, park-ride needs
- Clean Air initiatives:
 - Employee transportation coordinator training, travel demand management (TDM) seminars
- Demonstration projects:
 - Compressed work week, guaranteed ride home, telecommuting, parking management, travel demand reduction ordinances

NJ TRANSIT-NJDOT Projects to Support TMAs:

- TDM training program
- Business planning workshops
- Feasibility studies for potential TMAs
- Start-up money for new TMAs
- Clean Air tool kit
- Transit experts assigned to TMAs
- Computerized ridematching
- Technical assistance from NJ TRANSIT and NJDOT

Nontraditional Transit Project. NJ TRANSIT is currently working with Cross County Connection and employers to design innovative new transit services for the employment centers in suburban Camden. These services may include options for Camden city residents.

NJ TRANSIT is surveying area employees to determine origins and destinations, travel patterns, commute habits, and attitudes towards commuting. Employment levels and locations are being assessed. Focus groups with employers are also being conducted. This qualitative and quantitative data will form the basis for recommended transit options.

These innovative transit recommendations will provide new, less-expensive, smaller-scaled transit options to meet the demand for suburban travel. Instead of NJ TRANSIT's traditional fixed bus routes using 40-foot buses, these innovative options may include shuttles from bus stops or rail stations, smaller sized buses operating on fixed routes, "on request" route deviation services, expanded reverse commute services, demand responsive routes, "Dial-a-Commute," shared ride services, subscription buses, van pools, and car pools.

NJ TRANSIT is preparing an operations plan (routes, schedules, staffing, hours and days of service, carrier resources, dispatching, vehicles), a management and administrative plan (staffing and the responsibilities of the public sector, private sector, and contractors), a financial plan (operating and capital costs, ridership and revenue estimates), and an implementation plan (assignment of responsibilities for all primary activities, as well as support activities such as marketing) for services surrounding Camden. Final recommendations are expected by the summer of 1993.

8. Implement Major New Transit Initiatives

Major new initiatives are capital-intensive projects, designed to improve the transportation infrastructure. These projects have all undergone extensive study and conceptual planning; some have been discussed for decades. These projects will provide travel time savings and new travel pattern opportunities for all New Jerseyans, and they will substantially improve the existing bus and rail network in the state. Some of the projects have the potential to open up new worksites for urban residents, improve ambient air quality by replacing vehicle trips with transit trips, and provide access to more job sites. In part, the projects are perceived as tools to support and enhance the economic development in the targeted corridors.

Burlington-Gloucester Corridor Study. This initiative is designed to improve corridor transit services, address population, congestion and air quality problems, and reduce auto dependence. Technologies being studied are a full PATCO Hi-Speed Line, modified PATCO (mostly at grade), light rail and busway technology. Depending upon the selection of a locally preferred alternative, the prime benefit is the potential for faster service to Philadelphia, which increases access to job opportunities for suburban communities surrounding Camden. Also, for Camden residents, the new corridor services radiating outward from Camden would improve accessibility to the suburban job market in the corridors.

A systems planning study has been completed that evaluated 15 alternatives, using maximum or minimum length facilities to Mount Holly or Mount Laurel in the Burlington corridor, and to Glassboro or Mantua in the Gloucester corridor.

The next step is the initiation of a federal Draft Environmental Impact Statement (DEIS) process. During this process, benefits including ridership and market demand will be updated and alternatives will be refined based upon public input and technical work. Selection of the alternatives to be examined in the DEIS is expected to be complete by Fall 1993.

XIII. SUMMATION

A. City's Role

Camden, once one of the East Coast's major industrial support cities, now faces an uncertain future, as do many other cities along the country's eastern seaboard that had developed a traditional manufacturing base. Over the years Camden has lost its importance as a manufacturing center in South Jersey. It still maintains its role as an important node for freight and vehicular traffic and is gradually developing into a center for social services. These activities have not, however, developed to the level that they offset the city's economic decline.

B. Dominant Demographic Trends

The city's population is growing while its number of households is falling because average household size has increased. The housing stock in Camden has worsened considerably during the 1950-1990 period. Overcrowding has become a relatively serious problem in the city. The population mix of the city is changing; there are fewer white and more Hispanic, Asian, and black residents. While there are more people in the prime working age, the proportions of adolescents and elderly have declined. Only slightly more than one-half the households own a car, and that proportion decreased over the decade 1980-1990.

C. Dominant Characteristics of the Labor Force

A growing proportion of the city labor force holds jobs in service-producing sectors. The majority is still engaged in low-level white-collar jobs or low-skilled blue-collar jobs. The two most common occupations of Camden residents are technical/sales and operators/laborers. The relative importance of technical/sales occupations is growing while

that of operators/laborers is declining. Managerial/executive and services jobs are also increasing slightly in significance.

D. Dominant Characteristics of "At-Place" Employment and the Difference Between Employment Characteristics of Resident and Worker Populations

At-place employment in Camden mainly mirrors the characteristics of resident employment. Manufacturing, while still important, is declining; the services sector has grown into a major source of employment. On the other hand, while the relative significance of trade and transportation have risen in terms of resident employment, they have lost ground in at-place employment.

A large number of skilled and managerial functions within the city of Camden economy are filled by commuters from outside the city.

E. Employment Projections

In 1990 total employment in Camden City was 35,479, with the services sector having the largest share of that employment. Projections indicate that there will be a 34 percent increase in all jobs between 1990 and 2000. Camden County and the Camden labor area mirror trends in growth of the city but to a somewhat lesser degree. For the 1990-2000 period, an increase of 17.7 percent is projected for total employment in the county; for the same period, 18.5 percent growth is projected for all jobs in the labor area.

Of all Camden residents, about 40 percent work within the city and the remainder commute to work outside (i.e., the reverse commute). The most common employment destinations (in descending order) are Pennsauken, Mount Laurel, and Cherry Hill. The most significant employment locations are the Route 38 corridor towards Cherry Hill, the Route 70/Route 38 corridor, and locations on both sides of US Route 130. There has been some employment growth in both Burlington and Gloucester counties that is accessible to Camden residents. The largest employers within the city of Camden are the county, city, state, and federal governments; workers and staff employed by Rutgers University and Camden County College; Cooper Hospital, Our Lady of Lourdes Hospital, Plaza Medical Nursing; Quality Foods, Lambersky Poultry, Campbell Soup; NJ TRANSIT, General Electric, MacAndrews & Forbes; and numerous small-scale retailing firms within the downtown area. No existing firm, government office, or institution (hospital, university), however, has more than moderate potential for generating future employment growth. There is also the problem that much of the work that is likely to be generated will be in technical and mid-level managerial occupations that do not fit the skill profile of Camden city residents.

F. Existing Transportation Network

The city of Camden benefits from its past history as a major city within New Jersey and also from its close proximity to Philadelphia. It therefore possesses an extensive transportation network, that provides its population with convenient access to most important employment markets within both New Jersey and Pennsylvania. Numerous interstate highways, federal highways, and major state roads traverse Camden County and the fringes of the city. The city also possesses an extensive road system that allows relatively easy automobile movement in all directions.

The city is well served by both rail and bus transit. The PATCO Hi-Speed Line provides quick and safe access to Philadelphia and to areas within the city. Bus service within the Camden area is extensive and serves most of the employment markets within the city and beyond.

G. Transportation Problems

Because of diffused suburban employment and residential development sites, highway congestion problems in the Camden area are dispersed throughout the suburban corridors. Major choke points that impede travel into and out of the city include the interchange at Route 42 and I-295, the Airport Circle, Routes 70/73 intersection (Marlton Circle), and the Fellowship complex at Route 73/I-295, the NJ Turnpike, and County Route 673. In the city, poor local roadway access to the Camden waterfront for both automobiles and trucks, especially along Delaware Avenue and Front Street, impedes economic development.

Workers who require transportation for late night or early morning shifts either have difficulty in obtaining, or are unable to obtain, public transit. A further problem, especially given Camden's poor economic position, is the relatively high cost of interzonal commuting. This is a possible deterrent to job seekers in this city of the lowest household incomes in the state. A problem with regard to rail service is that the PATCO Hi-Speed Line serves very few major employment markets.

H. Problems Other Than Transportation

In addition to the various transportation problems there are a number of other impediments that preclude people from securing jobs. The most serious of these are lack of adequate skills, poor work history or lack of prior work experience, and lack of information about where potential jobs exist. Transport insufficiency is not generally perceived as a serious issue in Camden residents' search for employment. This is

particularly true for jobs within the city. However, for jobs offered a distance from the city, cost and schedules, rather than the availability of transport, are the main issues.

I. Conclusion

The preparation of this Urban Transportation Supplement marks a beginning. The road and transportation infrastructure network will be extensively overhauled during the next decade and, in consonance with the New Jersey State Development and Redevelopment Plan, central city areas will receive high priority for these capital investments. Public transit deficiencies have been clearly defined; services designed to respond to these deficiencies are in active preparation. How much of this service materializes will be financially dependent and, in any event, will evolve over time as air quality mandates become more imminent and agreements are forged between public transit service providers and employers facing these mandates.

Other deficiencies demand non-financial solutions. The designation of bus stops requires more concerted, cooperative efforts between NJ TRANSIT, municipalities, and NJDOT, since stops must be agreed to by municipalities and NJDOT, and since parking prohibitions at bus stops must be enforced by police forces having jurisdiction over these stops. Design deficiencies—including median barriers, suburban site plans with large setbacks, and the lack of pedestrian amenities—pose more daunting challenges, and suggest the need for new site planning standards and road/sidewalk design accommodations to govern future development approvals and roadway improvement efforts.

In summary, the Urban Transportation Supplement defines an ambitious agenda for transit service improvement, and the update called for by state statute in 1996 will serve as an important milestone for measuring progress.

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Those labor areas are slightly different from the ones used elsewhere in this report. Those labor areas used elsewhere are the New Jersey recognized labor areas. Occupational projections by NJDOT were already undertaken by the ITA labor areas, thus limiting the choices available for aggregation.
See New Jersey Department of Labor, Employment Projections, Volume II: Occupational Outlook for New Jersey and Selected Areas 1988-2000 (Trenton, NJ: New Jersey Department of Labor, October 1988).

A METHODOLOGICAL NOTE ON LESS-SKILLED EMPLOYMENT GROWTH AND LESS-SKILLED JOB SEPARATIONS

LESS-SKILLED EMPLOYMENT GROWTH

Less-skilled employment growth for the period 1993–2000 is estimated by using projections for the year 2000 for the twenty largest occupational growth categories in a county or group of counties (Job Training Partnership Act [JTPA] labor areas) in 1986 and sifting from these occupations those that are typically less-skilled. Less-skilled occupations *would* include salespersons, janitors, parking-lot attendants, waiters and waitresses, stock clerks, factory workers, and so on. Less-skilled occupations *would not* include registered nurses, bookkeepers, cooks, accountants, teachers, sales representatives, truck drivers, and so on. Projections were undertaken for the following JTPA labor area county groups:¹

Atlantic and Cape May
Bergen and Passaic
Burlington and Camden
Cumberland, Gloucester, and Salem
Essex and Hudson
Hunterdon and Somerset
Mercer
Middlesex and Union
Monmouth and Ocean
Morris, Sussex, and Warren

These projections of less-skilled employment growth were obtained from occupational employment projections by the New Jersey Department of Labor (NJDOL) for each of the above geographical areas.²

In order to estimate less-skilled employment growth by individual county and ultimately by municipality within a county, the less-skilled share of all occupations was determined for a county or county group and this ratio applied to total employment projections also by county or county group undertaken by the Center for Urban Policy Research (CUPR) at Rutgers University. For instance, if CUPR determined that of the job growth of all occupations in Bergen and Passaic counties (from the NJDOL projections), less-skilled job growth constituted 60 percent, the 1990–2000 employment projection for each of these counties would be multiplied by 60 percent to obtain a figure for less-skilled employment. These would further be multiplied by 70 percent to account for the seven-year projection period (1993–2000) used for less-skilled employment as opposed to the ten-year projection period (1990–2000) used for total employment.

Less-skilled employment projections were assigned to municipalities by the municipalities' shares of county total employment growth over the period 1970 to 1990. If, for example, Paramus in Bergen County had 40 percent of the county's total employment growth from 1970 to 1990, it would receive 40 percent of the projected less-skilled employment for the county from 1993 to 2000.

Finally, less-skilled employment growth is divided into three categories (basic, retail, and services) according to the existing local distribution of these broad classification types in 1990. Thus, less-skilled employment growth is a fractional share of CUPR's projection of total employment growth. NJDOL's figures for less-skilled employment growth are not used directly because these projections are dated and reflect the much more generous estimates of employment growth typical of a state economy viewed in the mid- to late-1980s. Currently new projections are underway but as of April 15, 1993 are available only at the state level. CUPR's adaptation of these projections anticipates the change in magnitude of (lower) employment projections taking place in the 1993 versus the 1988 projections.

Currently, new NJDOL projections are underway. They are available only at the state level. They show considerably less annual employment growth (–25 percent) and significantly less annual job separations (–50 percent) than prior projections. These numbers are in keeping with the lower projections employed by CUPR in this analysis.

¹ These labor areas are slightly different from the ones used elsewhere in this report. Those labor areas used elsewhere are the New Jersey recognized labor areas. Occupational projections by NJDOL were already undertaken by the JTPA labor areas, thus limiting the choices available for aggregation.

² See New Jersey Department of Labor, *Employment Projections. Volume II: Occupational Outlook for New Jersey and Selected Areas 1986–2000* (Trenton, NJ: New Jersey Department of Labor, October 1988).

LESS-SKILLED JOB SEPARATIONS

Job separations (at the time of this study)³ involve departures from the labor force due to death, ill health, pregnancy, or for personal or undetermined reasons. Job separations are not those jobs that result from individuals moving up the ladder of employment and, through this, the release of jobs that other aspiring workers fill. They thus represent removal from the labor force as opposed to removal from a specific job title.

Job separations are more prevalent where the employment base is large. They are concentrated in the older central core areas of employment, the older close-in suburban areas, or the newer suburban nodes of office space, retail, or industrial development.

Less-skilled job separations are also predicted by occupation for the period 1993–2000. Job separations are determined from procedures recommended by the U. S. Department of Labor and are essentially a percentage share of existing employment at any one time. These types of occupational projections, also available from the New Jersey Department of Labor and found in the prior-listed source, are somewhat less subject to widescale variation than are the occupational employment-growth projections discussed previously.

Using a procedure similar to that discussed above, the less-skilled occupations were sifted from those occupations experiencing the most growth and their average *annual* number of separations tallied. This was multiplied by 7 for the seven-year projection period 1993–2000 and divided by two-thirds to account for all occupations, not just those experiencing the most growth.

Less-skilled employment separation projections are assigned to each municipality in a JTPA labor area according to the ratio of total employment of that municipality in 1990 to total employment in the JTPA labor area, also in 1990. Employment separations are divided among basic, retail, and services categories at the municipal level according to the existing distribution of these types of employment in the municipality in 1990. On a statewide base, the components of annual job openings, i.e., job separations and job growth, are in a ratio of about 2–3 to 1.

WHAT IS THE EFFECT OF JOB GROWTH VERSUS JOB SEPARATIONS?

Much of the above discussion leads to an obvious question: Which is more important—job growth or job separations? The answer is that they are both important for different reasons.

Job growth is the net new addition of jobs to an area. The demand for workers does not bring with it an associated supply of workers. Job separations are losses of workers currently filling job billets in an area with an essentially similar number of workers ready to enter the labor force to take their places. In this case, job demand brings with it an almost equal amount of job supply. Thus, in a labor area, if 1,000 workers leave the labor force due to separations, and labor demand grows by an additional 250 jobs, there is a potential for 1,250 job openings in this labor area. If the community has 500 unemployed and another 900 ready to enter the labor force, the 1,250 openings theoretically could be filled immediately, yet with some workers still remaining unemployed.

For the job aspirant in the central city, both types of employment opportunity are important. Job growth provides net new employment opportunities. Job separations provide few net new employment opportunities from a macro perspective but potentially significantly more opportunities from a micro perspective. The latter is true for the following reason. If the central city of a labor area contains most of the job openings in the form of *separations*, and suburban workers will not go into the central city for employment, this provides a tremendous supply of available jobs to urban workers. On the other hand, if most of the job *growth* is in the suburbs and must be accessed by automobile, even though these are net new jobs, the urban resident, in only 50–75 percent of the cases having an automobile, could be at a significant disadvantage. Thus, each type of job creates a potential for employment with biases towards and biases against different types of workers (urban versus suburban).

A SUBNOTE ON THE ATLANTIC CITY/CAPE MAY AND MERCER COUNTY LABOR AREAS

Both of these labor areas have low levels of less-skilled basic employment. In the Atlantic City/Cape May case, this is due to manufacturing being almost totally eclipsed by services (casino) employment. In the case of Mercer, most of the basic employment that remains is higher skilled. In both of these cases, there is a projection of zero job separations for the basic sector.

³ There are slight definitional changes underway for the 1993 occupational projections.

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