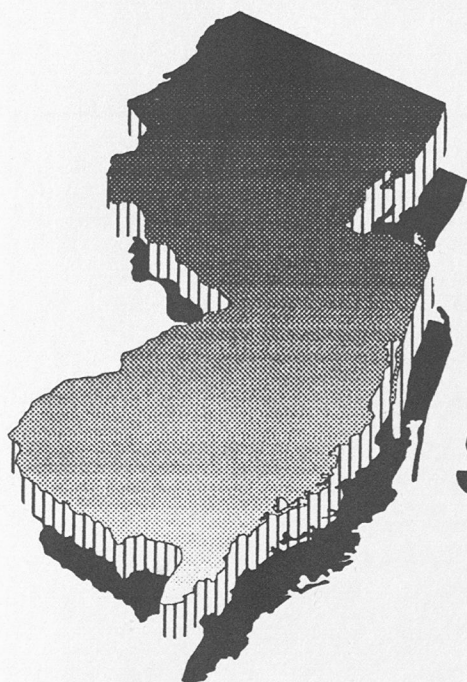


State Transportation Plan



Urban Transportation Supplement

Paterson

New Jersey Department of Transportation

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Rutgers University, Center for Urban Policy Research

Robert W. Burchell, Ph.D.
Emilie S.

PATERSON

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**URBAN TRANSPORTATION
SUPPLEMENT**

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

William S. Seely
James B. Lewis
Helen Rubin

New Jersey Transit

James B. Seely
Pippa del. usson Woods
Gregg D. Newman - Inerts

PATERSON

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PUBLIC TRANSPORTATION REQUIREMENTS
EMPLOYMENT GROWTH CENTERS, AND
FUTURE ECONOMIC CONDITIONS

PATERSON

TABLE OF CONTENTS

Prepared by:

Rutgers University, Center for Urban Policy Research

SECTION		PAGE
	<i>Principal Investigators:</i>	
SECTION I	Robert W. Burchell, Ph.D. Emilie Schmeidler, Ph.D.	1
SECTION II	<i>Demographic Profile of the City's Population</i>	2
SECTION III	<i>Labor Force</i> City Reseachers:	3
SECTION IV	Bratati Biswas - Trenton Dimitri Ioannides - Atlantic City	3
SECTION V	Daniel Kueper - Jersey City Lawrence Newton - Newark Grant Saff - Camden	14
SECTION VI	Emilie Schmeidler - Elizabeth Sean Thompson - Paterson	26
SECTION VII	<i>The Existing Transportation Network</i>	33
	New Jersey Department of Transportation	63
	William S. Beetle James B. Lewis Helene Rubin	63
SECTION IX	<i>Transportation Problems--City to Suburb</i>	63
SECTION X	<i>Transportation Problems--In City</i>	72
SECTION XI	<i>Problems Other Than Transportation</i>	73
	New Jersey Transit	73
SECTION XII	James Redeker Pippa deCosson Woods	73
SECTION XIII	Glenn D. Newman - Intern	83

Prepared by:
Rutgers University, Center for Urban Policy Research

Principal Investigators:

Robert W. Burchell, Ph.D.
Emilie Schneider, Ph.D.

City Researchers:

Brain Bivens - Trenton
Dimitri Ioannides - Atlantic City
Daniel Kueper - Jersey City
Lawrence Newton - Newark
Grant Salt - Camden
Emilie Schneider - Elizabeth
Sean Thompson - Paterson

New Jersey Department of Transportation

William S. Beale
James B. Lewis
Hilma Rubin

New Jersey Transit

James Redeker
Pops deCossou Woods
Glenn D. Newman - Trenton

I. INTRODUCTION

PATERSON

TABLE OF CONTENTS

<i>SECTION</i>		<i>PAGE</i>
SECTION I	<i>Introduction</i>	1
SECTION II	<i>Demographic Profile of the City's Population</i>	2
SECTION III	<i>Labor Force Profile</i>	5
SECTION IV	<i>"At-Place" Employment Profile</i>	8
SECTION V	<i>Employment Base and Employment Projections for the City, County, and Labor Area</i>	14
SECTION VI	<i>Present and Future Work Locations—A Micro View</i>	26
SECTION VII	<i>The Existing Transportation Network</i>	33
SECTION VIII	<i>Synthesis of Job Growth Data and Existing Public Transit Network</i>	63
SECTION IX	<i>Transportation Problems—City to Suburb</i>	63
SECTION X	<i>Transportation Problems—In City</i>	72
SECTION XI	<i>Problems Other Than Transportation</i>	73
SECTION XII	<i>Transportation Strategies</i>	75
SECTION XIII	<i>Summation</i>	83

PATERSON

TABLE OF CONTENTS

PAGE	SECTION
1	SECTION I Introduction
2	SECTION II Demographic Profile of the City's Population
3	SECTION III Labor Force Profile
8	SECTION IV "At-Place" Employment Profile
14	SECTION V Employment Base and Employment Projections for the City, County, and Labor Area
26	SECTION VI Present and Future Work Locations—A Micro View
33	SECTION VII The Existing Transportation Network
63	SECTION VIII Synthesis of Job Growth Data and Existing Public Transit Network
63	SECTION IX Transportation Problems—City to Suburb
72	SECTION X Transportation Problems—In City
73	SECTION XI Problems Other Than Transportation
75	SECTION XII Transportation Strategies
82	SECTION XIII Summary

I. INTRODUCTION

State legislation (P.L. 1991 Chapter 481) approved January 18, 1992 mandates that the New Jersey Department of Transportation (NJDOT), 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 Paterson 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 Paterson and Passaic County professionals working in planning, transportation, economic development, and job placement or training.

The area where Paterson lies was originally settled by the Dutch in the late seventeenth century as an agricultural community. In 1791 Alexander Hamilton, the country's treasury secretary, targeted Paterson as the first industrial city of the United States, promoting industry on the banks of the Passaic River to harness the power of the Great Falls. Shortly afterwards a series of water-powered cotton mills, and then other industries, were built. In the late nineteenth century, Paterson reached its zenith as a leading city for textile manufacturing, especially silk. With the development of hydroelectric power, more industries arrived. Paterson became the destination of many newly arrived immigrants who were lured by its rich job prospects; by 1900, Paterson was the fifteenth largest city in the country. Silk manufacturing declined with the advent of synthetic fibers, but silk dyeing and other manufacturing continued as Paterson's mainstay until World War II. Then the industrial base began to decline as many mills shut down. By the 1960s, the city developed a spate of economic problems characteristic of urban centers. During the 1970s, the city witnessed a high turnover of industrial firms: while 396 new firms entered the city, another 377 left, but most of the new firms that moved in did little towards replenishing the large number of manufacturing jobs that had been lost. Much of the new manufacturing development took place in suburban tracts in the northern part of Passaic County.

Meanwhile, city residents made considerable efforts to revitalize their city. The Great Falls was designated a National Landmark and parts of the mill district were designated a National Historic District. In 1986 the hydroelectric plant, which had been shut for 18 years, was brought back to life; it has acted as a catalyst for the city's revitalization. Through the use of Urban Development Action Grants (UDAGs), State Economic Authority Loans, and tax credits, the downtown area of the city is undergoing a slow process of rejuvenation. In addition to office space, middle-income housing has also been introduced in the downtown area in an effort to promote a greater sense of community. However, the post-1987 recession has hit the city hard.

Paterson's transportation network was shaped by its rise and decline as an industrial city. The street pattern was established in the nineteenth century. The radial public transportation system focused on bringing workers to Paterson's mills; later street development was based on rectangular grids connecting major arterials. As manufacturing in the city declined, the transportation network contracted. Between 1974 and 1977 the city lost three bus routes; in addition, frequency of service was reduced on almost all remaining routes. The 16 bus routes that serve Paterson mainly connect the city to Passaic, Clifton, and New York; they do not link Paterson as closely to the new industrial areas north and west of the city. Similarly, the NJ TRANSIT Main Line links Paterson to residential communities north of the city as well as to employment in Hoboken and, via PATH, in New York City.

No similar public transit ties Paterson to the new manufacturing development that has taken place in suburban areas of the northern part of Passaic County. This area is oriented to the highway network. Although the city is located close to many of New Jersey's important transportation arteries (i.e., the Garden State Parkway and Interstate 80), access from these highways to the city is not easy. However, construction of the new Route 19 interchange ramp from I-80 to Paterson has improved access to the city's core.

II. DEMOGRAPHIC PROFILE OF THE CITY'S POPULATION

During the period 1980-1990, Paterson's population remained relatively unchanged. This contrasts with most traditional manufacturing cities in the northeastern United States, which experienced a substantial exodus of their population to suburban and exurban areas over these decades. By 1970, the city had become the most densely populated and developed land area within Passaic County, with approximately one-third of the county's total population.

During the 1980s, Paterson's population increased slightly; in particular, the proportion of working-age adults and very young children grew. The number of

households decreased; as a result, the average household size increased. Although the per capita income doubled over the decade, Paterson is still far below the average for the state. Correspondingly, although the proportion of residents living below the poverty line has decreased, it is still far higher than the rest of the state or the country. The remainder of this section describes these demographic changes during the 1980s in greater detail.

In 1990 the city's population was 140,891, representing an increase of 2.1 percent over the 137,970 population in 1980 (Table 1). This rate of growth indicates that the city lagged behind the state's upsurge of 5 percent and also trailed the 2.2 percent population increase for the New York Metropolitan Area as a whole. Nevertheless, the fact that Paterson's population grew at all during the last decade suggests its uniqueness relative to other large cities in the metropolitan area.

Although Paterson's population increased, its number of households declined by 4.9 percent from 46,113 in 1980 to 43,862 in 1990. This contributed to a rather surprising increase in average household size from 2.96 to 3.14 over the decade. As a result, Paterson's 1990 household size is well above the 1990 national average household size of 2.63. At the national level, average household size has shrunk consistently in recent years due to the growth in numbers of non-family, single-parent, and elderly households—changes absent or not as strong in Paterson.

Table 2 describes Paterson's age profile for the years 1980 and 1990. The city's median age registered an increase of 2.3 years, from 27.5 to 29.8 years. The age composition in Paterson mirrors national trends. Residents under 5 years of age increased their share of the total very slightly from 8.7 to 8.8 percent; these children are the offspring of the post World War II nesting generation of the 1950s and 1960s. In contrast, the 5-19 year age group suffered a loss in its share of the total population, declining from 27.7 to 23.6 percent, reflecting the reduced population generation of the period 1965 to 1976. Persons in the age group 20-64 increased their proportion from 53.2 percent in 1980 to 58.2 percent in 1990, which implies a substantial increase in the city's potential work force. The group of persons over 65 years of age experienced a loss between 1980 and 1990, decreasing from 10.3 to 9.5 percent; this contrasts with the national trend in which the proportion of elderly people generally increased in urban areas.

During the 1980s, Paterson's ethnic composition changed considerably. Among ethnic groups, the proportion of Hispanics grew from 29 to 41 percent of Paterson's population. Almost one-fifth of the whites left the city, as their share dropped from 51 to 41 percent. Blacks and Asians increased somewhat, while those designated as "other" increased from 14 to 21 percent. These increases in the proportion of minority groups in Paterson

TABLE 1
POPULATION AND HOUSEHOLD
IN PATERSON 1980-1990

Population Indices	1980	1990	Change	
			Number	Percent
Population	137,970	140,891	2,921	2.1
Household	46,113	43,862	(2,251)	(4.9)
Average Household Size	2.96	3.14	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 PATERSON 1980-1990

Age Cohorts	1980	1990	Change
	Percent	Percent	Percent
<5 years	8.7	8.8	1.1
5 years to 19 years	27.7	23.6	(14.8)
20-64 years	53.2	58.2	9.4
Over 65 years	10.3	9.5	(7.8)
Median Age (years)	27.5	29.8	8.4

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

TABLE 3
INCOME AND POVERTY
IN PATERSON 1979-1989

Income Indices	1979	1989	Change	
			Number	Percent
Household Income	\$11,999	\$26,960	\$14,961	124.7
Per Capita Income	\$5,060	\$10,518	\$5,458	107.8
Percent Population Below Poverty Level	25.2	18.2	—	(27.8)

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

reflect broader regional and national trends of growing concentrations of minorities in urban areas.

Despite two recessions during the 1980s, Paterson's per capita income in current terms increased by 107.8 percent between 1979 and 1989 (Table 3). The city's median household income grew even more sharply, increasing from \$11,999 in 1980 to \$26,960 in 1990. This compares to an increase in New Jersey's median household income of 106.9 percent, from \$19,800 to \$40,972. Thus, in both 1980 and 1990, Paterson was about 60 percent of the statewide median. In parallel to the rise in per capita and median household incomes, the percentage of Paterson's residents living below the poverty level fell from 25.2 percent to 18.2 percent between 1979 and 1989. However, this figure is still far above Passaic County, New Jersey, and national averages.

III. LABOR FORCE PROFILE

In 1990, more Paterson residents were employed than had been in 1980. However, the industries in which they worked and their occupations changed. Manufacturing decreased sharply, as did jobs as operators and laborers. Jobs in all the other industrial sectors and occupational categories increased. Ironically, at the same time more Paterson residents were employed, a slightly higher proportion of residents was also unemployed. The proportion of households owning a car increased during the decade.

This section describes Paterson residents' employment.

A. Total Employed

During the 1980-1990 decade, the city's resident employment expanded from 52,753 to 62,543, a rise of 18.6 percent (Table 4). Overall, 44.4 percent of Paterson's residents had jobs in 1990 as opposed to 38.2 percent in 1980. The increase in jobs for the city's residents obviously reflects the positive impact of the strong economic growth which New Jersey as a whole experienced between 1983 and 1987. Additionally, Paterson's employment growth is due to changes in its demographic composition; as described in the previous section, by 1990 Paterson's age cohort of 20 to 64 increased its share of total population. However, this growth in the number of people employed does not show what proportion of new jobs pay significantly above minimum wage.

B. Employment by Industry

As Table 4 displays, a sizable number of Paterson residents continue to have jobs in manufacturing (29.5 percent). Yet the manufacturing sector suffered a substantial relative

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

<i>Resident Employment</i>	1980	1990	<i>Change</i>	
			<i>Number</i>	<i>Percent</i>
TOTAL EMPLOYMENT	52,753	62,543	9,790	18.6
	<i>1980 Percent</i>	<i>1990 Percent</i>	<i>Change Percent</i>	
STANDARD INDUSTRIAL CLASSIFICATION (SIC)				
Manufacturing	43.7	29.5	(32.5)	
Wholesale Trade	3.8	6.2	63.1	
Retail Trade	11.6	15.7	35.3	
Transportation	4.4	5.2	18.2	
Communications and Utilities	1.7	2.2	29.4	
Services	24.3	28.2	16.0	
Finance, Insurance, and Real Estate	3.3	5.0	51.5	
Construction	2.8	3.8	35.7	
Agriculture	0.2	0.5	150.0	
Public Sector	4.2	3.4	(19.0)	

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 PATERSON 1980-1990

<i>Resident Employment</i>	1980	1990	<i>Change</i>	
			<i>Number</i>	<i>Percent</i>
TOTAL EMPLOYMENT	52,753	62,543	9,790	18.6
	<i>1980 Percent</i>	<i>1990 Percent</i>	<i>Change Percent</i>	
OCCUPATIONAL CATEGORY				
Managerial/Executive	11.3	14.0	23.9	
Technical/Sales	24.0	29.7	23.8	
Services	14.3	15.8	10.5	
Farming	0.3	0.7	133.3	
Precision Production/Crafts	10.9	10.9	0.0	
Operators/Laborers	39.0	28.7	(26.4)	

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

decline between the two latest census periods. This slide of manufacturing's importance to Paterson's economy mirrors a trend that has been present since the end of World War II.

Though the manufacturing sector suffered a substantial loss in share of Paterson's total resident employment, all other categories of private-sector employment registered increases. Not surprisingly, the services sector became firmly established as the second most important category of employment; it rose from 24.3 percent in 1980 to 28.2 percent of the total in 1990. The increase in resident employment in retail and wholesale trade has also been substantial; together they account for well over one-fifth of Paterson residents' employment. Retail trade emerged as the third single largest employer of the city's residents, representing 15.7 percent of the total. Considerable construction of suburban strip and regional malls, including the Willowbrook Mall, accounts for this increase. Transportation, and communications and utilities, as well as construction, also registered increases in their share of employment of residents. However, many of the emerging jobs in services and retail require only minimal skills and pay poorly compared to the jobs that were lost in the manufacturing sector.

Public-sector employment was the only category, in addition to manufacturing, that decreased among Paterson residents. Public-sector jobs could be potentially significant since Paterson is the county seat and therefore the location of the court system and many of the social agencies.

C. Employment by Occupation

Table 5 indicates resident employment by occupation and change between the years 1980 and 1990. Shifts in the city's employment structure once more reflect the rising importance of the managerial/executive, services, and technical/sales occupational categories coupled with the declining role of manufacturing. The managerial/executive category increased its share from 11.3 percent in 1980 to 14.0 percent of the total in 1990. Services advanced from 14.3 percent of all employment in 1980 to 15.8 percent by 1990. The technical/sales category boosted its share of employment from 24.0 to 29.7 percent. Operators and laborers experienced the greatest loss, from 39.0 to 28.7 percent, reflecting the declining importance of manufacturing jobs to the city's population. The proportion of skilled jobs in the city, measured by the percentage of employment in the precision production/crafts occupational category, has maintained its 10.9 percent share of total resident employment.

D. Unemployment Levels

In 1990, Paterson's unemployment rate at 11.0 percent reflected a slight increase over that of 1980 (Table 6). This rate was considerably higher than the county, state, and national averages, yet lower than most other large New Jersey cities except for Atlantic City and Elizabeth. There are a number of reasons for Paterson's relatively high unemployment rate. One obvious explanation is the increase of the city's labor force and the possible mismatch between resident skills and available jobs. Another is the fact that the city is a victim of a nationwide recession that has been especially harsh on less-skilled labor.

E. Households Having Wage and Salary Income

In 1989 the number of households in Paterson that reported a wage or salary income increased from 73.4 to 78.9 percent of all households. This represented an overall increase of 7.5 percent (Table 7). As a result, city residents are closing the gap on Passaic County residents. The percent of county households with wage or salary income increased from 79.5 percent to 80.2 percent over the decade.

F. Household Automobile Ownership

Throughout the decade 1980 to 1990 Paterson's residents have gained greater personal mobility despite the fact that overall the city's economy does not appear to have fared very well. The automobile ownership rate between the two census years increased from 67.9 percent to 72.7 percent (Table 8). Paterson's current rate of automobile ownership is the highest of all cities studied in the Urban Transportation Supplement. However, this increase may not necessarily suggest increasing affluence of the city's residents; rather, it may merely reflect the fact that people increasingly need cars to get to available jobs in suburban Passaic and Bergen counties.

IV. "AT-PLACE" EMPLOYMENT PROFILE

The previous sections have described the population of Paterson and its residents' participation in the labor force. This section describes at-place employment, that is, the jobs available in the city of Paterson and in the Paterson labor area,¹ whether these jobs are held

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 PATERSON 1980-1990

City	Unemployment Level		Change Percent
	1980 Percent	1990 Percent	
PATERSON	10.6	11.0	3.8

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 PATERSON 1979-1989

Local Government	Households With Wage or Salary Income		Change Percent
	1979 Percent	1989 Percent	
PATERSON	73.4	78.9	7.5
PASSAIC COUNTY	79.5	80.2	0.9

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 PATERSON 1980-1990

City	Percent of Households Having at Least One Automobile		Change Percent
	1980 Percent	1990 Percent	
PATERSON	67.9	72.7	7.0

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

by residents or others. At-place employment is an indication of the extent to which the place is retaining its employment base.

Covered employment includes those jobs that are covered by New Jersey's unemployment insurance program. Covered employment dropped sharply in Paterson during the 1980s, especially jobs in manufacturing and retail trade. Comparing the number of working residents with the jobs available in the city shows that Paterson had far more working residents than it had jobs available in the city. Only in public-sector employment does Paterson, the county seat, have more jobs.

As in the city, over the last decade the Paterson labor area has experienced a relative loss of manufacturing jobs within the context of overall growth in at-place employment. The loss in the number of jobs in manufacturing, communications and utilities, and public employment is more than compensated by increased employment in services, wholesale trade, FIRE, and construction. However, although the number of jobs has increased, the new positions typically are lower paying services sector jobs rather than higher paying manufacturing employment.

This section describes at-place employment first for the city of Paterson and then for the Passaic-Bergen labor area. It also contrasts resident employment, which was described in the previous section, with at-place employment jobs available within the city and discusses the implications of the shift from manufacturing to services.

A. In the City

As seen from Table 9, total at-place employment fell by 13.5 percent between 1980 and 1990, from 50,656 to 43,840. Indeed, the share of manufacturing jobs in the city declined from 39.0 percent in 1980 to 28.9 percent in 1990, reflecting a proportional decrease of 25.8 percent.

Retail trade, which accounted for 10.6 percent of the Paterson jobs in 1980, dropped to 8.4 percent by 1990. Finance, insurance, and real estate (FIRE), communications and utilities, and transportation also declined during the decade. On the other hand, at-place employment in the services sector registered impressive growth. While in 1980 services accounted for 16.4 percent of covered employment in Paterson, by 1990 this sector increased its share to 24.0 percent. Wholesale trade increased its share of employment from 5.5 percent in 1980 to 8.6 percent in 1990. Jobs in construction also increased.

In both 1980 and 1990 public-sector employment accounted for about one-fifth of the jobs in the city of Paterson. During the decade the number of public-sector jobs fell; however, because total at-place employment decreased, its share increased 5.5 percent.

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

Employment By Industry	Total		Change	
	1980	1990	Number	Percent
TOTAL	50,656	43,840	(6,816)	(13.5)
	1980 Percent	1990 Percent	Change Percent	
STANDARD INDUSTRIAL CLASSIFICATION (SIC)				
Manufacturing	39.0	28.9		(25.8)
Wholesale Trade	5.5	8.6		56.4
Retail Trade	10.6	8.4		(20.8)
Transportation	3.0	2.8		(6.7)
Communications and Utilities	0.7	0.5		(28.6)
Services	16.4	24.0		46.3
Finance, Insurance, and Real Estate	2.2	1.9		(13.6)
Construction	2.6	3.7		42.3
Agriculture	0.1	0.2		100.0
Public Sector	19.9	21.0		5.5

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

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

Employment By Industry	1990	1990	Ratio of "At-Place" Employment to Resident Employment
	Resident Employment	"At-Place" Employment	
TOTAL	62,543	43,840	70.1
STANDARD INDUSTRIAL CLASSIFICATION (SIC)			
Manufacturing	18,450	12,669	68.7
Wholesale Trade	3,878	3,770	97.2
Retail Trade	9,819	3,683	37.5
Transportation	3,252	1,228	37.8
Communications and Utilities	1,376	219	15.9
Services	17,632	10,522	59.7
Finance, Insurance, and Real Estate	3,127	833	26.6
Construction	2,377	1,622	68.2
Agriculture	313	88	28.1
Public Sector	2,126	9,206	433.0

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*.

Table 10 displays the distribution, by industry, of jobs held by Paterson residents and of jobs available within the city, i.e, the at-place employment. In every private-sector category Paterson shows a surplus of workers over jobs. Retail trade, transportation, communications and utilities, FIRE, and agriculture have less than two-fifths as many jobs as workers. Manufacturing, services, and construction have 60–70 percent as many jobs. Only wholesale trade, with 97.2 percent, approaches having an equal number of jobs and workers.

In sharp contrast to these private-sector jobs, the public sector has four times as many jobs within the city of Paterson as Paterson has residents employed in the public sector.

Taking both private- and public-sector employment, Paterson has only 70.1 percent as many jobs as it has workers who live in the city. In addition, not all jobs in the city are held by residents. Figure 1 in Section VI shows that only 36 percent of Paterson residents worked in the city in 1990.²

B. In the Labor Area

Table 11 indicates total at-place employment and employment change in the Paterson labor area. Unfortunately, the definition of the labor area changed between the 1980 and 1990 census years: in 1980 Paterson's labor area comprised solely Passaic County; by 1990 the labor area expanded to include adjacent Bergen County. In order to make comparisons, Table 11 presents the at-place employment data for both years using the 1990 definition of the labor area. In 1980 there were 560,068 workers in Passaic and Bergen counties; by 1990 the Paterson labor area had swollen to 624,056, an increase of 11.4 percent.

In 1980, manufacturing clearly dominated the labor area with almost one-third of the jobs. Retail trade and services accounted for the next third. By 1990, service employment, with 24.2 percent, surpassed manufacturing at 21.7 percent; together they accounted for nearly one-half the jobs in the labor area. Four sectors increased their shares of employment by 20–30 percent: wholesale trade increased from 9.7 to 11.6 percent, FIRE grew from 4.6 to 5.8 percent, construction rose from 3.5 to 4.3 percent, and

² "Resident employment" in the tables above is not identical to "working residents" in the figures in Section VI below. 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. Conversely, 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. For more complete descriptions, see the Census definitions of "Employment Status" and "Journey to Work."

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

	1980	Total 1990	Change Percent
PATERSON LABOR AREA	560,068	624,056	11.4
	1980 Percent	1990 Percent	Change Percent
STANDARD INDUSTRIAL CLASSIFICATION (SIC)			
Manufacturing	31.3	21.7	(30.7)
Wholesale Trade	9.7	11.6	19.6
Retail Trade	16.9	16.8	(0.5)
Transportation	3.1	3.2	3.2
Communications and Utilities	1.7	1.5	(11.8)
Services	17.7	24.2	36.7
Finance, Insurance, and Real Estate	4.6	5.8	26.1
Construction	3.5	4.3	22.9
Agriculture	0.5	0.6	20.0
Public Sector	11.0	10.3	(6.8)

Note: Passaic and Bergen counties comprised the Paterson labor area in 1990. They are used for both 1980 and 1990 columns; see text for full explanation.

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

TABLE 12
 ANNUAL SALARIES FOR DEMAND OCCUPATIONS
 BERGEN-PASSAIC PMSA

Type of Employment	Annual Wage (\$)
MANUFACTURING OCCUPATIONS—EXAMPLES	
Drafter	26,910
Maintenance Worker	24,814
Material Handler	22,464
Truck Driver, Heavy	21,817
Warehouse Worker	25,958
SERVICE OCCUPATIONS—EXAMPLES	
Accounting Clerk	20,020
Receptionist	17,836
Computer Operator	24,570
Secretary	24,752
Word Processor	21,866

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

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

agriculture moved from 0.5 to 0.6 percent. Together these four sectors accounted for one-fifth of the at-place employment.

Manufacturing showed the greatest loss over the decade, both in the number of jobs lost and the percent change. Public-sector employment declined from 11.0 to 10.3 percent, while communications and utilities declined from 1.7 to 1.5 percent. Retail trade remained almost stable over the decade, with just over one-sixth of the jobs.

Thus by 1990, no one sector dominated the Paterson labor area. Five sectors—services, manufacturing, retail trade, wholesale trade, and public employment—each accounted for at least 10 percent of the at-place employment.

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

From 1980 to 1990, both the city of Paterson and the Paterson labor area experienced a sharp decline in manufacturing. Services employment had the largest increased share of at-place employment. However, jobs in the services sector typically do not pay as well as those in manufacturing. To illustrate this point, Table 12 displays examples of the annual wages from a selection of manufacturing and service jobs.

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

The earlier sections have summarized the history and population of Paterson as well as residents' current employment, and existing jobs within the city and the labor area. This section examines employment projections for the Paterson labor area, Passaic County, the city of Paterson, and for the other municipalities within this labor area.

The following at-place employment projections are based on the New Jersey State Development and Redevelopment Plan (State Plan), which mandates concentrating growth in existing urban centers to decrease suburban sprawl. The Center for Urban Policy Research (CUPR) has devised projections for at-place employment based on the assumption that the rate of future growth will reflect 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 Paterson, Passaic County, and the Paterson labor area, respectively. The projections present jobs in terms of three categories: basic, services, and retail. *Basic employment* includes the Standard Industrial Classification (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. It should be noted that at-place

employment and employment projections of Tables 13–15 include all employment, uncovered as well as covered, while Tables 9–11 include only covered employment.

The city, county, and labor area are all projected to lose a substantial number of jobs in basic industries. Retail and services will provide some new jobs, particularly in the Bergen County portion of the labor area. These changes in the city, county, and labor area are described in the first three subsections below. Many municipalities in which Paterson residents now work will lose jobs over the next ten years. However, because many jobs currently do exist in these communities and some people will leave the labor force, these are also the places where new employment opportunities for Paterson residents will occur. The final subsection identifies municipalities within the labor area in which new employment opportunities are projected.

A. City

Total employment in the city of Paterson in 1990 was 41,178. Of this, 44.7 percent was in basic employment, 46.9 percent in services employment, and 8.4 percent in retail employment (Table 13). Under the State Plan, Paterson is projected to lose 7,057 jobs, a decline of 17.1 percent, during the ten-year period 1990–2000. Although all three sectors will lose jobs, basic employment will lose far more than the other sectors—nearly one-third of the existing jobs. Basic employment will fall by 5,745 (31.2 percent), services employment will decrease by 1,112 (5.8 percent), and retail employment will decline by 200 (5.8 percent).

B. County

Total at-place employment for Passaic County in 1990 was 196,100 (Table 14). Of this, 43.0 percent was in basic employment, 39.3 percent in services employment, and 17.7 percent in retail employment. Under the State Plan assumptions, the county is projected to lose 19,429 jobs over the next decade, almost 10 percent of the total. As in Paterson, the losses are concentrated in the basic sector, which is projected to lose 22,910 jobs, or 27.2 percent. In the county, in contrast to the city, services and retail employment will grow slightly: Passaic County will gain 2,016 service jobs (2.6 percent) and 1,466 retail jobs (4.2 percent).

C. Labor Area

The Paterson labor area consists of Passaic and Bergen counties. The total at-place employment for the labor area in 1990 was 654,900 (Table 15). Of this, 43.0 percent was in basic employment, 39.3 percent in service employment, and 17.7 percent in retail

TABLE 13

**"AT-PLACE" EMPLOYMENT AND PROJECTIONS
IN PATERSON 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	41,178	18,402	19,306	3,470
1995	36,404	14,388	18,660	3,354
2000	34,121	12,657	18,194	3,270
CHANGE 1990-2000				
NUMBER	(7,057)	(5,745)	(1,112)	(200)
PERCENT	(17.1)	(31.2)	(5.8)	(5.8)

Source: CUPR Projections: 1990-2000.

TABLE 14

**"AT-PLACE" EMPLOYMENT AND PROJECTIONS
IN PASSAIC 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	196,100	84,379	77,066	34,655
1995	181,340	68,187	77,866	35,287
2000	176,671	61,469	79,082	36,121
CHANGE 1990-2000				
NUMBER	(19,429)	(22,910)	2,016	1,466
PERCENT	(9.9)	(27.2)	2.6	4.2

Source: CUPR Projections: 1990-2000.

TABLE 15
"AT-PLACE" EMPLOYMENT AND PROJECTIONS
IN THE PATERSON LABOR AREA¹ 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	654,900	281,948	259,526	113,426
1995	649,515	258,082	272,471	118,962
2000	662,949	251,293	286,787	124,914
CHANGE 1990-2000				
NUMBER	8,094	(30,655)	27,261	11,488
PERCENT	1.2	(10.9)	10.5	10.1

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 generally can change jobs without relocating. See discussion in text.

Source: CUPR Projections: 1990-2000.

employment. The labor area is projected to gain 8,094 jobs over the next decade, an increase of 1.2 percent in the total jobs. As in the city and county, the labor area will lose jobs in the basic sector, although a smaller proportion than either the city or the county: 10.9 percent or 30,655 jobs. Growth in service and retail employment will result in more jobs than will be lost in basic employment. The labor area will gain 27,261 services jobs (10.5 percent) and 11,488 retail jobs (10.1 percent).

D. Job Growth and Employment Separations in the Paterson Labor Area by Municipality—1993–2000

In addition to projecting employment for Paterson, Passaic County, and the Paterson labor area, CUPR has projected employment for all the municipalities in the labor area. Combining this data with employment projections from the New Jersey Department of Labor (DOL), Division of Labor Market and Demographic Research, provides another indication of potential employment change that will affect Paterson residents. The methodology is described in a note at the end of the chapter.

DOL makes projections of new employment opportunities. To do so, it distinguishes between job growth and separations from the labor force. "Growth" refers to newly created jobs. "Separation" refers to employment opportunities created when people leave the labor force because of death, retirement, pregnancy, or other reasons. "Separations" do not include job changes; when people leave jobs to take other jobs, no new opportunity is projected. The DOL data are organized by occupational category. Therefore, from it CUPR is able to project employment growth for less-skilled occupations;³ i.e., clerical jobs, sales, non-professional services, operators, and laborers. Table 16 displays projections for all the municipalities in the Paterson labor area, which is comprised of Bergen and Passaic counties.

As discussed above, between 1990 and 2000 the labor area is projected to gain a total of 8,094 jobs (Table 15). Of these, the labor area is projected to gain 1,534 newly created less-skilled jobs between 1993 and 2000 (Table 16). The impacts on the industrial sectors differ sharply: basic employment will lose 13,905 jobs, while retail will gain 6,404 and services will gain 9,035.

Passaic and Bergen counties will be differentially affected, as will the communities within them. Passaic County will lose 8,907 less-skilled jobs, while Bergen County will gain 10,441. In each county the losses are concentrated in the basic sector; however, Passaic will lose 10,392 jobs in contrast to Bergen's loss of 3,513. Both counties will gain

³ Less-skilled jobs is used as a collective term for low- and semi-skilled jobs.

both retail and services jobs: 817 retail jobs and 668 services jobs in Passaic County in contrast to 5,587 retail and 8,367 services jobs in Bergen County. Looking at specific communities in Passaic County, Paterson is projected to lose 3,086 less-skilled jobs while Clifton, Passaic, and Wayne will lose 1,000–2,000 each. The only Passaic County municipality projected to gain more than ten less-skilled jobs is West Paterson, with 227. In contrast, many Bergen County municipalities are projected to gain jobs. Hackensack and Fort Lee will grow by 1,000–2,000 each; Carlstadt, Paramus, Teaneck, Elmwood Park, Englewood, and Mahwah will gain 500–1,000.

Many municipalities in which Paterson residents now work—Paterson, Wayne, Clifton, Passaic—are projected to experience losses. However, some Paterson residents currently do work in the communities, such as West Paterson, Paramus, and Elmwood Park, that are projected to gain jobs between 1993–2000.

The discussion above pertains only to newly created jobs. Many more less-skilled job separations are projected for the period than are new jobs: 73,007 separations will occur within the labor area. These will provide many more employment opportunities for Paterson residents than will new jobs. Throughout the whole labor area, only 8,494 less-skilled separations are projected in basic employment. However, 32,672 less-skilled separations are projected for retail and 31,841 for services employment. A total of 21,463 less-skilled separations are projected for Passaic County, while 51,544 are projected for Bergen County.

The projected separations will provide substantial employment opportunities for Paterson residents. Since the separations tend to occur where jobs are concentrated, many will be in those places where Paterson residents currently work. Paramus and Wayne are projected to have 6,000–8,000 less-skilled separations; Hackensack, Clifton, and Paterson 3,000–6,000; and Fort Lee, Passaic, Englewood, Teaneck, Ridgewood, Lyndhurst, Totowa, Fair Lawn, East Rutherford, Carlstadt, Montvale, Mahwah, Saddle Brook, Elmwood Park, and Ramsey 1,000–2,000 each.

Table 16 lists the number of less-skilled job opportunities by municipality within the Paterson 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 the number of jobs per square mile, while Map B displays less-skilled separations in terms of the same variable. Rather than showing all the municipalities in the labor area, these maps show the area within 7–10 miles of Paterson.

Map A shows that Paterson, and many communities surrounding it—Wayne, Totowa, Little Falls, Clifton, Passaic, Rochelle Park, Fair Lawn, Hawthorne, and Haledon—are projected to lose jobs between 1993 and 2000. However, West Paterson,

TABLE 16
 LESS-SKILLED JOB GROWTH AND JOB OPPORTUNITIES THROUGH SEPARATIONS—1993-2000
 PATERSON LABOR AREA ¹

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	
BERGEN COUNTY										
Allendale borough	4	66	56	34	191	116	39	257	172	468
Alpine borough	-5	3	10	0	14	34	-4	17	44	57
Bergenfield borough	-72	46	36	44	407	231	-28	452	267	691
Bogota borough	-16	9	25	25	47	97	9	56	123	188
Carlstadt borough	373	223	96	498	604	186	872	827	282	1,981
Cliffside Park borough	-9	90	79	23	227	143	14	316	222	553
Closter borough	-34	47	40	33	247	151	-1	294	191	484
Cresskill borough	-38	22	30	24	124	121	-13	146	152	284
Demarest borough	-7	3	18	2	10	50	-5	13	67	75
Dumont borough	-25	29	32	12	133	106	-13	162	138	287
East Rutherford borough	-165	117	155	178	616	584	13	733	739	1,485
Edgewater borough	-38	51	28	57	174	70	19	225	98	343
Elmwood Park borough	138	202	251	182	460	409	320	662	660	1,641
Emerson borough	-15	60	66	21	200	156	7	260	221	488
Englewood city	-56	155	456	181	532	1,118	126	688	1,575	2,388
Englewood Cliffs borough	-232	7	40	206	117	465	-26	124	505	603
Fair Lawn borough	-275	96	178	170	537	713	-106	633	891	1,418
Fairview borough	-108	14	16	68	151	123	-40	165	139	264
Fort Lee borough	72	331	700	120	723	1,095	191	1,055	1,795	3,041
Franklin Lakes borough	-108	36	75	91	113	168	-17	149	244	376
Garfield city	-172	120	80	142	523	250	-30	643	330	943
Glen Rock borough	15	55	146	36	141	270	51	196	416	662
Hackensack city	-190	565	1,472	374	1,657	3,090	183	2,222	4,562	6,967
Harrington Park borough	6	5	12	8	15	29	14	20	41	76
Hasbrouck Heights borough	68	149	198	52	299	285	119	448	483	1,051

TABLE 16 (continued)
 LESS-SKILLED JOB GROWTH AND JOB OPPORTUNITIES THROUGH SEPARATIONS—1993-2000
 PATERSON LABOR AREA¹

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			
BERGEN (continued)												
Haworth borough	4	4	28	35	6	9	44	58	10	13	71	94
Hillsdale borough	-21	29	21	28	24	171	89	284	3	200	110	313
Ho-Ho-Kus borough	32	16	31	80	14	31	42	88	46	47	74	167
Leonia borough	9	31	65	105	27	85	127	240	37	115	192	344
Little Ferry borough	17	59	42	117	67	194	99	361	84	253	141	478
Lodi borough	-86	89	70	73	128	412	232	772	42	501	302	845
Lyndhurst township	-76	157	140	221	181	773	493	1,446	105	930	633	1,667
Mahwah township	145	209	167	521	187	641	367	1,195	332	849	534	1,716
Maywood borough	-3	88	108	192	53	228	200	481	50	316	308	674
Midland Park borough	32	93	84	209	59	218	141	418	92	311	225	627
Montvale borough	13	158	228	398	153	538	555	1,246	165	696	783	1,644
Moonachie borough	-282	10	7	-264	201	157	81	439	-81	167	89	174
New Milford borough	-21	17	26	23	7	102	112	221	-14	120	139	244
North Arlington borough	-38	32	32	25	30	194	140	363	-8	225	171	389
Northvale borough	-150	38	32	-80	119	135	83	337	-30	173	115	257
Norwood borough	-107	-14	-11	-132	38	76	44	158	-69	63	33	26
Oakland borough	125	115	116	355	149	265	191	605	274	379	307	961
Old Tappan borough	-64	12	13	-38	30	56	45	130	-34	68	58	91
Oradell borough	-31	9	51	29	58	58	235	351	27	67	286	381
Palisades Park borough	-122	16	27	-79	79	132	159	371	-43	148	187	292
Paramus borough	-579	724	497	641	203	4,897	2,408	7,508	-377	5,621	2,906	8,150
Park Ridge borough	141	117	233	492	42	157	223	422	183	274	457	914
Ramsey borough	14	150	116	281	115	586	326	1,027	130	735	443	1,308
Ridgefield borough	-81	50	47	16	132	266	178	576	51	316	225	592
Ridgefield Park village	119	43	91	253	59	78	119	255	177	121	210	508

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

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	Basic	Retail	Services	Total	Basic	Retail	Services	Total	
BERGEN (continued)													
Ridgewood village	-139	140	346	347	30	555	985	1,569	-109	695	1,331	1,916	
River Edge borough	-21	103	108	190	10	227	172	408	-11	330	280	599	
River Vale township	-13	5	15	8	6	33	71	110	-7	38	87	118	
Rochelle Park township	-16	76	42	102	52	428	170	649	36	504	212	752	
Rockleigh borough	-93	-3	-4	-100	82	59	45	187	-11	56	42	87	
Rutherford borough	-69	60	131	122	99	272	428	800	30	332	539	922	
Saddle Brook township	-113	10	15	-388	217	446	490	1,152	-196	455	505	764	
Saddle River borough	2	2	20	24	7	8	46	60	9	10	65	85	
South Hackensack township	-143	11	15	-117	124	117	115	355	-20	128	130	238	
Teaneck township	-61	138	537	614	90	400	1,116	1,606	29	538	1,654	2,220	
Tenafly borough	-30	83	134	188	26	249	287	563	-3	333	422	751	
Teterboro borough	-219	8	64	-147	235	67	401	703	16	75	465	556	
Upper Saddle River borough	-124	-7	-26	-157	46	50	139	235	-78	43	113	77	
Waldwick borough	-45	13	16	-16	23	144	131	298	-22	157	147	282	
Wallington borough	-8	32	29	53	74	113	71	258	66	145	100	311	
Washington township	-11	1	1	-9	3	64	22	89	-8	65	23	80	
Westwood borough	-78	79	125	127	44	399	451	894	-34	478	577	1,021	
Woodcliff Lake borough	78	23	167	268	85	54	278	416	163	77	444	684	
Wood-Ridge borough	-155	-15	-19	-189	48	117	108	274	-107	102	89	84	
Wyckoff township	-57	78	91	112	38	339	281	658	-20	417	372	769	
TOTAL FOR BERGEN	-3,513	5,587	8,367	10,441	6,080	22,861	22,603	51,544	2,567	28,448	30,970	61,986	

TABLE 16 (continued)
LESS-SKILLED JOB GROWTH AND JOB OPPORTUNITIES THROUGH SEPARATIONS—1993-2000
PATERSON LABOR AREA¹

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
PASSAIC COUNTY									
Bloomington borough	-30	15	21	11	45	45	-19	59	66
Clifton city	-2,332	189	327	638	1,559	1,929	-1,694	1,748	2,256
Haledon borough	-110	-54	-50	13	95	64	-96	42	14
Hawthorne borough	-393	18	14	99	346	192	-294	364	206
Little Falls township	-336	100	78	120	482	269	-216	581	347
North Haledon borough	-50	22	36	13	95	112	-38	116	149
Passaic city	-1,342	7	18	295	581	993	-1,047	589	1,011
Paterson city	-2,606	-111	-369	519	953	2,257	-2,087	842	1,888
Pompton Lakes borough	-144	-27	-32	23	147	126	-121	120	94
Prospect Park borough	-20	4	20	7	9	33	-12	13	53
Ringwood borough	-78	19	35	14	96	125	-64	115	160
Totowa borough	-674	81	86	193	709	539	-481	790	625
Wanaque borough	-81	5	20	21	39	112	-59	44	133
Wayne township	-1,992	341	231	376	4,067	1,971	-1,616	4,408	2,202
West Milford township	-131	68	73	28	274	212	-103	342	285
West Paterson borough	-74	140	160	44	315	258	-30	455	418
TOTAL FOR PASSAIC	-10,392	817	668	2,414	9,811	9,238	-7,979	10,628	9,906
LABOR AREA TOTAL	-13,905	6,404	9,035	8,494	32,672	31,841	-5,411	39,076	40,876
			1,534			73,007			74,541

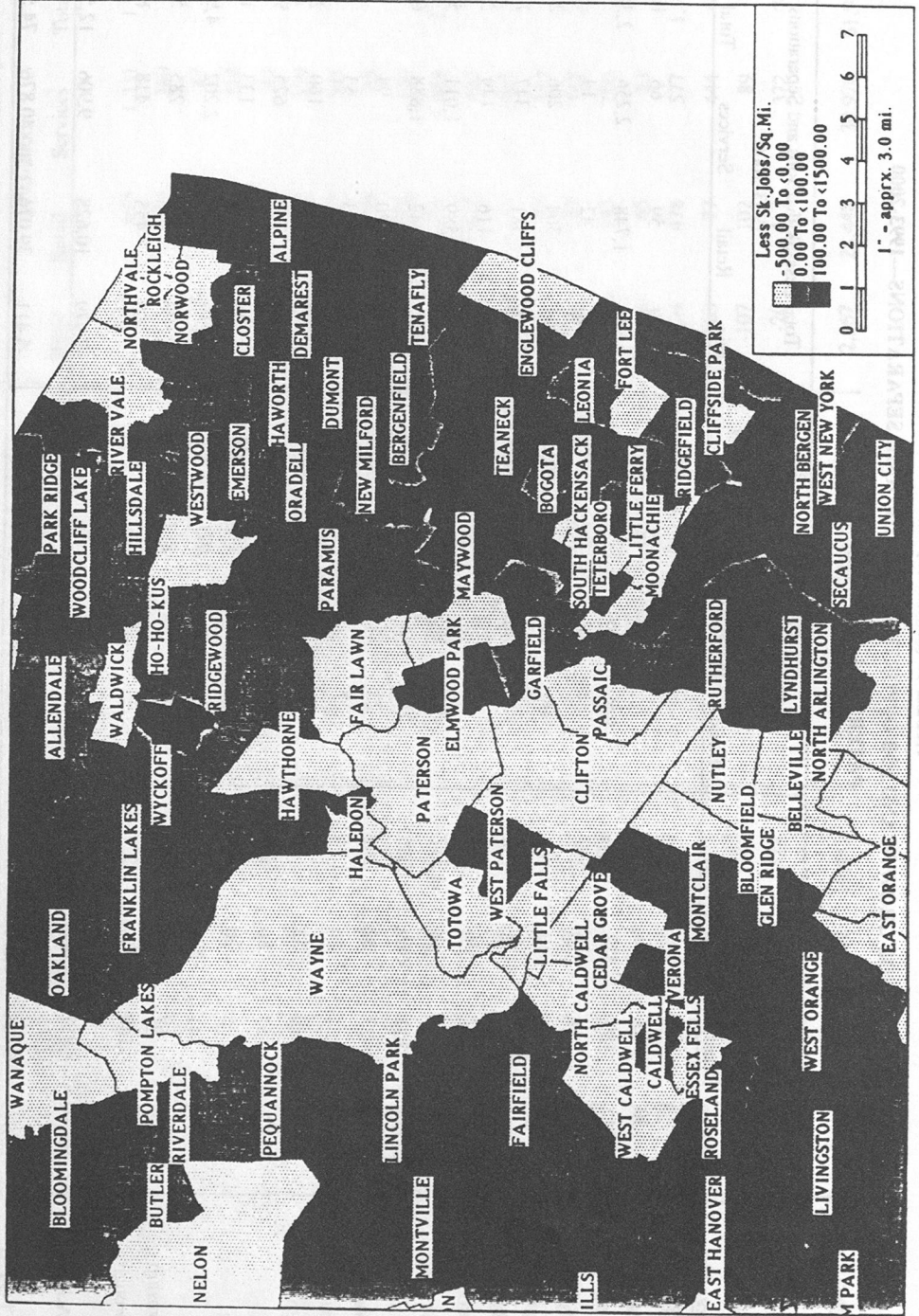
Notes: 1. Labor area is a geographic area consisting of a central community and contiguous areas that are economically integrated into that community. Within a labor area, workers can generally change jobs without relocating. See discussion in text.

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.

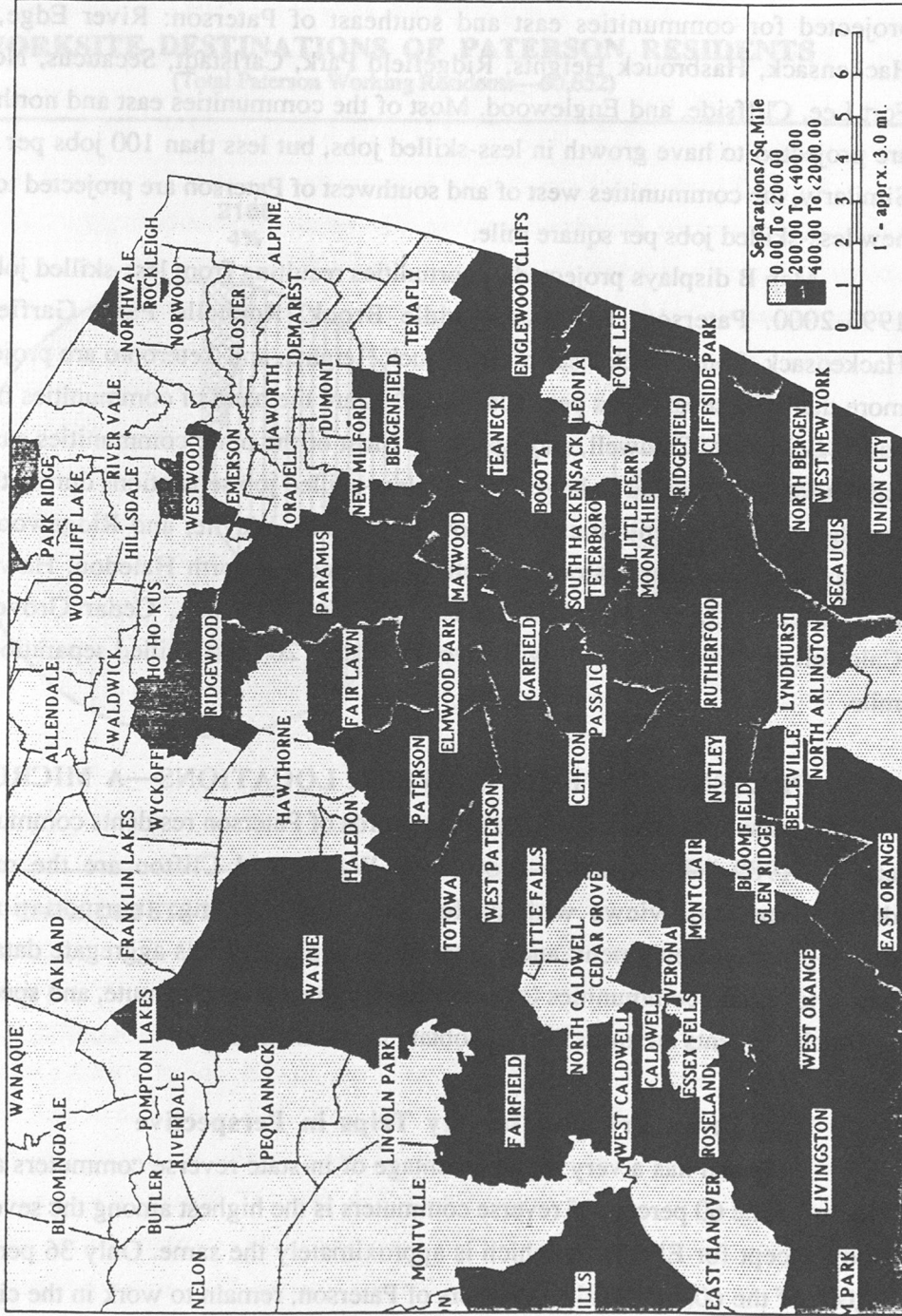
Source: CUPR Projections: 1993-2000.

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



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

North Haledon, Glen Rock, and Garfield are projected to gain up to 100 less-skilled jobs per square mile, while Elmwood Park is projected to gain more than 100 less-skilled jobs over this period. Beyond these closest communities, the most dense jobs growth is projected for communities east and southeast of Paterson: River Edge, Maywood, Hackensack, Hasbrouck Heights, Ridgefield Park, Carlstadt, Secaucus, North Bergen, Fort Lee, Cliffside, and Englewood. Most of the communities east and north of Paterson are projected to have growth in less-skilled jobs, but less than 100 jobs per square mile. Similarly, the communities west of and southwest of Paterson are projected to have 0–100 new less-skilled jobs per square mile.

Map B displays projected opportunities resulting from less-skilled job separations 1993-2000. Paterson, Paramus, Saddle Brook, Rochelle Park, Garfield, Passaic, Hackensack, South Hackensack, Hasbrouck Heights, and Teterboro are projected to have more than 400 separations per square mile, as are the band of communities from Fort Lee south, Belleville, Caldwell, and Roseland. Most of the other communities east, south, and southwest are projected to have 200–400 less-skilled job separations during this period, as are the nearby communities of Totowa, Fairfield, Wayne, and Ridgewood. However, communities north of Paterson, including Haledon, North Haledon, Hawthorne, Glen Rock, Wyckoff, and Franklin Lakes; and West Paterson, Cedar Grove, and North Caldwell (south of Paterson) will have fewer than 200 less-skilled separations per square mile.

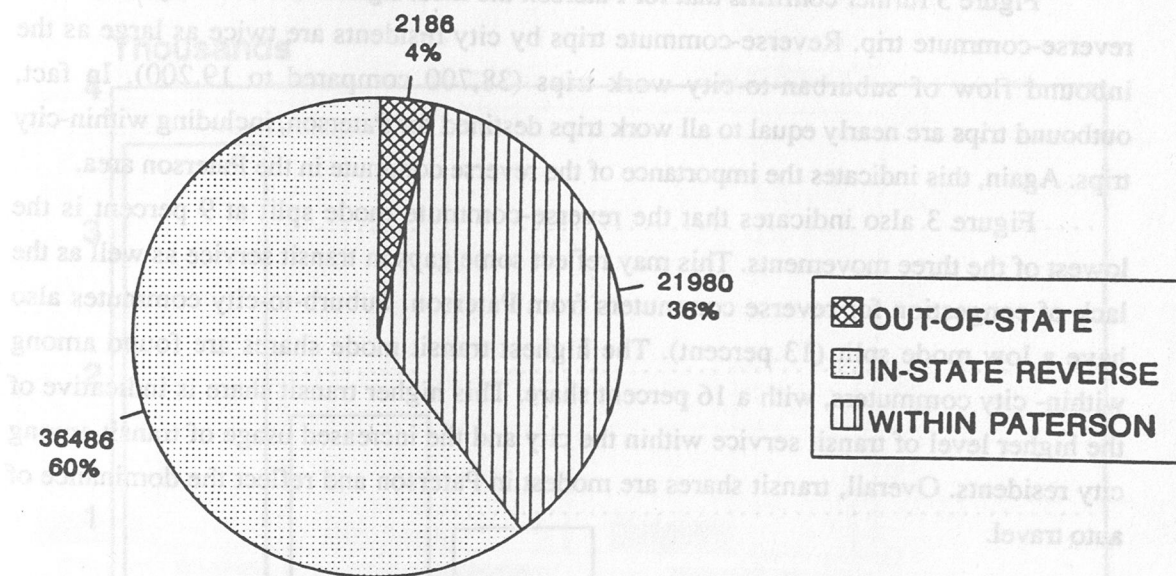
VI. PRESENT AND FUTURE WORK LOCATIONS—A MICRO VIEW

Census data show that nearly two-thirds of Paterson residents commute outside the city. A 1989 NJDOT study shows that Wayne and Clifton are the most common destinations. Interviews with professionals in planning, transportation, economic development, employment, and job training supplement this aggregate data. The section below identifies communities to which Paterson residents commute, and specific locations at which residents are most likely to obtain less-skilled jobs.

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

Paterson has a very high percentage of in-state reverse commuters as indicated in Figure 1. The 60 percent of reverse commuters is the highest among the seven cities under study except for Elizabeth, which is approximately the same. Only 36 percent, or about 22,000 of the 60,700 resident workers of Paterson, remain to work in the city. In fact, except for Newark, Paterson has the highest absolute number of reverse commuters. This probably reflects the weaker central business district and job base within Paterson com-

FIGURE 1
WORKSITE DESTINATIONS OF PATERSON RESIDENTS
 (Total Paterson Working Residents—60,652)



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

pared to cities like Newark, Jersey City, or even Trenton. It also reflects the availability of and competition from jobs in nearby suburban areas.

As indicated in Figure 2, the greatest number of transit riders for work trips are those carried within the city, with 3,600 trips. Except for nearby Bergen County locations with 1,700 riders, transit ridership to work by Paterson residents is small, even to New York with only 500 transit trips. Thus, transit is not a significant factor except for within Paterson and to nearby areas of Bergen and Passaic counties.

Figure 3 further confirms that for Paterson the most significant work trip flow is the reverse-commute trip. Reverse-commute trips by city residents are twice as large as the inbound flow of suburban-to-city work trips (38,700 compared to 19,200). In fact, outbound trips are nearly equal to all work trips destined for Paterson, including within-city trips. Again, this indicates the importance of the reverse commute in the Paterson area.

Figure 3 also indicates that the reverse-commute mode split at 9 percent is the lowest of the three movements. This may reflect some gaps in transit service as well as the lack of congestion for reverse commuters from Paterson. Suburb-to-city commutes also have a low mode split (13 percent). The highest transit mode shares are found among within-city commuters, with a 16 percent share. This higher transit share is indicative of the higher level of transit service within the city and the increased usage of transit among city residents. Overall, transit shares are modest in Paterson and reflect the dominance of auto travel.

B. Suburban Job Locations

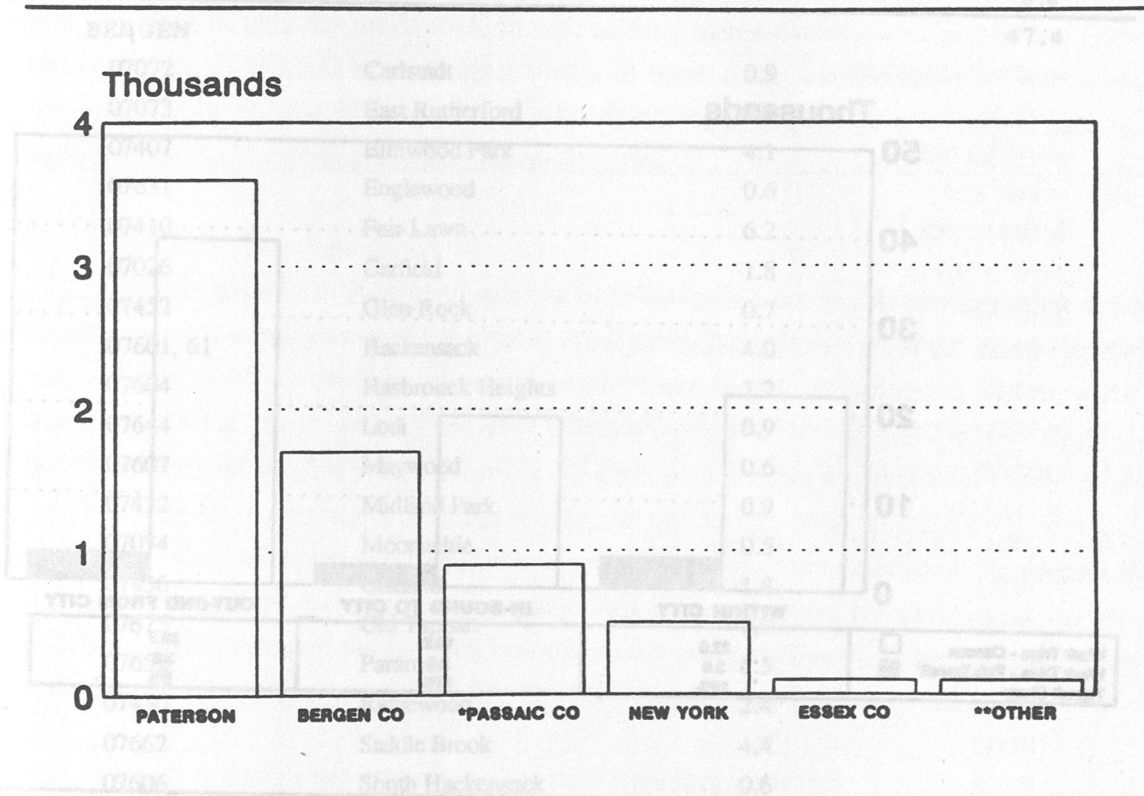
In 1989, a NJDOT study identified 33,508 Paterson residents who either work in the city or reverse commute to jobs in other towns and cities in the region. Half (50.0 percent) of these residents held jobs within the city limits. Municipalities outside the city of Paterson that provide employment for 100 or more Paterson city residents are shown in Table 17. The following zip codes define the city of Paterson for the purposes of this study: 07501, 07502, 07504, 07505, 07513, 07514, and 07524. Total reverse-commute work trips, as reported in the 1990 Census, are 36,486, out of a total city resident work force of 60,652. Table 17 represents a sample—22,204—which is 61 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. Nearly one-half of these residents commute to locations in Bergen County, while over one-third work in Passaic County. The largest number go to Wayne, Clifton, Totowa, Fair Lawn, and Paramus.

TABLE 17
 WORK LOCATIONS OF PATERSON RESIDENTS
 IN CITY AND REVERSE COMMUTES
 1989

FIGURE 2

**WORK TRIP DESTINATIONS OF PATERSON RESIDENTS
 USING PUBLIC TRANSIT**

(Total Volume of Transit Commutes by Paterson Residents—6,900)



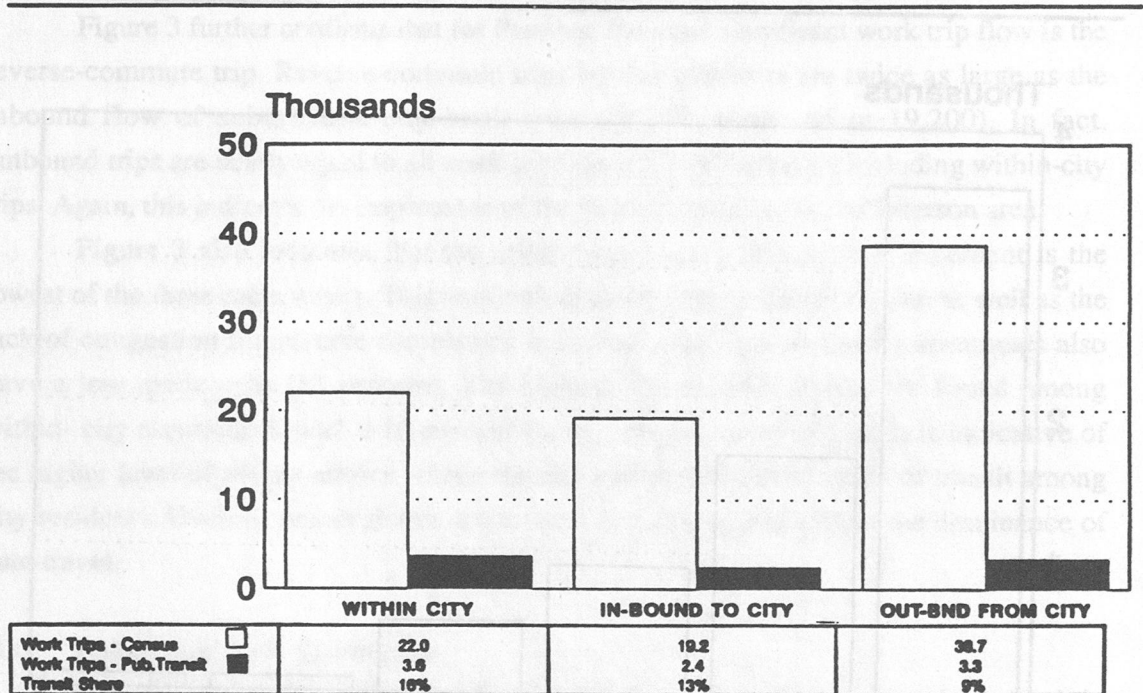
Notes: * Excludes Paterson.
 ** Includes Hudson, Morris, and Union counties.

Source: 1990 NJ TRANSIT Rail, Bus, and PATH Ridership Surveys.

FIGURE 3

**TRANSIT SHARE OF WORK TRIPS
PATERSON METROPOLITAN AREA**

(1990 Census Data and Public Transit Surveys; NJT Buses, NJT Rail)



Notes: All figures are thousands of riders, except transit share, which is percent share.
Transit totals do not include private carriers.

Source: 1990 U.S. Census STF 3 Data; 1990 NJ TRANSIT Ridership Surveys.

(continued) TABLE 17

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

County/ Zip Code	Community	Percent Reverse Commute to Community	Percent Reverse Commute to County
ATLANTIC			0.0¹
BERGEN			47.4
07072	Carlstadt	0.9	
07073	East Rutherford	1.1	
07407	Elmwood Park	4.1	
07631	Englewood	0.6	
07410	Fair Lawn	6.2	
07026	Garfield	1.8	
07452	Glen Rock	0.7	
07601, 61	Hackensack	4.0	
07604	Hasbrouck Heights	1.2	
07644	Lodi	0.9	
07607	Maywood	0.6	
07432	Midland Park	0.9	
07074	Moonachie	0.5	
07436	Oakland	1.8	
07675	Old Tappan	0.9	
07652	Paramus	5.5	
07450	Ridgewood	2.4	
07662	Saddle Brook	4.4	
07606	South Hackensack	0.6	
07608	Teterboro	1.3	
07481	Wyckoff	1.0	
BURLINGTON			0.0¹
CAMDEN			0.0¹
CAPE MAY			0.0¹
ESSEX			7.7
07009	Cedar Grove	0.6	
07102, 03, 04, 05, 06, 07, 08, 12, 14	Newark	0.8	
07006	West Caldwell-North Caldwell- Fairfield ²	4.2	

TABLE 17 (continued)

WORK LOCATIONS OF PATERSON 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>
HUDSON			1.8
07094	Secaucus	0.7	
HUDSON-BERGEN			0.2
07032	Kearny-North Arlington ²		
HUNTERDON			0.1
MERCER			0.1
MIDDLESEX			0.9
MONMOUTH			0.2
MORRIS			4.6
07082	Montville	0.7	
07035	Lincoln Park	0.7	
07034, 54	Parsippany-Troy Hills	0.6	
OCEAN			0.1
PASSAIC			35.8
07011, 12, 13, 14	Clifton	7.0	
07508	Haledon	1.7	
07506	Hawthorne	2.5	
07055	Passaic	3.1	
07440, 44	Pequannock	0.5	
07512	Totowa	6.6	
07424	West Paterson	3.6	
07470	Wayne	10.8	
SOMERSET			0.2
SOMERSET-UNION			0.1
07060, 63	Warren-Watchung-North Plainfield- Plainfield ²		
SUSSEX			0.1
UNION			0.8
WARREN			0.0¹

Notes: 1. 0.0 Reported reverse commute is less than 0.1%.

2. These jurisdictions, or portions of these jurisdictions, are included within this zip code.

Source: NJDOT 1989 ZIP Code Origin/Destination Data.

Tables 18A and 18B present results from interviews with city and county planning, economic development, transportation, and social service professionals, as well as information from the Passaic County Data Book. They indicate that most current, viable employment in the county is found in the Wayne-Totowa area, including the Willowbrook Mall, with somewhat less in Little Falls. In addition, firms in Clifton and along Route 46 provide employment opportunities. The largest Passaic County employers outside the city of Paterson include Hoffman-LaRoche and ITT Avionics in Clifton, American Cyanamid and the Singer Company in Totowa, as well as the Passaic County administration. These employ more than 2,000 workers each. Fourteen other companies, mostly in Totowa and Clifton, employ at least 1,000 people. Residents also find employment in Bergen County, especially in the Paramus malls and industrial parks.

C. In-City Job Locations

Within the city of Paterson itself, the hospitals and other health care providers are a major source of employment. As indicated previously, Paterson was a major center for the silk industry; with its decline, industrial employment in the city scattered among many small sites. What heavy industry remains is primarily located on the north side of the city. By far the largest employer in the city is St. Joseph's Hospital and Medical Center with 3,442 employees. Other major Paterson employers are Barnert Memorial Hospital with 913 employees; the city of Paterson administration offices with 544 employees; the county of Passaic offices; C. N. Burman and Company with 500 employees; Haband Company, Inc. with 366 employees; and the Okonite company with 300 employees. Table 18B lists these and other establishments with more than 200 employees.

VII. THE EXISTING TRANSPORTATION NETWORK

The earlier portion of this report presented a description of Paterson's population, labor force, and currently available and projected job opportunities for Paterson and its labor area. This section describes the existing transportation network within the city and from Paterson to the surrounding suburbs. The components—roadways, rail transit, bus routes, and alternatives to public transit—are described in turn. Sections IX and X relate this existing transportation network to present and potential work locations.

A. Roadways—City to Suburb

Table 19A displays information about the network of interstate, state, and county roadways in the Paterson area. The road network is shown in Map C.

TABLE 18A
SPECIFIC SUBURBAN SITES OF EMPLOYMENT
AND EMPLOYMENT GROWTH FOR THE REVERSE COMMUTE
PATERSON

<i>Corridors and Specific Locations</i>	A <i>Existing Employment or Growth Node</i> <i>Existing, Growth, or Both</i>	B <i>Site of Primarily Skilled or Less-skilled Employment</i> <i>Skilled, Less-skilled, or Both</i>	C <i>Potential for Jobs at Site</i> <i>High, Moderate, or Low</i>	D <i>Potential for Center City Residents at Site</i> <i>High, Moderate, or Low</i>
Rt. 23 N; Wayne Wayne Industrial Park State Farm Insurance	Existing Existing	Both Both	Moderate Moderate	High Moderate
Rt. 80 W; Totowa, Wayne Willowbrook Mall Commercenter	Both	Both	High	High
Rt. 46 W; Clifton, West Paterson, Totowa, Wayne New Jersey Development Center American Cyanamid Caldor Singer	Both Both Existing Existing	Both Both Less-skilled Less-skilled	High Moderate Low Low	High Low Moderate Moderate
Rt. 20 S; Rt. 3 E; Clifton, Passaic Hoffman La Roche, Inc. ITT Avionics Willet Street Industrial Center Passaic Industrial Center General Hospital Center at Passaic	Existing Existing Existing Existing Existing	Both Skilled Both Both Both	Moderate Moderate Moderate Moderate Moderate	Moderate Low Moderate Moderate Moderate
Rt. 3; East Rutherford Meadowlands Sports Complex	Both	Both	Moderate	Low
Rt. 80 E; Hackensack Meadowlands	Both	Both	High	Low

TABLE 18A (continued)
SPECIFIC SUBURBAN SITES OF EMPLOYMENT
AND EMPLOYMENT GROWTH FOR THE REVERSE COMMUTE

PATERSON			
A	B	C	D
Existing or Growth Node	Site of Primarily Skilled or Less-skilled Employment	Potential for Jobs at Site	Potential for Center City Residents at Site
Existing, Growth, or Both	Skilled, Less-skilled, or Both	High, Moderate, or Low	High, Moderate, or Low
<i>Corridors and Specific Locations</i>			
Rt. 4 E; Paramus			
Existing	Both	High	Moderate
Existing	Both	Moderate	Moderate
Existing	Both	High	Moderate
Existing	Both	Moderate	Moderate
Route 504 (Paterson, Hamburg Turnpike)			
Prospect Park, Haledon, Wayne			
Both	Both	High	High
Existing	Both	Low	Low
Existing	Both	Moderate	Low
Both	Both	Moderate	Moderate
Route 208; Fairlawn, Wyckoff			
Both	Both	Moderate	Moderate
Franklin Lakes, Oakland			
Mahwah			
Ringwood Industrial Park			
Both	Both	Moderate	Low

Source: CUPR interviews with city and county planning, economic development, transportation, and social services professionals, Summer 1992; Passaic County Department of Economic Development, *Passaic County Data Book*, 1992.

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

	A <i>Existing 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>				
Downtown				
Vanguard Plastics, Inc.	Existing	Both	Moderate	Moderate
Visiting Homemakers of Passaic Co.	Both	Less-skilled	High	High
Straight and Narrow	Existing	Both	Moderate	Moderate
Retail				
Brooks Brothers Distribution Center	Both	Both	Moderate	Low
Haband Company Inc.	Both	Both	Low	Low
C.N. Burman and Company	Both	Both	Moderate	Moderate
Hospitals				
Barnert Memorial Hospital	Both	Both	Moderate	High
St. Joseph's Hospital and Medical Center	Both	Both	High	High
County/City/State/ Federal Government				
City of Paterson Municipal Complex	Existing	Both	Moderate	Moderate
City Hall	Existing	Both	Moderate	Moderate
County Court	Existing	Both	Moderate	Moderate
Post Office	Existing	Both	High	High
Colleges/Schools				
Passaic County College	Both	Both	High	Moderate
William Paterson College	Both	Both	High	Moderate

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

PATERSON

<i>Corridors and Specific Locations</i>	A Existing 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
	Existing, Growth, or Both	Skilled, Less-skilled, or Both	High, Moderate, or Low	High, Moderate, or Low
Industrial Parks				
North side of Paterson, west of Madison Avenue	Existing	Both	Moderate	Moderate
Spruce Street corridor: Historic District	Existing	Both	Moderate	Moderate
Trenton Avenue corridor	Existing	Both	Moderate	Moderate
Paterson Shade Company	Existing	Less-skilled	Moderate	Moderate
Accurate Box Company	Existing	Less-skilled	Moderate	Moderate
Thermwell Products	Existing	Both	Moderate	Moderate
Kaysam Corporation	Existing	Both	Moderate	Moderate
Bagel Crisp	Existing	Less-skilled	Moderate	Moderate
Atlantic Battery Corp.	Existing	Both	Moderate	Moderate
Ports/Airports				
NA				
Other				
PSE&G	Existing	Both	High	High
New Jersey Bell	Existing	Both	High	High

Source: CUPR interviews with city and county planning, economic development, transportation, and social services professionals, Summer 1992; Passaic County Department of Economic Development, *Passaic County Data Book*, 1992.

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

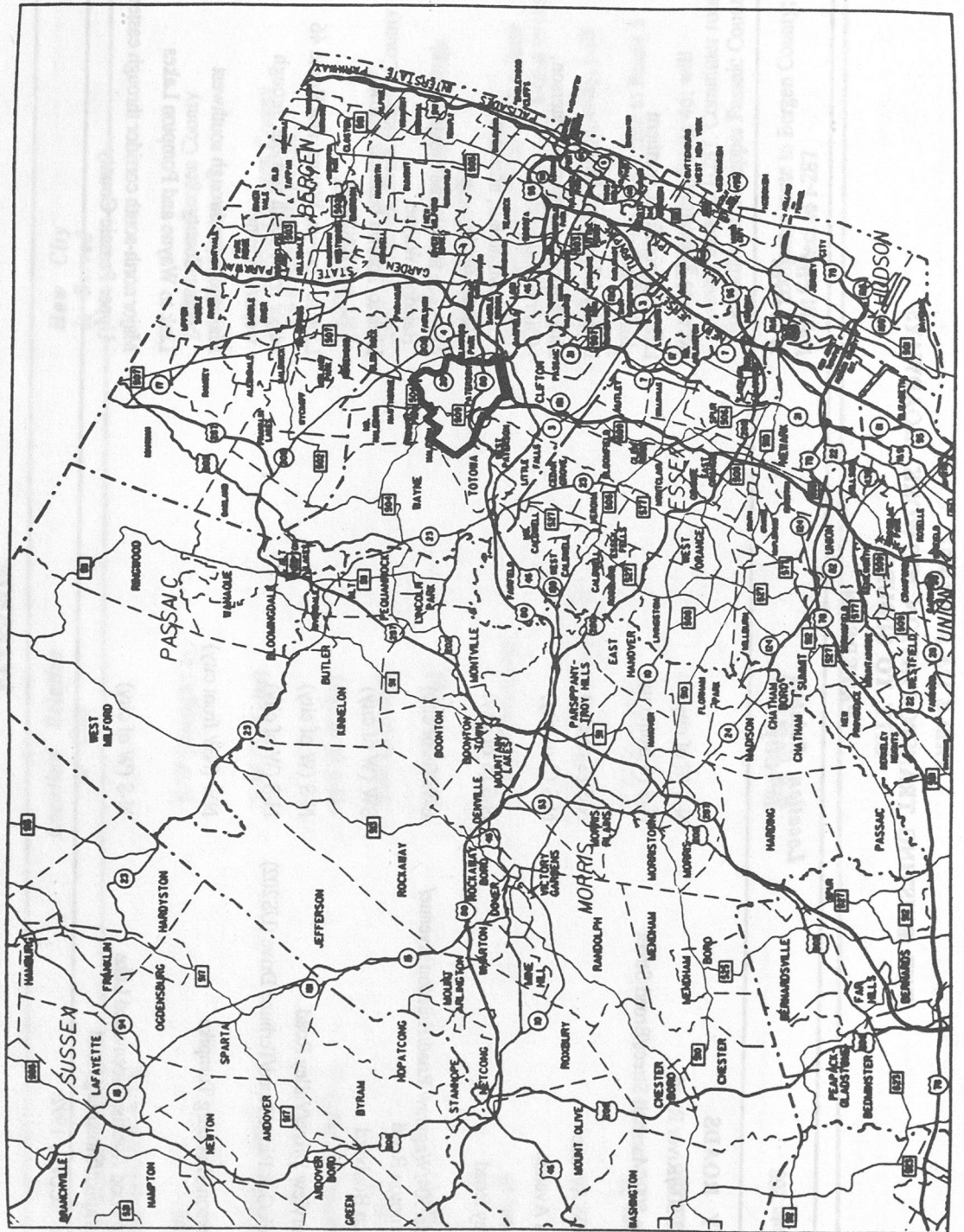
	<i>Location Relative to City</i>	<i>How City is Served</i>
STATE HIGHWAYS		
I-80	E-W (through city)	Links city to Bergen County and Manhattan
US Route 46	E-W (S of city)	Link to south Bergen County Parsippany-Troy Hills
Garden State Parkway	N-S (E of city)	Major N-S corridor
Route 3	E-W (S of city)	Link to Hudson, south Bergen County
Route 4	E-W (E of city)	Link to Bergen County and George Washington Bridge
Route 19	N-S (to downtown)	Links US Route 46 and Garden State Parkway to I-80; primary access to city
Route 20	N-S (express through city)	Links to Garden State Parkway, I-80
Route 21	N-S (S of city)	Links Clifton/Passaic area to Route 3
Route 23	N-S (W of city)	Links I-80 and US Route 46; will connect them to I-287. Commuter route for northwest and upper Passaic County
Route 208	E-W (N of city)	Key commuter route to Bergen County; will connect to I-287

TABLE 19A (continued)
 THE EXISTING TRANSPORTATION NETWORK—ROADWAYS
 CITY TO SUBURB
 PATERSON

COUNTY ROADS	Location Relative to City	How City is Served
Route 507/River Road	N-S (E of city)	Access to Rutherford
Route 509/Marshall Street/Broad Street	N-S (S from city)	Link to Bloomfield, northern Essex County
Passaic Avenue	N-S (S of city)	Link to Clifton and Passaic
Main Avenue	N-S (S of city)	Link business districts of Paterson, Clifton, and Passaic
Valley Road	N-S (S of city)	Link to Montclair, northern Essex County
Route 504/Wagaraw Road/Haledon Avenue/Pompton Road	E-W (N of city)	Access to Hawthorne Prospect Park, Haledon, Wayne
Union Boulevard	SW (W of city)	Link to Totowa business district, I-80, and Route 46
Riverview Drive/Valley Road	N-S (W of city)	Link to Totowa, Wayne, and Route 46
Black Oak Ridge Road/Terhune Drive (US202)	N-S (W of city)	Major north-south corridor through western Wayne
Paterson-Hamburg Turnpike	NW (NW from city)	Major corridor through southwest Passaic County
Ringwood Avenue/Greenwood Lake Turnpike/Sloatsburg Road	N-S (W of city)	Link to Wayne and Pompton Lakes
		Major north-south corridor through eastern Upper Passaic County

Source: CUPR, 1992.

MAP C
REGIONAL ROAD SYSTEM IN THE VICINITY OF PATERSON



1. Major Arterials

The major interstate road in the Paterson area is Interstate 80. Interstate 80 crosses through the southeast and southwest sections of Passaic County. To the east of the county, I-80 connects with I-95; it continues across the state providing direct access to the New Jersey Turnpike and George Washington Bridge. To the west, it continues across the state through Warren County to the Delaware Water Gap.

The regional highways are major routes for commuting and provide access to major metropolitan centers. Major state roads in and around Paterson are US Route 46, the Garden State Parkway, Routes 3, 4, 19, 20, 21, 23, and 208. They are discussed below.

US Route 46 runs east-west to the south of Paterson. It connects to the Garden State Parkway to the east and provides access to Morris County to the west. Generally it serves as a corridor south of, and parallel to, I-80.

The Garden State Parkway crosses the southeast part of Passaic County. The highway traverses the entire length of the state, north to south. It is a toll road, open only to non-commercial vehicles. It provides direct connections to the New York State Thruway and the New Jersey Turnpike.

Route 3 is a major east-west highway located in the southeast portion of Passaic County. To the west, it joins US Route 46; it continues east from the county to the Hackensack Meadowlands district, New Jersey Turnpike, and Lincoln Tunnel. This route serves as an important corridor for commuters to New York; it is utilized by bus transit as well as by private vehicles.

Route 4 is also a major east-west highway east of Paterson. It connects the city to important retail stores in Bergen County and to the George Washington Bridge.

Route 19 is a short north-south freeway that links US Route 46 and the Garden State Parkway to I-80. The interchange with I-80 in downtown Paterson was completed in 1992. It is designed to serve as the primary access to the city of Paterson.

Route 20 is located in the southeast portion of Passaic County, generally following the Passaic River. It provides north-south access to I-80, the Garden State Parkway, Route 4, and US Route 46 for the entire eastern portion of Paterson and nearby communities, as well as being an express route through the city. This route also serves the industrial areas of Paterson and Hawthorne.

Route 21 traverses the southern portion of the county, also following the Passaic River. It links the Clifton-Passaic area with Route 3, and then continues south to Newark. Currently the highway is incomplete, ending near downtown Passaic.

Route 23 crosses the western margin of the southwest and upper portions of the county. It links these areas with I-80 and US Route 46 and will link them with I-287 when

it is completed. It serves as an important commuter route from the northwest and upper parts of the county as well as communities in adjoining Morris and Sussex counties. The road provides access to the Willowbrook Mall and the Wayne Towne Center Regional Mall Complex, as well as many community shopping centers.

Route 208 is a limited-access highway that crosses the northern tip of the southeast section of the county. To the east it connects to Route 4; to the west it will connect to I-287, providing better access to the upper portion of the county. Currently it is a key commuter route and provides access to the shopping centers in central Bergen County.

2. County Roads

The most important county roads are Routes 504, 507, and 509; Passaic Avenue, Main Avenue, Valley Road, Wagaraw Road, Haledon Avenue, Union Boulevard, Riverview Drive, Black Oak Ridge Road, the Paterson-Hamburg Turnpike, and Ringwood Avenue. They are each described briefly below.

Route 507 (River Road) runs just east of Paterson. It provides access to Elmwood Park, Garfield, and East Rutherford.

Route 509 (Marshall Street and Broad Street) goes south from Paterson to northern Essex County communities such as Bloomfield.

Passaic Avenue in Clifton and Passaic primarily goes through a residential area connecting downtown Passaic to Route 3.

Main Avenue in Clifton, Passaic, and Paterson is a key north-south corridor, going through the major business districts of each town.

Valley Road becomes Barclay Street and then Marshall Street as it goes from Clifton to Paterson. It goes along the western edge of the southeast portion of the county, linking I-80, US Route 46, and Route 19.

Route 504 is Wagaraw Road in Hawthorne. It serves the industrial areas of Hawthorne and northern Paterson, which it links to Route 20. Route 504 continues west as Haledon Avenue, which becomes Pompton Road as it goes from Paterson through Prospect Park and Haledon to Wayne. It connects the other communities to Wayne and serves as the key access to William Paterson College, as well as serving the local business districts in Haledon and Prospect Park.

Union Boulevard in Totowa and Paterson serves the major business district in Totowa and the adjoining part of Paterson, and joins this area to I-80 and U.S. Route 46.

Riverview Drive in Totowa connects to Valley Road in Wayne and links the area to US Route 46. This is the major north-south corridor through the middle of Wayne. It also provides access to the industrial area of Totowa.

Black Oak Ridge Road and Terhune Drive (Route 202) in Wayne serve as a major north-south corridor through the western part of Wayne. Some long-distance traffic currently uses these roads, but this is expected to diminish once I-287 is completed.

The Paterson-Hamburg Turnpike in Wayne and Pompton Lakes is a major corridor through the southwest part of the county. It serves the commercially developed northern areas of Wayne Township, as well as Wayne General Hospital and William Paterson College.

Ringwood Avenue, Greenwood Lake Turnpike, and Sloatsburg Road form a major north-south corridor through the eastern portion of the upper county—Pompton Lakes, Wanaque, and Ringwood. Currently it serves the business district of Wanaque; it will connect with I-287.

B. Roadways—In City—Municipal Streets

Information on the most important roads in Paterson is displayed in Table 19B. Paterson is connected to Prospect Park and Hawthorne to the north by several adjoining roadways, or the same road under different names: Wagaraw Road in Hawthorne becomes Goffle Road, then East Main Street, Holsman Street, and Presidential Boulevard. These serve as an approach to downtown Paterson from Prospect Park and Hawthorne to the north, as well as the industrial areas along the Passaic River. They also connect downtown Paterson to Routes 20 and 208.

Paterson has several major local thoroughfares that run in a north-south direction. From west to east they include River Street, Main Avenue, Madison Street, Vreeland Avenue, and McLean Boulevard. River Street runs southwest from Wagaraw Road to Main Street, which becomes Main Avenue. Main Avenue goes through the central business district; it connects Paterson with Clifton and Passaic, and then with Route 21. Madison Street is the most important north-south corridor within Paterson; it connects to Route 20 and I-80. Vreeland Avenue goes from Broadway to Market Street. McLean Boulevard runs along the Passaic River on the eastern side of Paterson, providing access to US Route 46.

Important east-west roads through the center of Paterson include Broadway and Market Street. Broadway is the major approach to the city from the east; it links the city to Route 4, Route 20, and Bergen County. Market Street connects the city with I-80 and Route 20. West Broadway serves as a major approach to the central business district from the northwest communities of Haledon and Wayne.

Memorial Drive and Ward Street form a circumferential route around the central business district.

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

	<i>Location Relative to City</i>	<i>How City is Served</i>
MUNICIPAL STREETS		
Wagaraw Road/Goffle Road/East Main Street/Holsman Street/Presidential Boulevard	NE-SW (NW edge of city)	Major approach from northwestern suburbs; connects to Routes 20 and 208
River Street	N-S (western part city)	Access to industrial area along Passaic River
Main Avenue/Main Street	N-S (CBD)	Links city to Routes 46 and 21
Madison Street	N-S (center city)	Major north-south corridor in city; connects to Routes 20 and I-80
Vreeland Avenue	N-S (eastern part of city)	Connects Broadway and Market Street
McClellan Boulevard (Route 20)	N-S (eastern edge of city)	Access along Passaic River to Route 46
Broadway	E-W (center city)	Major access from eastern suburbs and Bergen County; link to Routes 4 and 20
Market Street	SE-NW (center city)	Links city to I-80 and Route 20
West Broadway	NW (from center city)	Major approach from northwestern suburbs
Memorial Drive/Ward Street	E-W (center city)	Circumferential route around central business district

Source: CUPR, 1992.

C. Rail Transit—City to Suburb

Rail transit is described in Table 20. Paterson is served by only one railway line, the Main Line, which links the city to Suffern, New York, and Hoboken, New Jersey; the route is shown on Map D, along with other regional rail lines. The majority of rail users use this line as a means to access New York City and Hoboken. Although this line extends to Suffern, New York, the reverse commute to Suffern is of only minor importance.

On weekdays, trains run from 5:44 AM to 12:35 AM. On weekends, they run from 7:54 AM to 10:45 PM. During peak periods, the trains have 30-minute headways; during non-peak periods, they run every 60–120 minutes. According to a 1990 ridership survey, there are approximately 25 passenger trips served for work purposes east of Paterson with destinations in Lyndhurst, Jersey City, and Hoboken.

One rail station serves the city of Paterson.

D. Bus Service—City to Suburb

NJ TRANSIT operates 17 bus routes in and around Paterson, three of which are interstate bus routes. Most bus routes serving Paterson are used to varying degrees by the city's reverse commuters. These routes serve most employment, shopping, education, and medical centers throughout the region.

Table 21A and Map E display regional bus routes. The first three routes originate in Paterson; they provide interstate service. The remaining 14 routes serve the region. Most of the regional routes are also important for transportation within the city of Paterson itself. The portion of these routes within the city of Paterson is described in subsection E below.

Route 161

Route 161 primarily serves destinations in Bergen County including the municipalities of Elmwood Park, Saddle Brook, Hasbrouck Heights, Teterboro, Little Ferry, and Moonachie, before reaching Union City and terminating at Port Authority Bus Terminal in New York. This route provides service to Teterboro Airport and Bendix Corporation employment center destinations. According to fare counts, Route 161 serves approximately 160 reverse-commute passenger trips from Paterson during peak periods. Almost one-quarter (24 percent) go to Lodi, Garfield, Saddle Brook, and Elmwood Park, while three-quarters (75 percent) go to East Rutherford and Hasbrouck Heights; only one percent go to Union City and Secaucus. On weekdays, Route 161 operates for 19 hours with 5–15 minute headways during peak periods and 30–60 minute headways during off peak and evening periods. On Saturday and Sunday the route runs for 17 and 14 hours, respectively, both with 40–60 minute headways.

TABLE 20
THE EXISTING TRANSPORTATION NETWORK: RAIL TRANSIT
CITY TO SUBURB

PATERSON

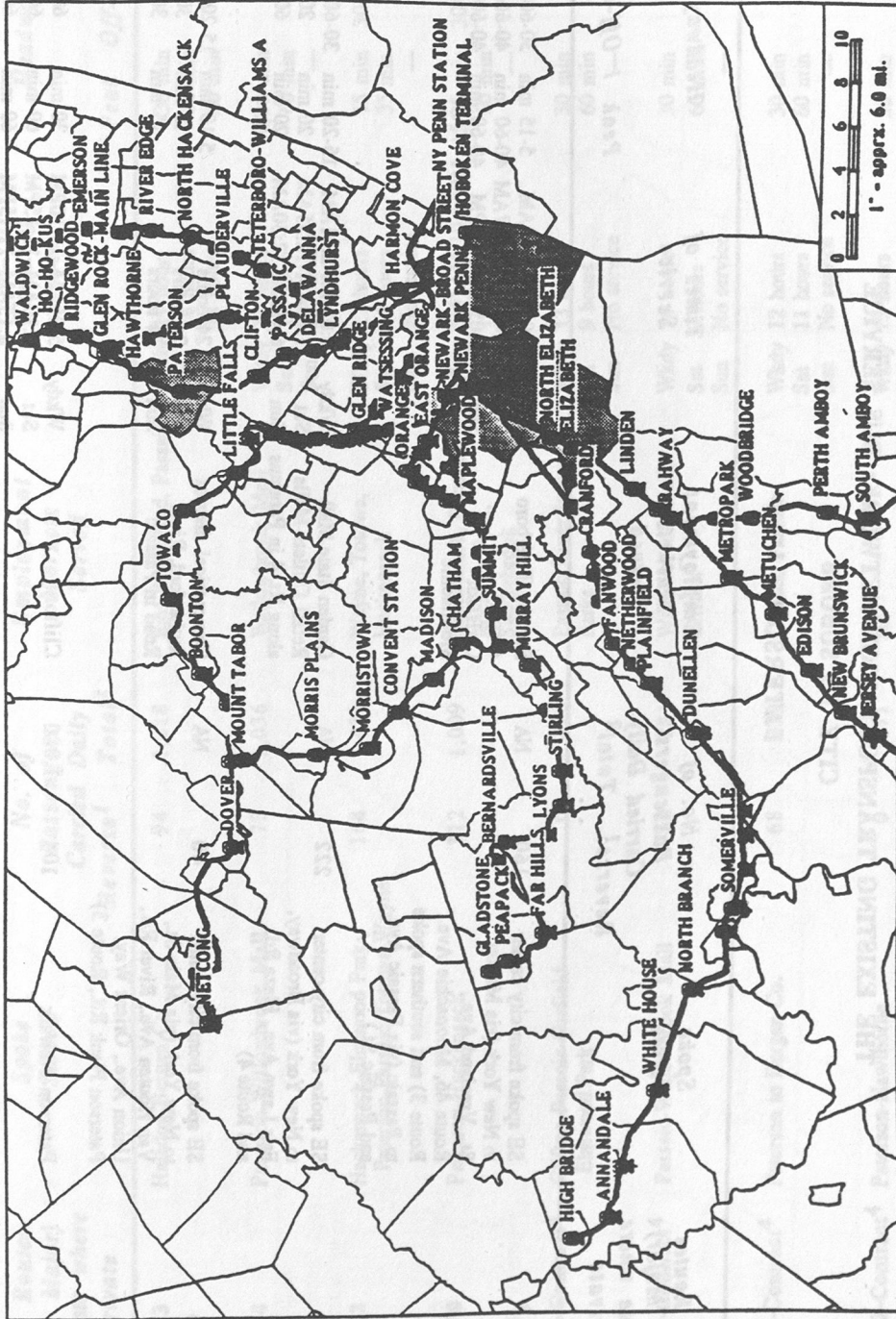
<i>Rail Lines</i>	<i>Destination Relative to City</i>	<i>No. of City Passengers Carried Daily (Reverse)</i>	<i>Major Employment Markets Served by This Line</i>	<i>Times of Service</i>	<i>Headway</i>	<i>Peak/Off-Peak</i>
Main Line	Port Jervis	*	Jersey City Hoboken	Wkdy 5:44AM-12:35AM Sat/Sun 7:54AM-10:45PM	30/60 min 120 min	
Main Line	Hoboken	25	Jersey City Hoboken	Wkdy 5:44AM-12:35AM Sat/Sun 7:54AM-10:45PM	30/60 min 120 min	

Note: *Minimal reverse commute.

Source: New Jersey Transit.

MAP D

NJ TRANSIT COMMUTER RAIL LINES IN THE PATERSON METROPOLITAN AREA



Source: NJ TRANSIT

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

<i>Bus Routes (List Major) Indicate where Private</i>	<i>Spoke Served</i>	<i>No. of Passengers Carried Daily Reverse¹ Total²</i>	<i>Employment Markets Served</i>	<i>Times of Service</i>	<i>Headway</i>	<i>Peak / Off-Peak</i>
161 ³	SE spoke from city center to New York (via Market St., Vreeland Ave., Route 46, Moonachie Ave., Route 3) and southern spoke to Passaic (via Passaic Ave. and Passaic St.)	160	Bendix, Teicrboro Airport Carlstadt Moonachie	Wkdy 6:00AM-1:00AM Sat 6:40AM-12:47AM Sun 7:05AM-9:57PM	5-15 min 30-60 min 40-60 min 40-60 min	
171	SE spoke from city center to New York (via Broadway, Fair Lawn Ave., Plaza Rd., and Route 4)	222	Garden State Mall Retail Outlets-Malls along Rt. 4 in Paramus	Wkdy 5:05AM-2:01AM Sat 7:10AM-12:35AM Sun 6:40AM-12:30AM	15-20 min 20 min 20 min 20 min 30-60 min 20 min 60 min	
190	SE spoke from city center to New York (via Main St., Van Houten Ave., River Rd., Union Ave., Orient Way, Paterson Plank Rd., Route 3)	40	Commerical district Rutherford, River Road in Passaic	Wkdy 24 hours Sat 24 hours Sun 24 hours	5-10 min 15 min 15 min 30 min 30 min	
72	Paterson-Newark	104	Clifton	Wkdy 5:05AM-11:10PM Sat 6:10AM-11:15PM Sun 8:15AM-11:15PM	30 min 60 min 60 min 60 min	
74	Paterson-Newark	292	Clifton, Passaic Newark	Wkdy 4:30AM-11:35PM Sat 5:45AM-11:35PM Sun 7:05AM-11:35PM	20-30 min 20 min 30 min 20-30 min 30 min 30 min	

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

Bus Routes (List Major) Indicate where Private	Spoke Served	No. of Passengers Carried Daily Reverse¹ Total²	Employment Markets Served	Times of Service	Headway Peak Off-Peak
703	Haledon-Bergen Co.	94	East Rutherford, Passaic	Wkdy 19 hours Sat 18 hours Sun 18 hours	30 min 60 min 60 min
704	Paterson-Willowbrook Mall	73	Willowbrook Mall	Wkdy 13 hours Sat 12 hours Sun No service	10/20 min 60 min —
712	Hackensack-Elmwood Park- Paterson-Passaic-Totowa-Wayne	168	Wayne, Totowa, Hackensack	Wkdy 17 hours Sat 14 hours Sun No service	15 min 30-60 min 35 min 70 min —
770	Paterson-Hackensack	312	Hackensack, Paramus, Rochelle Park, Saddlebrook	Wkdy 5:51AM-10:50PM Sat 12 hours Sun No service	15/25 min 60 min 60 min —
P2-Contract ⁴	Clifton-Passaic-Garfield- Elmwood Park	0	Passaic River Industrial Parks	Wkdy 13 hours Sat 9 hours Sun No service	30 min 60 min 60 min —
P5-Contract ⁴	Passaic-Willowbrook Mall	20	Willowbrook Mall, Clifton ⁵	Wkdy 14 hours Sat 9 hours Sun No service	30 min 60 min 60 min —
P7-Contract ⁴	Paterson to Bergen Co.	68	Clifton, Passaic	Wkdy 12 hours Sat 11 hours Sun No service	30 min 60 min 60 min —
P22-Contract ⁴	Paterson-Hawthorne Ridgewood-Wyckoff	0	NA	Wkdy 13 hours Sat 11 hours Sun No service	30 min 60 min 60 min —

Source: NJ TRANSIT

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

Bus Routes (List Major) Indicate where Private	Spoke Served	No. of City Passengers Carried Daily	Employment Markets Served	Times of Service	Peak Off-Peak	
					Reverse ¹	Total ²
P54-Contract ⁴	Passaic Co.	235	Wayne General Hospital, William Paterson College Wayne, Passaic	Wkdy 14 hours Sat 13 hours Sun No service	30 min 60 min	30 min 60 min
P82-Contract ⁴	Paterson to Greystone Sanitarium	0	None	Sat only	NA	NA
P86-Contract ⁴	Ridgewood-Paterson- Passaic Co., Pompton Lakes	510	Fair Lawn, Ridgewood, Wayne, Glen Rock,	Wkdy 14 hours Sat 10 hours Sun No service	20-25 min 60 min	20-25 min 60 min
Arrow Motor Coach (26)- Private	Paterson to Fairlawn	NA	Paterson, Fair Lawn	Wkdy 13 hours Sat 11 hours Sun No service	30 min 30 min	30 min 30 min

Notes: 1. Reverse—"to work" passenger trips by Paterson residents to reverse-commute destinations (excluding Newark, New York, Jersey City, Hoboken, and Paterson). (Note—commutes to Newark International Airport and Port Newark are included as reverse-commute destination.) "To work" trips are one-way passenger trips from place of origin to final worksite destination.
 2. Total—volume of passenger trips in outbound direction (includes commuters from all origins to all destinations, for all purposes). Trip counts from local bus routes are referenced from NJ TRANSIT Local Bus Ridership Survey—1990. Quantities are approximate and do not reflect current ridership counts in 1992.
 3. Reverse—totals from interstate bus routes (#161, #171, #190) are referenced from passenger trips tabulated from fare-box counts in June 1992 and reflect trips taken during AM peak time periods (5:30 AM-9:30 PM) originating in Paterson. Unlike the local bus ridership survey data, there is no method of verifying whether these trips are for work-related purposes and are completed by actual Paterson residents. Both have been assumed. Total trips for the interstate routes are not available. There is no methodology for separating a complete passenger trip including transfers from the individual trip counts tallied from fare boxes on each route.
 4. Operated by Community Bus Lines/Community Transportation, Inc. under contract with NJ TRANSIT.
 5. All reverse-commute destinations reported were in Clifton; half required a transfer.

NA = Not available
 Source: New Jersey Transit.

MAP E
NJ TRANSIT BUS ROUTES IN THE PATERSON METROPOLITAN AREA



Source: NJ TRANSIT

Route 171

Route 171 originates in Paterson; it serves destinations in Bergen County including the municipalities of Fair Lawn, Paramus, Teaneck, and Fort Lee, before terminating at the George Washington Bridge Bus Terminal in New York. It serves the Bergen Mall and Garden State Plaza as well as other malls and retail outlets along Route 4 in Paramus and Teaneck. According to fare counts, Route 171 served 222 Paterson reverse commuters during peak hours. About one-fifth (21 percent) go to Fair Lawn and the Garden State Plaza as well as other destinations in Paramus; 62 percent travel to the area bounded by Paramus, Hackensack, and Teaneck; the remaining 17 percent go to the area from Teaneck to Englewood and Fort Lee. Route 171 operates for 21 hours on weekdays, with 15–20 minute headways during peak periods and 30–60 minute headways in the off-peak periods and evenings. It operates 18 hours on Saturday with 20-minute headways; on Sunday it operates 17 hours with 20–60 minute headways.

Route 190

Route 190 originates in Paterson; it primarily serves interstate passengers from destinations in Passaic, Bergen, and Hudson counties before terminating at the Port Authority Bus Terminal in New York. This route accounts for 40 reverse-commute passenger trips. It provides transportation to the commercial districts in Rutherford. Eight percent of the trips are to Clifton and Passaic; Rutherford and East Rutherford account for 50 percent, while Secaucus and Union City are the destinations for 30 percent of the riders. Route 190 operates for 24 hours throughout the week. On weekdays, it has 5–10 minute headways during peak periods and 15–20 minute headways during off-peak and evening periods. On the weekend, it runs 15-minute headways during the day and 30-minute headways in the evenings.

Route 72

Route 72 originates in Paterson. It serves Clifton in Passaic County, as well as Nutley, Bloomfield, and Newark in Essex County. According to the NJ TRANSIT ridership survey, Route 72 serves 104 daily passengers with primary destinations to Clifton (40 percent). The route operates 18 hours per day with 30-minute headways during peak and midday time periods and 60-minute headways during off-peak periods. During the weekends it operates 15–17 hours per day with 60-minute headways.

Route 74

Route 74 originates in Paterson. It serves Clifton and Passaic in Passaic County before continuing to Nutley, Belleville, and Newark in Essex County. According to the NJ TRANSIT ridership survey, Route 74 carries almost three times as many reverse commuters as does Route 72. Route 74 accounts for 292 reverse commuters with destinations to Clifton (53 percent) and the city of Passaic (43 percent). The route has 20–30 minute headways throughout both peak and off-peak periods; it operates 19 hours per day during the week. It provides weekend service 16–18 hours per day with 20–30 minute headways.

Route 703

Route 703 originates in Haledon, travels through Paterson, and serves communities in Passaic and Bergen counties. It provides limited additional service during peak periods and evenings. The ridership survey shows 94 riders using the route to reverse commute for work purposes. The majority of their destinations are located in East Rutherford (43 percent) and the city of Passaic (26 percent). Carlstadt accounts for 11 percent and Moonachie for 5 percent. This route runs an average of 30-minute headways during peak and midday periods while averaging 60-minute headways during off-peak periods. Route 703 operates approximately 19 hours per day on weekdays and 18 hours per day on the weekends.

Route 704

Route 704 originates in Paterson. It serves West Paterson, Little Falls, and Wayne municipalities, terminating at the Willowbrook Mall in Wayne. There is a moderate amount of reverse-commute ridership for work purposes (73) with final destinations exclusively in Willowbrook Mall. Route 704 operates approximately 13 hours on weekdays, with 10–20 minute headways during peak and midday time periods, and 30 minutes in off-peak periods. On Saturday it provides 12 hours of service with 60-minute headways. No service is provided on Sunday.

Route 712

Route 712 originates in Hackensack, passes through Paterson, and provides service to other communities in Passaic and Bergen counties. The route has a large reverse-commute ridership: 168 passengers with final destinations split among Wayne (35 percent), Totowa (25 percent), and Hackensack (13 percent); Elmwood Park with 3–5 percent. On weekdays Route 712 provides 17 hours of service including off-peak service to

Willowbrook Mall, with 15-minute headways during peak periods, 30-minute headways during the midday, and 60-minute headways off-peak in the evenings. Saturday it runs for 14 hours with 35-minute headways in the day and 70-minute headways in the evening. Route 712 does not run Sunday.

Route 770

Route 770 originates in Paterson; it provides service to destinations in Bergen County, terminating at the bus transfer station in Hackensack. It serves 312 reverse commuters from Paterson: 40 percent to Hackensack, 20 percent to Rochelle Park, 7 percent to Paramus, and 5 percent to Saddle Brook. Route 770 provides 17 hours of service on weekdays, with 15–25 minute headways during peak periods, 30-minute headways during midday, and 60-minute headways during the evening off-peak hours. On Saturday it provides 12 hours of service with 60-minute headways. There is no Sunday service.

Route P2

Route P2 is operated by Community Bus Lines, Inc. under contract with NJ TRANSIT. It originates in Elmwood Park, Bergen County and serve Clifton in Passaic County. Although the route does stop in Paterson, it does not travel through a significant portion of the city and, according to the survey findings, does not presently serve reverse commuters from Paterson. The route runs 30-minute headways during peak and off-peak periods and is operational 13 hours per day. Saturday service operates for 9 hours with 60-minute headways; there is no service on Sunday.

Route P5

Route P5, is operated by Community Bus Lines, Inc. under contract with NJ TRANSIT. It originates in Passaic, serves communities in Essex and Passaic counties, and terminates at the Willowbrook Mall. This route serves 20 reverse commuters; although it does not serve the city of Paterson directly, 10 residents transfer to it in order to reverse commute to Clifton. The route operates 14 hours on weekdays, with 30-minute headways. On Saturday it operates for 9 hours per day with 60-minute headways. This route does not provide Sunday service.

Route P7

The P7, also operated by Community Bus Lines Inc. under contract from NJ TRANSIT, originates in Paterson and serves Passaic and Bergen County communities.

The 68 workers who use the route for commuting are destined for Clifton (56 percent) or Passaic (44 percent); none use it to reverse-commute to Bergen County. On weekdays, the route provides 12 hours of operation with 30-minute headways during peak periods and 60-minute service during midday periods. On Saturday, it provides 11 hours of service with 60-minute headways. No service is provided on Sunday.

Route P22

Route P22, operated by Community Transportation, Inc. under contract with NJ TRANSIT, originates in Paterson and provides service to Hawthorne in Passaic County and to Ridgewood and Wyckoff in Bergen County. NJ TRANSIT's survey indicates no use of the route for reverse commuting. Route P22 operates 13 hours on weekdays with 30-minute headways. On Saturday it runs for 11 hours with 60-minute headways. There is no Sunday service.

Route P54

Route P54, also operated by Community Transportation, Inc. under contract from NJ TRANSIT, provides service to municipalities in Passaic County, including major employment centers at Wayne General Hospital and William Paterson Collège, both located in Wayne. This route serves a substantial 235 reverse commuters from Paterson; their final destinations are Wayne (44 percent), Passaic (38 percent), and Prospect Park (5 percent). On weekdays, the route operates for 14 hours, with 30-minute headways. On Saturday it operates for 13 hours with 60-minute headways; it does not operate on Sunday.

Route P82

NJ TRANSIT runs the P82 from Paterson to Greystone Sanitarium on Saturday only. This bus transports people to visit patients at the sanitarium. It does not carry any people for work purposes.

Route P86

Route P86, operated by Community Transportation, Inc. under contract from NJ TRANSIT, originates in Ridgewood; it serves municipalities within Bergen County, passes through Paterson, and goes on to service other Passaic County communities. The route serves 510 reverse commuters from Paterson. Their destinations are Fair Lawn (25 percent), Ridgewood (16 percent), Wayne (15 percent), Glen Rock (11 percent), Pompton Lakes and Totowa (5 percent each), and Ringwood and Haskell (3 percent each) which require a transfer at Pompton Lakes.

During the week, Route P86 provides 14 hours of service, with 20–25 minute headways. On Saturday it provides 10 hours of service with 60-minute headways. There is no service on Sunday.

Arrow Motor Coach (26)

In addition to the bus routes run by NJ TRANSIT and those under contract from NJ TRANSIT, a private company, Arrow Motor Coach, Inc., operates the Paterson to Fair Lawn route. This route runs for 13 hours on weekdays and 11 hours on Saturday; it has 30-minute headways during peak and off-peak hours on both weekdays and Saturdays. There is no Sunday service.

E. Bus Service—In City

Table 21B indicates the major bus routes that operate in the city of Paterson. All of these routes also serve the region as described in the preceding section.

Route 72

Route 72 originates in Paterson and serves destinations in Passaic and Essex counties. Within Paterson, the route originates at Broadway Terminal located on Main Street. This route serves employment and transit centers located near and along Main Street, the Municipal Complex, the Passaic County Courthouse, and St. Joseph's Hospital. Route 72 operates 18 hours per day with 30-minute headways during peak and midday time periods and 60-minute headways during off-peak periods. During the weekend it operates 15-17 hours per day with 60-minute headways.

Route 74

Route 74 originates at the Broadway Terminal in Paterson and runs along Main Street to the city line before continuing to destinations in Passaic and Essex counties. Within Paterson, it serves the employment and transit centers in the retail strip along Main Street, the Municipal Complex, the Passaic County Courthouse, St. Joseph's Hospital, and the South Paterson Rail Station. Route 74 has 20–30 minute headways throughout both peak and off-peak periods; it operates for 19 hours per day. Weekend service is provided 16–18 hours per day with 30 minute headways.

Route 703

Route 703 serves communities in Passaic and Bergen counties. Within Paterson this route operates primarily through West Broadway, Market Street, 20th Avenue, 21st

Avenue, and Trenton Avenue. The employment centers served by this route within the city include Market Street retail strip, the manufacturing strip along Beckwith Avenue, the Broadway Terminal, and the Paterson Rail Station. Route 703 runs an average of 30-minute headways during peak and midday periods and averages 60-minute headways during off-peak periods. The route is operated approximately 19 hours per day on weekdays and 18 hours per day on the weekend.

Route 704

Within Paterson, Route 704 originates in the Riverside section of the city and serves the Municipal Complex, Passaic County Community College, and the Spruce Street corridor. The route runs an average of 10–20 minute headways during peak and midday time periods and 30 minutes in the off-peak period. It is operational approximately 13 hours per day. It provides 12 hours of service with 60-minute headways on Saturday. No service is provided on Sunday.

Route 712

Route 712 serves Bergen County and Passaic County. Within Paterson, this route provides transit to the Market Street retail strip, Spruce Street corridor, Passaic County Courthouse, and Paterson Rail Station. On weekdays, Route 712 provides 17 hours of service including off-peak service to the Willowbrook Mall, with 15-minute headways during peak periods, 30-minute headways during midday, and 60-minute headways off-peak in the evenings. Saturday it runs for 14 hours with 35-minute headways in the day and 70-minute headways in the evening; it does not run Sunday.

Route 770

Route 770 originates in Paterson and provides service to destinations in Bergen County. Within Paterson this route originates at the Broadway Terminal and is located primarily on Broadway. The major employment centers served include Passaic Community College and Barnert Memorial Hospital. Route 770 provides 17 hours of service on weekdays, with 15–25 minute headways during peak periods, 30-minute headways during midday, and 60-minute headways during the evening off-peak. On Saturday it provides 12 hours of service with 60-minute headways. There is no Sunday service.

Route P2

Route P2 is operated by Community Bus Lines, Inc. under contract with NJ TRANSIT. It originates in Bergen County and serves St. Joseph's Hospital in

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

PATERSON

<i>Bus Routes (List Major) Indicate where Private</i>	<i>Avenue or Street Served</i>	<i>No. of Passengers Carried Daily In-City¹ Total²</i>	<i>Employment Markets Served</i>	<i>Times of Service</i>	<i>Headway</i>
72	Main St.; Court St. Marshall St.	NA	Municipal Complex, Passaic County Courthouse; St. Joseph's Hospital; Main Street (retail)	See Table 21A	See Table 21A
74	Main Street	227	Municipal Complex, Passaic County Courthouse; St. Joseph's Hospital; Main Street (retail)	See Table 21A	See Table 21A
703	W. Broadway, Market Street, 20th Avenue, 21st Avenue	346	Market Street (retail), Beckwith Avenue, (manufacturing)	See Table 21A	See Table 21A
704	River St., Rosa Parks Blvd., Broadway, Grand Street	400	Municipal Complex, Passaic County Community College, Spruce Street Corridor (industrial)	See Table 21A	See Table 21A
712	Market Street	NA	Market Street, Spruce Street (industrial) Passaic County Courthouse	See Table 21A	See Table 21A
770	Broadway	107	Passaic County Community College, Barnert Memorial Hospital	See Table 21A	See Table 21A
P2-Contract ³	Valley Road-Clifton; Van Houten Avenue-Clifton Palisades Avenue-Garfield Boulevard-Elmwood Park	NA	St. Joseph's Hospital Passaic River (industrial)	See Table 21A	See Table 21A

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

Bus Route (List Major) Indicate where Private	Avenue or Street Served	No. of Passengers Carried Daily In-City ¹ Total ²	Employment Markets Served	Times of Service	Headway
Rt. P7 Contract ³	Marshall Street	NA	St. Joseph's Hospital		See Table 21A
Rt. P22 Contract ³	W. Broadway, Memorial Drive	45	Municipal Complex		
Rt. P54 Contract ³	Lakeview Ave., Vreeland Ave., Park Ave., Main St., Market Ave.	104	McClellan Avenue (industrial) Municipal Complex, Passaic County Community College, Main Street (retail)		See Table 21A
Rt. P86 Contract ³	McClellan Blvd., Madison Ave., Broadway	226	McClellan Boulevard (manufacturing), Route 20 (manufacturing), Municipal Complex, Passaic County Community College		See Table 21A
Arrow Motor Coach Private	River Road, Rt. 20	NA	Municipal Complex		See Table 21A

Notes: 1. In City—"to work" passenger trips by Paterson residents to reverse-commute destinations (excluding Newark, New York, Jersey City, Hoboken, and Paterson). (Note—commutes to Newark International Airport and Port Newark are included as reverse-commute destination.) "To work" trips are one-way passenger trips from place of origin to final worksite destination.

2. Total—volume of passenger trips in outbound direction. (Includes commuters from all origins to all destinations, for all purposes.) Trip counts from local bus routes are referenced from NJ TRANSIT Local Bus Ridership Survey—1990. Quantities are approximate and do not reflect current ridership counts in 1992.

3. Operated by Community Bus Lines/Community Transportation, Inc. under contract with NJ TRANSIT.

NA = not available

Source: New Jersey Transit.

Paterson and the industrial areas along the Passaic River. The route runs 30-minute headways during peak and off-peak periods; it is operational 13 hours per day. Saturday service operates for 9 hours with 60 minute headways; there is no service on Sunday.

Route P7

Route P7, operated by Community Bus Line, Inc. under contract from NJ TRANSIT, goes from Paterson to Passaic and Bergen counties. Within Paterson, the route is primarily located on Marshall Street, serving St. Joseph's Hospital. On weekdays, this route provides 12 hours of operation with 30-minute headways during peak periods and 60-minute headways during midday periods. This route provides 11 hours of service on Saturday with 60-minute headways. No service is provided on Sunday.

Route P22

Route P22 is operated by Community Transportation, Inc. under contract with NJ TRANSIT. Within Paterson the route is located primarily along West Broadway and Memorial Drive. This route provides service to the Broadway Terminal and the Municipal Complex. Route P22 operates 13 hours on weekdays with 30-minute headways. On Saturdays it runs for 11 hours with 60-minute headways. There is no Sunday service.

Route P54

Route P54, also operated by Community Transportation, Inc. under contract from NJ TRANSIT, provides service to municipalities in Passaic County. Within Paterson, the route is primarily located on Lakeview Avenue, Vreeland Avenue, Park Avenue, Main Street, and Market Avenue. This route provides transportation for commuters to the manufacturing corridor along McLean Boulevard as well as the Municipal Complex, Passaic County Community College, the retail strip on Main Street, and the Paterson Rail Station. On weekdays, the route operates 14 hours with 30-minute headways. On Saturday it operates for 13 hours with 60-minute headways; it does not operate on Sunday.

Route P86

Within Paterson, Route P86, operated by Community Transportation, Inc. under contract from NJ TRANSIT, provides service primarily on McLean Boulevard, Madison Avenue, and Broadway. This route services the manufacturing centers along McLean Boulevard and the Route 20 area, Passaic County Community College, the Municipal Complex, the Broadway Terminal, and the Paterson Rail Station. During the week, Route

P86 provides 14 hours of service with 20–25 minute headways. On Saturday it provides 10 hours of service with 60-minute headways. There is no service on Sunday.

Arrow Motor Coach (26)

The Arrow Motor Coach, Inc. a private carrier, operates the Paterson to Fair Lawn route. This route provides local service within Paterson along River Road, Route 20, and Fair Lawn Avenue, serving the Paterson Municipal Complex. The route operates 13 hours on weekdays and 11 hours on Saturday. It has 30-minute headways on- and off-peak hours on both weekdays and Saturdays.

F. Alternatives to Bus and Rail—City to Suburb

Passaic County does not have countywide transit alternatives to public bus and rail service. However, Passaic County does provide limited para-transit service for disabled people and senior citizens (see Table 22A).

The county transports residents to programs at shelters including the programs of the Association for Retarded Citizens, the Easter Seal Association, the North Jersey Development Center, and the Foster Grandparent Program. This service operates from 8:30 AM to 3:00 PM. Clients must make appointments two weeks in advance. County residents may use this service, with the exception of those from the cities of Clifton, Passaic, West Milford, and Paterson. The county provides money to each of these cities; the cities, in turn, provide countywide service for their own residents.

In addition, various social service agencies provide transportation to their own clients. For instance, the Board of Social Services has a van for its clients, and the Office on Aging takes senior citizens to nutrition sites. However, the services are limited to the particular agencies' clients and activities.

Taxis provide service in addition to these special services provided for the disabled, elderly, and social service clients. However, taxis are too expensive to serve regular reverse-commuting needs for most Paterson residents who seek employment outside the city.

G. Alternatives to Bus and Rail—In City

Paterson does not have an extensive network of alternative transportation services in lieu of rail and bus transit. The available service, provided by the city, is summarized in Table 22B. The city provides transportation services for disabled residents and senior citizens to programs at the Association for Retarded Citizens, the Easter Seal Association, the North Jersey Development Center, the Foster Grandparent Program, and various

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

<i>Who is Served</i>	<i>Approximate Number</i>	<i>Employment Markets Served</i>	<i>Times of Service</i>	<i>Frequency of Service</i>
DIAL-A-RIDE, JTPA, etc.				
Senior Citizens, Handicapped, Social Services Clients	Not available	Not applicable	8:30 AM-3:00 PM	On demand

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
PATERSON

<i>Who is Served</i>	<i>Approximate Number</i>	<i>Employment Markets Served</i>	<i>Times of Service</i>	<i>Frequency of Service</i>
JITNEYS, UNLICENSED CABS, ELDERLY PICK-UP, etc.	30	Not applicable	8:30 AM-3:00 PM	On demand

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

shelters. This service operates from 8:30 AM to 3:00 PM; clients must make appointments one week in advance. This service transports about 30 riders daily.

Taxis provide an alternative to public transportation that is available to all Paterson residents. Service is available on demand. However, because of the expense of taxi service, it does not serve as a regular form of transportation for commuting purposes.

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 better 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.

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

Professionals in Paterson and Passaic counties were asked to discuss specific obstacles facing unemployed or underemployed residents. Among the obstacles they assessed, they ranked transportation as being of moderate importance. This section of the report describes transportation problems in accessing employment sites from Paterson to the surrounding region. Table 24A lists problems encountered in city-to-suburb commutes. Section X describes transportation problems within the city. While lack of transportation may be a significant obstacle for Paterson residents seeking employment, it is not the only

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

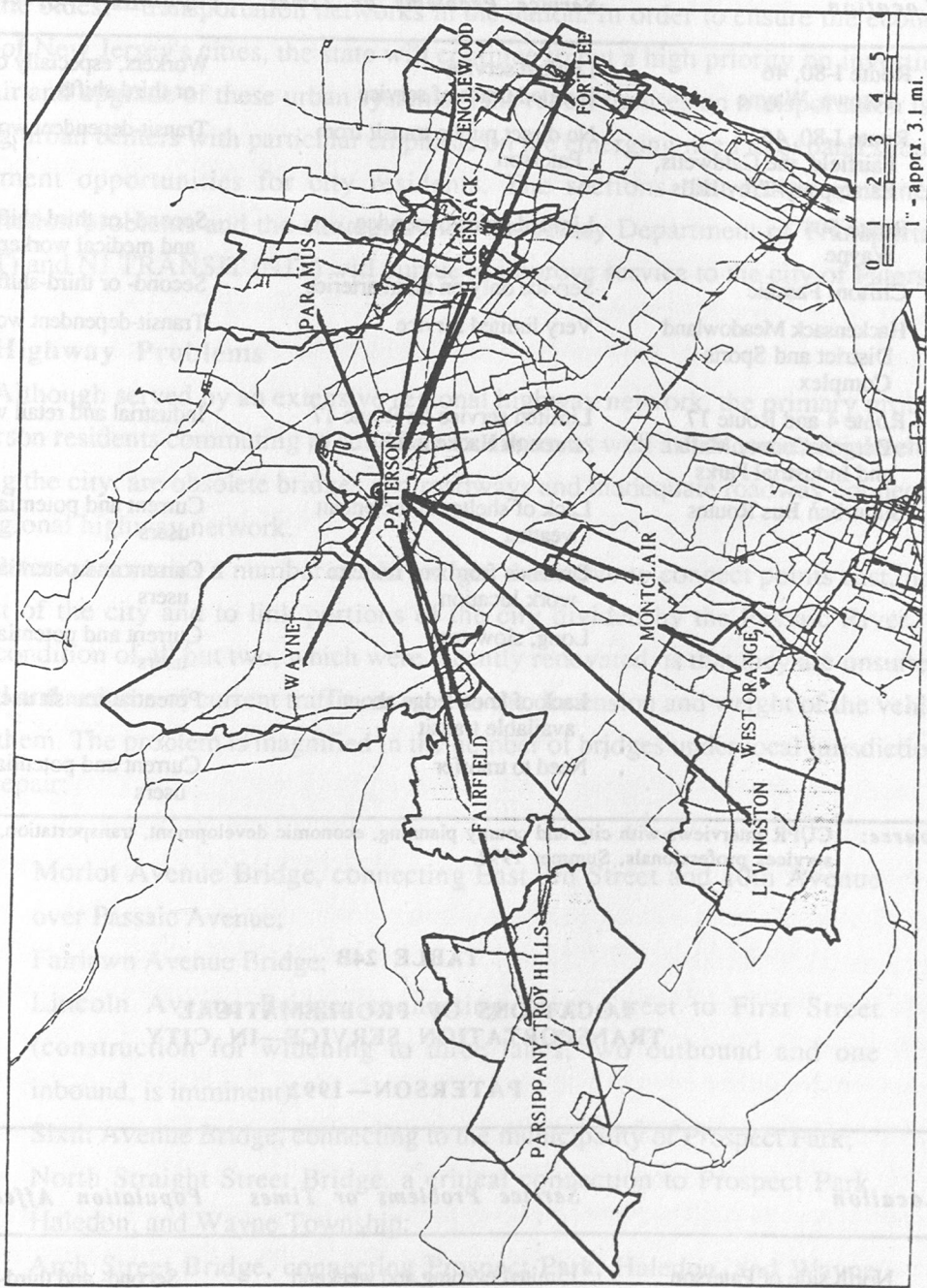
<i>Location</i>	<i>New Jobs</i>	<i>Job Separations</i>	<i>Total</i>	<i>Transit Service Yes/No</i>
Paramus	641	7,508	8,150	Yes
Hackensack	1,846	5,121	6,967	Yes
Parsippany/Troy Hills	1,801	4,823	6,624	No
Wayne	(1,420)	6,414	4,994	Yes
Livingston	64	4,149	4,214	Yes, Limited
West Orange	245	3,216	3,461	Yes
Fort Lee	1,103	1,938	3,041	Yes
Fairfield	191	2,502	2,693	Yes
Englewood	556	1,832	2,388	Yes
Montclair	14	2,324	2,338	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 PATERSON

(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

TABLE 24A
LOCATIONS OF PROBLEMATIONAL
TRANSPORTATION SERVICE—CITY TO SUBURB
PATERSON—1992

<i>Location</i>	<i>Service Problems or Times</i>	<i>Population Affected</i>
Route I-80, 46 Totowa, Wayne	Limited service Limited times of service	Workers, especially on second or third shifts
Route I-80, 46 Fairfield, the Caldwells, Parsippany-Troy Hills	No direct public transit from Paterson	Transit-dependent workers
Route 504 Wayne	Limited hours of service	Second- or third-shift industrial and medical workers
Clifton, Passaic	Service only on main arteries	Second- or third-shift workers
Hackensack Meadowland District and Sports Complex	Very limited service	Transit-dependent workers
Route 4 and Route 17 Bergen County Malls and Industrial Parks	Limited service on Route 17 through Hackensack	Industrial and retail workers
Suburban Bus Routes	Lack of shelter in inclement weather	Current and potential transit users
	Distance from bus route to work location	Current and potential transit users
	Long, slow trip	Current and potential transit users
	Lack of knowledge about available transit	Potential transit users
	Need to transfer	Current and potential transit users

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

TABLE 24B
LOCATIONS OF PROBLEMATIONAL
TRANSPORTATION SERVICE—IN CITY
PATERSON—1992

<i>Location</i>	<i>Service Problems or Times</i>	<i>Population Affected</i>
North side of Paterson	Limited evening and weekend service	Second- and third-shift workers

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

problem unemployed inner-city residents face in obtaining jobs within or outside the city; Section XI, therefore, describes obstacles to employment other than transportation.

Whether reverse commuters from the city of Paterson use the automobile, bus, or train for their daily commute, they travel on one of the most extensive—and within the city, one of the oldest—transportation networks in the nation. In order to ensure the economic vitality of New Jersey's cities, the state will continue to put a high priority on investing in the repair and upgrade of these urban systems. This report focuses on transportation issues affecting urban centers with particular emphasis on the emerging need to expand suburban employment opportunities for city residents. The sections that follow outline the transportation problems and the strategies the New Jersey Department of Transportation (NJDOT) and NJ TRANSIT (NJT) will pursue to improve service to the city of Paterson.

A. Highway Problems

Although served by an extensive regional highway network, the primary problems for Paterson residents commuting to suburban locations, as well as for commercial vehicles accessing the city, are obsolete bridges and roadways and inadequate roadway connections to the regional highway network.

Paterson contains a number of old bridges that serve to connect points east, north, and west of the city and to link portions of the city divided by the Passaic River. The general condition of all but two, which were recently renovated, is that they are unsuited to the speed and volume of current traffic, as well as the dimension and weight of the vehicles that use them. The problem is magnified in the number of bridges under local jurisdiction in need of repair:

- Morlot Avenue Bridge, connecting East 3rd Street and 10th Avenue over Passaic Avenue;
- Fairlawn Avenue Bridge;
- Lincoln Avenue Bridge, connecting River Street to First Street (construction for widening to three lanes, two outbound and one inbound, is imminent);
- Sixth Avenue Bridge, connecting to the municipality of Prospect Park;
- North Straight Street Bridge, a critical connection to Prospect Park, Haledon, and Wayne Township;
- Arch Street Bridge, connecting Prospect Park, Haledon, and Wayne Township, which has been closed for four years, causing an increase in the load on nearby bridges;

- Lower Main Street Bridge, two blocks west of Arch Street Bridge;
- West Broadway Bridge, connecting the city to up-county towns as well as providing access to I-80;
- McBride Avenue Bridge extension to Spruce Street, connecting the west side of the city, which is two lanes (causing underutilization of the recently widened 4-lane bridge); and
- Clover Avenue Bridge.

Access to the employment centers of the Clifton/Passaic area is hampered by the missing extension of Route 21, from the city of Clifton north to Route 46. To facilitate this connection a new interchange to replace the Route 46 Bridge over the Passaic River at Route 20, Crooks Avenue, and the Garden State Parkway is under study and development. The Route 21 addition would also provide additional access to Route 3, the Hackensack Meadowlands, and Newark.

Although I-80 traverses the city of Paterson with four interchanges, access to the interstate is incomplete and poorly defined. With the exception of the recently completed Route 19 Freeway, the local roads connecting I-80 to the CBD are circuitous and require upgrading.

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>	Moderate	Moderately Good	Good to Excellent

Although 17 bus routes provide service to Paterson residents, employment training and placement professionals cited several types of transportation problems affecting employment. The Private Industry Council (PIC) reports that lack of transit is sometimes a problem for clients even in acquiring training; however, it is primarily a problem at the end of the training program. Many clients do not know how to get to jobs outside the city. While PIC often can find ways for a person to get to a job, some of the trips are excessively long if the person must use public transit: what would only be a ten-minute ride by car might take as long as an hour by bus. In addition, if the trip requires a transfer, this provides yet another difficulty for those unaccustomed to transit. Job planners at the New Jersey Employment Service who know of jobs in locations where transit is not available

report that they send only those job seekers who have cars to these locations. An example is the malls outside Bergen County that usually entail Sunday employment when most buses do not run. Job planners also are reluctant to refer transit-dependent residents to jobs, especially low-wage jobs, in more distant locations because of the cost and the length of the trip.

With regard to specific work locations, transportation from Paterson is generally adequate. Paterson has good regional highway corridors along I-80 and US Route 46, as well as the Garden State Parkway and the New Jersey Turnpike. However, Paterson's access to the regional network has two major limitations. First, the roads connecting the city to the network are limited, causing delay and congestion; the Route 19 Freeway is designed to improve this access. Second, although the Hackensack Meadowlands district is very close to Paterson, no major roads provide direct access. Public transit generally parallels major arteries, providing access to many employment sites. Specific problems at current or potential employment sites are described below.

Totowa and Wayne currently are major employment areas for Paterson residents; routes I-80 and US 46 west from Paterson are major transportation corridors to these communities. Nearby communities, such as Fairfield or North Caldwell in Essex County, or Parsippany-Troy Hills in Morris County, are attractive potential employment sites; Routes I-80 and US 46 also serve these communities. Routes 202 and 23 go north through Wayne and then into Morris County. Three buses—Routes 712, 704, and P5—connect Paterson with parts of this area. However, service on these routes is limited, presenting several problems to those who want to commute by bus. First, none of the buses provides service on Sunday. Only Route 712 operates in the evening. This means that those who need to work second or third shifts and those who must work on the weekends—at Willowbrook Mall, for example—cannot use the buses. In addition, all these buses terminate at Willowbrook Mall. Even using a transfer, no bus routes enable Paterson residents to continue to employment sites south or west of Willowbrook Mall, such as the Caldwell, Fairfield, or Parsippany-Troy Hills. Access to communities north of Wayne is provided by bus Route 194 which serves Wayne, Pequannock, Pompton Lakes, Butler, and West Milford.

Route 504 provides access to the northeast portion of Wayne, including major hospitals and care facilities such as Wayne General Hospital and the North Jersey Nursing and Convalescent Center. The corridor is also served by the P86 bus. However, the P86 operates only 14 hours on weekdays, and 10 hours on Saturdays; it does not operate at all on Sundays. This is a problem for those employees, such as nurses aides, who need to work second or third shifts or on the weekends.

South from Paterson, residents find considerable work in Clifton and Passaic. Half a dozen bus routes serve the main corridors in Clifton and Passaic; several offer service into the evening; however, only Route 703 provides any Sunday service. Thus, the main corridors are well served, but areas that are off the main corridors are not. This limited service may present a problem, especially for those working second or third shifts in industrial areas.

The Hackensack Meadowlands District is another area that provides considerable employment potential for Paterson residents, but it is difficult to reach. No road connects Paterson directly to the major employment areas. In addition, employment in the Meadowlands spreads over a considerable area; transit to work locations within the Meadowlands district is very limited. Meadowlands employers frequently tell potential workers that they need to have a car in order to commute. The major problem for those trying to commute by public transit is getting from these bus routes to the specific work locations. Currently, Paterson residents can reach East Rutherford or Hackensack on the Route 190 bus; it provides round-the-clock service, and thus access for employment destinations along that route. Route 161 serves Moonachie twenty hours a day. Routes 703, 712, and 770 provide much more limited service.

Route 4 connects Paterson with Paramus and other employment centers east of the city. Nine malls are located near the intersection of Routes 4 and 17; the largest are the Bergen Mall, Garden State Plaza, and Paramus Park Mall. Bus Route 171 provides service to the Bergen Mall and other retail employment along Route 4 throughout the week including evenings and weekends. Route 770 to the Garden State Plaza provides service on weekdays and evenings; however, it operates only twelve hours on Saturdays. Since retail employment, especially at the entry level, frequently requires weekend work, lack of public transportation limits the ability of Paterson residents to obtain these jobs.⁴ Access to the Paramus Mall on Route 17, and the nearby but smaller Fashion Mall, is more difficult still since Paterson residents must first take a bus to Hackensack and then transfer to the B2 bus route. (Alternatively, between 9:00 AM and 10:00 PM Paterson residents can go to the Bergen Mall or Garden State Plaza, and then take the Mall Link, the B16, to the Paramus Park Mall.)

Interspersed with these Bergen County malls are numerous industrial and office sites. The largest concentrations of industrial parks are located near Route 17 and on

⁴ Bergen County has blue laws prohibiting sales of clothing, furnishings, appliances, and building and lumber supplies on Sundays. In addition, some local communities, including Paramus, Wyckoff, and Ridgewood, have more restrictive blue laws. As a result most Bergen County malls and many retail outlets are closed on Sundays.

Century Road. However, access from Paterson to these sites is difficult. Residents would need to go from Paterson to Hackensack, then transfer to the B2 bus, and then walk into the industrial park.

Route 208 is a major corridor connecting communities north of Paterson: Fair Lawn, Glen Rock, Hawthorne, Ridgewood, Wyckoff, Franklin Lakes, and Oakland. The B2 bus serves portions of this corridor on local roads paralleling Route 208. However, Paterson residents would have to go to Hackensack in order to transfer to the B2. From Paterson, commuters can get to some of these communities by other bus routes, e.g., the Arrow Motor Coach to Fair Lawn or the P22 to Wyckoff during peak hours. Mahwah is accessible by rail only. Communities still further north, such as Ringwood, are accessible by public transit with a transfer at Pompton Lakes to Route 197.

In addition to the problems relating to specific bus routes, the professionals interviewed for this report described other difficulties using public transit. Lack of comfort and convenience dissuades some people from using buses. One problem is that since the buses make many stops and do not use the major arteries, travel by bus is much slower than by private vehicle; for example, the trip from Paterson to Willowbrook Mall takes 30 to 40 minutes by bus, perhaps three times as long as by private car. A second problem is that bus stops are infrequent in the suburban areas; bus shelters are even less frequent. In addition, many of the roads do not have sidewalks, and the entrances to companies at some industrial parks are set far back from the roads. These are problems for bus riders, especially in inclement weather.

A third problem for potential transit riders is their lack of knowledge and readily accessible information about existing services. It is often difficult to know where buses stop, what routes are found at each location, or what routes go to various communities. While this may not be much of a problem to regular users who know the routes they need, it is a substantial barrier to potential users.

The discussion above describes bus transit issues. Currently, although Paterson is on NJ TRANSIT's Main Line, the train is not being used extensively for commuting. Some people are uncomfortable using the train station in downtown Paterson because of its poor physical condition, and also because the area in which it is located is regarded as unsafe.

X. TRANSPORTATION PROBLEMS—IN CITY

A. Highway Problems

In addition to the obsolete Passaic bridge crossings mentioned above, narrow local roads provide the only access to upper Passaic County and to other communities north of the city including Haledon, Prospect Park, Hawthorne, and Wayne Township.

Congested central business district streets pose problems both for commuters and goods movement. To access the CBD, trucks must travel through the city on residential streets. Downtown congestion is exacerbated by truck traffic, especially since there are few places out of the flow of traffic for them to load or unload. In sum, a cluster of related problems need to be addressed: old narrow streets and bridges, inadequate traffic management, and insufficient parking and unloading areas.

B. Public Transit Problems

Transportation Problems in Perspective

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

Bus service within Paterson is generally good, serving residential, commercial, and industrial locations. However, in the evenings and on weekends bus service does not cover the whole city (see Table 24B). This may create difficulties for those who commute to jobs outside the city during these hours.

During the daytime on weekdays, bus service operates throughout the city on the main arteries: River Street, Main Street, Broadway, McLean Boulevard, Market Street, and Trenton Avenue. On weekends and evenings, buses provide more limited service. None of the private carriers under contract to NJ TRANSIT operate on the weekends or in the evenings. Routes 704, 712, and 770 provide limited service. Only Routes 72, 74, and 703 provide service throughout the week, including the evenings and weekends. Routes 72 and 74 provide service from the Broadway Terminal along Main Street, while Route 703 goes from the Broadway Terminal to Market Street and Trenton Avenue. Thus, the residential areas in the southern part of the city are relatively well served but the northern portion of the city is less so.

The two hospitals are major employment centers in the city requiring access during evenings and weekends. St. Joseph's Hospital and Medical Center is served by several

buses including Route 74, which operates with 20-30 minute headways on both evenings and weekends. Barnert Memorial Hospital is served by Route 770. Route 171 is available along Broadway. Although Route 770 operates 17 hours on weekdays, it runs only 12 hours on Saturdays and does not operate at all on Sunday; further, during the evenings and on Saturday, it has one-hour headways.

XI. PROBLEMS OTHER THAN TRANSPORTATION

Lack of transportation is not the only significant obstacle for Paterson residents seeking jobs within or outside the city. The job training and placement professionals in Paterson and Passaic County interviewed for this report were asked to discuss specific obstacles facing unemployed or underemployed residents. They said that lack of skills was the most important obstacle, followed by a cluster of problems: the individual's prior history, lack of transportation, lack of child care, and inappropriate attitudes and behaviors. Current economic conditions make placing people particularly difficult, far more difficult than even two years ago. Lack of information about jobs was judged to be the least significant obstacle among those they discussed. These obstacles, and their relative importance, are displayed in Table 25A. Lack of transportation has been discussed in the two sections above; this section discusses briefly the other obstacles to employment.

The other job-related factors relate to a cluster of obstacles; each cluster is described in Table 25B. Lack of skills incorporates both formal education and vocational skills. Many unemployed people lack basic skills. For example, almost half the adults who participate in the Job Training Partnership Act (JTPA) program have not completed high school; many read only at a seventh- or eighth-grade level. Before they can receive training in particular vocational skills, they need basic education. This is particularly a problem for Spanish-speaking residents who do not speak English fluently. Other residents do have adequate basic education but still have problems because they lack the necessary job-related skills or because their skills are obsolete.

Another significant set of problems relates to attitudes and behaviors. Many unemployed residents lack the self-esteem and social skills they need to obtain and hold a job. One of the components in the public programs to prepare unemployed people for employment is termed "life skills"; it is designed to teach what the Department of Labor calls "the attitudes and behaviors of work." Clients need to learn the physical and mental requirements of jobs, but they also need to learn the broader culture work requires. Many people entering these programs feel discouraged and defeated; before the program can address specific vocational skills, it attempts to build these clients' self-esteem and

TABLE 25A

**TRANSPORTATION IN THE
CONTEXT OF OTHER PROBLEMS
PATERSON—1992**

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

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

TABLE 25B

**SPECIFIC PROBLEMS OTHER THAN TRANSPORTATION
PATERSON—1992**

<i>Type of Problem</i>	<i>Description</i>
Skills Training	Lack basic education Lack fluency in English Lack specific vocational skills
Current Economic Conditions	Very difficult to place clients Clients receive lower wages
Child Care	Major problem for those responsible for young children Significant cost of employment
Personal History	Being on welfare Prior criminal record Poor work history No driver's license
Lack of Information	Many jobs communicated only by word of mouth

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

confidence. Thus, the agencies include life skills such as budgeting and transportation but also stress reliability and appropriate social interaction in the workplace.

For those responsible for young children, lack of child care is a potentially overwhelming obstacle. In general, people do not present themselves for training or job-search assistance until they have handled their child care needs. The Realizing Economic Achievement (REACH) program provides its clients with child care and transportation while they are undergoing training and even for a period after they obtain employment. But for others, one implication of the costs of child care and transportation is that it is not economically feasible to take the typical low-paying jobs that are available.

Problems relating to the individual's personal history include being on welfare, having a criminal record, having a poor work history, or not having a valid driver's license. While such problems relating to the individual's personal history may be an obstacle, the professionals in Paterson did not report that these prevented people from obtaining jobs. The JTPA program makes special provisions for including people with problems, such as being single parents, or having abused substances, or having a criminal record. Although clients on welfare tend to need substantial supportive services while they are receiving training, they are among the most successful people emerging from the training program.

Lack of information about jobs was not ranked as very important relative to the other obstacles. The main communication problem results from many jobs never being advertised formally; therefore, knowing that these jobs are available depends largely on word of mouth. Staff members of agencies that provide training and other employment-related services seek out job opportunities. In addition, clients who have been placed in jobs sometimes tell the staff at these services about openings, and employers who are pleased with the employees they have hired come back to the agencies when they have more jobs available. Also, the community agencies cooperate informally by sharing information about available jobs and by referring clients to each other.

Current economic conditions are another important factor. Although the economy is beyond the control of the unemployed and of those offering employment training or placement programs, it has a profound impact on the programs' ability to place clients and on the wages the clients receive.

XII. TRANSPORTATION STRATEGIES

Over the past three years Passaic County, the city of Paterson, NJDOT, and NJ TRANSIT have been working together to improve Paterson's aging infrastructure. The

city and the county have placed particular priority on upgrading roads and bridges, and on the need for improved public transit. The strategies and planned improvements presented in this section represent achievement of the following NJDOT and NJ TRANSIT investment objectives for the city of Paterson 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. The Urban Transportation Supplement report is not intended to be a comprehensive detailed analysis and assessment of all cities' transportation infrastructure needs. 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.

1. Improve and Preserve the Existing System and Enhance Safety

Rehabilitation and replacement of deficient bridges will continue to be a top priority for state transportation investments. NJDOT's five-year capital program will earmark substantial funding for infrastructure improvements to rehabilitate and replace deficient bridges. An example of projects planned for the five-year period include:

- Rehabilitation and widening of the Route 46 Bridge at McBride Avenue;
- Replacement of the Straight Street Bridge;
- Replacement of Union Avenue Bridge;
- Rehabilitation of Crooks Avenue Bridge over Passaic River and River Road.

NJDOT will also continue to give a very high priority to resurfacing, rehabilitating and reconstructing state highways. NJDOT's Pavement Management System, with the aid of sophisticated new equipment, will be used to develop a multiyear program of improvements for the most efficient investment of highway rehabilitation and construction funding. These improvements, which often include shoulder-widening and drainage improvements, prolong the life of the facility and provide a smoother, safer, and often quicker journey.

2. Improve Access to the Regional Transportation Network

NJDOT has completed a study for improving operational conditions for traffic exiting I-80 at the Squirrelwood Road Interchange (Interchange 56). The report recommends improvements to the Glover Avenue/McBride Avenue intersection and the Squirrelwood Road/Glover Avenue intersection, both of which are under local jurisdiction.

NJDOT will continue to make certain major investments that are carefully targeted to leverage economic opportunities in strategic locations, such as the following proposals:

- Construction of an interchange at Routes 3 and 46 and Valley Road.
- Routes 46 and 20 improvements at Crooks Avenue interchange.
- Extension of Route 21 Freeway from Clifton to Routes 46 and 20.

3. Improve Highway Operations and Alleviate Congestion

Given the relocation problems and environmental constraints of dense urban areas, NJDOT is focusing on improving the operations of the existing highways. Investments in new construction—adding new through lanes and constructing new interchanges to replace at-grade intersections—are being deemphasized in favor of system management operational improvements. NJDOT will continue to seek the most cost-effective operational solutions to capacity problems.

Highway Operational Improvements

The term "system management" refers 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 to the I-80 interchanges Nos. 58 and 59 are currently in study and development for lighting, safety, and ramp weave improvements.

Traffic Management

Traffic flow can be substantially improved with the implementation of computerized traffic signal control systems. These projects "wire together" traffic signals in a corridor so that traffic signal timing patterns can be varied according to traffic conditions. 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.

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. NJDOT is currently developing the Metropolitan Area Guidance Information Control (MAGIC) system for the highway network leading to the Hudson River crossings into Manhattan.

Urban and suburban congestion is a serious and worsening problem in New Jersey. 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. These types of investments have also historically served as major economic development tools but have not resolved the congestion problem.

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 Paterson 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. A TMA is currently under study by NJ TRANSIT.

5. Continue the TEC Outreach Program

NJDOT and NJ TRANSIT staff will continue the annual outreach effort to give Passaic County and officials from the city of Paterson 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 face-to-face dialogue with NJDOT and other transportation agencies' management and is considered a major opportunity for the state's major cities to gain direct access into the annual capital programming process.

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 Paterson, 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 seem 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 North Jersey are \$41 and \$54, 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" refers 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 work site hours, extending service to meet closing hours at shopping malls, and so on.

Traditional Service Project Descriptions

Bus Route Revisions and Scheduling Changes. The dilemma facing the reverse commuter in Paterson is the result of a route network that has been reduced in frequency as a result of funding limitations and declining ridership. Improvements in frequency will require additional funding. In addition, much of the economic development has occurred in highway corridors that are extremely difficult to serve with traditional bus service. The particular development patterns, at some distance from the center of Paterson, encourage long and difficult commutes. Improving services north and west would entail expanding evening and late night services on Routes 712, 714, P54, and P86 during weekdays, if funds were available. To the south and east, expansion of evening and late night service on P2, 74, 161, and 703 routes could be implemented with additional funding.

Route 4 (Bergen County Malls and other office parks) is well served, including meeting second shift schedules. Service bisects Route 46 in Totowa and Wayne at various locations, which affords access during the day to many of the major employment sites.

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 staff must reduce single-occupant vehicle trips magnifies the importance of seeking 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 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 comprises a base of approximately 1,800 employers.

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, for a total of more than 5,000 potential clients.

Nontraditional Service Project Descriptions

Route 46, West Fairfield, West Caldwell Nontraditional Transit Project. NJ TRANSIT has received some requests for bus service from Paterson to the small employers located in the Fairfield and West Caldwell areas. Because of their relatively small size, these employers cannot easily support bus service or other forms of ridesharing on their own. At least initially, there would be insufficient ridership to cover the cost of this service because most current employees drive to work from dispersed origins.

Employers in the area include retail (American Way Mall), services (Premier Printing, realtors, employment firms, Mosen Engineering, Sir Speedy, West Caldwell Care Center, Commercial Computer Services Inc., Royal Rubber Stamps), banks (Midlantic, Carteret, Chemical), auto dealers (Honda, Buick), institutions (Essex County Airport, Essex County College), and hotels (Sheraton).

NJ TRANSIT is currently working with the West Essex Chamber of Commerce, Essex County, Morris County Rides (MCRIDES), and employers in the Fairfield/West Caldwell areas to design innovative new transit services for these western Essex employment centers.

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.

It is anticipated that these potential nontraditional transit services will address transit service problems in the Bloomfield Avenue corridor including the length of the bus commute and poor bus stop-workplace connections in the Fairfield/West Caldwell areas of western Essex County.

Lyndhurst Office Complex Nontraditional Transit Service. The Meadowlink TMA has identified this corporate center, bounded by Polito Avenue, Valley Brook Avenue, Chubb Avenue, and Route 3, as having the potential for nontraditional transit opportunities. This development is a large office park with several large employers including Novell Hotel, Medieval Times Restaurant, Bellemead, Coach Leather, American Import/Export, and Peugeot, plus dozens of smaller employers including financial services and legal firms. This study may be of some benefit to Paterson residents, as the Lyndhurst office center is within reasonable commuting distance.

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, new travel pattern opportunities for all New Jerseyans, and 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.

The Secaucus Transfer, planned for the Hackensack Meadowlands, will provide access between central New Jersey and Bergen, Hudson, Passaic, Orange, and Rockland counties. In addition, riders on the Bergen County, Main, Pascack Valley, and Port Jervis Lines will be able to shorten their commute by transferring to Northeast Corridor Line trains rather than traveling to Hoboken to connect with PATH service into New York. The Secaucus Transfer will require extensive electrification, track additions, communications, signal, and structural work. A three-level station facility will be built to accommodate anticipated ridership.

XIII. SUMMATION

A. City's Role

Paterson, once one of America's leading industrial cities, now faces an uncertain future. For almost a century and a half Paterson flourished as a leader in textile manufacturing; now the once-famous silk industry has all but disappeared. Other industries such as glass and metals, which at one time prospered in the city, in recent years have moved to suburban locations or have ceased operations entirely. Suburban locations in the

northern and western parts of Passaic County, especially Totowa and Wayne, have become the major focus of new nonresidential development. However, the Great Falls of the Passaic River, which once stimulated the city's development and subsequent manufacturing takeoff, may again offer the city a new lease on life. The Great Falls and surrounding area offer potential for the development of a tourist attraction.

B. Dominant Demographic Trends

Over recent decades Paterson has not lost population, as have most traditional manufacturing cities. By 1970, it was the most densely populated and developed land in Passaic County. During the past decade the proportion of working-age adults has increased. Although per capita as well as median household incomes have increased in Paterson during the period 1980 to 1990, these figures are substantially below those of the state. A high proportion of residents still are below the poverty level; however, the proportion of those in poverty is decreasing.

C. Dominant Characteristics of Labor Force

The city's labor force has increased substantially, indicating the growing proportion of people eligible to work as part of the total population. Over the past decade, manufacturing has declined in Paterson as in other cities. Despite the declining importance of manufacturing as an economic sector in New Jersey, almost 30 percent of Paterson's population continued to be employed in manufacturing in 1990. Other sectors, especially retail trade and services, have increased. However, it is important to note that many of the jobs in these sectors require minimal skills and consequently offer poor wages. Further, as most employment growth in recent years has taken place in the suburbs to the north and west of Paterson, city residents may have some difficulty accessing these jobs.

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

Paterson has lost 14 percent of its at-place employment over the past decade. For every category of private-sector employment, fewer jobs are available in Paterson than there are Paterson residents employed in that sector. Most strikingly, Paterson lost one-quarter of its manufacturing base. At the same time, the services sector increased its share of the remaining employment by 46 percent. The FIRE sector, which has registered increases in some of the region's largest cities, declined slightly in Paterson.

Within the Paterson labor area manufacturing has also declined from 1980 to 1990. However, at-place employment in other sectors grew. These trends indicate that the types

of jobs most available for Paterson residents require lower skills and offer lower pay than those previously available.

E. Employment Projections

Employment projections to the year 2000 based on the New Jersey State Plan indicate that total employment for Passaic County and Paterson will decline over the next decade. The jobs lost in the basic employment sector will not be offset by the increases in the services and retail employment sectors. However, in the Paterson labor area, while manufacturing will decline, services and retail employment will grow more rapidly.

While newly created jobs will create some new employment opportunities, most opportunities for less-skilled jobs will occur when people leave the labor force. These opportunities are projected to occur primarily in those municipalities where the most jobs currently exist.

F. Existing Transportation Network

Paterson's existing transportation network developed early in the twentieth century while Paterson was a major industrial center. Major roads, and most public transit, connect the city with nearby older industrial centers to the east and south: Hackensack, Clifton, Passaic, Newark, and New York. Seventeen buses currently provide service to the city. The Main Line provides railroad service to Hoboken, and, by transfer, to Jersey City and New York.

Newer interstate and state highways near the city provide goods and people with access to major population and employment centers in northern New Jersey. These include areas of recent industrial and commercial development, including Totowa, Wayne, and Parsippany-Troy Hills to the west, as well as Paramus and other Bergen County communities to the east and northeast.

G. Transportation Problems

Although served by an extensive regional highway network, the primary problem for Paterson residents commuting to suburban locations, and for commercial vehicles, is obsolete bridges and roadways and inadequate highway connections to the CBD. The bridges that connect the city with points east, north and west are unsuited to the speed and volume of current traffic, as well as the dimension and weight of the vehicles that use them. Although I-80 traverses the city with four interchanges, access to the interstate is incomplete and poorly defined. With the exception of the recently completed Route 19 Freeway, the local roads connecting I-80 to the CBD are circuitous and require upgrading.

The major road transportation problems are congestion within the city of Paterson and inadequate access to the regional road network. Public transit provides good access within the city and to nearby employment sites. However, public transit to suburban areas that have been the site of more recent employment opportunities, such as Totowa, Wayne, or the Hackensack Meadowlands district, is more limited. Public transit is particularly limited for those working on Sundays, evenings, or nights.

H. Problems Other Than Transportation

Transportation is only one of several obstacles for inner-city residents seeking employment. Professionals in employment training and placement indicate that lack of educational and vocational skills is the most severe problem. In addition, many of those seeking employment lack self-confidence as well as knowledge of workplace culture. For those responsible for small children, obtaining affordable, reliable child care is a major hurdle.

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.

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 (NJDOLE) 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 NJDOLE 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. NJDOLE'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 NJDOLE 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.

*Passaic County Planning Board, Passaic County Master Plan, Report No. 1—Land Use
Element, April 1988.*

- 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 NJDOLE 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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