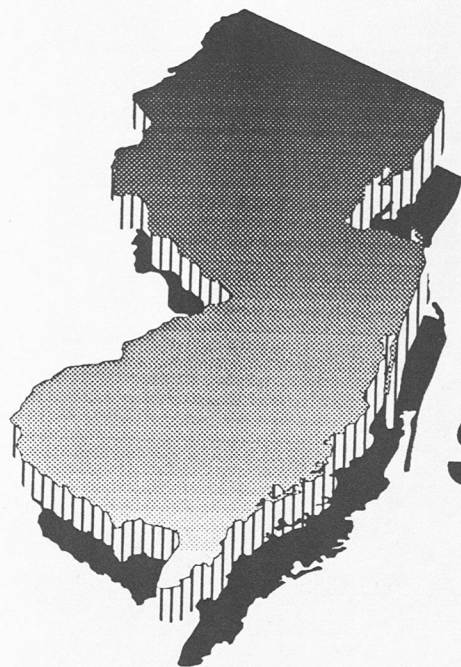


State Transportation Plan



Urban Transportation Supplement

Atlantic City

New Jersey Department of Transportation

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ATLANTIC CITY

**URBAN TRANSPORTATION
SUPPLEMENT**

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

Emilio Schneider - Elizabeth

New Jersey Department of Transportation

William S. Bectle
James B. Lewis
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New Jersey Transit

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EMPLOYMENT GROWTH CENTERS, AND
FUTURE ECONOMIC CONDITIONS

ATLANTIC CITY

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I. INTRODUCTION

State legislation (P.L. 1991 Chapter 481) approved January 18, 1992, mandates that the New Jersey Department of Transportation (NJDOT), in conjunction with NJ TRANSIT (NJT), prepare and submit to the Legislature an Urban Transportation Supplement to the State Transportation Plan. The supplement, to be updated every five years, is to identify and address transportation needs and issues of seven cities: Atlantic City, Camden, Elizabeth, Jersey City, Newark, Paterson, and Trenton, with a view to improving access into and out of these major urban centers. 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."

Information on Atlantic City 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 for the State Development and Redevelopment Plan, New Jersey Department of Labor employment projections, numerous other forms of published data, and from personal interviews with Atlantic City and Atlantic County professionals working in planning, transportation, economic development, and job placement or training.

Since its establishment in 1852, Atlantic City's fortunes have been determined to a great extent by the various transportation innovations of the last 150 years. The Camden and Atlantic Land Company—a railroad company subsidiary—quickly sold real estate in Atlantic City once it was established as the railroad terminus of a line from Philadelphia. For almost a century, Atlantic City gained a reputation as a leading holiday destination—the "Queen of the New Jersey Shore"—for New York City's and Philadelphia's inhabitants. Unfortunately, by the end of World War II, Atlantic City's path to economic and physical decline had begun as transportation innovations, such as affordable air travel, brought competing resorts further afield (e.g., Florida and the Caribbean) within easy access of the New York/Philadelphia metropolitan area. Moreover, rising car ownership levels enabled travelers to seek out alternative hotel accommodations on the mainland.

During the 1960s and 1970s the city was in dire financial straits. In 1976, the New Jersey State Legislature voted to legalize casinos in Atlantic City in an attempt to revitalize the city and simultaneously generate state revenues for property tax and utility bill relief for the elderly. The 1976 vote instilled seeds for the city's economic revival. The 1980s have witnessed a return of fortune to Atlantic City's economy as the casino industry has emerged as a dominant form of regional economic activity.

The city's transportation system mirrored its economic status. During the city's zenith as many as one hundred trains visited on a daily basis. Gradually, excursion rail services were phased out, no longer able to compete with the more efficient modes of air and auto transportation. Only limited commuter rail services continued to operate.

The development of the casino industry in the late 1970s led to special transportation needs for the community. The 1978 Atlantic City Master Plan addressed the casinos' potential impact on parking, public transportation, the arterial street system, and air travel. The plan discussed parking lots at the city's major gateway—the Atlantic City Expressway—complemented by a public transportation system. By 1983, the rapidly evolving casino industry made Atlantic City the most frequently visited United States resort. The great number of visitors led to considerable demands on the city's transportation system. It is estimated that each casino adds between 200 and 250 buses per day to the overall flow, in addition to private vehicles. The city's highway capacity has not been significantly expanded since 1980 despite an enormous increase of private cars related to the gaming industry.

In order to alleviate some of the problems caused by excessive congestion, Atlantic City has enacted a series of measures. The phenomenal increase of buses to the city has led ACTA (the Atlantic County Transportation Authority, which is now included in the South Jersey Transportation Authority, SJTA) to limit bus access to certain parts of the city and to introduce a strict schedule of arrivals and departures. Casino employees must park their cars at "intercept" lots situated at the city's entrance on the Atlantic City Expressway and take shuttles to the casinos. Plans were generated to provide a multi-modal, publicly funded transportation station. In addition to these responses to the severe transportation problems brought on by the advent of the casinos, less conventional means of transportation, such as small jitney buses, have proliferated.

A number of features set Atlantic City apart from the other six cities reviewed in the Urban Transportation Supplement. First, the city is physically smaller than the others; its location on a sandbar off the mainland and its oblong shape mean that most of its population is within easy access of the transit corridors traversing the city. Second, unlike the other cities, Atlantic City is located far from the main transportation corridors linking southern to central and northern New Jersey; hence, access to some of the state's largest employment centers is difficult. Most important, since the inception of the casinos in the late 1970s, the flight of jobs from the city has been reversed to the point where Atlantic City is now the major job site in both Atlantic County and the region. As a result of these factors, the reverse commute as a key to future employment of residents is much less of an issue in Atlantic City than it is in New Jersey's other major urban areas.

II. DEMOGRAPHIC PROFILE OF THE CITY'S POPULATION

Despite the enormous impact the casinos have had on the city's economy over the last fifteen years, they have not stalled the population flight to the suburbs that began in the 1950s. Nevertheless, while the population declined overall, the proportion of working-age adults, as well as very young children, grew. Median household and per capita income in Atlantic City more than doubled during the decade from 1980 to 1990; they are both below figures for New Jersey and the nation as a whole, and are the second lowest of the seven cities studied. These trends, combined with the fact that the city's poverty level declined only negligibly, indicate that despite expectations of economic revival the casinos have had less than anticipated impact on society's poorer segments. This section details the significant demographic changes that have taken place in Atlantic City over the past decade.

In 1990 Atlantic City's population reached its lowest level in sixty years. Despite casino growth, over the period 1980 to 1990 Atlantic City's population declined by 5.5 percent to 37,986 (Table 1). The ongoing population decline reflects long-term outmigration to the mainland of Atlantic County, a response to the city's deteriorating housing stock and public services, the latter particularly in the form of public education. The period 1980-1990 has also seen the number of Atlantic City's households fall by 5.0 percent from 16,736 to 15,891, coterminous with a slight decrease in average household size from 2.32 to 2.30 persons. The fact that the average household size in Atlantic City in 1980 was already below the national average of 2.76 persons reflects the city's sizable proportion of elderly and single-person households.

Overall, the median age of the city's inhabitants fell from 38.5 years to 35.3 years (Table 2). The 5-19 and the 65 and older age cohorts declined in absolute as well as percentage terms. The 65 and older cohort declined proportionally by 19.1 percent while the 5-19 age cohort fell by 26.9 percent. The decrease in the latter indicates that over the next few years the city will witness a shrinking labor force. The declining share of the city's population over 65 years old contrasts with national trends that depict an aging of America's population during the 1980s. A possible explanation for this trend is that by 1980, Atlantic City already had a sizable retirement community with elderly persons comprising a large proportion of the total population: 23.5 percent of the residents were over 65, and 11.7 percent were over 75 years old.

The proportion of two age groups—very young children and working-age adults—increased. The under-5-years age cohort increased by more than 50 percent, indicating an "echo" of the baby boom generation. The proportion of persons between the ages of 20 and 64 rose by 12.8 percent. This upswing in the proportion of working-age adults partly

TABLE 1
POPULATION AND HOUSEHOLD
IN ATLANTIC CITY 1980-1990

<i>Population Indices</i>	1980	1990	<i>Change</i>	
			<i>Number</i>	<i>Percent</i>
Population	40,199	37,986	(2,213)	(5.5)
Household	16,736	15,891	(845)	(5.0)
Average Household Size	2.32	2.30	(0.02)	(0.86)

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 ATLANTIC CITY 1980-1990

<i>Age Cohorts</i>	1980	1990	<i>Change</i>	
			<i>Number</i>	<i>Percent</i>
<5 years		5.4	9.0	66.7
5 years to 19 years		21.9	16.0	(26.9)
20-64 years		49.3	55.6	12.8
Over 65 years		23.5	19.0	(19.1)
Median Age (years)		38.5	35.3	(8.3)

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

TABLE 3
INCOME AND POVERTY
IN ATLANTIC CITY 1979-1989

<i>Income Indices</i>	1979	1989	<i>Change</i>	
			<i>Number</i>	<i>Percent</i>
Household Income	\$9,807	\$20,309	\$10,502	107.0
Per Capita Income	\$5,708	\$12,017	\$6,309	110.5
Percent Population Below Poverty Level	24.9	24.2	—	(2.8)

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

reflects a response to the rapid evolution of the casino industry and that sector's demand for a variety of jobs at different wage levels.

The median household income more than doubled in Atlantic City, from \$9,807 in 1979 to \$20,309 in 1989 (Table 3), a rate of increase roughly equivalent to that of the state as a whole. Yet, the city's median household income in 1990 was still far lower than the state median of \$40,050 or the national median of \$27,225. Atlantic City residents' per capita income similarly increased by 110.5 percent, from \$5,708 in 1979 to \$12,017 in 1989 but once more was far below comparable figures for the nation and New Jersey. The low levels of median household income as well as per capita income reflect the city's low labor force participation rate and the fact that many local jobs are targeted towards less-skilled and lower paid persons.

The percent of population below the poverty level declined only slightly, from 24.9 percent in 1979 to 24.2 percent in 1989. The relatively high proportion of persons below the poverty level indicates that, despite the casino industry's overwhelmingly positive impact on both Atlantic County and Atlantic City, city workers occupy relatively low paying employment billets. More important within the context of this study, the city residents' low income inhibits access to suburban jobs because many cannot afford the transportation costs involved.

III. LABOR FORCE PROFILE

The previous section indicated that the proportion of working-age persons in Atlantic City rose between 1980 and 1990. Indeed, the decade witnessed a substantial rise in the city's resident employment while unemployment levels fell—a reflection, no doubt, of the casino industry's effect on the local economy.

Not surprisingly, Atlantic City's employment structure reflects the city's historical and current association with resort activities. The advent of the casinos has meant that the proportion of workers in the services sector¹ of the economy has increased significantly during the period 1980 to 1990. In related fashion, all other sectors of the economy lost proportional shares of total resident employment.

Reverse commute is an issue of relatively minor importance in Atlantic City compared to the state's other major urban areas. Fewer than half of Atlantic City's residents owned a car in 1990. Almost nine-tenths of the city's workers are employed in the city itself; because of the city's small size, many walk to work.

¹ This broad standard industrial classification contains a subcategory of "amusements." This subcategory plays a much larger role in Atlantic City than it does in any other location.

A. Total Employed

Tables 4 and 5 display statistics on Atlantic City's employment dynamics for the period 1980 to 1990. By 1990 the total number of employed city residents had increased by 10.2 percent above the 1980 figure to 16,812, representing 44.4 percent of the city's population (Table 4). This is a marked improvement over 1980 when only 38.0 percent of city residents were employed. This increase in employment of residents is in the middle in terms of similar increases in the other cities studied. It is obvious that this increase is related to the proliferation of casino gaming during the same time period. What is perhaps less evident is that many of the jobs that have been created as a direct result of both gaming and renewed tourist industry employment have tended towards less-skilled and lower wage jobs.

B. Employment by Industry

Atlantic City's employment profile typifies a city dominated by the services sector—especially tourist-related activities (Table 4). Not surprisingly, considering the rapid evolution of the city's casino industry, the largest gains were made by the services/amusements sector, which grew from 50.7 percent of the total in 1980 to 61.7 percent in 1990. The types of jobs that have been created, however, are low wage and less skilled (e.g., bellboys, elevator operators, waiters).

Apart from service and agriculture, all other Standard Industrial Classification (SIC) sectors' shares of total employment declined between 1980 and 1990. Residents' jobs in manufacturing and wholesale trade declined by one-half. Public sector employment dropped by more than one-quarter, while employment in the finance, insurance, and real estate (FIRE), retail trade, transportation, communications and utilities, and construction sectors lost 10-20 percent each.

C. Employment by Occupation

The largest single increase among occupational categories between 1980 and 1990 was the services group, which includes hotel, casino, and restaurant jobs (Table 5). This trend began shortly after the opening of the city's first casino in 1977; services sector employees have tripled in number since that date. The second largest of the city's occupational groups—technical/sales—also relates directly to the retailing and technical employment gains connected with the growth of the casino industry.

Skilled jobs, as reflected by the precision production/crafts occupational category, declined a substantial 26.8 percent from 1980 to 1990, as Atlantic City residents worked less in the manufacturing sector. The operators and laborers category decreased even more

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

<i>Resident Employment</i>	1980		1990		<i>Change</i>	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
TOTAL EMPLOYMENT	15,257		16,812		1,555	10.2
		<i>1980</i>		<i>1990</i>		<i>Change</i>
		<i>Percent</i>		<i>Percent</i>		<i>Percent</i>
STANDARD INDUSTRIAL CLASSIFICATION (SIC)						
Manufacturing		7.9		4.4		(44.3)
Wholesale Trade		1.9		0.9		(52.6)
Retail Trade		16.1		13.2		(18.0)
Transportation		3.3		3.0		(9.0)
Communications and Utilities		2.6		2.3		(0.3)
Services		50.7		61.7		21.6
Finance, Insurance, and Real Estate		4.7		4.0		(14.8)
Construction		4.2		3.6		(14.2)
Agriculture		0.3		0.6		100.0
Public Sector		8.2		5.9		(28.0)

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 ATLANTIC CITY 1980-1990

<i>Resident Employment</i>	1980		1990		<i>Change</i>	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
TOTAL EMPLOYMENT	15,257		16,812		1,555	10.2
		<i>1980</i>		<i>1990</i>		<i>Change</i>
		<i>Percent</i>		<i>Percent</i>		<i>Percent</i>
OCCUPATIONAL CATEGORY						
Managerial/Executive		16.5		15.6		(5.5)
Technical/Sales		25.9		26.2		1.1
Services		35.7		43.4		21.5
Farming		0.4		0.5		25.0
Precision Production/Crafts		7.1		5.2		(26.8)
Operators/Laborers		14.2		9.0		(36.6)

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

8.

sharply, losing 36.6 percent by 1990, reflecting the end of the construction boom that had taken place in the city during the 1980s, as well as the aforementioned loss of jobs in manufacturing. Managerial/executive positions also accounted for a smaller proportion of the total resident employment in 1990 than they did in 1980.

D. Unemployment Levels

By 1990, despite the economic recession, the city's unemployment level had declined to 9.6 percent, down from 11.2 percent in 1980 (Table 6). Seasonality, which was an enormous problem in 1980, currently is much less severe.

E. Households with Wage and Salary Income

In 1979 11,050 of Atlantic City's 16,689 households (66.0 percent of the total) had earnings in the form of wages or salaries (Table 7). By 1989 this proportion had increased slightly to 68.5 percent. The proportion of Atlantic County households with income from wages or salaries increased from 77.2 percent in 1979 to 78.4 percent in 1989. Thus, Atlantic City lags far behind the rest of Atlantic County and the state as a whole in terms of salaried residents. One optimistic sign, however, is that the proportion of households receiving wage or salary income increased more rapidly in the city than it did in the rest of the county.

F. Household Automobile Ownership

Between 1980 and 1990 the proportion of households that owned at least one car in Atlantic City remained almost unchanged, declining only slightly from 47.9 percent to 47.1 percent (Table 8). While this is only two-thirds of the average for the state as a whole, it is typical of central cities and is higher than the figures for Camden and Newark. Jobs in nearby casinos and casino-related activities are a short journey by car, bus, foot, or jitney for most residents.

IV. "AT-PLACE" EMPLOYMENT PROFILE

At-place reflects those jobs that are located within specific geographical bounds. It includes the private- and public-sector jobs covered under the New Jersey State Unemployment Insurance program. This section presents information about the at-place

TABLE 6
RESIDENT UNEMPLOYMENT AND CHANGE
IN ATLANTIC CITY 1980-1990

City	Unemployment Level		Change Percent
	1980 Percent	1990 Percent	
ATLANTIC CITY	11.2	9.6	(14.2)

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 ATLANTIC CITY 1979-1989

Local Government	Households With Wage or Salary Income		Change Percent
	1979 Percent	1989 Percent	
ATLANTIC CITY	66.0	68.5	3.8
ATLANTIC COUNTY	77.2	78.4	1.6

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 ATLANTIC CITY 1980-1990

City	Percent of Households Having at Least One Automobile		Change Percent
	1980 Percent	1990 Percent	
ATLANTIC CITY	47.9	47.1	(1.7)

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

employment for Atlantic City itself and the Atlantic City labor area² which is comprised of Atlantic and Cape May counties.

During the last intercensal period 1980–1990, Atlantic City witnessed a substantial increase in at-place employment, as did its labor area. For both the city and the labor area, the services sector made the largest gains by far. This demonstrates the enormous influence the casinos have had on the city's and surrounding area's employment patterns, and the degree to which tourism, spurred on by the gaming industry, has come to dominate the economic landscape of southeastern New Jersey.

A. In the City

Table 9 indicates the changes in at-place covered employment in Atlantic City. Once again, the data reflect both the growth in employment due to the casinos and the increasingly concentrated nature of the city's employment.

In 1980 total at-place employment was 44,172; in 1990 this number increased by 67.0 percent to 73,779. All SIC categories except one—services—registered a decline in their proportion of total employment. Manufacturing, wholesale and retail trade, construction, and FIRE sectors registered substantial proportional losses (more than 50 percent), mirroring the exodus of these activities. Public-sector employment's share of total at-place employment fell by more than 40 percent. (The number of actual jobs in these sectors declined much less.) In contrast, employment in the services sector increased from 54.9 to 77.8 percent, a gain of more than 40 percent.

Table 10 shows the difference between Atlantic City's labor force and the jobs available within the city broken down by SIC category. In 1990 a total of 16,812 Atlantic City residents were employed. During that year 73,779 jobs were available in the city. This shows that Atlantic City is unique among New Jersey's cities in that it has many more jobs than there are residents.

The difference is especially evident in the services sector. While there are more than 57,000 services jobs available in the city—the vast majority of them casino related—these employ only 10,380 local people, the rest of the jobs going to people from outside the city. The public sector also offers a considerable number of jobs in Atlantic City: while the city has 7,744 public-sector jobs, only 995 residents are public-sector employees. The only

² **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 9
 "AT-PLACE"¹ EMPLOYMENT AND EMPLOYMENT
 CHANGE IN ATLANTIC CITY 1980-1990

Employment By Industry	Total		Change	
	1980	1990	Number	Percent
TOTAL	44,172	73,779	29,607	67.0
	1980 Percent	1990 Percent	Change Percent	
STANDARD INDUSTRIAL CLASSIFICATION (SIC)				
Manufacturing	2.3	0.4	(82.6)	
Wholesale Trade	1.6	0.5	(68.8)	
Retail Trade	13.1	6.4	(51.1)	
Transportation	1.4	1.4	0.0	
Communications and Utilities	1.9	— ²	— ²	
Services	54.9	77.8	41.7	
Finance, Insurance, and Real Estate	2.4	1.3	(58.6)	
Construction	4.3	1.7	(60.5)	
Agriculture	0.01	— ²	— ²	
Public Sector	17.6	10.5	(40.3)	

Notes: 1. "At-place" employment statistics include private-sector covered employment and city and federal government covered employment recorded in September 1990.
 2. Data are not included where there are fewer than three units in an industry or when one unit makes up 80 percent or more of an industry.

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

TABLE 10
 RESIDENT AND "AT-PLACE"¹
 EMPLOYMENT, TOTAL AND BY SIC—1990
 ATLANTIC CITY

Employment By Industry	1990	1990	Ratio of
	Resident Employment	"At-Place" Employment	"At-Place" Employment to Resident Employment
TOTAL	16,812	73,779	438.8
STANDARD INDUSTRIAL CLASSIFICATION (SIC)			
Manufacturing	747	283	37.9
Wholesale Trade	150	333	222.0
Retail Trade	2,232	4,675	209.5
Transportation	517	1,009	195.2
Communications and Utilities	390	— ²	— ²
Services	10,380	57,412	553.1
Finance, Insurance, and Real Estate	679	867	127.7
Construction	622	1,232	198.1
Agriculture	100	— ²	— ²
Public Sector	995	7,744	778.3

Notes: 1. "At-place" employment statistics include private-sector covered employment and city and federal government covered employment recorded in September 1990.
 2. Data are not included where there are fewer than three units in an industry or when one unit makes up 80 percent or more of an industry.

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*.

sector where the supply of in-city jobs does not meet residents' demand is manufacturing. In 1990, while 747 Atlantic City residents were classified as manufacturing workers, there were only 283 manufacturing jobs in the city. Thus, the majority of the few Atlantic City residents employed in manufacturing seek jobs outside the city.

B. In the Labor Area

Table 11 indicates total at-place employment and employment change in the Atlantic City labor area in 1980 and 1990.³ In 1980 at-place employment in the Atlantic City labor area was 125,483; by 1990, due mainly to the growth of casinos, at place employment was significantly higher at 177,591.

In 1990, the services sector accounted for 45.8 percent of at-place employment in the labor area, reflecting that a major part of southeastern New Jersey's economy is composed of employment relating directly or indirectly to tourism. Transportation, which accounts for 1.8 percent of the jobs, was the only other sector to increase its share of at-place employment.

Retail trade was the second most dominant category of employment in the reconstituted labor area, with 20.2 percent in 1990. Although its share of at-place employment declined proportionately, the absolute number of jobs in retailing increased by about 6,500 over the decade, an indication of the proliferation of suburban retailing. No other private sector accounted for more than 5 percent of the at-place employment.

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

Despite the enormous increase of services sector jobs in Atlantic City and the concurrent reduction of unemployment, most of the jobs that have been created are lower paying than jobs in the manufacturing sector. The growth of hotels and casinos has meant that many of the job openings are for housekeeping and maintenance personnel. These jobs, which employ individuals with a minimum range of skills, pay only about \$15,000 annually. Table 12 shows that, on average, regional manufacturing jobs pay salaries that are significantly higher than those offered in the services sector. The shrinkage of the manufacturing sector concurrently with the growth of the services sector in Atlantic City, therefore, means that higher-paying jobs have been lost in one sector and not replaced by equally paying jobs in the other sector.

³ Between 1980 and 1990 the boundaries of Atlantic City's labor area changed. For comparative purposes, the Atlantic City labor area for 1980 has been extended to include Cape May County.

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

	1980	Total 1990	Change Percent
ALTANTIC CITY LABOR AREA	125,483	177,591	41.5
	1980 Percent	1990 Percent	Change Percent
STANDARD INDUSTRIAL CLASSIFICATION (SIC)			
Manufacturing	7.9	4.1	(48.1)
Wholesale Trade	2.4	2.3	(4.2)
Retail Trade	23.4	20.2	(13.6)
Transportation	1.3	1.8	38.5
Communications and Utilities	2.7	1.8	(33.3)
Services	32.1	45.8	42.7
Finance, Insurance, and Real Estate	4.6	3.7	(19.6)
Construction	5.2	4.1	(21.1)
Agriculture	2.0	1.0	(50.0)
Public Sector	18.2	15.2	(16.5)

Note: Ocean and Cape May counties that make up the Atlantic City Labor Area in 1990 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
 ATLANTIC CITY MSA

Type of Employment	Annual Wage (\$)
MANUFACTURING OCCUPATIONS—EXAMPLES	
Drafter	20,134
Electrician	32,760
Maintenance Workers	21,632
Truck Driver, Heavy	22,755
Mechanic	30,243
SERVICE OCCUPATIONS—EXAMPLES	
Janitor/porter/cleaner	15,267
Receptionist	14,040
Computer Operator	20,696
Secretary	19,469
Word Processor	20,134

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

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

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

In the previous sections the demographics of Atlantic City as well as the city's employment dynamics have been described in some detail. This section goes on to provide projections of future employment in Atlantic City, Atlantic County, and the Atlantic City labor area.

The New Jersey State Development and Redevelopment Plan stipulates that growth is to be concentrated within existing urban areas in order to limit metropolitan sprawl. CUPR's projections for at-place employment in Atlantic City, Atlantic County, and the city's labor area are based on the State Plan's guidelines and reflect recent growth rates. Tables 13–15 indicate these projections. Note that since these tables include uncovered as well as covered employment, they differ from those in the previous section, which included only covered employment.

Overall, the projections indicate that the services sector⁴ of the economy will increase over the next decade in the city, county, and labor area. Moreover, the CUPR projections indicate a rise also in the retail sector for all three areas. Only basic employment will remain relatively unchanged during the period 1990–2000. Perhaps even more important is the fact that lower level jobs, especially in the services sector, are projected to show a considerable increase over the next decade. Most of this gain in lower level services jobs will take place within Atlantic City itself, underscoring the fact that much of the tourism industry's promised employment multiplier is reflected in lower paid, less-skilled jobs (Table 12).

A. City

In 1990 Atlantic City's total employment (including private- and public-sector covered and uncovered employment) amounted to 76,729 (Table 13). Approximately 87 percent of all employees in Atlantic City are found in the services sector, many of them in casinos. Basic employment accounted for only 6 percent of total employment, while the retail sector accounted for about 7 percent.

CUPR projections indicate that total at-place employment will increase by 8.5 percent between 1990 and 2000, mostly during the period 1990 to 1995. Service and retail employment are projected to increase by 9.0 percent each between 1990 and 2000. However, basic employment will increase only very slightly over the period.

⁴ *Basic employment* includes mining, construction, manufacturing, transportation, communications and utilities, and wholesale trade. *Service employment* includes finance, insurance and real estate, business and repair services, personal services, entertainment and recreation services, professional and related services, and public administration. *Retail employment* consists solely of those engaged in retail trade.

TABLE 13

**"AT-PLACE" EMPLOYMENT AND PROJECTIONS
IN ATLANTIC 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	76,729	4,614	66,709	5,406
1995	82,770	4,589	72,320	5,860
2000	83,283	4,637	72,751	5,895
CHANGE 1990-2000				
NUMBER	6,554	23	6,042	489
PERCENT	8.5	0.5	9.0	9.0

Source: CUPR Projections: 1990-2000.

TABLE 14

**"AT-PLACE" EMPLOYMENT AND PROJECTIONS
IN ATLANTIC 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	139,720	22,853	94,984	21,882
1995	148,429	23,010	102,191	23,228
2000	148,680	22,957	102,550	23,173
CHANGE 1990-2000				
NUMBER	8,960	104	7,566	1,291
PERCENT	6.4	0.5	7.9	5.9

Source: CUPR Projections: 1990-2000.

B. County

In 1990, employment in Atlantic County amounted to 139,720 (Table 14). The services sector comprised the largest proportion, with 68.8 percent of total employment. Basic employment made up the next largest sector with 16.4 percent of the total while retail employment, at 15.7 percent, accounted for just slightly fewer jobs than basic employment.

Projections for the period 1990–2000 indicate that total employment in the county will increase by approximately 8,960 (6.4 percent). The services sector is projected to be the largest growth component over the ten-year period, with an overall increase of 7.9 percent. Between 1990 and 1995 it is expected that this sector will gain an additional 7,207 employees (7.5 percent). Beyond 1995 the employment increase is projected to be far more modest as the spinoff effects of the casinos begin to level off. Retail employment is projected to show slightly less growth: an increase of 6.2 percent between 1990 and 1995, but then a slight decline from 1995 to 2000. Basic employment will expand slightly to 1995, and then contract from 1995 to 2000.

C. Labor Area

Employment projections for the Atlantic City labor area indicate that, during the period 1990–2000, total employment will increase by a modest 4.7 percent (Table 15). The services sector is expected to gain 6.5 percent over the ten-year period. Retail employment in the labor area will increase by 2.7 percent between 1990 and 2000. Basic employment is expected to remain relatively constant. Again, the majority of the projected increases will take place between 1990 and 1995. Indeed, during this period total employment will increase by 5.3 percent and reach a peak of about 184,000. After 1995, total employment is projected to decline by approximately 1,000 to 183,091.

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

Employment projections by occupational category made by the New Jersey Department of Labor Market and Demographic Research provide yet another indication of potential employment change affecting Atlantic City residents. These are based on annual jobs added through both growth in jobs and separation⁵ of employees from the labor force. This is a particularly useful set of data in that it partitions job growth by occupational category so that one can project the growth in *less-skilled*⁶ new jobs and job separations.

⁵ Separations are openings created when people leave the labor force for reasons such as death, retirement, pregnancy or family reasons, and do not include movement from one job to another.

⁶ Less-skilled occupations (an umbrella term for both lower-skilled and semi-skilled occupations) include nonprofessional services, clerical, sales, operators, and laborers.

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

COUNTY	New Less-Skilled Jobs			Less-Skilled Separations ²			Total Less-Skilled Jobs and Separations ²		
	Basic	Retail Services	Total ³	Basic ⁴	Retail Services	Total ³	Basic	Retail Services	Total ³
ATLANTIC COUNTY									
Absecon city	3	30	162	0	81	554	3	111	716
Atlantic City city	11	318	2,606	0	1,208	12,361	11	1,526	14,967
Brigantine city	27	92	69	0	134	126	27	226	195
Buena borough	-42	-4	-9	0	27	86	-42	23	77
Buena Vista township	29	35	11	0	79	30	29	115	41
Corbin City city	0	-1	0	0	3	2	0	2	1
Egg Harbor township	-33	-13	-6	0	626	355	-33	612	349
Egg Harbor City city	49	52	73	0	95	164	49	147	236
Estell Manor city	1	1	2	0	2	8	1	2	10
Folsom borough	12	2	5	0	7	26	12	9	31
Galloway township	-11	19	44	0	186	539	-11	205	583
Hamilton township	23	143	83	0	537	389	23	680	472
Hammoncton town	-46	19	33	0	310	661	-46	329	694
Linwood city	0	7	40	0	66	499	0	73	540
Longport borough	3	10	18	0	13	32	3	23	49
Margate City city	-7	-11	-10	0	119	143	-7	108	133
Mullica township	37	9	10	0	14	20	37	23	30
Northfield city	-6	29	28	0	312	376	-6	340	404
Pleasantville city	8	45	41	0	405	465	8	450	506
Port Republic city	4	1	12	0	1	14	4	2	26
Somers Point city	-8	43	40	0	450	520	-8	493	560
Ventnor City city	-5	13	10	0	165	164	-5	178	175
Weymouth township	0	1	1	0	5	10	0	5	11
TOTAL FOR ATLANTIC	49	839	3,263	0	4,843	17,544	49	5,682	20,807
			4,151			22,387			26,538

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

COUNTY	New Less-Skilled Jobs 1993-2000			Less-Skilled Separations ² 1993-2000			Total Less-Skilled Jobs and Separations ² 1993-2000		
	Basic	Retail	Services	Basic ⁴	Retail	Services	Basic	Retail	Services
			Total ³			Total ³			Total ³
CAPE MAY COUNTY									
Avalon borough	-12	-41	-36	0	106	117	-12	65	81
Cape May city	-2	84	52	0	440	336	-2	524	388
Cape May Point borough	0	1	3	0	1	3	0	2	6
Dennis township	16	29	38	0	60	98	16	89	136
Lower township	12	36	17	0	184	111	12	220	129
Middle township	47	105	181	0	342	737	47	448	918
North Wildwood city	-32	-109	-131	0	119	179	-32	10	47
Ocean City city	-14	23	19	0	462	463	-14	485	481
Sea Isle City city	0	28	19	0	100	83	0	128	101
Stone Harbor borough	3	32	15	0	140	82	3	172	97
Upper township	47	77	40	0	203	132	47	280	172
West Cape May borough	0	3	2	0	11	10	0	14	12
West Wildwood borough	-1	0	-1	0	0	3	-1	0	2
Wildwood city	-83	-429	-228	0	444	295	-83	15	67
Wildwood Crest borough	-25	-76	-143	0	102	241	-25	26	98
Woodbine borough	1	2	14	0	8	61	1	10	75
TOTAL FOR CAPE MAY	-42	-232	-139	0	2,722	2,951	-42	2,490	2,812
LABOR AREA TOTAL	7	607	3,124	0	7,565	20,495	7	8,172	23,618

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 exactly total due to rounding.
4. These projections are based on the occupational categories with the greatest growth. In this county, all those occupations were in the services or retail sectors. Therefore, the lack of separations in the basic category of industrial occupations results from having no observed cases of growth in the specific job categories projected. Of course, in actuality there will be some low level of separations in basic employment over time.

Source: CUPR Projections: 1992-2000.

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

Total job change in the Atlantic City labor area, which includes both Atlantic and Cape May counties, shows a gain of 3,737 less-skilled jobs for the period 1993 to 2000. This job growth is comprised of a net gain of 3,124 jobs in the services sector, 607 jobs in retail, and 7 jobs in the basic sector. A far larger source of job opportunities will result from job separations, which will create a total of approximately 28,000 job opportunities in the same geographical location. This involves 7,565 jobs in the retail sector and 20,495 jobs in the services sector.⁷

During the period 1993 to 2000 Cape May County will witness a loss of 414 less-skilled new jobs while Atlantic County will experience an overall gain of 4,151 less-skilled new jobs in all sectors. In terms of less-skilled job separations, Cape May County will experience a gain of 5,673. During the same period Atlantic County will witness an increase of 22,387 job separations.

With regard to municipal locations, Atlantic City, with 2,935 new less-skilled jobs, will gain the most over the seven-year period. Of these, new less-skilled jobs almost all will be in the services sector, reflecting the enormous influence of the tourist trade on the city's economy. Other gainers in terms of new less-skilled jobs will be Hamilton Township with 249; Absecon City with 195; Brigantine City with 188; Egg Harbor City with 174; as well as Middle Township in Cape May County with 333.

Regarding separations, Atlantic City will once again witness an enormous incidence of 13,568 less-skilled job separations, of which 12,361 will be in the services sector. Other municipalities that will experience substantial increases in less-skilled job separations include Egg Harbor Township, Hamilton Township, Hammonton Township, and Somers Point in Atlantic County, as well as Middle Township and Ocean City in Cape May County.

Table 16 lists the number of less-skilled job opportunities by municipality within the Atlantic City labor area. From a transportation point of view, the density of these opportunities is important. Therefore, Map A displays the new less-skilled employment

⁷ These projections are based on the occupational categories with the greatest growth. In Atlantic and Cape May counties, all those occupations were in the services or retail sectors. Therefore, the lack of separations in the basic category of industrial occupations results from having no observed cases of growth in the specific job categories projected. Of course, in actuality there will be some level of separations in basic employment over time.

opportunities in terms of density per square mile, while Map B displays the less-skilled separations in terms of the number of jobs per square mile. Rather than showing all the municipalities in the labor area, these maps show an area within about 15–20 miles of Atlantic City.

Map A shows that new less-skilled jobs will be most dense in Atlantic City, where they are projected to grow at a rate of 200–400 per square mile between 1993 and 2000. In most of the other municipalities near Atlantic City, a lower rate of new jobs is projected, from 0–100 jobs per square mile. However, Margate, Egg Harbor Township, Corbin City, and Buena Borough are projected to lose less-skilled jobs.

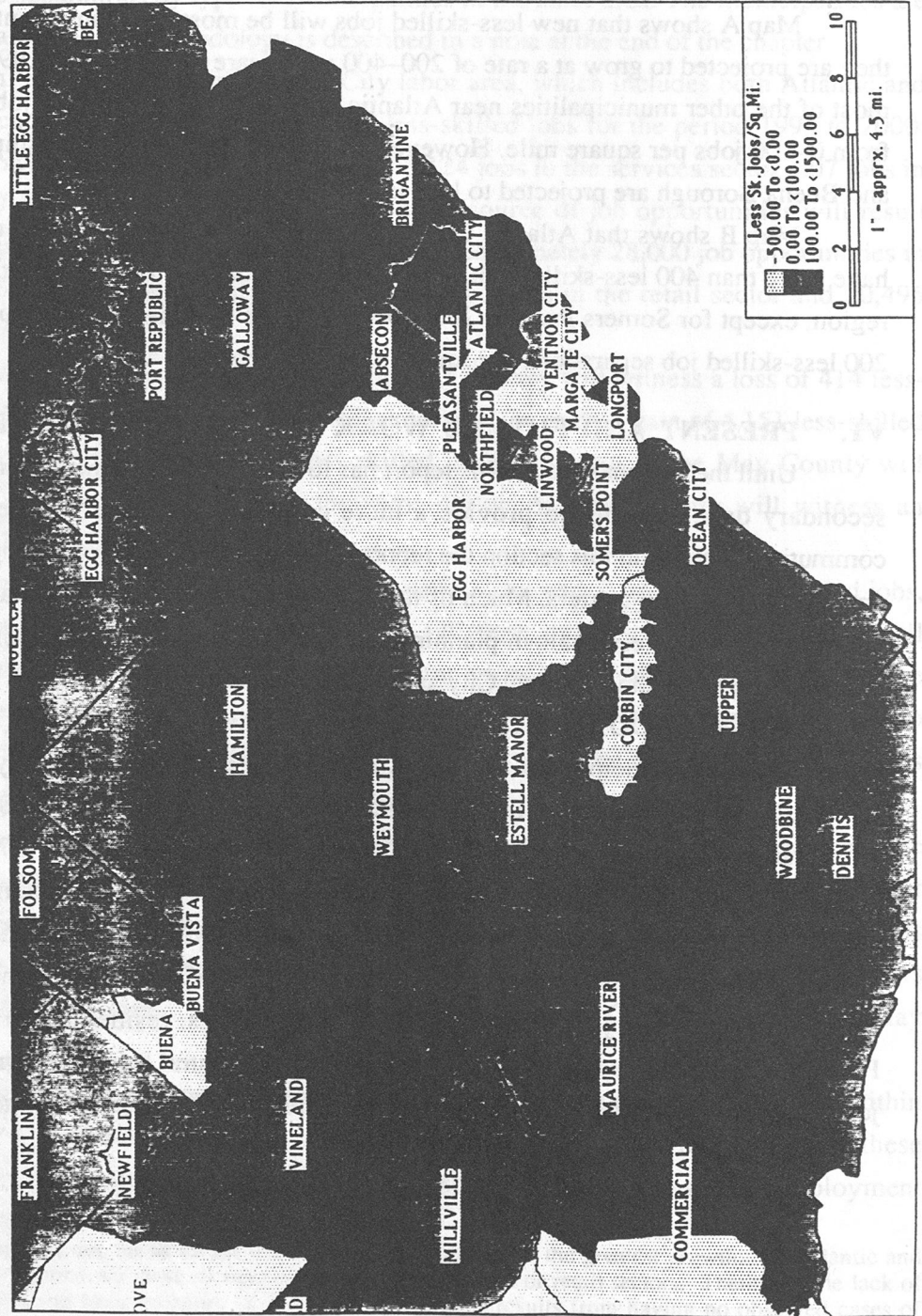
Map B shows that Atlantic City is the only municipality in the region projected to have more than 400 less-skilled job separations per square mile. In contrast, the rest of the region, except for Somers Point at 200–400 per square mile, is projected to have less than 200 less-skilled job separations per square mile between 1993 and 2000.

VI. PRESENT AND FUTURE WORK LOCATIONS—A MICRO VIEW

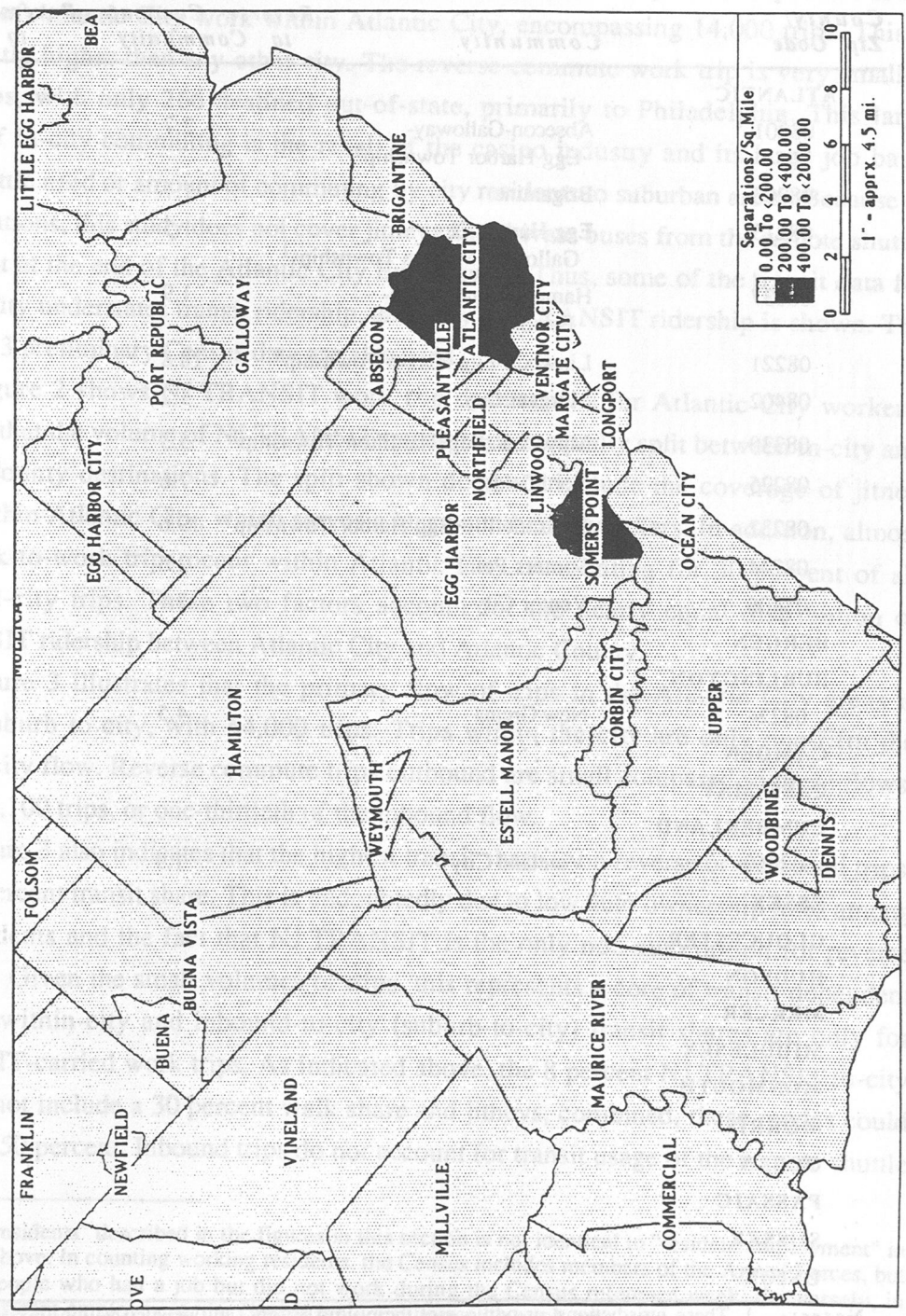
Until the present section, this report has focused on employment trends indicated by secondary data. In order to provide a more complete picture of future Atlantic City commuting patterns, in this section the report identifies some of the more important existing and potential growth centers. Much of the material used in this section was gleaned from interviews with professionals in planning, economic development, transportation, and job training agencies both in Atlantic City and Atlantic County.

In 1989, NJDOT collected data on the work locations of Atlantic City residents. Table 17 shows municipalities, outside Atlantic City, that provide employment for 25 or more Atlantic City residents. The zip code that defines Atlantic City is 08401. There is a total resident work force of 16,327. Table 17 represents a sample—1,759—that is 91 percent of the 1990 Census total reverse commute trips (1,937). This sample is based on 1989 NJDOT Origin/Destination Employment Data. The NJDOT survey data includes only covered employment. For locations outside the city, NJDOT data show that the two most important suburban job locations for Atlantic City's residents are Linwood and Pleasantville, which lie within a five-mile radius of the central business district (CBD); they jointly account for 50 percent of all Atlantic City residents' reverse commutes.

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



MAP B
DENSITY OF LESS-SKILLED EMPLOYMENT SEPARATIONS
IN THE ATLANTIC CITY METROPOLITAN AREA, 1993-2000



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

TABLE 17
 WORK LOCATIONS OF ATLANTIC CITY 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>
ATLANTIC			85.8
08201	Absecon-Galloway- Egg Harbor Township ¹	2.7	
08203	Brigantine	1.7	
08215	Egg Harbor City- Galloway-Mullica Townships ¹	1.5	
08037	Hammonton-Mullica- Folsom ¹	1.9	
08221	Linwood-Egg Harbor Township ¹	28.8	
08402	Margate City	3.2	
08330	Mays Landing-Hamilton Township ¹	5.3	
08225	Northfield	7.6	
08232	Pleasantville-Egg Harbor Township ¹	19.6	
08244	Somers Point	2.6	
08406	Ventor City	7.4	
BERGEN			0.1
BURLINGTON			5.3
08224	New Gretna	4.5	
CAMDEN			1.1
CAPE MAY			2.0
CUMBERLAND			2.2
08360	Vineland City	1.9	
ESSEX			0.2
GLOUCESTER			0.6
HUDSON			0.1
MERCER			0.1
MIDDLESEX			0.6
MONMOUTH			0.2
MORRIS			0.0²
OCEAN			0.3
PASSAIC			0.1
SUSSEX			0.1
UNION			0.1

Notes: 1. These jurisdictions, or portions of these jurisdictions, are included within this zip code.
 2. 0.0 Reported reverse commute is less than 0.1%.

Source: NJDOT 1989 ZIP Code Origin/Destination Data

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

Atlantic City has the highest proportion of in-city commuting by resident workers among the seven cities examined in this study.⁸ As indicated in Figure 1, 86 percent of the residents of Atlantic City work within Atlantic City, encompassing 14,000 trips. This is significantly higher than any other city. The reverse commute work trip is very small—2,000 trips, with only 266 destined out-of-state, primarily to Philadelphia. This large amount of in-city commuting is the result of the casino industry and its large job base. There is little need or amount of commuting by city residents to suburban areas. Because of data limitations, this study does not cover jitneys and private buses from the remote shuttle parking lot at the end of the Atlantic City Expressway. Thus, some of the transit data for Atlantic City understates transit ridership, and only NJ TRANSIT ridership is shown. The 1990 STF 3 preliminary Census data are also used.

Figure 2 shows NJ TRANSIT work trip destinations for Atlantic City workers, indicating that the volume of NJ TRANSIT transit trips is equally split between in-city and Atlantic County destinations. The split shown does not include the coverage of jitney service within Atlantic City, which serves a large number of workers. In addition, almost 4,000 walk-to-work trips occur within Atlantic City, accounting for 30 percent of all resident in-city trips. These two factors account for the nearly equal distribution of NJ TRANSIT ridership between Atlantic City and Atlantic County.

Figure 3 illustrates that the primary flow of trips in the Atlantic City areas is inbound suburb to city, with 64,000 trips. Trips within the city are only one-fifth the suburb-to-city flow. Reverse commute trips outbound are small compared to these flows, with only 2,100 trips, or one-thirtieth of the inbound flow.

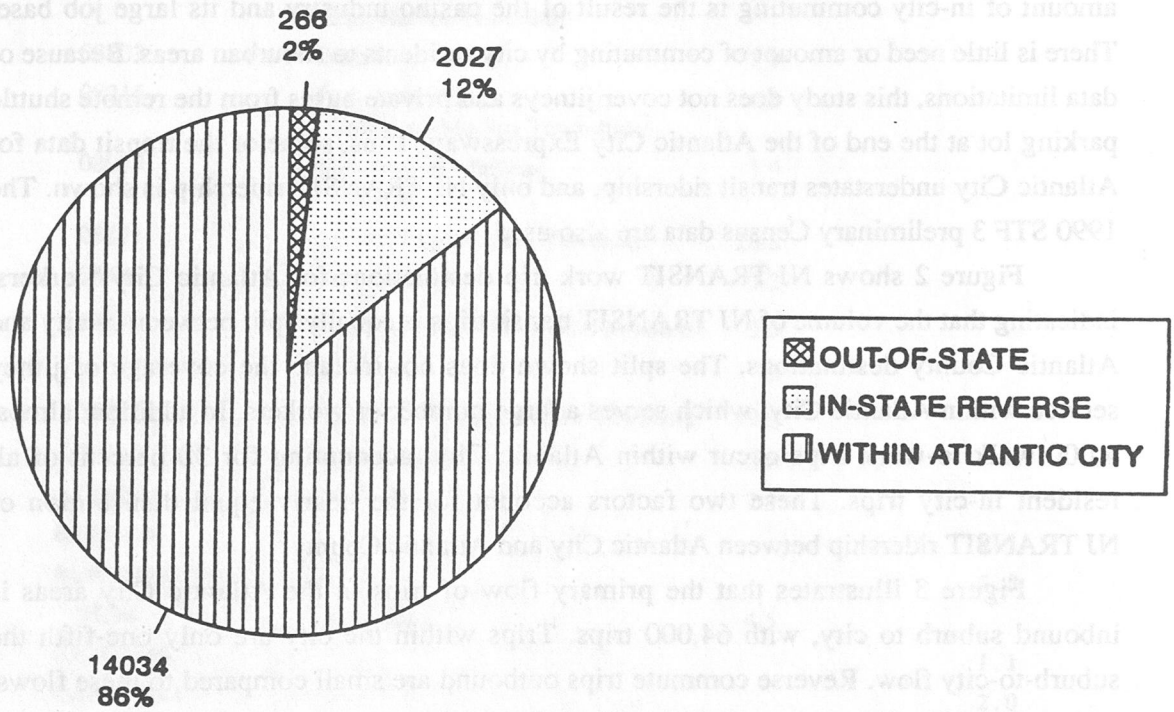
Figure 3 also indicates that the highest transit share is on reverse or outbound trips, with a 52 percent transit share. This is undoubtedly due to low auto ownership rates among in-city residents and the fact that NJ TRANSIT is the only non-auto option for reverse commuters. Given the small volumes of trips, this represents a core of transit-dependent users. The within-city and inbound-to-city (suburb-to-city) transit shares are only for NJ TRANSIT-carried work trips. As indicated above, the 8 percent NJ TRANSIT in-city share does not include a 30 percent walk share and jitneys; combined, these modes could total nearly 50 percent. Inbound trips do not account for transit usage of the remote shuttle

⁸ "Working residents" described in the figures in this section is not identical to "resident employment" in the tables above. In counting working residents, the Census includes members of the Armed Forces, but excludes people who had a job but did not work during the Census reference week. Conversely, in counting resident employment, the Census includes those with a job who were not at work during the reference week, but excludes members of the Armed Forces. For more complete descriptions, see the Census definitions of "Employment Status" and "Journey to Work."

TABLE 17

A. City-to-city and in-city trips of residents of Atlantic City has the highest percentage of in-city commuting by resident workers among the seven cities examined in Figure 1. 86 percent of the

FIGURE 1
WORKSITE DESTINATIONS OF ATLANTIC CITY RESIDENTS
 (Total Atlantic City Working Residents—16,327)



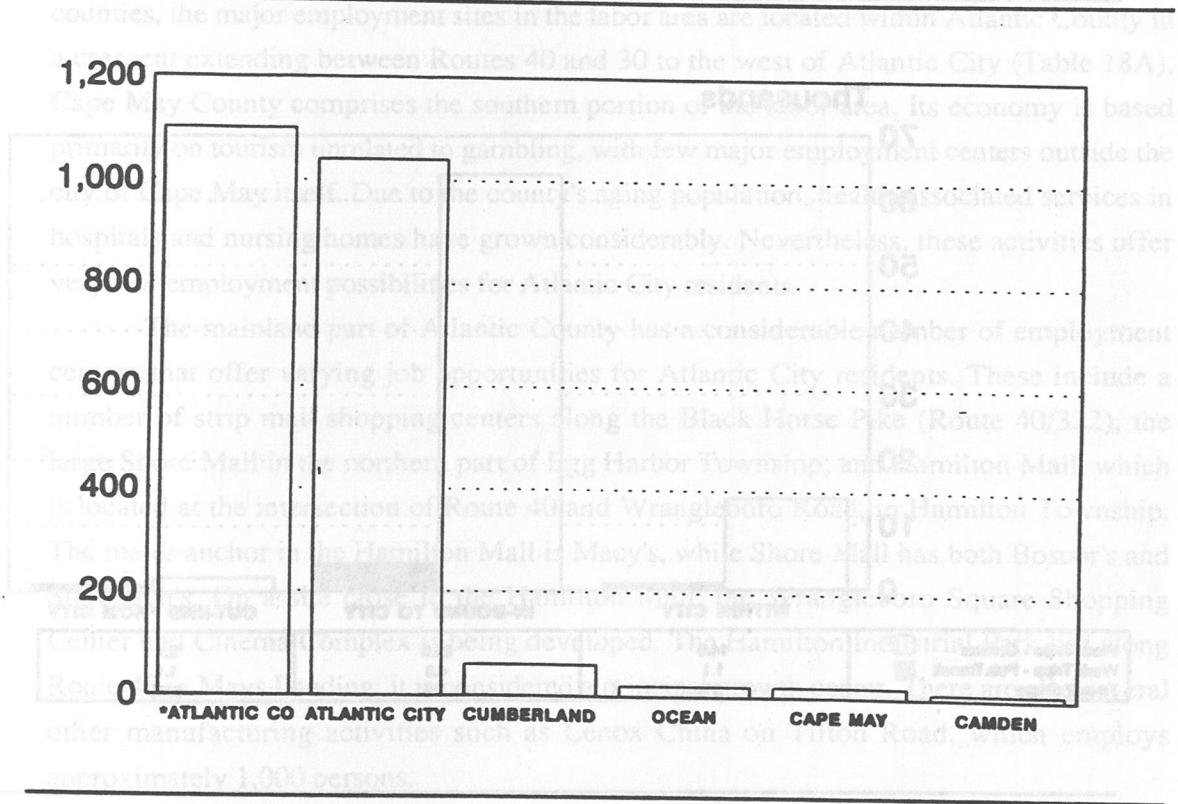
Source: 1990 U.S. Census Data STF-3.

in-city residents and the fact that NJ TRANSIT is the only non-rail option for reverse commuters. Given the small volumes of trips, this represents a role of transit-dependent users. The within-city and in-bound-to-city (suburb-to-city) transit shares are only for NJ TRANSIT-carried work trips. As indicated above, the 8 percent NJ TRANSIT in-city share does not include a 30 percent walk share and they, combined, that mode share total nearly 50 percent. In-bound trips do not account for transit usage of the transit shuttle

"Working residents" described in the figures in this section is not identical to "resident employment" in the tables above. In counting working residents, the Census included members of the Armed Forces, but excludes people who had a job but did not work during the Census reference week. Conversely, in counting resident employment, the Census includes both with and without work during the reference week, but excludes members of the Armed Forces. For more complete responses, see the Census definitions of "Employment Status" and "leave to work."

lot where many casino employees park, or private bus usage for work trips. Recent casino and other surveys indicate that inbound trips are in the magnitude of 15 to 20 percent transit share including these modes. Thus, the NJ TRANSIT 7 percent mode share appears reasonable.

FIGURE 2
WORK TRIP DESTINATIONS OF ATLANTIC CITY RESIDENTS USING PUBLIC TRANSIT
(Total Volume of Transit Commutes by Atlantic City Residents—2,200)



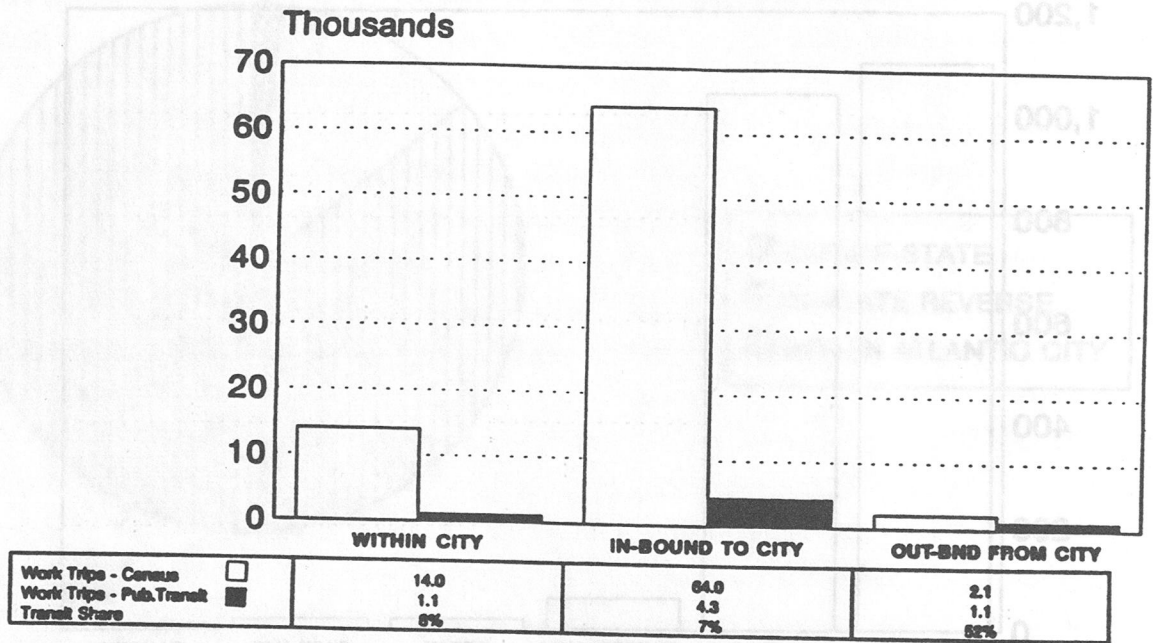
Notes: * Excludes Atlantic City.
Totals do not include private carriers, jitneys, and remote shuttles.
Source: 1990 NJ TRANSIT Bus Ridership Survey.

In Egg Harbor two major developments are currently being undertaken. One significant effort by the Federal Aviation Administration (FAA) and IBM consists of a \$24 million, 183,000 sq. ft. Advanced Automation Systems Laboratory to modernize the nation's air traffic control system. In addition, the FAA is constructing a laboratory to develop devices to detect explosives. Also in Egg Harbor, the Harbor Creek Office Park has opened the first phase of a proposed 40-acre development that will consist of a mix of office and retail facilities.

FIGURE 3

**TRANSIT SHARE OF WORK TRIPS
ATLANTIC CITY 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, jitneys, and remote shuttles.

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

lot where many casino employees park, or private bus usage for work trips. Recent casino and other surveys indicate that inbound trips are in the magnitude of 15 to 20 percent transit share including these modes. Thus, the NJ TRANSIT 7 percent mode share appears reasonable.

B. Suburban Job Locations

Although the Atlantic City labor area is comprised of Atlantic and Cape May counties, the major employment sites in the labor area are located within Atlantic County in a crescent extending between Routes 40 and 30 to the west of Atlantic City (Table 18A). Cape May County comprises the southern portion of the labor area. Its economy is based primarily on tourism unrelated to gambling, with few major employment centers outside the city of Cape May itself. Due to the county's aging population, health-associated services in hospitals and nursing homes have grown considerably. Nevertheless, these activities offer very few employment possibilities for Atlantic City residents.

The mainland part of Atlantic County has a considerable number of employment centers that offer varying job opportunities for Atlantic City residents. These include a number of strip mall shopping centers along the Black Horse Pike (Route 40/322), the large Shore Mall in the northern part of Egg Harbor Township, and Hamilton Mall, which is located at the intersection of Route 40 and Wrangleboro Road, in Hamilton Township. The major anchor in the Hamilton Mall is Macy's, while Shore Mall has both Boscor's and Steinbach's. On a site close to the Hamilton Mall, the Wrangleboro Square Shopping Center and Cinema Complex is being developed. The Hamilton Industrial Park lies along Route 40 in Mays Landing; it is considered a principal growth center. There are also several other manufacturing activities such as Lenox China on Tilton Road, which employs approximately 1,000 persons.

Along the White Horse Pike (Route 30) and in Galloway Township are a number of hotels and other lodging facilities. Other major employment centers in the area include Stockton State College and the Atlantic City Medical Center in Pomona.

In Egg Harbor two major developments are currently being undertaken. One significant effort by the Federal Aviation Administration (FAA) and IBM consists of a \$24 million, 183,000 sq. ft. Advanced Automation Systems Laboratory to modernize the nation's air traffic control system. In addition, the FAA is constructing a laboratory to develop devices to detect explosives. Also in Egg Harbor, the Harbor Creek Office Park has opened the first phase of a proposed 40-acre development that will consist of a mix of office and retail facilities.

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

	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
<i>Corridors and Specific Locations</i>				
Route 40 (to Pleasantville and Mays Landing)	Both	Both	High	High
Expressway Corporate Park	Existing	Less-skilled	Low	Low
Hamilton Mall	Existing	Skilled	Low	Low
Hamilton Industrial Park	Growth	Less-skilled	High	High
Wrangleboro Square	Existing	Both	Low	Low
English Creek/Scarborough	Existing	Less-skilled	Moderate	Moderate
Shore Mall				
Pomona Road (Egg Harbor)				
FAA Technical Center	Both	Skilled	Moderate	Moderate
International Airport	Both	Both	High	High
Atlantic Research Park	Growth	Skilled	High	Moderate
Galloway				
Stockton State College	Existing	Both	Moderate	Low
Atlantic City Medical Center	Existing	Both	Moderate	Low
Route 30 Corridor				
Hotels/Motels	Existing	Less-skilled	Moderate	Moderate
Ventnor				
Ventnor Plaza Shopping Center	Existing	Less-skilled	Moderate	Moderate
Linwood				
Prudential-Linwood	Existing	Both	Low	Low
Egg Harbor				
Harbor Creek Office Park	Growth	Skilled	Moderate	Low

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

In April 1991, Governor Florio announced a joint venture with American Cyanamid whereby the New Jersey Economic Development Authority will develop the Atlantic Research Park near Pomona Airport in Galloway Township. The proposed development will contain 1.9 million square feet of office, industrial, research, conference, and hotel space aimed primarily towards the study of advanced chemical and material technologies. When fully operational, it is expected that this research park will be the locus of approximately 5,000 jobs. Its development is not certain, however; Galloway Township, the jurisdiction controlling development permissions, believes that the tract can be utilized more effectively if it is developed into an international speedway.

Other existing or proposed employment centers in the Atlantic City labor area include plans for upgrading the city's airport to an international facility, and additions to the Expressway Corporate Center in Egg Harbor Township, which already includes a regional distribution center for the U.S. Postal Service. In addition, NJ TRANSIT will soon have a major maintenance facility and the State of New Jersey has planned a Social Security office within the Corporate Center.

Table 18A indicates the potential for jobs at the sites described above and whether or not these can serve as sites of employment for Atlantic City residents. It appears that the Expressway Corporate Center offers strong potential for employment of both skilled and less-skilled workers and thus offers good opportunity for employment of city residents. The development of the international airport also offers significant potential for the creation of jobs at various levels and thus the possibility that a number of skill levels of Atlantic City residents will be served. The Wrangleboro Square in Hamilton also possesses good prospects for employment, primarily blue-collar service jobs. By contrast, some of the other proposed developments for research and development facilities, such as the FAA Technical Center, offer limited opportunities for the employment of Atlantic City residents.

C. In-City Job Locations

Table 18B shows the major sites of employment in Atlantic City. The city's largest single employment concentration is the twelve casinos, ten of which are located along the Boardwalk. These offer opportunities for skilled and less-skilled labor and already employ a significant proportion of the city's labor force. According to the Casino Association of New Jersey, about 10,000 of the city's residents are employed by the casino industry in 1993. In addition to the casinos, other major employers in the city include the county and city offices as well as the Atlantic City Medical Center. There is only one private non-casino employer of major size—a law firm with a few hundred employees. Retail outlets in

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

ATLANTIC CITY

	A <i>Existing or Employment or Growth Node</i>	B <i>Site of Primarily Skilled or Less-skilled Employment</i>	C <i>Potential for Jobs at Site</i>	D <i>Potential for Center City Residents at Site</i>
<i>Corridors and Specific Locations</i>	<i>Existing, Growth, or Both</i>	<i>Skilled, Less-skilled, or Both</i>	<i>High, Moderate, or Low</i>	<i>High, Moderate, or Low</i>
Casinos	Existing	Both	Low	Low
Hospitals Atlantic City Medical Center	Existing	Both	Low	Low
County/City Government City Hall Atlantic County Complex	Existing Existing	Both Both	Moderate Moderate	Low Low
Retail Atlantic Avenue Retail Boardwalk Retail Pacific Avenue Retail	Existing Existing Existing	Less-skilled Less-skilled Less-skilled	Low High Moderate	Low Moderate Moderate
Other Major law firm Days Inn (Non-casino hotel proposal)	Existing Growth	Both Less-skilled	Low High	Low High

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

REGIONAL ROAD SYSTEM IN THE VICINITY OF ATLANTIC CITY

the city are limited to the Boardwalk, Pacific and Atlantic Avenues, and multiple perpendicular streets. They generally tend to be small in nature.

Over the next few years the main project in the pipeline for the city is a large convention center that is expected to create enormous potential for additional service jobs and thus directly benefit the city's residents. Construction of the convention center has begun and is to be completed by 1995. In addition to 487,000 sq. ft. of exhibition space and 42 meeting rooms covering a total of 104,000 sq. ft., the convention center will include a 1,000-room hotel and a 1,600-space parking garage. Another planned development for the city involves the construction of a non-casino hotel for an entire block bordered by Arctic, Atlantic, and Indiana avenues. This 134,000 sq. ft. Days Inn will consist of 234 rooms and is another site offering high employment potential for Atlantic City residents. It is also psychologically important in that it not only is part of the new gateway to the city, it is the first of, hopefully, many new non-casino-related hotel rooms in Atlantic City.

VII. THE EXISTING TRANSPORTATION NETWORK

Thus far the report has examined the population, labor force, and job opportunities in Atlantic City and Atlantic County, as well as the Atlantic City labor area. The following sections will focus on the transportation network serving the city.

Because Atlantic City is located on an island, access to and from the city is limited to just a few routes. Unfortunately, the large number of visitors to the city has placed a heavy burden on the existing transportation infrastructure and has led in most cases to severe congestion on the city's main access routes. The aim of the next part of this report is to describe the existing transportation network within the region as well as the city. It then examines the rail transit, bus routes, and alternative modes of transportation that exist within the city and its suburbs.

A. Roadways—City to Suburb

1. Major Arterials

Table 19A lists the major interstate, state, and county roads serving Atlantic City and its environs. These are also shown on Map C.

The major interstate roads that traverse Atlantic County are US Route 9, which runs in a north-south direction and is located to the west of the city, and the White Horse and Black Horse Pikes (Routes 30 and 40/322 respectively), which run in an east-west direction in and out of the city.

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

	<i>Location Relative to City</i>	<i>How City is Served</i>
STATE HIGHWAYS		
US Route 9	N-S (W of city)	Intercity route links city to north and south NJ
Route 30 (White Horse Pike)	E-W (NW of city)	Links city to south central NJ and Philadelphia
Route 40 (Black Horse Pike)	E-W (W of city)	Links city to south central NJ and Delaware
Garden State Parkway	N-S (W of city)	Links city to north and south NJ
Atlantic City Expressway	E-W (W of city)	Links city to Garden State Parkway and western New Jersey
COUNTY ROADS		
Route 561	E-W (NW of city)	Links Route 9 to Garden State Parkway
Route 563	E-W (W of city)	Links city to airport
Route 651	N-S (W of city)	Links 563 to 634
Route 585	N-S (W of city)	Links with Routes 30 and 40

Source: CUPR, 1992.

US Route 9 links Atlantic City to the northern and southern parts of the state, while the two pikes run in a westerly direction through central and western Atlantic County. Route 30 links the city to Camden and Gloucester counties; Route 40 connects the city to the Delaware Memorial Bridge some 60 miles away.

There are two major regional highways traversing Atlantic County that literally dominate in the channeling of traffic to Atlantic City.

The Garden State Parkway, a toll road running in a north-south direction approximately 4 miles to the west of the city, links Atlantic City to Cape May County in the south, as well as to central and northern New Jersey and points north to New York and beyond.

The Atlantic City Expressway runs in an east-west direction between and parallel to the Black Horse Pike and the White Horse Pike, connects the city to the western part of the state and ultimately to Philadelphia.

2. County Roads

The major county roads in Atlantic County are Routes 561 (Jimmie Leeds Road), 563 (Tilton Road), 651 (Fire Road), and 585 (Shore Road). These also are listed in Table 19A.

Route 561 runs in an east-west direction and is situated to the northwest of the city. This road links US Route 9 to the Garden State Parkway.

Route 563, which also runs from east to west, is located west of the city. This is an important road as it provides access from the Pomona Airport area.

Route 651 which runs in a north-south direction links Routes 563 and 634.

The fourth important county road is Route 585, which runs north-south parallel to US Route 9 and lies to the west of the city. This road provides an important intracounty link between Routes 30 and 40.

B. Roadways—In City—Municipal Streets

Table 19B lists the existing roadways within Atlantic City. The most important routes within the city are Atlantic and Pacific avenues, which pass through the city's center. Both these routes run in a east-west direction and serve the CBD. These roads are heavily used throughout the day.

Absecon Boulevard, found in the northwest part of the city, runs in an east-west direction, and links the city to Route 30 and its centers of employment. Absecon Boulevard provides the only northern egress from the city.

TABLE 19B
THE EXISTING TRANSPORTATION NETWORK—ROADWAYS
IN-CITY
ATLANTIC CITY

	<i>Location Relative to City</i>	<i>How City is Served</i>
MUNICIPAL STREETS		
Abscon Boulevard	E-W (NW part of city)	Links to Route 30
Albany Avenue	E-W (S of CBD)	Links to Route 40/322
Arkansas Avenue (one way)	N-S (W of CBD)	Links Expressway to city outbound
Atlantic Avenue	E-W (through city center)	Serves CBD and intermunicipal travel
Missouri Avenue (one way)	N-S (W of CBD)	Links city to Expressway inbound
Pacific Avenue	E-W (through city center)	Serves CBD and down beach travel

Source: CUPR, 1992.

Albany Avenue is another important road within Atlantic City. This road runs in an east-west direction and is located to the south of the CBD. Albany Avenue links Atlantic City directly to Route 40/322, which is the main corridor of commercial activity leading out of the city.

Perhaps the two most important access routes into the city are Arkansas Avenue and Missouri Avenue, which link Atlantic City's CBD to the Expressway. These roads are one-way in opposite directions. Missouri Avenue serves as an inbound feeder into the city while Arkansas Avenue moves traffic in an outbound direction.

C. Rail Transit—City to Suburb

Atlantic City has one railway line operated by NJ TRANSIT that links the city to Lindenwold in Camden County (Table 20). The rail route is shown on Map D. The sole rail terminal in Atlantic City is the Atlantic City Rail Station. At Lindenwold passengers can change to AMTRAK as well as PATCO for service to Philadelphia. As of May 2, 1993, direct train service is available between Atlantic City and Philadelphia. The railway line primarily serves commuting workers to Atlantic City, as well as serving visitors to the city. The number of reverse commute workers from Atlantic City using this line is negligible. According to a rail ridership survey completed in 1990 there were no trips reported for work purposes by Atlantic City residents. Trains on the Atlantic City Rail Line run between 4:45 AM and 12:45 AM daily. Train service is not frequent. Indeed during peak hours, service headways are 75 minutes, while at off peak, trains run every three and one-quarter hours.

Reverse commute from Atlantic City is of minor importance to this line. There are a small number of people who live in Atlantic County and travel to locations in Camden County primarily for shopping. This number is low, however. The majority of people who use the train are inbound casino workers.

D. Bus Service—City to Suburb

NJ TRANSIT operates 20 bus routes in the Atlantic City area. These include five shuttle bus routes that run within the city linking the rail terminal to the casino hotels. There are also a number of commuter routes to locations in Atlantic, Camden, Cumberland, and Ocean counties, as well as express service to Camden, Philadelphia, and New York. On an average weekday a total 12,111 passengers board NJ TRANSIT buses in Atlantic City. The bus routes are shown on Map E.

Most bus routes serve the Atlantic City periphery and are used to varying degrees by the city's reverse commuters. These routes access most major employment, shopping,

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

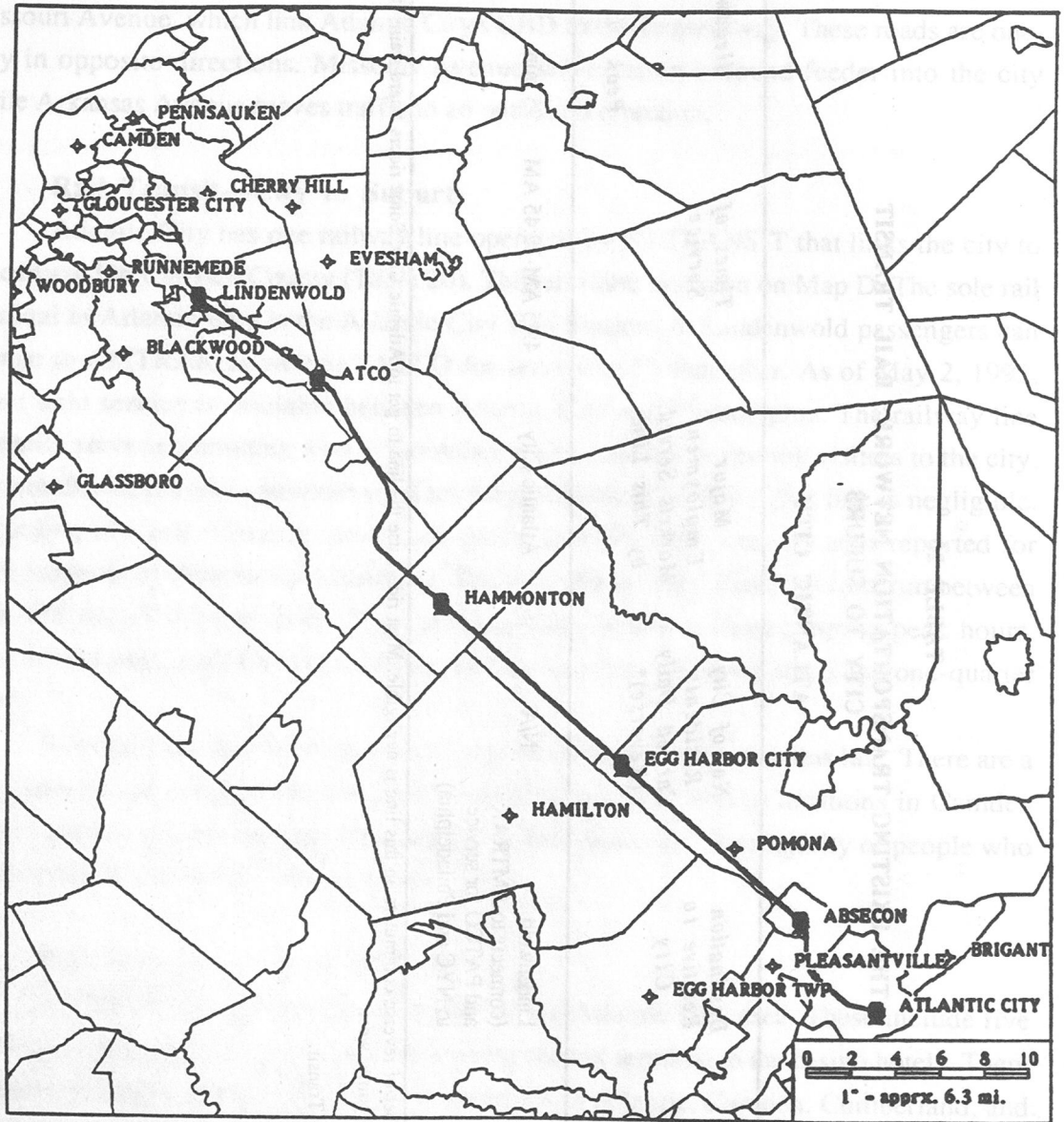
<i>Rail Lines</i>	<i>Destination Relative to City</i>	<i>No. of City Residents Carried Daily (Reverse)*</i>	<i>Major Employment Markets Served by This Line</i>	<i>Times of Service</i>	<i>Headway</i>	<i>Peak / Off-Peak</i>
NJT	Lindenwold (connects to AMTRAK and PATCO for service to NYC and Philadelphia)	N/A	Atlantic City	4:45 AM-12:45 AM	75 min	195 min

Note: * The number of reverse commuters on this line is negligible. Most riders use the line to get to Atlantic City. Some riders board trains in Atlantic County for points west.

Source: New Jersey Transit.

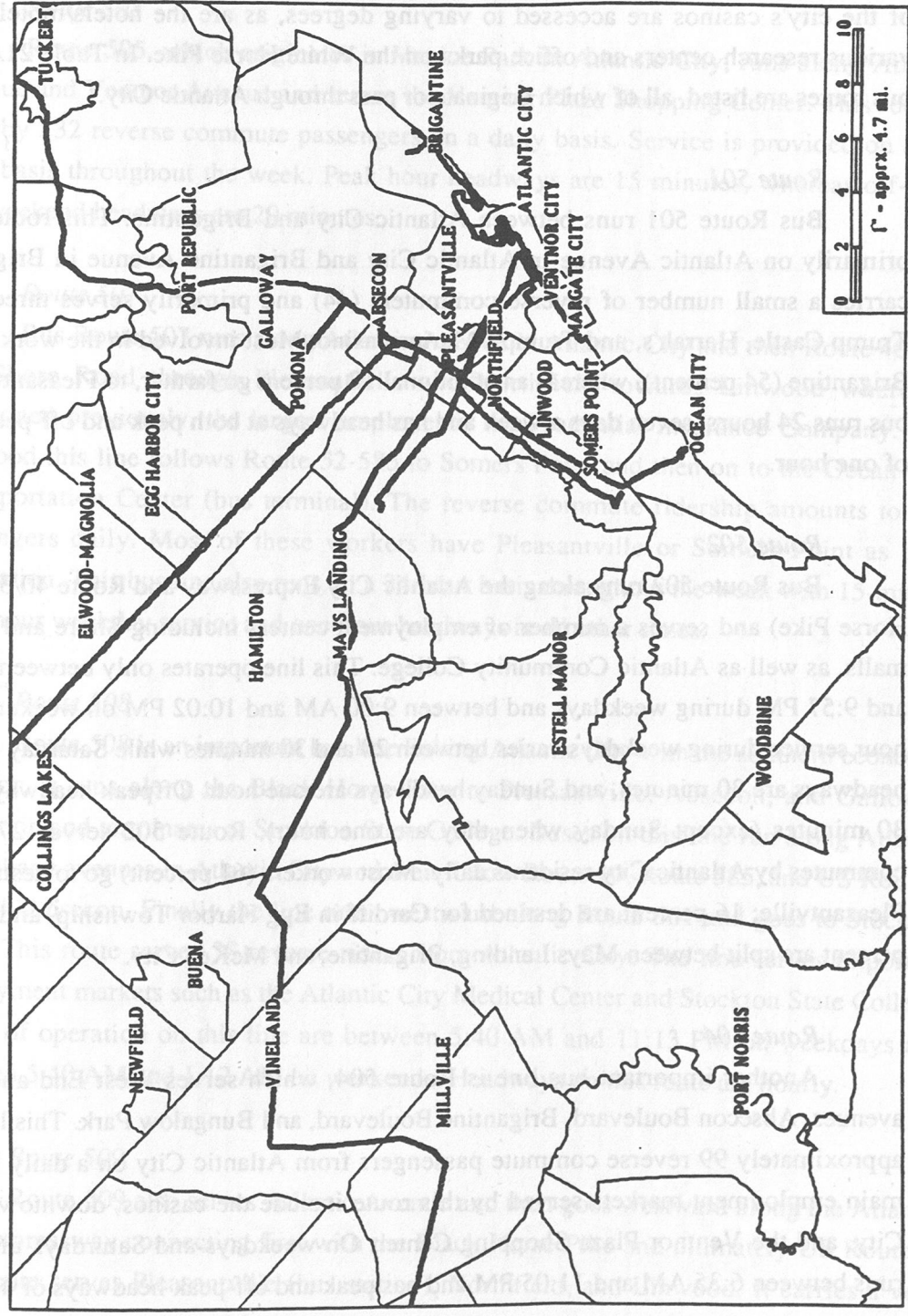
MAP D

NJ TRANSIT COMMUTER RAIL LINES
IN THE ATLANTIC CITY METROPOLITAN AREA



Source: NJ TRANSIT

MAP E
NJ TRANSIT BUS ROUTES IN THE ATLANTIC CITY METROPOLITAN AREA



Source: NJ TRANSIT

educational, and medical service locations within the region. Malls that are served include Hamilton, Shore, English Creek, and Ventnor Plaza. The county's various hospitals are also served, as are Stockton State College and Atlantic Community College. In addition, all of the city's casinos are accessed to varying degrees, as are the hotels/motels and the various research centers and office parks on the White Horse Pike. In Table 21A thirteen bus routes are listed, all of which originate or pass through Atlantic City.

Route 501

Bus Route 501 runs between Atlantic City and Brigantine. This route remains primarily on Atlantic Avenue in Atlantic City and Brigantine Avenue in Brigantine. It carries a small number of reverse commuters (44) and primarily serves three casinos: Trump Castle, Harrah's, and Trump's Marina casino. Most involved in the work trip go to Brigantine (54 percent), whereas an additional 12 percent go farther, to Pleasantville. This bus runs 24 hours, seven days a week and has headways at both peak and off-peak periods of one hour.

Route 502

Bus Route 502 runs along the Atlantic City Expressway and Route 40/322 (Black Horse Pike) and serves a number of employment centers including Shore and Hamilton malls, as well as Atlantic Community College. This line operates only between 6:20 AM and 9:57 PM during weekdays and between 9:00 AM and 10:02 PM on weekends. Peak-hour service during weekdays varies between 20 and 30 minutes while Saturday peak-hour headways are 30 minutes, and Sunday headways are one hour. Offpeak headways are also 30 minutes (except Sunday when they are one hour). Route 502 serves 277 reverse commutes by Atlantic City residents daily. Most workers (61 percent) go to destinations in Pleasantville; 16 percent are destined for Cardiff in Egg Harbor Township, and another 8 percent are split between Mays Landing, Brigantine, and McKee City.

Route 504

Another important bus line is Route 504, which serves West End and Atlantic avenues, Absecon Boulevard, Brigantine Boulevard, and Bungalow Park. This line carries approximately 99 reverse commute passengers from Atlantic City on a daily basis. The main employment markets served by this route include the casinos, downtown Atlantic City, and the Ventnor Plaza Shopping Center. On weekdays and Saturdays this bus line runs between 6:35 AM and 11:05 PM and has peak and off-peak headways of 45 minutes;

on Saturday headways are 45 minutes all day. On Sunday Route 504 operates from 9:05 AM to 5:15 PM with 90 minute headway both peak and off peak.

Route 505

Route 505, which originates in Venice Park in Atlantic City, runs along Atlantic Avenue and Ventnor Avenue and serves the Ventnor Plaza Shopping Center. This route is used by 232 reverse commute passengers on a daily basis. Service is provided on a 24-hour basis throughout the week. Peak hour headways are 15 minutes, whereas off-peak and weekend headways are 20 minutes.

Route 507

Bus Route 507 runs along Atlantic Avenue in Atlantic City and then Route 40/322 and Shore Road through Pleasantville and Northfield towards Linwood where, as mentioned previously, the largest employer is the Prudential Insurance Company. Past Linwood this line follows Route 52-585 to Somers Point and then on to the Ocean City Transportation Center (bus terminal). The reverse commute ridership amounts to 157 passengers daily. Most of these workers have Pleasantville or Somers Point as their destination. This bus line also runs on a 24-hour basis throughout the week with 15-minute peak-hour weekday service and one-hour headways at all other times.

Route 508

Route 508 is an important bus line linking Atlantic City with the southern economic corridor. It runs along the Black Horse Pike to Pleasantville, Absecon, and Galloway Township and terminates at Stockton State College. Buses on this line run along Atlantic and Albany avenues in Atlantic City and then follow Route 40, Route 585, and US Route 9 through Absecon. Finally the line turns westward along Route 561 and goes to Stockton State. This route serves 38 reverse riders from Atlantic City. The line serves important employment markets such as the Atlantic City Medical Center and Stockton State College. Hours of operation on this line are between 5:40 AM and 11:13 PM on weekdays and between 5:40 AM and 1:12 AM on weekends. Headways on this route are hourly.

Route 509

Route 509 also serves Atlantic Avenue and then goes westward along the Atlantic City Expressway connecting first with the Black Horse Pike and ultimately US Route 9. This route serves Pleasantville (bus station), Northfield, and Linwood. It carries a very

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

Bus Routes (List Major) Indicate where Private	Spoke Served	No. of Passengers Carried Daily	Employment Markets Served	Times of Service	Headway	Peak/Off Peak
		Reverse ¹ Total ²				
501	Atlantic Avenue, Brigantine Avenue, Brigantine	44	Brigantine, Pleasantville	Wkdy Wkend	24 hours 24 hours	60 min 60 min
502	Atlantic City Expressway, Route 40/322	277	Shore Mall, Hamilton Mall, Atlantic Comm. College	Wkdy Sat Sun	6:20AM-9:57PM 9:00AM-10:02PM 9:00AM-10:02PM	20/30 min 30 min 30 min 60 min
504	West End Ave., Atlantic Avenue, Absecon Blvd., Brigantine Blvd.	99	Casinos, downtown Ventnor Plaza Shopping Center	Wkdy Sat Sun	6:35AM-11:05PM 6:35AM-11:05PM 9:05AM-5:15PM	45 min 45 min 90 min
505	Atlantic Avenue, Ventnor Avenue	232	Ventnor Plaza Shopping Center	Wkdy Wkend	24 hours 24 hours	15 min 20 min
507	Atlantic Avenue, Route 40/322, Shore Road	157	Linwood, Pleasantville, Somers Point	Wkdy Wkend	24 hours 24 hours	15 min 60 min 60 min
508	Atlantic Avenue, Albany Avenue, Route 40/322, Route 585, US Route 9 Route 561	38	Black Horse Pike AC Medical Center, Stockton State College	Wkdy Wkend	5:40AM-11:13PM 5:40AM-1:12AM	60 min 60 min 60 min
509	Atlantic Avenue, Atlantic City Expressway, Route 40/322, US Route 9	26	Northfield, Linwood	Daily	6:15AM-7:07PM	60 min 60 min
551	Atlantic City, Philadelphia ³	NA	NA	Daily	24 hours	30 min 30 min

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

Bus Routes (List Major) Indicate where Private	Spoke Served	No. of Passengers Carried Daily		Employment Markets Served	Times of Service	Headway	Peak/Off Peak
		Reverse ¹	Total ²				
319	NYC-Atlantic City-Cape May	NA	NA	NA	Daily	24 hours	60 min
554	Atlantic Avenue, Atlantic City Expressway, Route 30	139	725	Pleasantville, White Horse Pike hotels and motels	Daily	24 hours	30 min
559	Expressway, Shore Rd., US Route 9	97	507	Pleasantville, Absecon	Daily	24 hours	60 min
552	Expressway, Parkway, US Route 9	NA	NA	Cape May	Daily	24 hours	60 min
553	Expressway, Route 40/322	1454	NA	Hamilton Mall, Hamilton Business Park, Mays Landing, Cumberland Mall	Daily	24 hours	15 min 30/60 min

- Notes:
1. "Reverse"—"to work" passenger trips by Atlantic City residents to reverse commute destinations (excluding Atlantic City). "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 for local bus routes are referenced from NJ TRANSIT Local Bus Ridership Survey—1990. Quantities are approximate and do not necessarily reflect current ridership counts in 1992.
 3. "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. "Reverse" totals for bus Route 553 is referenced from passenger trips tabulated from fare-box counts in March 1992 and reflect trips taken during AM peak time periods (5:30-9:30AM) originating in Atlantic City. 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 Atlantic City residents. Both have been assumed.

NA = not available

Source: New Jersey Transit.

small number of reverse commute passengers (26) to work sites. Hours of operation are limited to 6:15 AM to 7:07 PM, and headways are one hour.

Route 554

Another important bus route from Atlantic City is Route 554, which runs to Lindenwold in Camden County and provides connecting services to the railway at Lindenwold, Hammonton, Egg Harbor, Absecon, and Atlantic City. This route leaves the Atlantic City Bus Terminal and follows the Expressway until it links with the White Horse Pike (Route 30) via Shore Road, Pleasantville, and Absecon. It follows the White Horse Pike to Lindenwold. Important employment centers include Pleasantville, as well as the various hotel/motel accommodations on the White Horse Pike. The bus line passes about one half mile from the Atlantic City Airport and FAA Technical Center. Approximately 139 reverse commute passengers ride this line daily. Service is provided around the clock daily at 30-minute peak and one-hour off-peak headways.

Route 559

Route 559 leaves the Atlantic City Bus Terminal, runs along the Atlantic City Expressway to Pleasantville/Absecon, and then joins US Route 9. It follows US Route 9 northward to Lakewood after passing through the communities of Barnegat, Forked River, and Toms River. The nearest employment sites to Atlantic City that this route serves are Pleasantville and Absecon. Ninety-seven reverse commuters from Atlantic City ride the line daily. Headways are one hour on a 24-hour basis.

Routes 552 and 553

In addition to the bus routes that have been described above, NJ TRANSIT serves Atlantic City with two other Routes, 552 and 553. The former runs basically south to Cape May, while the latter runs westward to Vineland, Millville, and Bridgeton; and serves Hamilton Mall, the county seat of Mays Landing, and the Cumberland Mall. Each of these routes runs 24 hours per day. Route 552 has one-hour headways at peak and two-hour headways off-peak. Route 553 has 15 minute headways at peak and 30/60 minute off-peak.

E. Bus Service—In City

Table 21B indicates major bus routes operating within Atlantic City. The only routes that operate exclusively within the city are the free shuttles that run from the rail terminal to the various casinos. Shuttles are scheduled to meet all arriving and departing

Atlantic City Rail Line trains. All other routes have service times and headways as listed previously.

Shuttles

In all, there are five shuttle routes. Shuttle 506 serves the Marina while 510 goes to the Brighton Park area and Bally's, the Claridge, and the Sands casinos. Shuttle 511 serves the uptown section of the city, 512 the midtown casinos, and 513 the downtown casinos. All other bus routes that initiate service in Atlantic City extend their services beyond city limits. For this reason the in-city bus routes are the same as those described earlier.

Routes 501 and 502

Route 501 serves the Atlantic City CBD (Atlantic, Arkansas, Baltic, and Missouri avenues) and then follows Brigantine Avenue, while Route 502 provides service to Atlantic Avenue. The major employment centers served by these lines include the Boardwalk casinos and the Atlantic Avenue retail corridor, as well as the city and county offices close to Atlantic Avenue.

Routes 504 and 505

The other bus lines that operate within the city also serve the same employment markets, namely the Boardwalk casinos and the Atlantic Avenue retail and government sectors. The line that carries most passengers within the city is Route 505 with 1,179 passenger trips, 567 by Atlantic City residents. Other heavily used bus routes include Route 504, which provides 508 passenger trips within the city, 243 by Atlantic City residents.

F. Alternatives to Rail and Bus—City to Suburb

Atlantic County does not have an extensive network of alternative transportation services in lieu of rail and bus. However, the County Department of Social Services provides an important alternative transportation system that operates in three ways: subscription, demand-responsive, and charter services (Table 22A). Subscription services operate on a modified fixed route and benefit three groups of people: those traveling to nutrition sites, those attending rehabilitation therapy, and those receiving life-essential medical care. These trips are scheduled throughout the week and terminate at prescribed locations. The county also offers demand-responsive services to people who wish to make nonemergency medical trips. These trips are composed of multiple origins and destinations and are not limited to predetermined routes. Those who require service must make

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

ATLANTIC CITY

Bus Routes (List Major) Indicate where Private	Avenue or Street Served	No. of Passengers Carried Daily ¹	In City ² Total ³		Times of Service	Headway
			Employment Markets Served			
501	Arkansas, Baltic, Missouri, and Brigantine Avenues	23	285	Casinos, Atlantic Avenue Retail		—SEE TABLE 21A—
502	Atlantic Avenue	11	NA	Atlantic Avenue Retail Casinos		—SEE TABLE 21A—
504	Arctic Avenue, Baltic Avenue, Atlantic Avenue	243	508	Atlantic Avenue Retail, Casinos, Government offices		—SEE TABLE 21A—
505	Atlantic Avenue (Venice Park Streets, Inlet Streets)	567	1,179	Atlantic Avenue Retail, Casinos, Government offices		—SEE TABLE 21A—
507	Albany Avenue, Atlantic Avenue	129	251	Atlantic Avenue Retail, Casinos, Government offices		—SEE TABLE 21A—
508	Albany Avenue, Atlantic Avenue	5	251	Atlantic Avenue Retail, Casinos, Government offices		—SEE TABLE 21A—
509	Atlantic Avenue	8	159	Atlantic Avenue Retail, Casinos, Government offices		—SEE TABLE 21A—

TABLE 21B (continued)

**THE EXISTING TRANSPORTATION NETWORK: BUS SERVICE (WITHIN CITY ROUTES)
IN CITY**

ATLANTIC CITY

Bus Routes (List Major) Indicate where Private	Avenue or Street Served	No. of Passengers Carried Daily ¹	Employment Markets Served	Times of Service	Headway
		<i>In City² Total³</i>			
559	Missouri Avenue, Arkansas Avenue	NA	Atlantic Avenue Retail, Casinos, Government Offices	—SEE TABLE 21A—	
506	Marina Rail Shuttle	NA	Harrah's, Trump Castle	Irregular	Irregular
510	Brighton Park Rail Shuttle	NA	Bally's, Claridge, Sands	Irregular	Irregular
511	Uptown Rail Shuttle	NA	Resorts, Taj Mahal, Showboat	Irregular	Irregular
512	Midtown Rail Shuttle	NA	Caesar's, Trump Plaza	Irregular	Irregular
513	Downtown Rail Shuttle	NA	Trop World, Bally's Grand	Irregular	Irregular

Notes: 1. Trips counts are referenced from NJ TRANSIT Local Bus Ridership Survey—1990. Quantities are approximate and do not necessarily reflect current ridership counts in 1992. Table shows only major routes with ridership survey data available. This is not a complete listing of all motor bus routes serving Atlantic City residents.

2. "In City"—one way "to work" passenger trips by Atlantic City residents to destinations within Atlantic City.

3. "Total"—total volume of passenger trips boarding and deboarding within city limits (includes commuters from all origins to all destinations, for all purposes).

NA = not available

Source: New Jersey Transit.

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

Who is Served	Approximate Number	Employment Markets Served	Times of Service	Frequency of Service
DIAL-A-RIDE, JTPA, etc.				
County of Atlantic Rural Transit System (CARTS) provided by Atlantic County Dept. of Social Services	NA	Atlantic County rural areas	Monday-Friday*	*
Atlantic County Transportation Program	NA	Atlantic County	Monday-Friday*	*
Atlantic Electric Van Pool	NA	Atlantic City	Monday-Friday*	*

Notes: * Although these services normally operate on a Monday-Friday basis, for certain services they also operate during the weekend. They work on a demand-responsive or subscription basis.
NA = not available

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

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

Who is Served	Approximate Number	Employment Markets Served	Times of Service	Frequency of Service
DIAL-A-RIDE, JTPA, etc.				
Jitneys	NA	Atlantic City (casinos) (Crosstown route)	24 hours	5-10 min (7AM-7PM) 10-15 min (7PM-7AM)
Boardwalk—Bikeway (4 miles)		Atlantic City	6 PM to 10 AM	NA
Golden Age Transportation Service	23*	Atlantic City	on demand	NA

Notes: * This number relates only to visits to medical services.
NA = not available

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

reservations 24 hours in advance. The charter services are offered to provide social and recreational trips.

The Atlantic County Department of Social Services operates the Atlantic County Transportation Program, which runs everywhere within the county except Atlantic City. This service is used by the elderly, the physically handicapped, and welfare recipients. It operates primarily between Monday and Friday, although for selected medical purposes the service is extended to include weekends. The types of services provided include transporting patients to Hammonton or Shore Memorial Hospitals for dialysis or other medical treatments. In addition, the elderly use the service to get to various sites in the county where Meals on Wheels stops. Other services include the transportation of the above groups to shopping malls, to access financial services, or for day trips. Some handicapped people use this service to access work sites.

Another important service that the county Department of Social Services operates is the County of Atlantic Rural Transit Systems (CARTS). This system serves patients and users of rehabilitation services. It provides both modified fixed-route and demand-responsive transportation services. CARTS operates two minibuses, each of which contains 19 seats (17 ambulatory and 2 wheelchair).

Taxis also provide a transportation alternative to public transit. However, the cost of using taxis for trips to work on the mainland is so expensive that taxis are not a viable form of reverse commute for most Atlantic City residents.

G. Alternatives to Rail and Bus—In City

Within Atlantic City the only major alternative to NJ TRANSIT buses is the jitney buses that operate along Pacific Avenue and a few crosstown corridors (Table 22B). The jitneys comprise a major component of the city's transportation system carrying both the city's residents and tourists. Although no precise data exist relating to the ridership levels of jitneys, they appear to operate regularly along their designated routes, making frequent stops to discharge and receive passengers. Jitneys also operate in the Inlet Area of Atlantic City and provide a valuable transportation service for this portion of the city's residents.

Jitneys run on a 24-hour basis, 7 days a week, and have the following operating schedule: between 7 AM and 7 PM they operate at headways of 5–10 minutes; during the next 12 hours they operate at intervals of 10–15 minutes. Most of Atlantic City is well served by jitneys, partly because of the city's geography. The fact that the city is located on a narrow island means that residents rarely have to walk more than two blocks to get to a route traversed by a jitney. Jitneys are also restricted from Atlantic Avenue, on which NJ TRANSIT buses ride, and cannot roam freely to pick up passengers in a fashion

analogous to taxis. The only area where service by jitneys may be problematic is the marina area, or on the wider parts of the island (e.g., the area around Illinois Avenue).

Other than taxis, which are highly unlikely to be useful for regular commuting because of their relatively high cost, no other alternative forms of transportation, such as dial-a-rides or van pools, are available in the city. However, there is a service provided by the Atlantic City Department of Social Services called Golden Age, which is available to elderly and handicapped residents. This operation serves approximately 23 handicapped persons per day. In addition, it offers transportation to the shopping malls and for social outings. The service operates daily although its schedule varies by demand.

Another minor component of alternative forms of transportation in Atlantic City is the bikeway, which is located on the Boardwalk. The bikeway is used for recreational purposes by tourists and also serves as a minor thoroughfare. Since the bikeway is closed between 10 AM and 6 PM it is not envisioned that bicycles will constitute any portion of residents' journey to work choices. The city is in the process of creating a pedestrian corridor linking the planned convention center to the Boardwalk some four blocks to the east.

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

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

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

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 data and perceptions gathered through interviews allows NJ TRANSIT and NJDOT to work on an

TABLE 23

**MUNICIPALITIES WITH
GREATEST JOB GROWTH POTENTIAL
IN THE ATLANTIC CITY AREA**

<i>Location</i>	<i>New Jobs</i>	<i>Job Separations</i>	<i>Total</i>	<i>Transit Service Yes/No</i>
Hamilton Township	249	927	1,176	Yes
Somers Point	76	970	1,045	Yes
Pleasantville	94	870	964	Yes
Ocean City	28	924	953	Yes
Egg Harbor Township	(52)	981	929	Yes
Absecon	195	635	830	Yes
Galloway	52	725	777	Yes
Northfield	51	687	738	Yes
Linwood	47	565	612	Yes
Brigantine	188	260	488	Yes

Note: Rows may not total exactly due to rounding.

Source: CUPR and NJ TRANSIT.

B. Public Transit Problems

Transportation Problems in Perspective

Service Adequacy

Service Frequency

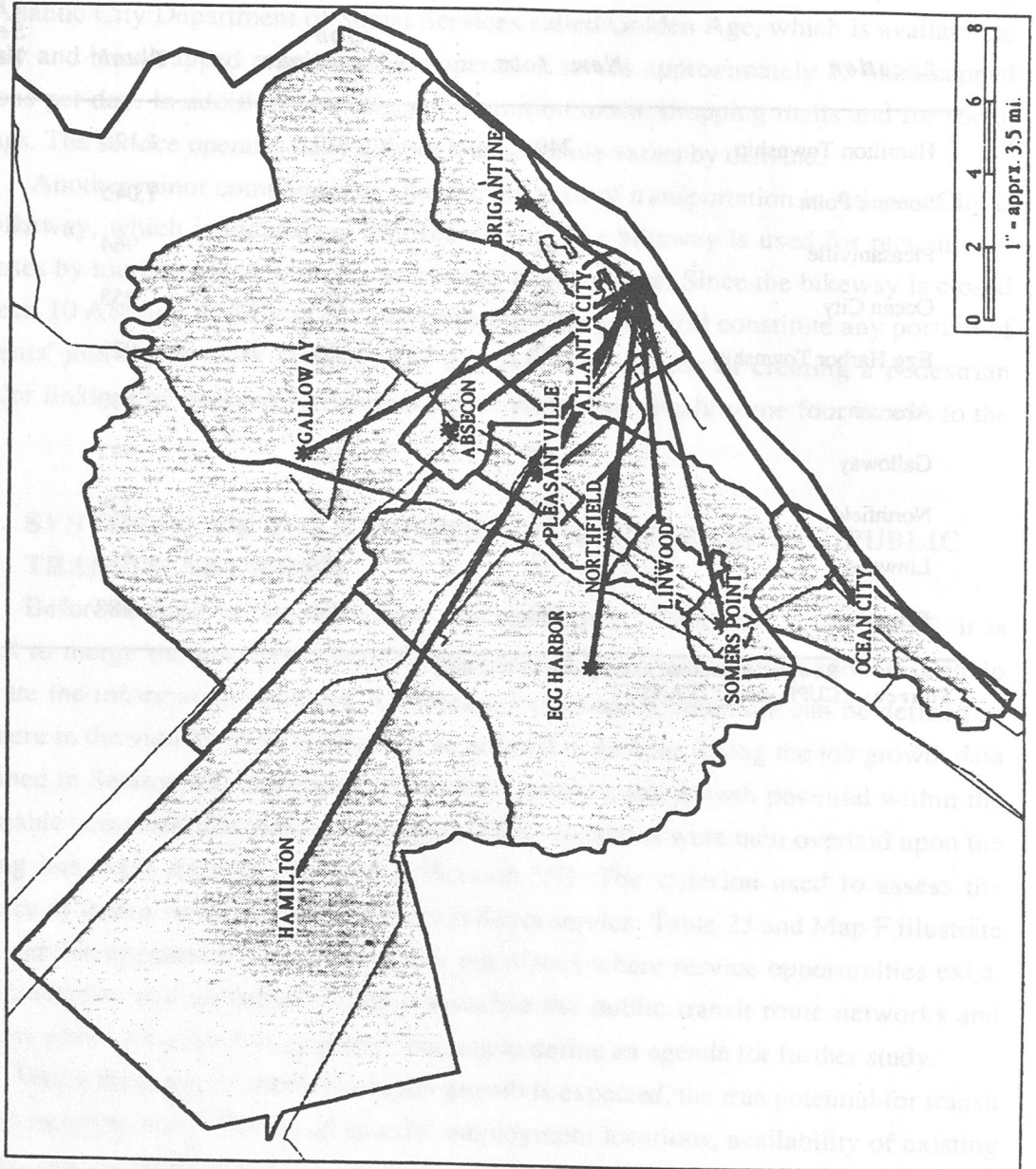
Service Cost

City or Suburb Fairly Well Served Mostly Good

Fair to Good

As indicated previously, Atlantic City is unique among the seven cities described in the Urban Transportation Supplement in that the largest employer by far is actually located

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



agenda for further study that will prove responsive to the specific transportation challenges discussed in the next section.

IX. TRANSPORTATION PROBLEMS—CITY TO SUBURB

Ensuring the economic vitality of New Jersey's cities is a high priority for the state of New Jersey. Atlantic City, with its growing employment base of casino-related jobs, is unlike the other large New Jersey cities that have lost jobs to the suburbs. Improving the reverse commute opportunities is not as relevant an issue for Atlantic City residents. However, the highway network serving the city is congested, and poor highway linkages hamper automobile and commercial vehicle access to the city. The sections that follow focus on the transportation challenges facing the New Jersey Department of Transportation and NJ TRANSIT and the strategies for improving service to Atlantic City and the surrounding area.

A. Highway Problems

Capacity constraints and poor highway connections impede regional traffic flow and threaten economic expansion outside Atlantic City, as well as the growth of tourism. Routes 30 and 40/322 experience severe peak-hour congestion, especially in the portions close to Atlantic City. Congestion on Route 30 is accentuated by the fact that although it is a heavily used route, it does not have a direct entrance to the Atlantic City CBD or boardwalk and instead traverses multiple residential streets before linking with Atlantic Avenue. Areas of extreme congestion on Route 30 lie between New York and Illinois avenues and the Casino Bus Parking Lot. Atlantic City experiences three congestion periods in contrast to the more traditional AM and PM peaks. Atlantic City's third peak period is from 9–11 PM due to the round-the-clock operation of the casinos, which attract a significant after-hours clientele.

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>	Fair to Mostly Good	Mostly Good	Fair to Good

As indicated previously, Atlantic City is unique among the seven cities described in the Urban Transportation Supplement in that the largest employer by far is actually located

within the city; thus, most people do not commute to suburban job locations. Yet, the city does share some common transportation problems with the other larger cities in terms of the reverse commute. In recent years there has been an explosion of growth in Atlantic County. Major shopping malls have sprung up on the main arteries leading to Atlantic City, and a considerable number of research and office parks have been developed or are planned. Thus, it is envisioned that in the near future reverse commuting from the city to suburban locales will become a more feasible option for many inner-city residents, just as it is in other cities. To take advantage of these opportunities, a number of problems relating to transportation will have to be overcome in order to enhance inner-city residents' access to these out-of-town job locations.

Overall, the public transit network for city-to-suburb trips is fairly good along the major routes leading out of the city. Nevertheless, there are far more options for an east-west commute than for a north-south commute. On a radial basis, Atlantic City is well served with buses running on all the major connecting routes to the mainland. On the other hand, cross-county bus service from north to south is extremely poor and in certain instances nonexistent.

The Atlantic City region does not face any major insufficiencies in rail service that could survive a test of the market. Atlantic City residents wishing to access locations to the west of the city by rail face few problems other than infrequent service. During peak hours, service headways are 75 minutes, while at off peak, trains run only every three and one-quarter hours. Atlantic City has no rail service to points north or south of the city.

The discussion below highlights factors that inhibit the broader use of public transportation by Atlantic City's residents wishing to access current and potential job sites in the suburbs outside the city. Most locations are along the Route 30 and Route 40 transportation corridors and the suburban job centers that lie in-between (e.g., the airport and the FAA Technical Center). Few problems are unique to a specific employment center. These problems are displayed in Table 24A.

Route 40 Corridor

The principal obstacles facing Atlantic City's residents wishing to commute to one of the many employment sites (i.e., the Expressway Corporate Center, Shore Mall, Cardiff and English Creek Shopping Centers and Hamilton Mall) along the Black Horse Pike (Route 40), especially in Pleasantville and Hamilton, are the cost of the commute, the length of the trip, and the infrequent nature of the bus service.

The cost of the commute from Atlantic City to Pleasantville or Egg Harbor Township, a 2-zone commute, amounts to \$1.40 each way, or \$49 for a monthly pass.

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

ATLANTIC CITY—1992

<i>Location</i>	<i>Service Problems or Times</i>	<i>Population Affected</i>
ROUTE 40 CORRIDOR		
Egg Harbor	Cost of commute	Commuters from Atlantic City looking for or holding unskilled jobs in these areas.
Pleasantville	Cost of commute	
Hamilton	Cost of commute	
Hamilton Mall	Length of bus commute	
Expressway Corporate Center	Infrequent service/no night service	
Other	Poor bus stop workplace connection	
ROUTE 30 CORRIDOR		
FAA Technical Center	No service	Commuters from Atlantic City looking for or holding unskilled jobs in these areas.
Airport	No service	
Atlantic City Medical Center	Length of bus commute	
Stockton State College	Length of bus commute	

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

TABLE 24B
 LOCATIONS OF PROBLEMATIC
 TRANSPORTATION SERVICE—IN CITY

ATLANTIC CITY—1992

<i>Location</i>	<i>Service Problems or Times</i>	<i>Population Affected</i>
Down-beach communities	Bus vibration	Residents
Area between Bungalow Park and Venice Park	Not served with single bus	Residents
Showboat/Taj Mahal	Not served directly except by rail shuttles	Residents/Visitors
Inlet	Security on Rt. 505	Bus riders

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

Commuting to Hamilton Mall or Wrangleboro Square, a 3-zone ride from Atlantic City, costs \$2.05 per trip, or \$57 for a monthly pass. This cost is difficult for Atlantic City's residents, especially those who depend on low-wage jobs such as those available in the strip malls and shopping centers along Route 40.

On average, the trip from Atlantic City to the Expressway Corporate Center takes 30 minutes, while traveling to Hamilton Mall takes nearly an hour. The frequency of service on Route 502 is between 20 and 30 minutes to most destinations, although buses to the Expressway Corporate Center, which is a fundamental growth employment site, run only once an hour. Furthermore, no buses run to the Expressway Corporate Center after 5 PM, meaning that people working evening shifts (e.g., in the regional distribution mail center of the U.S. Postal Service) cannot use existing transit services.

Route 30 Corridor

Many of the problems faced by commuters who use the White Horse Pike (Route 30) are similar to the ones described in the previous section. A major problem involves the lack of direct public transit access from Atlantic City to the airport and the FAA Technical Center. Inner-city residents who are employed at these two growth centers face a severe problem of access. Obviously, tourists who do or will fly into the Atlantic City Pomona Airport also face a problem in accessing the downtown area. Most bus routes operate at headways of between 45 minutes and one hour. Moreover, the average length of a bus trip from Atlantic City to one of the major employment centers on the mainland along Route 30 takes between 30 and 60 minutes, making this mode of transportation unattractive to many people. For instance, the journey to the Atlantic City Medical Center and Stockton State College (both of which offer a moderate potential for employment of less skilled persons) by bus Route 508 takes up to one hour and only runs once hourly.

X. TRANSPORTATION PROBLEMS—IN CITY

A. Highway Problems

The main access routes that connect to the Atlantic City Expressway, i.e., Arkansas and Missouri avenues and Absecon Boulevard, which connects to Route 30, are congested during peak hours due primarily to the large number of visitors to the city.

B. Public Transit Problems

Transportation Problems in Perspective

	<i>Service Adequacy</i>	<i>Service Frequency</i>	<i>Service Cost</i>
<i>In City</i>	Excellent	Excellent	Excellent

Table 24B lists problems faced by Atlantic City's residents who work in the city. In general, public transportation within Atlantic City is very good, thanks in part to the city's geography. People never have to walk more than a few blocks to a bus or jitney stop. Most buses and shuttles serve the main business district along Atlantic Avenue. What follows is a brief summary of some of the most pressing problems that affect Atlantic City residents wishing to commute within the city.

Area Between Bungalow Park and Venice Park

The only part of the city that is not served by NJ TRANSIT in linked fashion is the area between Bungalow Park and Venice Park, although both of these areas are individually served. This does not constitute a major problem since the farthest distance one has to walk for a bus is two or three blocks.

Showboat and Taj Mahal casinos

The only other area in the city that is not served by public transit is the area near the Showboat and Taj Mahal casinos. Both casinos are served, however, by the NJ TRANSIT shuttles originating at the rail terminal. The people most impacted by a lack of regular bus service are employees of these two casinos who live within the city. On average, these workers have to walk about one-quarter mile from the nearest bus stop to get to their place of employment.

Down-Beach Communities

Residents complain of excessive vibration caused by buses and large vehicles. Vibration studies are underway at the time of this study.

Inlet Area

Finally, on Route 505, which runs through the Inlet area, security has been a problem affecting bus drivers and passengers.

Problems for Jitney Users

The one minor constraint concerning the jitneys is that they are not permitted to operate freely throughout the city. This limits their effectiveness in corridors away from Pacific Avenue or the Inlet area. Alternatively, taxi cabs operate regularly throughout the city.

XI. PROBLEMS OTHER THAN TRANSPORTATION

In addition to the various transportation issues there are a number of other factors that limit job accessibility. Professionals in Atlantic City ranked these factors' importance as reported in Table 25A. More detailed explanations of these problems are provided below and are summarized in Table 25B.

The most serious obstacle affecting Atlantic City residents is the current economic situation. Beyond that, residents seeking employment face a number of significant obstacles. Prior work history is an issue because the largest employers in the city (i.e., the casinos) limit access to those with a prior criminal record especially for those jobs involving the handling or transfer of money. In addition, if there is evidence that a person has had an ongoing involvement with drugs, then that person is unlikely to be considered for all but the most menial of positions. Another serious problem is a lack of adequate skills to perform the various jobs that are found in casinos. Lack of proficiency in mathematics and basic arithmetic is especially problematic in the casino industry where much of the work depends on calculations. In addition, the constant introduction of new technology in the casino industry means that people have to be retrained to embrace these new techniques. Presently, the Private Industry Council, Inc. (PIC) for the Atlantic City and Cape May Service Delivery Area sends prospective casino employees to the Casino Training Institute in order to equip these individuals with the necessary skills to be employed in the casino industry. In addition, the state of New Jersey has given one casino, the Sands, money to subsidize training of primary supervisors in the gaming industry.

The lack of affordable and quality child care is an acute problem in Atlantic City. Single parents are prevented from taking steps to join the labor pool because there is no one to care for the children. This problem is particularly serious as many of the city's lower-income households are headed by a single parents. So far most casinos, with the exception of the Sands, have been unwilling to provide child care service, citing the high insurance costs associated with such a service.

In addition, the professionals pointed to a problem they termed, "the resort mentality." Because Atlantic City has long depended on the tourist industry, many residents

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

<i>Type of Problem</i>	<i>Importance</i>
Current economic conditions	High
Inadequate skills	High
Prior work history	High
Child care	High
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
 ATLANTIC CITY—1992

<i>Type of Problem</i>	<i>Description</i>
Skills Training	Lack of basic skills; language; math
Work Histories	Exclusion of persons with criminal records from casinos, if job has to do with money
Child Care	Lack of affordable, quality child care has proven a major hindrance to people with children
Communication or Knowledge of Job	Generally very good because of small city size
Other	Resort mentality: employers believe that this is prevalent and are reluctant to hire people who appear unwilling to work. Casinos have a turnover of jobs of nearly 50 percent per year.

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

expect seasonal employment. Employers are reluctant to hire residents who appear uncommitted to continuous employment.

The least significant problem facing would-be workers is their lack of knowledge about where jobs are. The city and county training programs—where the unemployed are being trained in basic and technical skills—are in close touch with prospective employers in the city and county. In addition, the relatively small size of Atlantic City means that information concerning job openings diffuses rapidly.

XII. TRANSPORTATION STRATEGIES

Since initiation of the New Jersey Transportation Executive Council (TEC) Local Outreach Program in September 1990, Atlantic County, Atlantic City, NJDOT and NJ TRANSIT have been working together to structure a multimodal transportation strategy for improving the movement of people and goods from, through, and within the Atlantic City area. The strategies and planned improvements presented in this section represent achievement of the following NJDOT and NJ TRANSIT investment objectives for Atlantic City and the region:

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

A. Highways

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

1. Improve and Preserve the Existing System and Enhance Safety

Rehabilitation and replacement of deficient bridges and highways will continue to be a top priority for state transportation investments. 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. NJDOT will invest heavily in resurfacing during the five-year plan period, continuing a trend begun in Fiscal Year 1991.

Operational improvements affecting transportation in and out of Atlantic City are under study and development. These include construction of a barrier curb, widening of existing substandard 10-foot lanes to 12-foot lanes, widening of existing substandard shoulders, construction of three new jughandles, resurfacing, addition of center turning lanes, and new signalization of a one-half mile segment of Route 40/322 in Egg Harbor Township.

2. Improve Access to the Regional Transportation Network

The Atlantic City Improvement Authority and the transportation agencies serving the city are taking measures to maintain Atlantic City's competitiveness as a gaming destination. A Route 30 connector, which would provide a limited access link to Atlantic City at its northern entrance, is under study by the Atlantic City Improvement Authority. The New Jersey Turnpike Authority is studying a direct link between the New Jersey Turnpike and Route 42 at the Atlantic City Expressway's western end. The Garden State Parkway's planned improvement to the interchange with Route 40 will be key to reducing the surge load placed on the local system. The New Jersey Highway Authority is also developing plans to upgrade interchanges 40 and 44 on the Garden State Parkway from partial to complete interchanges.

3. Improve Highway Operations and Alleviate Congestion

Traditional means of addressing congestion through new highway construction, widening existing highways by adding new through lanes, and building interchanges to replace at-grade intersections, are difficult and extremely expensive in dense urban areas. Stringent environmental restrictions and congestion costs are the primary reasons. State policy is to deemphasize investment in major capacity increases in favor of investment in system management and operation improvements.

The term "system management" is given to investments that improve the operational sufficiency of existing transportation systems to move people and goods with little or no physical construction. Improvements in this broad category are typically much more "doable" than major capacity increases in terms of cost, environmental restrictions, right-

of-way needs, community support, and time and money required for design. These improvements are typically classified as highway operational improvements or traffic management measures.

Highway Operational Improvements

These consist of relatively low-cost, small-scale improvements made to relieve spot congestion problems. Improvements to at-grade intersections constitute the largest number of jobs in this category. Others include improvements to existing grade separated interchanges and the addition of center turning lanes. Examples of projects under development by NJDOT include the following:

- Route 30 widening and resurfacing project, from First Avenue to Chester Avenue, with barrier curbs, construction of acceleration and deceleration lanes, six jughandles, and new signals.
- Route 30 construction, from Chester Avenue to Shore Road, of three right-turn, elongated, deceleration lanes; five new jughandles; new signalization; resurfacing; and new barrier curbs.
- Route 30 widening and resurfacing, from Shore Road to East Riverside Drive, with barrier curbs, eleven jughandles, and new signals.

Traffic Management

NJDOT is implementing a computerized traffic signal program to improve traffic flow substantially. 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. Systems are planned for U.S. Route 9, mileposts 32 to 43; Route 30, mileposts 49.9 to 53.8; and Route 40/322, mileposts 51.7 to 64.3.

4. Encourage Greater Use of Public and Nonstandard Transportation

The New Jersey Traffic Congestion and Air Pollution Control Act—the state response to the Federal Clean Air Act Amendments (CAAA) of 1990—is lending impetus to the efforts undertaken by Atlantic City to reduce automobile traffic in and through the city. A major component of these efforts is the management of vehicular demand into Atlantic City.

5. Continue the TEC Outreach Program

NJDOT and NJ TRANSIT staff will continue the annual outreach effort to give Atlantic City officials the opportunity to submit their top transportation needs and current project priorities to NJDOT for possible project development and state funding. The process includes face-to-face dialogue with transportation authorities and is considered a major opportunity for Atlantic County and Atlantic City officials to gain direct access to 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; the most common problem is 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 Atlantic City, it is important to respond to the issue of cost and fares. The comparative costs between public transit and autos are 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 South Jersey are \$37 and \$49, respectively. Many of the major suburban employment clusters outside the urban areas examined in the Urban Transportation Supplement can be reached by a one- or two-zone bus trip.

The issue of bus stop signs and shelters was also raised. Both in urban and suburban areas, bus stop signs and shelters are controlled by the local government and

NJDOT (for code conformance). Another local responsibility is parking enforcement. When bus stops are designated but parking restrictions are not enforced, buses cannot exit traffic flow and use the bus stop zone, effectively undermining one of the important purposes of bus stops as a congestion-management tool. With greater movement for buses, traffic flows more smoothly and air quality is improved. Another purpose served by bus stop signs and shelters, also reported by interviewees, is in the promotion of transit for the regular rider as well as the non-user. This is an effective form of public communication about where routes go. Bus stops need to be designated and parking enforced so that buses can exit and enter the traffic flow, easing congestion, ensuring curbside access for passenger safety and accessibility, and providing an important promotion and visible reference for public transit, thereby improving communication about services.

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

Targeted Strategies

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

6. Implement Traditional Transit Service Strategies

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

Traditional Service Project Descriptions

Route 40 Corridor—Bus Route Revisions and Scheduling Changes. The island that comprises the Atlantic City urban area is small and well served by bus and/or jitney

services. Reverse commute options that present themselves off the island are, whenever possible, the motivation for service modifications. The recent institution of express service to Hamilton Mall is one such example. The movement of the Post Office to the Expressway Corporate Center, with large numbers of workers and varied work shifts, will offer the opportunity to rethink the service to that generator.

Other improvements which have been implemented are expanded service from Atlantic City to Linwood and Somers Point on 509 line, and improved connections between commuter routes and 501 to Brigantine on a 21-hour per day basis. Service on Route 507/505 has been expanded to serve neighborhoods between Bungalow Park and Venice Park. Rail Shuttles to Taj Mahal and Showboat provide limited hourly service via Atlantic City.

Transit on Patrol (TOP) and the Bus Radio System has improved security for riders in the Atlantic City area. The drivers can immediately report suspicious behavior to the central dispatch which relays the report to local police. NJ TRANSIT sees its obligation to provide service as a continuous process, shaped by the changes in land use and limited, of necessity, by funding.

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 1990 adoption of Clean Air Act Amendments (CAAA), the Suburban Initiatives program becomes an important component of compliance. The urban centers in the state of New Jersey are all in severe 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 looking for transportation solutions for the work commute—traditional or nontraditional—peak direction or reverse commute. NJ TRANSIT, as an integral part of the solution, has made a commitment to a leadership role in defining nontraditional service strategies to help the state meet these mandates. In this role, NJ TRANSIT has a working approach which 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 TMA's. This special Suburban Initiatives program is now identifying the potential for nontraditional services within the service area of the TMAs. The TMA service areas include Burlington-Camden, Greater Princeton, the

Meadowlands, Middlesex, Monmouth, Morris, and Somerset and comprise a base of approximately 1,800 employers.

B. The Business Transit Alliance (BTA) is an outreach program to businesses throughout 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 to implement CAAA, for a total of more than 5,000 potential clients.

Nontraditional Service Project Descriptions

Route 575 and Route 30 Corridor. Atlantic County has identified the Route 575 corridor as a potential site for nontraditional transit service. Major employers in the corridor include Stockton State College, Pomona Industrial Park, the FAA Technical Center, the Betty Bacharach Medical Center, and the Hamilton Mall. These activity generators may warrant a new nontraditional transit service.

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

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

NJ TRANSIT is preparing operations plans (routes, schedules, staffing, hours and days of service, carrier resources, dispatching, vehicles), management and administrative plans (staffing and the responsibilities of the public sector, private sector, and contractors), financial plans (operating and capital costs, ridership, and revenue estimates), and implementation plans (assignment of responsibilities for all primary activities as well as

support activities such as marketing) for the above corridors. Final recommendations are being prepared in the summer of 1993.

8. Implement Major New Transit Initiatives

Major new initiatives are capital-intensive projects designed to improve the transportation infrastructure. These projects have all undergone extensive study and conceptual planning; some have been discussed for decades. These projects will provide travel time savings and new travel pattern opportunities for all New Jerseyans, and will substantially improve the existing bus and rail network in the state. Some of the projects have the potential to open up new work sites 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.

XIII. SUMMATION

A. City's Role

Atlantic City differs historically as well as geographically from the other six cities examined in the Urban Transportation Supplement to the State Transportation Plan. Most importantly, its location in southeastern New Jersey isolates it from the main transportation corridors that traverse the state; thus, some of the state's major employment centers are not as easily accessible to Atlantic City as they are to the other cities. Moreover, while most other cities in New Jersey have witnessed considerable flight of industry and employment in recent decades, Atlantic City, by virtue of its casinos, has experienced a dramatic increase in employment, albeit primarily in the gaming industry.

Atlantic City witnessed an evolution from a seaside resort to a mass tourist destination in the 1920s and 1930s, to a city in dire straits by the early 1970s. The city is now in a period of reclamation. This reclamation is once more based on tourism. However, while in yesteryear the allure of the city was linked to the sea and sand, the new tourism rests entirely on the casino and gaming industry. During the 1980s the city's shorefront saw extensive transformation as a series of major casino hotels was constructed. Yet, except for the Inlet area, the inland parts of the city, with their declining housing stock and obvious structure abandonment, portray a city whose future is still far from certain.

B. Dominant Demographic Trends

The economic downturn which began in Atlantic City in the 1930s led to a precipitous decline in the city's population. Several years prior to 1980 Atlantic City was a

deteriorating resort and retirement location. By 1990, the rapid growth of the casino industry spawned an increase of people aged 20 to 64 and brought new wealth and life to the city. Despite the rapid development of the casino industry, some economic promises remain unfulfilled. The median household income of Atlantic City is still considerably lower than the state average, and the percent of people below the poverty line has decreased only slightly over the past decade.

C. Dominant Characteristics of the Labor Force

On the surface it appears that the casino industry benefits Atlantic City residents. The unemployment rate in Atlantic City has decreased significantly during the last decade. The overwhelming majority of residents work within the city. Residents are concentrated in service jobs, however; and this concentration has increased over the most recent census period. Many of the jobs held by city residents require limited skills and provide low pay.

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

An examination of the city's at-place employment reveals the dominance of the services category of employment and an increasingly tourism-focused economy. This also means that most of the jobs in the city are either directly or indirectly linked to the fortunes of the casino industry. Over the past decade, service jobs have increased from slightly more than one-half to more than three-quarters of at-place employment. Considering Atlantic City's relatively small number of residents, about one-half of whom are employed (16,000-17,000), it is clear that many of the 76,000 jobs in the city are filled by nonresidents.

Atlantic City's gambling initiative has had a large impact on the labor area, comprised of Cape May and Atlantic counties. Nearly half the jobs in the labor area are in the services sector. The retail sector accounts for another 20 percent of the jobs; this sector has also been bolstered by the casino industry. Each of the other industrial sectors accounts for 5 percent or less of the jobs.

E. Employment Projections

Employment projections indicate that over the period 1990-2000 the Atlantic City labor area and Atlantic City itself will experience modest growth. Not surprisingly, considering the tourist-oriented economy of southern New Jersey, most of this growth will take place in the services sector. Retail employment will also increase, although this sector will still comprise a small portion of overall employment. Job change in the Atlantic City labor area indicates a net gain of 3,737 less-skilled new jobs during the period 1993-2000,

most of which will be in the services sector. Atlantic City is projected to gain the most less-skilled jobs (2,935) of any city in the labor area, almost all of which will be in the services sector.

While the casinos will continue to be the single largest employer for the city's residents, it is envisioned that a number of future projects presently in the pipeline—both within the city and on the mainland—offer varying employment prospects. Of these proposed projects, the development of the international airport, the Expressway Corporate Center, and the convention center are expected to offer strong potential for the employment of less-skilled city residents.

F. Existing Transportation Network

Generally, Atlantic City is quite well served by a comprehensive system of interstate, state, and county roads that link the city to the major metropolitan areas of New York and Philadelphia.

The city is served by one railway line operated by NJ TRANSIT linking the city to Lindenwold in Camden County, and then to Philadelphia. This line primarily serves inbound commuters as well as visitors to the city.

Atlantic City is also served by a comprehensive radial bus route system linking the city to mainland employment centers like Pleasantville and Linwood. Almost all of these bus routes operate within the city itself. In addition, NJ TRANSIT operates a number of shuttles that run from the rail terminal to the various casinos.

The most important alternative mode of transportation for Atlantic City residents is the jitneys that operate along Pacific Avenue and a few crosstown corridors. The jitneys offer a valuable service to Atlantic City's residents who work within the city itself, as well as to a significant proportion of visitors.

G. Transportation Problems

Capacity constraints and poor highway connections impede regional traffic flow and threaten economic expansion outside Atlantic City as well as the growth of the tourism market. Route 30 and Route 40/322 are among the most severely congested arterials during peak hours, especially the segments close to Atlantic City. Route 30 also has no direct entrance into Atlantic City. The main access routes that connect to the Atlantic City Expressway, i.e., Arkansas and Missouri Avenues, and Absecon Boulevard which connects to Route 30, are operating at capacity during the peak commuting period.

A number of transit problems stand in the way of Atlantic City residents who wish to find employment on the mainland. One of the most serious problems involves the lack of

direct bus access to a number of key employment centers in Pleasantville, Galloway, and Hamilton. The absence of night service to some of these locations (e.g., the Expressway Corporate Center) hinders workers on late shifts. In most instances the cost of a bus ticket proves to be prohibitively high for persons characterized by low income.

H. Problems Other Than Transportation

Problems other than transportation also impede unemployed Atlantic City residents from obtaining jobs. Among the major problems, especially for jobs in the casinos, are specific aspects of workers' prior histories, particularly a record of criminal activity or current drug use. Another problem for many city residents is their lack of the basic skills required to carry out many of the mid-level jobs in the region. A further serious problem concerns the lack of affordable, quality child care—a constraint that seriously inhibits single-parent households from joining the labor force.

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.

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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