

1.0 Introduction

In 1997, the New Jersey Departments of Transportation and Human Services, along with the New Jersey Transit Corporation (NJ TRANSIT), initiated a statewide planning process to address the transportation needs associated with the state's Work First New Jersey (WFNJ) welfare reform initiative. Each of the state's 21 counties developed a Community Transportation Plan that incorporated local and regional transportation strategies. These plans formed the basis for the State and County applications for federal Job Access and Reverse Commute (JARC) funds.

In February 2000, the South Jersey Transportation Planning Organization (SJTPO) issued the *SJTPO Mobility Plan for Transit-Dependent Populations*. The mobility plan, which emerged from the statewide county and community transportation planning process, summarized community characteristics and service recommendations for Atlantic, Cape May, Salem, and Cumberland Counties.

This report summarizes background information on socioeconomic and demographic characteristics of the SJTPO region, identifies regional transit needs, and presents a series of service strategies for addressing those needs. The report is organized as follows.

- Chapter 1.0 summarizes the project background.
- Chapter 2.0 profiles the SJTPO region.
- Chapter 3.0 summarizes available transportation services.
- Chapter 4.0 identifies local and regional transportation service needs.
- Chapter 5.0 describes the general transportation service concepts proposed for this region.
- Chapter 6.0 details the proposed service strategies
- Chapter 7.0 presents the results of the evaluation process.
- Chapter 8.0 summarizes the overall study findings and next steps.

2.0 Profile of the SJTPO Region

The SJTPO region comprises four counties in southern New Jersey: Atlantic, Cape May, Cumberland, and Salem. The region is bounded by Ocean and Burlington Counties to the north, Camden and Gloucester Counties to the west, the Delaware River and Bay to the southwest, and the Atlantic Ocean to the east and southeast. The eastern portion of the

region, which includes Atlantic City, Ocean City, and Wildwood, is densely developed along the barrier islands and immediate mainland. Other sections are more rural in character and include large preservation areas, parkland, and wildlife refuges. In the central portion of the region, the cities of Vineland, Millville, and Bridgeton form a major urbanized area, and the western edge of the region includes the Salem City/Pennsville Township urbanized area. (See Figure 2-1.)

2.1 Population Overview

In 2000, the SJTPO region had a population of 565,601, which was an increase of 8.2% over the 1990 population. Atlantic County was the largest county in the region, with 44% of the area's residents, and also the fastest growing. The county's population of 252,552 represented a 12.6% increase between 1990 and 2000. Cape May and Cumberland Counties also showed population growth during this period, at 7.6% and 6.1%, respectively. Only Salem County lost population in the past decade; the 1.5% decrease underscored the county's rural character. (See Table 2-1.)

As Table 2-2 shows, half of the region's residents live in only 10 communities. Vineland was the region's largest community, with a population of 56,271, followed by Atlantic City (40,517), Galloway Township (31,209), and Egg Harbor Township (30,726). Rounding out the top ten were Millville, Lower Township, Bridgeton, Hamilton Township, Pleasantville, and Middle Township. A number of the region's cities exceeded the state's average population density of 1,134 people per square mile (p/sm). Ventnor was the most densely populated community in South Jersey (6,023 p/sm), followed by Margate (5,825 p/sm), Penns Grove Borough (5,276 p/ms), Wildwood (4,213 p/sm), Bridgeton (3,660 p/sm), and Atlantic City (3,570 p/sm).

2.2 Low-Income Residents

In 2001, there were approximately 2,000 WFNJ/TANF¹ clients in the SJTPO region. Individuals were concentrated in Cumberland and Atlantic Counties, with 41 percent and 36 percent of the region's total, respectively. Another 12 percent were located in Cape May County and 10 percent in Salem County. Figure 2-2 shows the location of these individuals throughout the region. As Table 2-3 shows, about 60 percent of the region's welfare recipients were concentrated in five municipalities: Atlantic City (19%), Vineland (15%), Millville (11%), Bridgeton (10%), and Pleasantville (5%).

Consistent with state and federal policy, the number of individuals receiving TANF benefits has decreased steadily since welfare reform was introduced in 1996. The current population of WFNJ/TANF clients has declined by more than 1,300, or 40%, since January 1998. (See Table 2-4.) Cumberland County saw the largest decrease in the region during this period, with approximately 600 WFNJ/TANF clients leaving the benefits program.

¹ The Temporary Assistance for Needy Families (TANF) program replaced the Aid for Families with Dependent Children (AFDC) program with the introduction of federal welfare reform.

It is important to recognize that transit dependence is not limited to welfare clients and that welfare clients themselves may not necessarily depend on transit for work trips. Accordingly, the distribution of low-income households was also examined to identify regional transit needs. Two measures were used: percent of households without automobiles and percent of households living in poverty. (See Figures 2-3 and 2-4.) Based on 1990 indicators and stakeholder comments, low-income households were concentrated as follows:²

- Atlantic County – Atlantic City, Pleasantville, Buena Vista, Brigantine, Margate, Somers Point
- Cape May County – Wildwood, Woodbine, Cape May
- Cumberland County – Vineland, Bridgeton, Seabrook, Laurel Lake, Port Norris
- Salem County – Salem, Pennsville, Penns Grove

All the indicators of poverty taken together – TANF clients, households without vehicles, and households in poverty – suggest that low-income individuals are concentrated in only a few locations throughout the four-county SJTPO region.

2.3 Employment

In the fall of 2001, the SJTPO region had approximately 204,000 jobs and 2,000 employers.³ (See Figure 2-5.) About 57 percent of the region's jobs were located in Atlantic County, 22 percent in Cumberland, 13 percent in Cape May, and 8 percent in Salem. As Table 2-5 shows, about half of the area's jobs were concentrated in five communities: Atlantic City (29%), Vineland (10%), Egg Harbor Township (5%), Millville (4%), and Hamilton Township (4%). The region's 45 largest employers (measured as those with 500 or more employees on site) included Atlantic City's casino hotels, government agencies (federal, state, and local), health-care facilities, and manufacturers. Taken together, these major employers comprised 2 percent of South Jersey's employers but 39 percent of the region's jobs. (See Table 2-6.)

² At the time this study was prepared, the U.S. Census had not yet released data on income and vehicle ownership for 2000.

³ Includes employers with 20 employees or more.

3.0 Existing Transportation Services

This section summarizes the existing network of transportation services in the SJTPO region. It includes both fixed route public transportation and demand responsive paratransit services, focusing on those services that would be best suited for employment trips. Available transportation services in the SJTPO region include NJ Transit (NJT) fixed-route bus and rail service, NJ Transit Access Link ADA complementary paratransit service, county-level transportation services, private jitney operations, and demand responsive services operated by municipalities and non-profit agencies.

3.1 Overview

NJ Transit provides fixed-route bus and rail service throughout the SJTPO region. NJT operates the Atlantic City Rail Line, which is a regularly scheduled rail service between Philadelphia and Atlantic City with intermediate stops. NJT also operates approximately 30 fixed-route bus lines throughout the four-county SJTPO region. An overview of these routes is found in Table 3-1. NJT operates various types of routes in the region: local, regional, express and interstate. Other independent fixed route services also exist in Atlantic, Cape May and Cumberland Counties. Public agencies and private companies operate these services.

In addition, there are a number of public and private demand responsive transportation providers in the SJTPO region. The majority of these transportation services provide demand responsive transportation service for agency clients, which typically are senior citizens and persons with disabilities. While these services are important, most have not been designed to provide reliable, sustainable employment transportation for individuals transitioning from welfare to work situations. This section will identify the demand responsive transportation providers in the SJTPO region, emphasizing those currently providing employment transportation services, as well as those services with the potential to expand into welfare to work transportation providers.

Access Link is NJ Transit's complementary paratransit service, developed in response to the Americans with Disabilities Act of 1991 (ADA). Access Link is a curb-to-curb transportation service for eligible people with disabilities designed to complement local bus service. NJT operates Access Link service throughout the SJTPO region. Consistent with the ADA requirements, trips are limited to pick-up and drop-off points within three-quarter miles of an eligible (non-commuter) NJT bus route. NJ Transit determines passenger eligibility after the applicant is assessed by a local social service agency (such as a county office for the disabled) to determine the extent of the disability and whether it prevents use of regular NJ Transit buses. Hours of Access Link service are the same hours as regularly scheduled local bus service, including weekends and holidays. Fares are the same full fare as the local bus service. There are no restrictions on trip purpose. Arrangements for transportation are made through a toll-free telephone reservation

system and can be made up to 14 days in advance, but no later than 4:00 p.m. on the day before the trip. Passengers request a specific pick-up time. There is a 20-minute window allowed for Access Link pick-ups, meaning the actual pick-up time can be as much as 20 minutes before or after the requested time.

An overview of fixed-route and demand-response services in each county follows.

3.2 Atlantic County

This section describes fixed-route and demand-response services in Atlantic County.

3.2.1 Rail Services

NJT operates the Atlantic City Rail Line between the Atlantic City Rail Terminal and 30th Street Station in Philadelphia. Intermediate stations are located at Absecon, Egg Harbor City, and Hammonton in Atlantic County, and Atco, Lindenwold and Cherry Hill in Camden County. There are 14 trips in each direction, seven days a week between 5:44 a.m. and 12:45 a.m. Transit connections to the rail line include Atlantic City Jitney shuttle buses in Atlantic City, the PATCO Hi-Speed Rail Line in Lindenwold, SEPTA rail and bus routes from 30th Street Station in Philadelphia, and various NJT bus routes at several station stops.

In addition, the NJT Route 554 bus provides supplementary service along the rail route, operating between Atlantic City and the Lindenwold NJT/PATCO station 24 hours a day. Route 554 parallels the Atlantic City rail line, operating on 60-minute headways (30 minutes during peak commute hours) with stops at or within walking distance of each NJT rail station between Atlantic City and Lindenwold.

3.2.2 NJT Bus Routes

NJT fixed-route bus service in Atlantic County includes 14 local, regional and interstate routes.

- NJT operates interstate bus service from Atlantic City to New York City (Route 319) and Philadelphia (Route 551). Another interstate route (Route 315) passes through Atlantic County in Mays Landing along its Cape May-to-Philadelphia run.
- Regional bus routes (Routes 552, 553, 554, 559) provide regularly scheduled transit from Atlantic City to the surrounding Atlantic County area and the counties of Camden, Cape May, Cumberland, Burlington, Gloucester, and Ocean.
- Local routes (Routes 501 – 509) concentrate service between Atlantic City and adjacent communities in Atlantic County and the coastal communities of Cape May County.

3.2.3 Atlantic City Jitneys

The Atlantic City Jitney Association is a consortium of approximately 190 independent jitney (small bus) owner/operators in Atlantic City. The jitneys run 24 hours a day, 365

days per year. The regular fixed route jitney fare is \$1.50 for a one-way trip, with an advance fare ticket available for \$1.25 and a senior citizen fare of \$.50.

In July 1998, the Jitney Association and NJT reached an agreement to have the Atlantic City Jitneys provide free shuttle transportation for passengers from the Atlantic City Rail Station to all casino properties in Atlantic City. The service runs 24 hours a day on three fixed routes (Pink, Blue and Green) and from 7:00 a.m. to 7:00 p.m. on the Orange Line. Prior to the 1998 agreement, NJT operated a free shuttle bus from the rail station to the casinos. Under the new agreement, NJ Transit purchased a new fleet of jitneys, which the agency leases to the jitney drivers for \$1 per year. At the end of six years, the drivers will have an opportunity to purchase the vehicles at a substantial discount. This capital investment provided the incentive for the jitney operators to take over the casino shuttle routes from NJT. The free rail shuttle agreement between NJT and the Jitney Association will expire in the summer of 2002. It is not known at this time if a new agreement will be negotiated between NJT and the Jitney Association.

3.2.4 Atlantic County Transportation

Atlantic County operates a countywide demand responsive service through its Office of Intergenerational Services. Eligible passengers include any person over age 59, persons with disabilities (regardless of age), veterans (for medical services), and all rural residents. Service is available Monday through Friday from 5:30 a.m. to 8:30 p.m. Service is provided within county limits, although on certain days service is provided to parts of Cape May, Cumberland, Gloucester, and Camden Counties and the City of Philadelphia. Advance reservations are required; passengers may reserve a trip up to seven days in advance. No fare is charged, but a passenger donation of 50 cents per trip is encouraged. Rural county residents, defined as those living west of the Garden State Parkway, are eligible to use the County of Atlantic Rural Transportation System (CARTS). All rural residents are eligible, and there are no limits on trip purpose. Atlantic County transported over 175,000 total passengers in 2001. Its combined services provided over 40,000 vehicle hours of service and traveled over 500,000 service miles.

3.2.5 City of Atlantic City

Atlantic City provides fare free fixed-route and demand responsive community transportation for city residents through the Atlantic City Department of Health and Human Services. The service, operating as Atlantic City Senior Transportation, is geared towards serving senior citizens, but is open to other segments of the community such as disabled persons and community groups (church organizations, youth groups, school trips, after school programs, etc.). Service is available five days a week from 8:30 a.m. to 5:00 p.m., with extended service hours available in the evening and on weekends. Senior transportation services include medical appointments, banking trips, shopping trips, and dialysis trips. Reservations for service are on a first come, first served basis. The fleet consists of two large buses (37- and 44-passenger), two lift- equipped cutaway buses and several sedans and passenger vans. The service is funded solely by the City of Atlantic City.

3.2.6 Other Demand Responsive Services

Several private and public non-profit organizations also provide demand responsive transportation services in Atlantic County. These organizations typically provide transit service for their clients, who often comprise elderly and/or special needs populations. The transportation services offered are usually tailored for the specific needs of the clientele, and generally are limited in hours and days of service or geographic area and are not open to the general public. These additional operators include:

- Margate Senior Citizen Volunteer Bus Shuttle
- Brigantine Senior Shuttle
- City of Ventnor Shuttle
- Buena Boro Senior Outreach Program
- Galloway Township Senior Services Office
- Atlantic County Special Services School District
- ARC of Atlantic County
- Spanish Community Center
- Community Programs Adult Medical Day Care
- AtlantiCare Behavioral Health Division/Health System
- Career Opportunity Development, Inc.
- Caring Inc.
- Family Service Association
- Kessler Memorial Hospital
- Uptown Family Center
- Various Medicaid vendors

3.3 Cape May County

This section described fixed-route and demand-response services in Cape May County.

3.3.1NJT Bus Routes

NJT fixed-route bus service in Cape May County includes six regional and interstate routes. Because of the county's tourist-oriented economy, much of the service is operated on a limited or seasonal schedule.

- Limited local service is available in the communities of Ocean City and Somers Point to Atlantic City (see Atlantic County Routes 507 and 509).
- Three interstate routes provide service to Philadelphia and one to New York City. NJT Route 316 to Philadelphia is a seasonal express route, operating from June to September. The New York route, an extension of Route 319 to Atlantic City, provides limited service to Cape May, with three daily round trips.
- NJT regional routes include limited service to Ocean City and Somers Point on the Atlantic City – Philadelphia express (Route 551) and a Cape May – Atlantic City run (Route 552) operating 24 hours a day, seven days per week.

3.3.2Fare Free Transportation

Cape May County Fare Free Transportation operates modified fixed route services throughout the County. Service is oriented around the needs of agency clients, who are primarily senior citizens, and is available Monday through Friday from 9:00 a.m. to 4:00 p.m. In addition, two modified fixed-route work runs serve major county employers daily, as described in Section 3.6.

3.3.3Five Mile Beach Electric Railway Company

This private company operates rubber-tired trolleys year round on fixed-routes. The service operates at its peak during the summer tourist season, providing daily service from 8:30 a.m. until midnight in Wildwood Crest and Wildwood to destinations near the beach and boardwalk. Some services are available to Cape May and other tourist areas, and a new route was recently introduced between Wildwood and Rio Grande. The regular adult fare is \$2.00 for a one-way trip, with discounted fares for children and senior citizens.

3.3.4Cape May County Board of Social Services

The Board of Social Services (BSS) provides fare-free employment transportation for TANF participants and medical transportation for Medicaid clients. The agency does not directly operate transportation services, but contracts with various vendors to provide transportation using taxis and minibuses. BSS contracts for demand-responsive services with agencies such as Fare Free Transportation, Spanish Community Center, Five Mile Beach Electric Railway, and Belleplain Ambulance Corporation. For example, Fare Free Transportation provides demand response services using a minibus leased with BSS funds. BSS also provides operating funds to pay for a driver.

Services are provided Monday through Friday from 8:30 a.m. to 4:30 p.m. Participants must request service 48 hours in advance for non-emergency medical transportation;

employment trips can be made on an as needed basis. BSS provided approximately 186,000 trips in 2001, but a breakdown by trip purpose was not available. BSS also participates in the Work Pass program, providing free NJT bus tickets and passes to TANF clients. The passes allow TANF clients to use NJT buses not only for employment trips, but also for any other essential purposes they need.

3.3.5 Puerto Rican Action Committee

PRAC provides transportation service for its clients, who are indigent residents of Cape May County. Service is available weekdays from 8:00 a.m. to 5:00 p.m. and advance reservations are required. The fleet consists of five minivans, each seating eight passengers; none is wheelchair accessible.

3.3.6 Other Demand Responsive Services

Several private and public non-profit organizations also provide demand responsive transportation services in Cape May County. These services are generally the same as the services described in the Atlantic County section. Additional operators include:

- Fare Free Transportation
- Cape May County Youth Services
- Cape May Special Services School District
- Wildwood Housing Authority
- Spanish Community Center
- Cape Counseling Services
- Disabilities Resource Center
- Easter Seals Adult Training Center
- Magnolia Adult Medical Day Care.

3.4 Cumberland County

This section describes fixed-route and demand-response services in Cumberland County.

3.4.1 NJT Bus Routes

NJT operates one regional route and three interstate routes in Cumberland County.

- Route 553, a regional service, operates from Upper Deerfield Township through the major Cumberland County cities of Bridgeton, Millville and Vineland on the way to its destination in Atlantic City. Service is operated round the clock, seven days a week.

- Three interstate routes serve the County. Routes 408 and 410 originate in the cities of Millville and Bridgeton respectively, and travel through the county to their destination in Philadelphia. Route 313 travels through a large portion of Cumberland County on its journey from Cape May to Philadelphia.

3.4.2Cumberland Area Transit Services

CATS provides demand responsive services for seniors and persons with disabilities in Cumberland County. CATS also provides regularly scheduled weekly shopping routes and a once a week hospital shuttle. As of September 1, 2001, CATS began providing services for low income and welfare to work participants. This was made possible by the receipt of additional state and Federal welfare to work funds, as well as other jobs access funding. CATS is operated by the Cumberland County Office on Aging. CATS operates approximately 28 vehicles in service Monday through Friday from 6:00 a.m. to 6:00 p.m.

3.4.3Other Demand Responsive Services

Several private and public non-profit organizations also provide demand responsive transportation services in Cumberland County:

- Casa PRAC
- CHAIR
- Cumberland County Board of Social Services
- Cumberland County Office on Aging
- Cumberland County Office of Employment and Training

3.5 Salem County

This section describes fixed-route and demand-response services in Salem County.

3.5.1NJT Bus Routes

NJT operates interstate fixed-route bus service in Salem County. Salem County Transit/Community Bus Service (SCOT) provides local service under contract to NJT.

- NJT operates two interstate commuter routes originating in Salem County and traveling to Philadelphia. Route 401 originates in Salem City and travels east through the county to Woodstown, before turning north towards Philadelphia. Route 402 originates in Pennsville, and travels north through the western county communities along the Delaware River on its way to Philadelphia. A third interstate route, Route 410, originates in Bridgeton (Cumberland County) and passes through the eastern panhandle of Salem County on NJ Route 77. There are no major population centers along this mostly rural stretch of the county.

- SCOT operates two local routes: one intra-county route (Route 468) serving the major towns and cities of the county, and one commuter route (Route 423) running four round trips between Pennsville and the other river towns to Wilmington, Delaware, during the morning and evening commuter hours. All service is provided with full-size transit coaches owned by NJT.

3.5.2 Demand Responsive Services

Salem County's demand responsive services are limited to the senior citizen, disabled and other special needs populations. Most of the directly operated services run Monday through Friday from about 8:00 a.m. to 5:00 p.m. Other agencies contract with private operators to provide services at all hours with an advance reservation. Identified demand responsive service providers include:

- Salem County Board of Social Services
- Salem Care, Inc.
- Inter Agency Council
- Puerto Rican Action Center.

3.6 Access-to-Jobs Transportation Services

The four counties in the SJTPO region have already begun the process of providing job-access and welfare-related transportation. Several services are already underway, and funding has been sought for others. These services are described below and illustrated in Figure 3-1.

3.6.1 Atlantic County Shuttles

The Atlantic County Shuttles were created with various funding sources received through the Atlantic County JARC application to the Federal Transit Administration. The shuttles are operated by Atlantic County Transportation. The Shuttles connect TANF and low-income residents to employment opportunities and to existing NJT bus and rail routes. Three shuttles are currently in service or about to begin.

- The **Mid-County Connector** operates two different transit services using the same vehicle: a circulator shuttle in the Egg Harbor Industrial Park, and a loop along Route 50 between the communities of Egg Harbor City and Mays Landing. The Industrial Park shuttle operates between approximately 6:00 and 9:00 a.m. and 3:00 and 6:00 p.m. Monday through Friday. The shuttle route runs between the Industrial Park and the downtown Egg Harbor City business district, including connections to the Egg Harbor City NJT rail station and NJT bus routes along US 30 (Routes 502, 553 and 554). During off peak hours, approximately 9:00 a.m. to 3:00 p.m. and 6:00 to 8:00 p.m., the Mid-County Connector provides several round trips between Egg Harbor City and Mays Landing, including a stop at Atlantic Cape Community College. The shuttle travels along NJ 50, providing feeder connections to the NJT bus routes in

Egg Harbor City and the Egg Harbor City NJT rail station. These connections provide greater access to the routes serving the large Atlantic City employment centers.

- The **Community Shuttle** is expected to begin operation during Summer 2002. New Jersey Transit awarded the vehicle to Atlantic County Transportation, which will operate the service. Drivers are currently being recruited. The Community Shuttle will provide service between Buena and Hammonton along NJ 54, providing feeder service to NJT buses in Hammonton on US 30, and the Hammonton NJT rail station. The service will operate Monday through Friday, completing several circuits during the morning and afternoon rush periods, approximately 6:00 to 9:00 a.m. and 4:00 to 7:00 p.m. The southern terminus of the route may be extended to US 40 to provide better connections with NJT services.
- The **Eastern Connector** is currently operating as a demand response employment transportation service. Atlantic County Transportation is operating one vehicle Monday through Friday as a demand response service between Pleasantville and Atlantic City. The Connector provides curb-to-curb service to and from job sites in Atlantic City. The Eastern Connector is currently being studied for transformation into a fixed route service operating a loop from Pleasantville to Atlantic City, similar to the Mid-County Connector Egg Harbor Industrial Park loop.

3.6.2Cape May County Work Bus

Fare Free Transportation operates two weekday routes designed to serve county-based work trips. The work runs travel along the Route 9 corridor, stopping at employment centers along the corridor. The northern run begins in Ocean City and travels south to Rio Grande; the southern route begins in Cape May and travels north to Cape May Court House via Villas and Rio Grande. Morning trips start between 6:45 a.m. and 7:34 a.m.; return trips start at 4:30 p.m. Passengers on the work trips include county employees as well as low-income individuals seeking access to social services in Rio Grande.

3.6.3Cumberland County Shuttles

The Cumberland County Office of Employment and Training (OET) received a Welfare-to-Work grant from the U.S. Department of Labor to fund employment transportation services. The grant provided funds for procuring three 20-passenger shuttle buses, plus operating funds for the service. Only one of the buses purchased is lift equipped. OET sponsors the following services:

- The **Vineland Shuttle** transports students, trainees and workers between downtown Vineland and the Vineland Industrial Park. In operation since Fall 2000, the route uses one bus to make three round trips, twice a day, Monday through Friday. The bus begins its route in downtown Vineland at 5:30, 6:30 and 7:30 a.m., and makes three return trips from the Industrial Park at 3:15, 4:15 and 5:15 p.m. The shuttle serves approximately 30 employers and averages 33-35 daily riders. No funding or operating subsidies are received from any of the employers served by the shuttle.

- The **Seabrook – Bridgeton Shuttle** operates between the City of Bridgeton and the Seabrook area, a major employment center just north of Bridgeton. The shuttle provides service to such employers as the Bridgeton Industrial Park, the downtown Bridgeton business district, the food processing plants of Seabrook, and various other businesses in between such as shopping centers, supermarkets and restaurants. The shuttle operates one bus Monday through Friday, with two trips in the morning commute time and three trips during the afternoon commute. The morning runs consist of one northbound Bridgeton to Seabrook run at 6:00 a.m., and a return Seabrook to Bridgeton run at 7:00 a.m. In the afternoon, there is a 2:00 p.m. northbound trip, a 3:00 p.m. southbound return trip, and another round trip from Bridgeton to Seabrook and back at 3:45 p.m.
- The **Millville Industrial Park Shuttle** is in the planning stages, with no route or schedule information available at this time. The Millville shuttle would operate in and /or around the City of Millville, using the third shuttle bus purchased with Cumberland County's Welfare-to-Work grant.

3.6.4 Wildwood to Millville Route

Cape May County received funding from a JARC grant to purchase a vehicle and begin regularly scheduled free bus service on a route traveling from Wildwood to Millville, Cumberland County. Cape May County Fare Free Transportation will be the operator of the route, which is still in planning. The route would pass through the Cape May County towns of Rio Grande, Cape May Court House and Woodbine before continuing on to Millville. The service would operate Monday through Friday. The final alignment and schedule has not yet been established, but two alternatives are under consideration. The first route would travel direct from Wildwood to Millville. Northbound buses would leave from Wildwood starting at approximately 5:30 a.m. and make several trips until mid-afternoon (approximately 2:00 p.m.), when the bus would begin the southbound return runs from Millville. The second service option is to run two separate buses on two round trip loops, one from Wildwood to Woodbine, the other from Woodbine to Millville. The schedule for the buses would be coordinated to allow for transfers in Woodbine from one bus to the other, for those wanting to make a through trip from Wildwood to Millville.

3.6.5 CATS Expansion

The Cumberland County Improvement Authority has submitted a JARC grant application for additional funds to expand the service hours of the current CATS demand response transportation system. This system expansion will add approximately 30 additional hours of service per week to CATS existing schedule. This will give CATS customers an effective service day of 6:00 a.m. to midnight, five days a week. For Fiscal Year 2003, funds have been requested to expand service to include Saturdays from 6:00 a.m. to 10:00 a.m. and from 3:00 p.m. to 7:00 p.m., adding another eight hours of service per week. These service expansions will provide demand response employment transportation services for underserved areas of the county without interfering with CATS' traditional

service base, which is transportation for seniors and persons with disabilities from 8:00 a.m. to 4:00 p.m. Monday through Friday.

4.0 Transportation Service Needs

Qualitative and quantitative approaches were used to identify local and regional transit needs. First, input was sought from stakeholders in the SJTPO region through a series of working meetings. Stakeholders – who included local representatives from local transportation, planning, and human service organizations – were asked to identify regional and local transportation needs. Second, a geographic analysis was conducted to identify welfare clients and employers without convenient transit access. Existing and proposed bus routes were mapped in relation to the location of welfare clients and employers to identify gaps in transit services. Buffer zones were drawn around each route, extending three-quarters of a mile on each side. It was assumed that individuals living or working within these zones could walk to the bus. It was further assumed that these buses took individuals where and when they wanted to travel. Based on this analysis several service gaps – welfare clients or jobs outside the bus catchment areas – were identified throughout the SJTPO area.⁴ (See Figure 4-1.)

While this approach provided a useful snapshot of transportation needs, individual transportation decisions can be more complex than this simplified analysis allowed. As noted earlier, not all welfare clients can be assumed to need transportation services. Many have access to automobiles or have other transportation alternatives available to them. Moreover, even when welfare clients live near bus or rail, the services may not operate when or where these individuals need to travel. In addition, this analysis did not include every employer in South Jersey, but focused instead on those with 20 or more employees on site.

Finally, although only a small proportion of the region’s welfare clients were located beyond fixed-route bus service, other low-income residents can be expected to benefit from new or modified services in these areas. Conversely, other transit-dependent individuals throughout the region can also be expected to benefit from new transportation connections. While the number of welfare recipients has declined dramatically since Work First New Jersey was introduced, the SJTPO region still has concentrations of individuals who depend on transit to get around. The list of individuals who may rely on transit typically includes adults without automobiles by economic circumstance or choice, those without a valid driver’s license, seniors who choose not to drive, children and teenagers who are not old enough to drive, and people with disabilities that prevent

⁴ Because only a small number of welfare clients and employers were located beyond walking distance for current or proposed transit services, general locations were identified to preserve confidentiality.

them from driving. Potential service gaps are identified in the following sections and summarized in Table 4-1.

Table 4-1
Access to Fixed-Route Transit
Percentage within Three-Quarter Mile Buffer of Existing and Proposed Routes

County	Welfare Transit			Employers Transit			Jobs Transit		
	Total	Access	Percent	Total	Access	Percent	Total	Access	Percent
Atlantic	726	661	91%	912	679	74%	116,259	97,479	84%
Cape May	249	228	92%	442	317	72%	27,497	20,328	74%
Cumberland	818	688	84%	493	320	65%	44,500	31,951	72%
Salem	203	147	72%	200	90	45%	16,185	7,172	44%
<i>Total</i>	1,996	1,724	86%	2,047	1,406	69%	204,441	156,930	77%

4.1 Atlantic County

Atlantic County had the best transit service coverage in the SJTPO region. About 9 percent of welfare clients and 16% of jobs were located beyond walking distance of fixed-route transit in Atlantic County. The following issues were identified:

- The geographic analysis identified a pocket of residential development without transit service south of Black Horse Pike, in the vicinity of English Creek Avenue.
- Some residents in Buena Vista Township were without access to fixed-route transit.
- Stakeholders expressed some concerns about the length of the new Community Shuttle, which would operate between Buena and Hammonton along NJ 54.

4.2 Cape May County

In Cape May County about 8 percent of welfare clients and 26% of jobs were located beyond convenient transit access. The following issues were identified for this county.

- Some gaps in transit service were identified along US 9, especially between Cape May Court House and Ocean View. Several local nursing homes in this corridor do not have adequate transit service for their staff, many of whom live in the southern part of the county.
- Anticipated growth in Wildwood associated with the new convention center is expected to increase employment opportunities in the area's hotels, restaurants, and entertainment facilities. Improved north-south connections along the island, along with more frequent transit connections to Rio Grande, would help increase access to jobs in this community.

- While NJ Transit Route 552 provides hourly service to the Crest Haven complex, passengers must cross the Garden State Parkway on both inbound and outbound trips. Although the intersection is signalized, the environment is not pedestrian-friendly and could pose a hazard for individuals seeking access to the jobs and services in this facility.
- Fare-Free Transportation currently provides service five days a week from 8:00 a.m. until 4:00 p.m. Extending service hours to start earlier and end later would help serve workers with nontraditional schedules.

4.3 Cumberland County

Unlike the other counties in the SJTPO region, Cumberland County has extended the eligibility requirements and hours of its CATS demand-response service to more easily serve work trips. This has given all county residents access to employment-related transportation within county borders. To allow comparisons with the rest of the SJTPO region, the geographic analysis has indicated that 16% of welfare clients and 28% of jobs in Cumberland County do not have convenient access to fixed-route transit. Gaps in access to fixed-route transportation were identified for Port Norris, Buckshutem, Laurel Lake, Fairton, Rosenhayn, Seabrook Farms, and portions of northeast and southwest Vineland. However, individuals living in these areas can use CATS demand-response service to access locations within the county or to make connections to regional bus routes. Also the Cumberland County Office on Aging, on Shiloh Pike outside Bridgeton, is not easily served by fixed-route transit, but agency clients can be expected to take advantage of CATS demand-response services.

In addition to the service gaps identified through the geographic analysis, stakeholders in Cumberland County identified the following concerns.

- There is no transit connection between Vineland and Bridgeton along NJ 56.
- Employers along Route 56 outside Vineland are not well served by fixed-route transportation. Some stakeholders suggested modifying the Vineland Shuttle to serve these locations.
- There is no transit connection between the City of Salem and Bridgeton via NJ 49.

4.4 Salem County

Because of its more rural nature, Salem County had the lowest level of transit coverage in the SJTPO region. Approximately 28% of welfare clients and 56% of jobs did not have convenient access to fixed-route transit. Service gaps were observed around Elmer, Olivet, Norma, and Brotmanville, all in the eastern part of the County, and near the Delaware River between Carneys Point, Penns Grove, and Woodstown.

Consistent with the service gaps identified for Cumberland County, stakeholders called for improved transit connections between Salem City and Bridgeton to improve access to jobs and facilitate regional connections. In addition, stakeholders identified the need for additional transit services to connect residents with the employment opportunities in the Pureland Industrial Complex, in Gloucester County, as well as those in Wilmington and Christiana (Delaware).

5.0 Service Concepts

The geographic analysis, in combination with stakeholder input, has identified areas of transit need throughout the SJTPO region. The needs assessment focused on welfare clients but took into account other transit-dependent residents as well. Although not all welfare recipients need transit – and not all transit dependent residents receive welfare – the distribution of welfare clients is a useful proxy for identify areas of transit need.

As the geographic analysis has shown, a high percentage of welfare recipients live in the region’s urbanized areas, where fixed-route transit is generally available. NJ Transit generally serves these communities with local and regional routes. In addition, many of the new or proposed job-access services are located in the region’s more densely developed areas, including Vineland, Bridgeton, Atlantic City, and Pleasantville. Not surprisingly, most of the individuals without direct transit access are located in low-density or rural areas, including eastern Salem County, Cumberland County along the Delaware Bay, western Atlantic County, and central Cape May County.

While fixed-route services may still provide the best solution for some corridors, flexible or demand-response services can provide a better match for these areas where origins and destinations are widely scattered. As a general guideline, fixed-route services can be supported in areas of moderate- to high-density development. In lower density areas, flexible routes and demand-response services generally provide a better match. The following table shows industry guidelines for type of service by density (expressed as households per acre).⁵

Service Type	Population Density
High-frequency fixed-route to all households	15 hh/acre or more
Fixed-route service to at least 90% of households	3-15 hh/acre
Fixed and flexible service to 80% of households	2-3 hh/acre
Demand-response/Flexible	1-2 hh/acre
Demand-response	0-1 hh/acre

⁵ The thresholds and percentages are derived from the *Transit Capacity and Quality of Service Manual*.

As Figure 5-1 shows, the population density throughout much of the SJTPO region is less than one household per acre.⁶ Accordingly, many of the recommendations for updating SJTPO's Job Access and Reverse Commute plan call for flexible or demand-response services. The different types of service strategies are described below.

5.1 Modifications to Existing Services

Several proposals called for adjusting schedules or alignments on existing bus routes. In general these recommendations were made to facilitate transfers between existing routes or use existing resources to address an identified service gap. For example, in Cape May County, a recommendation was made to extend existing fixed-route service along US 9 to improve access to area employers. In response to this planning process, NJ Transit has already adjusted the schedule on local routes in Salem County to facilitate transfers for individuals working at the Pureland Industrial Complex in Gloucester County.

5.2 Demand-Response Services

In low-density parts of the region, flexible or demand-response services can supplement the existing fixed-route network. These programs provide more customized service for people whose trips cannot be accommodated on the existing fixed-route bus network, either because their origin or destination is not on a bus route or the time they are traveling is not served.

This plan proposed two new public transportation alternatives be provided for WFNJ participants and other low income residents: feeder service to existing public transportation routes, and curb to curb paratransit service to specific locations. These demand-response services could be operated by an existing agency that provides transportation service, a private provider working through a contract, or some combination of public and private service provision. The two service concepts are explained below.

- **Feeder service** – A small vehicle would pick up riders at their residence or another pre-arranged pick-up point and deliver them to a bus stop. At that point, the riders would transfer to another bus to complete the trip to their destination. On the return trip, the riders would be picked up at the bus stop by the feeder service and returned to their home or pre-arranged drop-off point.
- **Demand-response/Paratransit** – A small vehicle would be dispatched, upon advance request, to a pick-up point. The passengers would board the vehicle and use this service to reach their final destination. The paratransit service would operate on a curb-to-curb basis; drivers would not accompany passengers to the front door of their destination.

⁶ Based on data from the 2000 U.S. Census.

Passengers would use the feeder service if traveling to or from a destination that is served by a fixed-route bus when the bus route is in service. At all other times, passengers would use curb-to-curb paratransit or demand-response service. Feeder service may be appropriate in corridors near urbanized areas where fixed-route bus service is available; for example, such service might address transit demand in Atlantic County along English Creek Avenue. In rural areas, like Elmer or Buena Vista, demand-response service may be a more suitable alternative.

Paratransit service as envisioned in this plan would be introduced primarily for WFNJ participants who have no other alternative for making their work or work-related trip. In this manner, it would serve as a transportation “safety net”. Customized rides, such as emergency trips, guaranteed rides home or initial employment trips for newly hired WFNJ participants could also be provided. Once established, this service could be extended to other transit dependent residents in the SJTPO region.

5.3 Deviated Fixed-Route Services

Deviated fixed-route service has a defined route and stops, but the driver may make additional drop-offs and pick-ups within a specified zone. Passengers usually are required to request the deviations in advance and may pay a premium fare. These routes are well suited to low density communities, where homes, jobs, and other destinations are set back from the main roads.

This flexibility affords additional convenience for passengers, who may include those with mobility limitations, those with baby strollers or shopping carts, or those traveling after dark. Flexible services may also help a transit operator provide more community-oriented services that respond to customer needs. Moreover, under certain conditions, deviated fixed-route service may allow transit operators to meet the requirements of the Americans with Disabilities Act (ADA) without providing a separate complementary paratransit service. If deviation requests are available to the general public, the operator must ensure that sufficient capacity is available to meet the travel needs of those eligible for ADA paratransit. If deviation requests are limited to ADA-eligible patrons, then the operator must provide these individuals with “equivalent” service. To be considered equivalent, service must be available within a three-quarter-mile deviation zone on each side of the route, fares must not exceed twice the standard adult fare, and days and hours of service must be comparable.

Flexible services do require more administrative and operating support than fixed-route services, especially upon start-up. First, the operator must be able to handle deviation requests. Operators already providing ADA complementary paratransit, like the county-based paratransit systems, should already have a reservation system in place. Second, a higher level of marketing and customer service may be required to familiarize passengers with the new services. While flexible routes are often perceived as more customer-friendly than traditional fixed-route services, the transition may be confusing for some passengers. Also, the need to cover the additional mileage associated with deviation

requests within a fixed time period may require additional vehicles and drivers. Finally, some systems have found that introducing advanced technology, such as automatic vehicle location systems, can enhance flexible services, but this level of technology is only recommended for large systems.

5.4 Mobility Manager

A mobility manager or transportation broker serves as the primary point of contact for public transportation service in a county or region. The individual would have responsibility for coordinating all transportation information and services within the designated geographic area, serving as an information clearinghouse for all services, whether operated by NJ Transit, county transit operators, or social service agencies.

A mobility manager would facilitate coordination among these various services, making the best match for each customer. For example, a mobility manager could coordinate with the local WFNJ office to provide transportation for individuals who find employment through the WFNJ office. The broker would determine the best transportation option for that person, choosing between fixed-route bus service, feeder service, paratransit, or ridesharing. This type of service coordination would help maximize the availability of transportation services and, ideally, increase the efficiency of those services.

5.5 Ridesharing

Ridesharing programs provide another transportation alternative for serving work trips in the SJTPO region. Ride sharing programs link employees with autos with employees at the same company who live nearby and have no transportation options available. This service could be as simple as a carpool between two individuals or as complex as a leased vanpool sponsored by the county or by an employer with six or eight participants.

Most formal vanpools in New Jersey are facilitated and managed by two private companies, VPSI Commuter Vanpools and Van Pool of New Jersey, Inc. (VPNJ). Since vanpools require the participants to share the costs of operating and maintaining the vehicle, a vanpool may not be appropriate for WFNJ participants entering the workforce, unless their share of the costs is subsidized. Nonetheless, a vanpool may be a good choice for other residents traveling to a location that is not conducive for bus service. The many jobs in Christiana, for example, are prime candidates for ridesharing efforts from Salem County; similarly the jobs in Atlantic City may be ideally suited for ridesharing for those working nontraditional shifts.

Employers, employee groups, local governments, and non-profit organizations can establish vanpools quickly and easily by contacting a vanpool provider. A typical vanpool consists of the following:

- **Leased van** - Van size is determined by commuter group size. Leases can be for as little as 30 days or for longer periods, with additional savings.

- **Volunteer driver** or a driver provided or designated by the employer or organizing agency - Volunteer drivers usually are allowed to use the van for their personal use on weekends and other times when the vehicle is not being used for vanpool trips. Drivers arrange preventive maintenance services. Drivers usually receive a discounted rate on their share of vanpool costs.
- **Shared costs** - The passengers in the group share all costs associated with the operation of the vanpool. The driver is responsible for collecting monthly fees and paying the bills incurred by the pool.
- **Insurance and maintenance requirements** - Insurance and maintenance programs usually are administered by the vanpool company, which retains title to the vehicle.

Carpooling is usually an informal agreement between two or more people, but agencies can often help individuals make commuting connections. The Cross County Connection Transportation Management Association (CCC), for example, already provides ride-matching services for individuals who work in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties. Vanpooling is usually a more formalized program that requires a lead agency. CCC is a candidate for leading these activities in South Jersey, while for trips to Delaware; a comparable agency in that state also might be the appropriate lead.

5.6 Automobile Purchase Programs

In rural parts of the SJTPO region, residents rely on the private automobile for mobility. In many situations, particularly for residents of outlying areas, programs to help welfare recipients acquire a car may prove to be the best long-term solution for providing mobility.

One innovative program currently in use throughout the country is the automobile purchase program. Typically, a human service or non-profit agency at the county level administers this type of program. The program identifies eligible welfare-to-work candidates, usually those who have found employment but have no automobile, and provides them with a purchased or donated car. Vehicles are obtained through donations or are purchased directly by the agency. The vehicles are repaired and refurbished, preferably with donated or volunteer labor, and are turned over to the candidate. Operating expenses, insurance, taxes, tags and title are paid for by the recipient, the agency or shared between them. The recipient also may receive some type of temporary stipend to help defray the initial operating costs of the auto. In a variation on the automobile purchase program, an agency may team up with local lenders to provide low-cost loans to welfare recipients to purchase their own vehicles. Such loans provide an extra benefit beyond transportation by helping former welfare recipients build a credit history for future reference.

6.0 Proposed Transportation Strategies

Based on the transportation needs identified in Chapter 4.0, a menu of service strategies was developed for the SJTPO region. Counties may choose to adopt any or all of these strategies or, alternatively, develop their own proposals. Proposed projects include a combination of fixed-route and demand-responsive alternatives, as well as local and regional alternatives.

6.1 Atlantic County

Atlantic County has a high level of existing transit services and has three job-access routes in operation or development. The following strategies were proposed for Atlantic County to supplement existing services. (See Figure 6-1.)

6.1.1 Extend CARTS service hours to better serve work trips

Rural county residents, defined as those living west of the Garden State Parkway, are eligible to use the County of Atlantic Rural Transportation System (CARTS). Atlantic County Transportation operates this service Monday through Friday from 8:00 a.m. to 4:00 p.m. Reservations are required. While the program places no limits on trip purpose, CARTS focuses on transporting rural residents to shopping areas, hospitals, and major food markets in Atlantic County and portions of Cumberland County. The service hours are not well suited for work trips, especially for individuals with nontraditional work schedules.

This proposal would expand service hours on CARTS to better accommodate work schedules. To maximize efficiency, feeder service would be provided to existing fixed-route services when available; otherwise curb-to-curb service would be provided. Ideally, service expansion would follow the model in Cumberland County, operating from 6:00 a.m. to 12:00 midnight five days a week, with at least eight hours of Saturday service. These service hours could be phased in gradually, however, starting with a 12-hour shift, from 6:00 a.m. to 6:00 p.m., and adding service in three-hour increments as demand warrants. To test the market for this service expansion, a pilot program can be implemented in Egg Harbor Township, in and around the English Creek Avenue corridor where a cluster of welfare clients was identified or around Buena and Buena Vista Township where fixed-route alternatives are limited.

6.1.2 Review alignment for Community Shuttle

The new community shuttle was designed to operate between Buena and Hammonton along NJ 54, providing feeder service to NJT buses in Hammonton on US 30 and the Hammonton NJT rail station. The route is quite long – about 20 miles – and operates through low-density areas with very few potential origins or destinations. Operating such a long route with only one vehicle, as currently funded, also limits service frequency.

Atlantic County is already reviewing several alternatives that would improve operations on this route. For purposes of analysis the following alternative was evaluated. The community shuttle would operate between US 322 and Hammonton. The segment south of US 322 would be eliminated. Instead, residents in Buena would receive demand response connections to NJT Transit services along US 40 or to services in Vineland. Potential service operators include Atlantic County's CARTS service, Cumberland County's CATS countywide demand-response service, or a new serviced dedicated for job access transportation.

6.2 Cape May County

Because the majority of individuals in Cape May County have access to fixed-route transportation services, recommendations focused on refining existing services to better address the needs of individuals accessing employment or the county's social services. (See Figure 6-2.)

6.2.1 Increase bus service between Wildwood and Rio Grande

The new Wildwood Convention Center is expected to increase travel to and from the Boardwalk and increase activity in the area's hotels and other visitor-oriented businesses. In addition, plans are underway to restore the railroad platform in Rio Grande on the Cape May Seashore Lines to establish a rail connection between Cape May and Rio Grande.

Bus service between Wildwood and Rio Grande is recommended to serve individuals working in the hospitality industry in Wildwood, as well as low-income individuals who need access to the services available in Rio Grande. Such a route would also provide rail connections at a restored Rio Grande station. While NJ Transit currently serves this corridor on Route 552, service is oriented toward the Atlantic City market and vehicles and schedules are not suited for local trips. An alternative recommendation, described below, is to develop a route serving lower Cape May County, with stops in Wildwood, Rio Grande, Villas, North Cape May, and Cape May.

The Greater Wildwood Chamber of Commerce has worked with its members to develop transportation services to meet the anticipated demand for convention participants and hospitality employees. Five Mile Electric Railway Co., a private transit operator, has initiated a route connecting North Wildwood and Wildwood with Rio Grande. The route currently makes eight round trips a day between 7:00 a.m. and 4:00 p.m. The route operates Monday through Friday with a one-way fare of \$2.00. This recommendation would build on that service, ideally through a public-private partnership, and extend the service span to serve individuals with other work shifts. This recommendation calls for from 6:00 a.m. to 9:00 p.m. on weekdays and from 7:00 a.m. to 7:00 p.m. on Saturdays. If demand warrants, service could be expanded to seven days a week as funding becomes available.

6.2.2 Establish community bus service between Wildwood and Cape May

This proposal would provide an alternative to the Wildwood – Rio Grande option outlined above. This route would provide a community-oriented route, with service to Wildwood, Rio Grande, Villas, North Cape May, and Cape May. The route would provide connections to the employment opportunities in the Wildwoods, Rio Grande, and Cape May and offer low-income residents additional opportunities to access the regional transit network. While NJ Transit already operates in this corridor, this proposal would offer deviated fixed-route service to better serve community-based transportation needs. Service is proposed Monday through Saturday, from 7:00 a.m. to 7:00 p.m. Service could be expanded as demand warrants and funding permits.

6.2.3 Improve pedestrian access to Crest Haven complex

While NJ Transit Route 552 provides hourly service to the Crest Haven complex, passengers must cross the Garden State Parkway on both inbound and outbound trips. Although the intersection is signalized, the environment is not pedestrian-friendly, and many of the offices within this facility are set back quite a distance from the road. The county has proposed building an entrance ramp from the facility to the northbound Parkway to accommodate buses and general traffic originating within the facility. This would allow northbound buses to travel through the complex and enter the Parkway directly without doubling back to the entrance. Southbound buses would retain their current alignment without serving the facility directly.

6.2.4 Improve transit connections to Ocean View

Stakeholders suggested providing local bus service along US 9 between Cape May Court House and Ocean View. Several local nursing homes are located in this corridor, and the lack of transit connections limits access for current and potential staff, many of whom live in the southern part of the county. One possibility would be to extend coverage on the Fare Free work bus north along US 9 from its current terminus in Cape May Court House. To support this modification without incurring additional resource requirements, it may be possible to reallocate resources from the work bus operating between Ocean City and Cape May Court House. Ridership has been low on this route. Alternatively, it may be desirable to restructure existing service between Cape May and Atlantic City into a local (via US 9) and an express (via the Garden State Parkway).

6.2.5 Extend service hours for Fare Free Transportation

Participants discussed increasing service hours on Fare Free Transportation to better serve work trips. Currently service is available five days a week from 8:00 a.m. until 4:00 p.m. This proposal would expand service hours on Fare-Free Transportation to better accommodate work schedules. Ideally, service expansion would follow the model in Cumberland County, operating from 6:00 a.m. to 12:00 midnight five days a week, with at least eight hours of Saturday service. These service hours could be phased in gradually, however, starting with a 12-hour shift, from 6:00 a.m. to 6:00 p.m., and adding service in three-hour increments as demand warrants. To maximize efficiency, feeder

service would be provided to existing fixed-route services when available; otherwise curb-to-curb service would be provided.

6.3 Cumberland County

Like the other counties in the SJTPO region, Cumberland County has a mix of urban and rural areas. The urbanized areas have a mix of fixed-route services, including several designed specifically for job-access transportation. Unlike the rest of the region, however, Cumberland County has already expanded the availability of its county-based demand-response services to address job-access needs. The proposed service recommendations focus on continuing efforts to expand demand-response service to address job-access needs and to improve transit connections between regional employment and population hubs. (See Figure 6-3.)

6.3.1 Extend service hours for CATS

CATS began to provide services for low-income and welfare-to-work participants in September 2001. Job access services are currently available from 6:00 a.m. to 6:00 p.m. Additional funding has been sought to extend weekday service until midnight and to add Saturday service as well. This service expansion will provide demand response employment transportation services for underserved areas of the county without interfering with CATS' traditional service base, transportation for seniors and persons with disabilities from 8:00 a.m. to 4:00 p.m.

6.3.2 Consider providing connections between Vineland and Bridgeton

No fixed-route services currently link these two population centers. Because the NJ 56 corridor is not densely populated, deviated fixed-route service is proposed. This would enable a transit vehicle to pick up and drop off passengers who live within a defined distance from the main route. This route would provide service to the employers on NJ 56 without affecting service quality on the existing Vineland Shuttle.

6.3.3 Consider providing connections between Salem and Bridgeton

Stakeholders expressed interest in a bus route connecting these cities via NJ 49. Like the Vineland-Bridgeton proposed route, discussed above, the corridor between these two cities is not densely populated. Should demand justify transit connections between these communities, deviated fixed-route service would provide the best match to the land-use characteristics of this corridor.

6.4 Salem County

While fixed-route transit service is generally available in the western part of Salem County, many rural parts have no service is available for the general public in many rural parts of the county. The proposed service improvements for Salem County focus on improving access for these rural residents and expanding service connections to the employment centers beyond the county borders. (See Figure 6-4.)

6.4.1 Extend service to Pureland

The Pureland Industrial Complex is located adjacent to Interstate 295 in Logan Township, Gloucester County, just north of the Salem County border. The park is home to over 100 employers, including several companies with 100 or more employees. By auto, the park is easily accessible from I-295 and U.S. Route 130.

NJ Transit serves Pureland with Route 402, which runs from Pennsville to Philadelphia. Route 402 travels through the park along High Hill Road. Passengers wishing to access Pureland employers must walk from this main road to their final destination. The route runs six northbound weekday trips from Pennsville to Philadelphia, and four on weekends. Moreover, the schedule was not suitable for employees on the many different shifts used by the companies at Pureland. This was true for most day shifts and is even more pronounced for workers on the second and third shifts and weekends.

In response to these concerns, NJ Transit modified Route 402 in conjunction with SCOT Route 468 to enhance early morning service to Pureland. NJT added one run to Route 402 from Pennsville. In addition, NJT adjusted the timing of the 6:10 a.m. Route 468 to allow a transfer with the 6:55 a.m. trip on Route 402 from Pennsville. Finally, NJT added an additional run to SCOT Route 468 to leave the Salem Shopping Center at 5:33 a.m. in order to meet the current 5:55 a.m. trip on Route 502. These changes added 77 minutes to service on SCOT 468.

6.4.2 Improve transit connections to job opportunities in Delaware

The State of Delaware is a major employment center for Salem County residents. Many clerical jobs are located in the City of Wilmington, and the Christiana area to the south is the site of many emerging manufacturing jobs.

While Salem County residents can commute to Delaware on SCOT Route 423, service is quite limited. The route provides only two round-trips a day and operates on weekdays only. To access Christiana and Newark, passengers would transfer from Route 423 to the appropriate DART FirstState bus. The limited service into Wilmington further affects the ability of individuals to reach other locations within the state.

Coordination between NJ Transit and DART FirstState is recommended to review the potential for providing better connections between Salem County and the job opportunities in the Wilmington/Christiana area. Suggested improvements include coordinated transit service between SCOT and DART, and coordinated fare collection agreements.

6.4.3 Provide paratransit to serve job access transportation

An alternative for consideration would be to provide county-based paratransit services for welfare clients and, potentially, other low-income individuals. Service hours could be designed to accommodate work schedules. Ideally, service availability could follow the model in Cumberland County, operating from 6:00 a.m. to 12:00 midnight five days a

week, with at least eight hours of Saturday service. These service hours could be phased in gradually, however, starting with a 12-hour shift, from 6:00 a.m. to 6:00 p.m., and adding service in three-hour increments as demand warrants.

6.4.4 Provide connections between Salem and Bridgeton

This proposed, discussed in Section 4.3.3, would respond to interest among stakeholders in Salem and Cumberland counties to connect these cities via NJ 49. Like the Vineland-Bridgeton proposed route, discussed above, the corridor between these two cities is not densely populated. Should demand justify transit connections between these communities, deviated fixed-route service would provide the best match to the land-use characteristics of this corridor.

6.5 Regional Programs

This analysis has identified the interdependence of the four counties that comprise the SJTPO region. In addition to the local service strategies described above, several regional programs have been recommended that address regional travel patterns.

6.5.1 Develop transportation partnerships

Because many residents cross county lines when traveling for work, personal business, or medical purposes, SJTPO should consider creating partnerships with regional and county-based transportation providers to foster more cross border transportation opportunities. Some examples of these partnerships include:

- Coordinating transportation services between Salem and Cumberland Counties to enable residents in the eastern part of Salem County (Elmer, Norma, Brotmanville) to access facilities and services available in Cumberland County. The major cities in Cumberland County, Vineland, Millville and Bridgeton, are closer to the Elmer area than are Salem, Pennsville, and Penns Grove in Salem County. It may be more convenient for residents of eastern Salem County to access jobs and services in Cumberland County than in Salem County.
- Coordinating transportation services between Atlantic and Cumberland Counties to enable residents in the western part of Atlantic County, including those in Buena Borough and Buena Vista Township, to access services in the Vineland area. As above, it may be easier for these residents to take advantage of the opportunities in the Vineland urban area than those available in the eastern parts of Atlantic County.
- Continuing to work with representatives of NJ Transit and Gloucester County to develop expanded transportation services to the Pureland Industrial Complex. Pureland employs significant numbers of workers from Salem and Cumberland Counties. A coordinated transportation plan among all three counties for getting workers to the jobs available in Pureland would be more effective than trying to develop a plan unilaterally.

- Work with representatives of the Greater Wildwood Chamber of Commerce to coordinate plans to improve access to the jobs and services in this community.
- Contact and discussions with transportation officials in the State of Delaware. The importance of the Wilmington and Christiana job centers should be a catalyst to developing coordinated, efficient transit service between Salem County and Delaware.

6.5.2 Introduce regional or county-based mobility manager

The review of regional transportation services and demographic patterns has underscored the regional nature of travel in the SJTPO region. As indicated above, there are numerous opportunities for inter-county (and in some cases interstate) coordination. A regional mobility manager would create a centralized point of coordination for these services. A mobility manager would be the primary point of contact for public transportation services in the SJTPO region, with responsibility for coordinating all transportation information and services. The mobility manager would serve as an information clearinghouse for all regional and county-based services, regardless of operator.

The mobility manager would facilitate coordination between the various services. For example, the mobility manager could coordinate with the local WFNJ office to provide transportation for individuals who find employment through the WFNJ office. The mobility manager would determine the best transportation option for that person, choosing between fixed-route bus service, feeder service, paratransit, or ridesharing.

Currently Cumberland County has a mobility manager to coordinate county-based transportation services. Expanding this function throughout the SJTPO region would require careful coordination among existing organizations.

6.5.3 Introduce ridesharing programs

Ridesharing may prove to be another suitable transportation solution for some individuals. Potential participants may include individuals who live in low-density parts of the region and those who work in areas with limited transit availability. Carpooling and vanpooling programs may both be suitable in the SJTPO region.

As indicated earlier, Cross County Connection provides ride-matching services for individuals who work in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties. Informal carpooling arrangements may be a good solution for individuals who work in the region's employment centers, particularly for those with nontraditional work shifts. The more formalized vanpooling programs may require a subsidy from an agency or employer. Again, CCC is a candidate for leading these activities in South Jersey.

6.5.4 Develop automobile ownership program

In the rural parts of the SJTPO region, residents tend to rely on private automobiles for mobility. Developing one or more programs to help welfare recipients, and other low-income individuals, acquire a car may be the best long-term solution for some situations. While a particular program is not recommended here, numerous models for such programs have been tested throughout the state and country. A mobility manager could develop and implement such a program on behalf of residents of the region.

7.0 Service Evaluation

The proposed services were evaluated using a combination of quantitative and qualitative measures. These measures included the following:

- **Service consumption** – Annual ridership
- **Implementation costs** – Annual operating costs and vehicle requirements
- **Service effectiveness** – Passengers per hour
- **Cost effectiveness** – Cost per passenger trip
- **Increased mobility** – Additional population and jobs with transportation access
- **Improved transit connections** – Facilitated transfer opportunities
- **Use of existing resources** – Minimizes additional capital and operating expenditures
- **Ease of implementation** – Institutional requirements and jurisdictional issues

Although these criteria may be applied to develop implementation priorities at any time, the proposals are presented without ranking at this time. Instead the service alternatives are intended to serve as a menu of alternatives for further review, refinement, and implementation in response to funding availability and evolving local and regional goals. Table 7-1 summarizes the service characteristics for each proposal, and Table 7-2 presents the results of this evaluation.

7.1 Ridership Estimation

A simplified technique was used to estimate ridership for the proposed service strategies. Because most of the alternatives are expected to operate in low-density environments, assumptions were made about ridership based on similar experience in other locations. All routes were assumed to serve welfare clients, as well as other transit-dependent residents including low-income individuals and those with disabilities. Deviated fixed-route services would provide service within a three-quarter mile zone of the route, allowing the operator to address ADA requirements for complementary paratransit

service. Demand-response services would provide curb-to-curb service, which would also comply with ADA requirements.

For deviated fixed-route services and route extensions, a market share was estimated based on the total number of residents living within three-quarters of a mile from the route. For routes operating in areas where welfare clients made up less than 0.5% of the population with access to the route, a daily transit market share of 0.5% was used. For routes operating in areas where welfare clients made up a larger percentage of the population, a market share of 0.75% was used to reflect the greater potential to serve transit dependent residents. A three-quarter mile buffer on each side of the route was used because this is the distance associated with requirements to provide complementary paratransit service under the Americans with Disabilities Act (ADA). Daily ridership was annualized using the following factors: 250 days for weekday-only routes, 300 days for Monday-through-Saturday services, and 50 days for Saturday-only extensions.

Ridership estimates for demand-response services assumed that three passengers per hour would use each route throughout the service day. These figures are conservative estimates based on industry-wide experience for similar paratransit services. The annualization factors applied to fixed routes were used for demand-response services as well.

Service productivity, or passengers per hour, was also calculated as a measure of transit service effectiveness. While this would allow comparisons among the fixed-route proposals, the demand-response services all assumed a consistent productivity of three passengers per hour.

7.2 Capital and Operating Costs

Operating costs were estimated at a rate of \$40 per hour, which was consistent with current service estimates in the region. This information, in turn, was used to calculate annual operating expenses and costs per trip. The analysis further estimated the number of vehicles required to operate the proposed services. While some services would be expected to take advantage of existing resources (for example, Saturday extensions of weekday routes), the vehicle estimates did not take those decisions into account. Instead, this was factored into the qualitative assessment.

7.3 Increased Mobility

For comparison purposes, the analysis identified improvements to regional mobility associated with each strategy, based on changes in access to transit services. For deviated fixed-route services and route extensions, the number of individuals or jobs located within a three-quarter mile buffer of the route was identified. For new demand-response services, the service area was assumed to be the county boundary for Cape May and Salem Counties. For Atlantic County the service area was defined as the portion of the county located west of the Garden State Parkway, consistent with current CARTS operations. To calculate the benefits from the extension of demand-response services, the

analysis netted out the number of jobs and individuals already located within three-quarters of a mile of existing services. For new Saturday services, the analysis assumed that half of the weekday individuals and jobs would be affected.

7.4 Improved Transit Connections

This assessment reviewed opportunities to take advantage of the existing transit network. Services that enabled passengers to make connections with available NJ Transit and local routes had the potential to serve locations well beyond their defined catchment area.

7.5 Use of Existing Resources

The evaluation identified proposals that used existing transit resources to expand service opportunities (by extending an existing route or increasing service hours). In addition to allowing transit operators to take advantage of their existing fleet, such strategies were likely to be easier to implement because the service infrastructure was already in place.

7.6 Ease of Implementation

This aspect of the assessment focused on institutional and jurisdictional issues. In general, modifications to existing routes or services (such as extended service hours) were considered easier to implement than entirely new routes. Further, services that crossed jurisdictions were considered more complex than those remaining within county boundaries because of the need for coordination among multiple government agencies.

8.0 Findings

This section provides a brief summary of the characteristics of each proposal to guide decision-makers as funding becomes available.

8.1 Atlantic County

Proposed service strategies for Atlantic County focused on the county's lower density communities.

8.1.1 Review potential alignments for Community Shuttle

- Proposal for shortened route provides better service in higher density segment.
- Consider replacing segment south of US 322 with extended CARTS service in this low-density area.

8.1.2 Extend CARTS service hours to better serve work trips

- Expands access to employment opportunities and regional destinations.
- Takes advantage of existing resources.

- Facilitates transfers to regional bus network.
- Candidate pilot program in Buena Borough and Buena Vista Township in conjunction with proposed modifications to Community Shuttle.
- Potential for coordination with Cumberland County services.

8.2 Cape May County

Recommendations for Cape May County focused on refining existing services to better address the needs of individuals accessing employment or the county's social services.

8.2.1 Increase bus service between Wildwood and Rio Grande

- Improves access to jobs in Wildwood's hospitality industry.
- Improves access to services in Rio Grande.
- Potential for public-private partnership.

8.2.2 Establish community bus service between Wildwood and Cape May

- Alternative to Wildwood – Rio Grande service.
- Enhances improves connections to employment opportunities and county services for low-income residents.
- Provides local alternative to regional NJ Transit service.

8.2.3 Improve pedestrian access to Crest Haven complex

- Improvements would enhance access for bus passengers using services in Crest Haven complex.
- Modifications to NJT 522 could increase travel time for northbound passengers.
- Proposal does not change access to southbound bus service, nor does it benefit pedestrians who are not accessing the complex on NJT 522.
- Proposal requires capital investment and interagency coordination.

8.2.4 Improve transit connections to Ocean View

- Proposal improves access for employees in Ocean View area, including those working at local nursing homes.

- Potential to reallocate resources from Fare Free work bus operating between Ocean City and Cape May Court House.

8.2.5 Extend service hours for Fare Free Transportation

- Expands access to employment opportunities and regional destinations.
- Takes advantage of existing resources.
- Facilitates transfers to regional bus network.

8.3 Cumberland County

Because Cumberland County has already expanded the availability of its county-based demand-response services to address job-access needs, proposals focused on continuing efforts to expand demand-response service to address job-access needs and to improve transit connections between regional employment and population hubs.

8.3.1 Extend service hours for CATS

- County has already applied for funding to support this proposal.

8.3.2 Provide connections between Vineland and Bridgeton

- Service would connect two population centers, but low-density development along NJ 56 might limit potential ridership.
- Potential to serve employers on NJ 56 without degrading service on Vineland Shuttle.
- Additional review is suggested to document demand for connections between these population centers.

8.3.3 Provide connections between Salem and Bridgeton

- Service would connect two population centers, but low-density development along NJ 49 might limit potential ridership.
- Additional review is suggested to document demand for connections between these population centers.

8.4 Salem County

The proposed service improvements for Salem County focus on improving access for the area's rural residents and expanding service connections to the employment centers beyond the county borders.

8.4.1 Extend service to Pureland

- NJ Transit has implemented service modifications designed to improve transit connections from Salem County

8.4.2 Improve transit connections to job opportunities in Delaware

- Continued coordination among transit operators in New Jersey and Delaware would be required.

8.4.3 Provide county-based paratransit to serve job access transportation

- Expands access to employment opportunities and regional destinations.
- Takes advantage of existing resources.
- Facilitates transfers to regional bus network.

8.4.4 Provide connections between Salem and Bridgeton

- Service would connect two population centers, but low-density development along NJ 49 might limit potential ridership.
- Additional review is suggested to document demand for connections between these population centers.

8.5 Regional Strategies

This analysis has identified the interdependence of the four counties that comprise the SJTPO region. For this reason, a number of regional strategies were proposed.

8.5.1 Develop regional partnerships

This study has identified several opportunities for inter-county (and in some cases interstate) coordination.

- Regional solutions can contribute to a more seamless transportation environment.
- Public-private partnerships can build support for transit expansion.
- Additional inter-jurisdictional coordination requirements can complicate planning, funding, and operating requirements.

8.5.2 Introduce regional or county-based mobility manager

A regional mobility manager would create a centralized point of coordination for these services. A mobility manager would be the primary point of contact for public

transportation services in the SJTPO region, with responsibility for coordinating all transportation information and services.

- Serve as an information clearinghouse for all regional and county-based services, regardless of operator.
- Helps coordinate transportation resources across jurisdictional boundaries.
- Provides additional support to county transportation operators.
- Requires additional staff resources.
- Establishing regional coordinator would require cooperation among multiple jurisdictions and agencies.
- May require coordination with existing mobility manager services in Cumberland County.

8.5.3 Introduce ridesharing programs

Ridesharing may prove to be another suitable transportation solution for some individuals.

- Well-suited for individuals who live in low-density parts of the region and those who work in areas with limited transit availability.
- Cross County Connection can provide ride-matching services.
- May require subsidy from employers or agencies.

8.5.4 Develop automobile purchase program

Developing one or more programs to help welfare recipients, and other low-income individuals, acquire a car may be the best long-term solution for some situations.

- Well-suited for rural areas.
- May help individuals build credit ratings.
- Requires substantial staff support.
- May facilitate public-private partnerships.

8.6 Summary

These proposals comprise elements of the updated SJTPO Job Access and Reverse Commute Plan. They were designed to respond to identified transportation needs for WFNJ/TANF clients, along with other transit-dependent residents of the four-county

South Jersey region. As such, they constitute a menu of service strategies for implementation as local and regional priorities evolve and as funding sources become available.