GO
Coordinated Human Services Transportation Plan
FARTHER

2017

NJTPA
NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

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Edward J. Bloustein School of Planning and Public Policy

GO FARTHER
Coordinated Human Services Transportation Plan

NJTPA

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ACKNOWLEDGEMENTS

Advisory Committee

- Bergen County Disability Services
- Bergen County Workforce Development Board
- Cross County Connection TMA
- DAWN Center for Independent Living (CIL)
- Greater Mercer TMA
- HART TMA
- Hudson TMA
- Keep Middlesex Moving TMA
- Meadowlink TMA (EZ Ride)
- Monmouth County Division of Planning
- Morris County Engineering and Transportation
- Newark Housing Authority
- NJ Association of County Disability Services
- NJ Association of People Supporting Employment (NJ APSE)
- NJ Commission for the Blind and Visually Impaired
- NJ Department of Labor & Workforce Development
- NJ Department of Military and Veterans Affairs
- NJ Foundation for Aging
- NJ TRANSIT
- NJ Council on Special Transportation (COST)
- NJ Developmental Disabilities Council
- NJ Department of Transportation
- Passaic County Paratransit
- RideWise TMA
- Somerset County Planning Board
- Somerset County Department of Human Services
- Thomas Edison State University
- TransOptions TMA
- VA New Jersey Healthcare System
- Warren County Department of Human Services

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EXECUTIVE SUMMARY

This Coordinated Human Services Transportation Plan (CHSTP) for the NJTPA region offers comprehensive recommendations for meeting the transportation needs of four target populations: persons age 65+, low-income persons, persons with disabilities, and veterans. It presents 33 strategies across nine areas of concern designed to address the existing and emerging needs of the approximately 1 million transportation disadvantaged residents within the 13-county NJTPA region, which spans 4,200 square miles and includes a total population of over 6.7 million people. The CHSTP updates the previous plan, adopted in 2008, and was developed through a local planning process that included the transportation providers (public, private and non-profit), human services providers, and members of the public.

Human Service Transportation planning, done well, can have a profound effect on the lives of the passengers it serves. The right systems, services and policies can facilitate access to employment, education, social supports and personal independence. Lack of coordination, poor communication, and non-integrated service areas can leave passengers frustrated, physically stranded, and socially and economically isolated. Safe mobility underpins independence, self-determination and dignity.

To provide such safe mobility and best meet the needs of the region and its residents, ample opportunity was afforded to the public and regional organizations to participate in shaping this update of the CHSTP. The region's Transportation Management Associations (TMAs), working in coordination with NJTPA, engaged with stakeholders through focus groups, surveys, and community planning sessions; in total, nearly 5,000 people representing the four target populations provided input through the public outreach effort. An Advisory Committee of informed stakeholders was also formed to offer input and give feedback at each phase of the plan development process.

The CHSTP includes an examination of existing plans, reports, laws and regulations to inventory how and where services are provided to the transportation disadvantaged populations. In addition, data from various sources were analyzed to profile the travel patterns of the disadvantaged populations. The CHSTP culminates with the development of strategies for addressing the identified needs. These strategies focus on improving access to destinations relevant to the target populations such as human service agencies, medical centers, local service providers, employment centers and One-Stop Career Centers; leveraging newly emerging technologies to enhance the mobility of targeted populations; and incorporating innovative best practices developed nationally and within New Jersey.

Strategies designed to enhance mobility, reduce service gaps, and respond to unmet needs are presented in terms of the needs they can address, the persons they can benefit, the geographic coverage they can provide, the variety of population groups they can affect, the resources involved, the ease of implementation, the public support they receive, and the availability of funding.

Service gaps and unmet needs in transportation services are grouped by types:

- **Spatial.** Gaps in the transportation network exist when locations and/or destinations are not served.

- **Temporal.** Gaps occur when service is not available at the times or frequency needed by consumers.

- **Institutional.** Gaps exist when the rules, regulations, and/or requirements that govern transportation service provision create barriers that limit mobility.

- **Infrastructure.** Gaps exist when conditions in the physical network or in technological infrastructure prevent or limit individuals from accessing available transportation options.

- **Awareness.** Gaps occur when providers and consumers lack information.

Strategies and Recommended Activities

The CHSTP articulates nine strategic themes that address the transportation needs of CHSTP target populations. The strategic themes emerged from public engagement activities, input from the Advisory Committee and experienced transit users, and review of county human services transportation plans as well as innovative practices.

The nine themes are presented below.

- **Increasing Auto Connections with Assistance** – Involves the use of automobiles with extra help from drivers to connect older adults with their desired destinations.

- **Reducing Financial Barriers** - Increasing access to a variety of modes of transportation that are typically unavailable to low-income populations due to financial constraints.

- **Coordinating Regional Destinations** - Maximizing resources and increasing efficiency by identifying common destinations of the target populations.

- **Improving Customer Experience** - Providing training to operators and services to customers that promote human dignity and customer satisfaction.

- **Enhancing Communication** - Strengthening communication between transportation providers and passengers; providing information, assistance, and training to increase awareness of available services.

- **Infrastructure Improvements** – Increasing vehicle accessibility and removing barriers in the physical landscape that impede access to transit options.

- **Enhancing and Expanding Service** – Expanding effective models and creating new connections to targeted locations using customer input.

- **Promoting Mobility on Demand** – Capitalizing on transportation network companies and their potential ability to offer accessible and flexible on demand service that can work in tandem with fixed route transit.

- **Incentivizing Operational Coordination** - Reducing redundancies in service and optimizing existing resources through interagency coordination.

Implementation

This report concludes with a list of 33 recommended activities designed to advance each of the nine strategic themes. The activities are categorized into short and mid-range (5+ years) timeframes and identify potential implementation partners and funding/resources. Some recommended activities build on existing programs, projects, and resources in the NJTPA region and are readily implementable. Examples of innovative strategies and actions being proposed in this plan include the following:

Concierge ride hailing scheduling without a smart phone – Older adults and persons with disabilities request rides through a concierge with a Transportation Network Company, such as UBER or Lyft. This bridges the technology gap experienced by many older adults and provides flexible service, as it does not require advance reservations. This service currently exists in the region, and could be expanded in the near term with support from foundations, human service non-profits, medical centers and others.

Universal payment/pre-paid fare card - This program effectively eliminates the need for understanding a variety of fare systems by streamlining the fare payment process and transfers across a region. One example is the LA Metro TAP Card, accepted by 25 different transit agencies in the Greater Los Angeles region. A similar program could integrate NJ TRANSIT bus, rail and light rail, PATH, and NYC MTA fares, and include all passengers -- within the general public and CHSTP target populations. Implementation would take a number of years, but could start with fare integration within NJ TRANSIT.

"Simply Get There" One-Click Site - This program provides a single website for information and trip planning for all riders. In Atlanta, Simplygetthere.org is a one-click site for customers to plan their trips through driving, biking, specialized services, vehicles for hire, and public transit. First piloted in 2015, the program provides a centralized online resource for all modes of transportation in the

Atlanta metro area, with a specific emphasis on options for individuals with disabilities, chronic medical conditions, lower income individuals, older adults, and veterans. Information from multiple providers and sources within the NJTPA region could be woven together to create a similar tool in a relatively short timeframe.

Safe Streets for Seniors and "City Bench" – These programs seek to provide a safe environment for seniors to walk in their communities and better access transit. In New York City, pedestrian projects to improve safety include intersection enhancements, additional traffic signals, curb extensions and new pedestrian islands. "City Bench" increases the amount of public seating with input from the general public -- flagging locations within a quarter mile from a hospital, community health center, or municipal facility. These types of programs could complement existing Complete Streets efforts across the region and could be pursued in the short-term.

Late night job access - Helping workers access jobs during the "third shift" - this program creatively addresses the needs of workers with nontraditional schedules and helps close first-mile, last-mile service gaps. An example in the NJTPA region is the Essex Night Owl, which moves commuters between their homes and Newark Penn Station from 1 AM to 5 AM , one of the largest transit hubs in the region. The program is operated by Meadowlink TMA with accessible vehicles and provides 450 rides per night. Priority is given to welfare or former welfare clients, or other low income, transit dependent individuals.

There are numerous other strategies and actions in the plan, which are prioritized to develop specific projects for future implementation, based on project feasibility and potential funding sources when available. Detailed profiles of innovative strategies are presented as examples within each strategic theme and highlight promising practices both within New Jersey and nationally.

CHAPTER 1

INTRODUCTION

INTRODUCTION

Human Service Transportation planning, done well, can have a profound effect on the lives of the passengers it serves. The right systems, services and policies can facilitate access to employment, education, social supports and personal independence. Lack of coordination, poor communication, and non-integrated service areas can leave passengers frustrated, physically stranded, and socially and economically isolated. Safe mobility underpins independence, self-determination and dignity. This Regional Coordinated Human Services Transportation Plan (CHSTP) provides an opportunity to use planning expertise to bring about meaningful quality of life improvements for seniors, people with disabilities, veterans and low income persons in our region.

The CHSTP documents the challenges of the passengers who use human service transportation systems; it is built upon a foundation of effective planning techniques: GIS, mapping, surveys, focus groups, plan review, syntheses and forecasting. These approaches were bolstered by a robust outreach effort that solicited input from nearly 5,000 people whose everyday lives depend upon the vans, buses, trains, paratransit vehicles, and dial-a-ride programs – among other transport modes – deployed within the region. The CHSTP seeks to consider and address the diverse set of perspectives expressed by the affected targeted populations and informed stakeholder organizations throughout the plan development process.

People with special transportation needs live throughout the NJTPA region in urban centers, in suburban landscapes, and in rural areas. For those without the access or availability of a car, viable transportation options must exist in order to satisfy the basic demands of life safely and reliably. Being able to go about one's daily life includes making trips to and from one's home on a regular basis for a wide variety of reasons. People may make trips every day, week or only occasionally. Trips may be to work, training, school or volunteering, for personal business, for medical appointments, to socialize with family or friends, to attend worship, or for pleasure. Destinations sought may include: health care facilities, colleges & universities, government offices, senior & nutrition centers, employment-related facilities (One-Stop Centers or job locations), or places that enhance one's quality of life (parks, theaters, etc.). A household or family without a car may face economic hardship without a reliable way to get to a One-Stop Center, employment, social service appointments, or even a food bank on a regular basis. A person whose mobility prevents him/her from driving may still need to get to work and other destinations.

Of particular concern for the CHSTP are regional generators of trips. While these include many locations within a county, such as county offices, county welfare agencies, and the NJ One-Stop Centers, regional destinations generate travel demand that crosses county boundaries, such as hospitals (including those operated by the Veterans Administration), major shopping centers (malls), and institutions of higher learning. Detailed information about regional trip generators considered within the plan can found in *Technical Memorandum #1, Assess Services and Conditions*.

Access to reliable transportation, whether via a personal vehicle, public transit, or community transportation, allows members of each of the targeted population to reach services necessary to fulfill their daily needs, pursue economic and personal goals, secure health services,

and make use of programs offered by community organizations and government agencies. Ensuring the mobility of these targeted populations allows them to not only access services and supports, but also to participate and contribute more meaningfully within their communities.

The federal government has recognized the importance of coordination of human service transportation over several rounds of major federal transportation legislation and most recently in the Fixing America's Surface Transportation (FAST) Act. Transportation projects funded under Section 5310, which is designed to enhance the mobility of seniors and people with disabilities, must be identified through a local planning process that includes transportation providers (public, private and non-profit), human services providers, and members of the public. With this in mind, the Regional CHSTP identifies the transportation needs of transportation disadvantaged individuals (older adults, low-income persons, people with disabilities and veterans) in the region. The plan provides strategies for meeting these needs and prioritizes transportation services for funding and implementation. The CHSTP maps a course for improving coordination between transportation systems and providers and strengthening transportation services for those with special needs.

NJTPA last undertook this task in 2008, resulting in the 2008 NJTPA *North Jersey Regional Coordinated Human Services Transportation Plan (2008 CHSTP)*. This 2017 document serves as an update to the 2008 the Regional Coordinated Human Services Transportation Plan and offers a comprehensive strategy to meet the transportation needs of older adults, low-income persons, persons with disabilities, and veterans. Following an extensive public outreach process and intensive coordination between transit providers and stakeholders in the region, this plan recommends strategies to meet those needs.

The 2017 Regional CHSTP builds upon the customer's perspective, and is informed by the experiences of users: families who are concerned about their child with a disability transitioning out of high school, seniors who are contemplating life without driving, and One-Stop clients searching for a good job along a transit route, among many others. The Regional CHSTP incorporates the assets of each of the 13 NJTPA counties to create a plan with these passengers, not for them, building upon the NJTPA 2045 Regional Transportation Plan's goals of improving quality of life, providing a range of travel options, and connecting all residents with opportunities regardless of disability or income.

THE PLANNING PROCESS

THE PLANNING PROCESS

There were three major components in the planning effort: a review of current conditions (plans, reports and data), public engagement, and needs identification and strategy development. Each is described briefly throughout the chapter.

CURRENT CONDITIONS

Review of Plans and Reports

To put the 2017 update into context, a thorough assessment of the regulatory framework and the economic and social conditions that can affect the Coordinated Human Service Transportation Plan was conducted. The task involved the review of federal and state regulations and funding, existing services, county human services transportation plans, the 2008 Regional Coordinated Human Services Plan, and prior studies completed by the Alan M. Voorhees Transportation Center to establish additional context in the North Jersey region.

Federal regulations were reviewed including the Americans with Disabilities Act (ADA), Human Service Transportation Coordination, United We Ride, and the ADA Amendment Act (ADAAA). Important federal funding programs were also taken into account, including SAFETEA-LU, MAP-21, FAST Act and prior programs such as JARC (Section 5316) and the New Freedom Initiative Program (Section 5317). In addition to 5310 funding, the team also examined legislation around Urban Area Formula Grants (Section 5307), Rural Transportation Assistance Program (Section 5311), and CMAQ as potential funding sources. The team also examined the Senior Citizen and Disabled Resident Transportation Assistance Program (SCDRTAP), which is supported by Casino Revenue funding (and has been decreasing since 2007).

During this phase, existing services including fixed route, demand-response, and deviated-route, ride hailing, ridesharing, and volunteer programs were examined and the 13 county plans were reviewed.

Data Review

Data profiling the travel patterns of the disadvantaged populations were reviewed and analyzed, comparing their travel patterns with that of the general population, and gaps were identified in the available transportation services. These data were used to anticipate where future growth of the targeted populations is likely to occur, and to project changes in future demand.

To have more accurate population estimates and forecasts of the various disadvantaged populations the team reviewed area-specific forecasts made by the NJTPA, the NJ Department of Labor and NJTPA's sub-regions. The analysis of inter-county, intra-county and regional services and needs was reviewed by the Transportation Management Associations (TMAs) as part of the community and stakeholder outreach process, and then used to inform demand forecasts and help identify anticipated service gaps during the plan period.
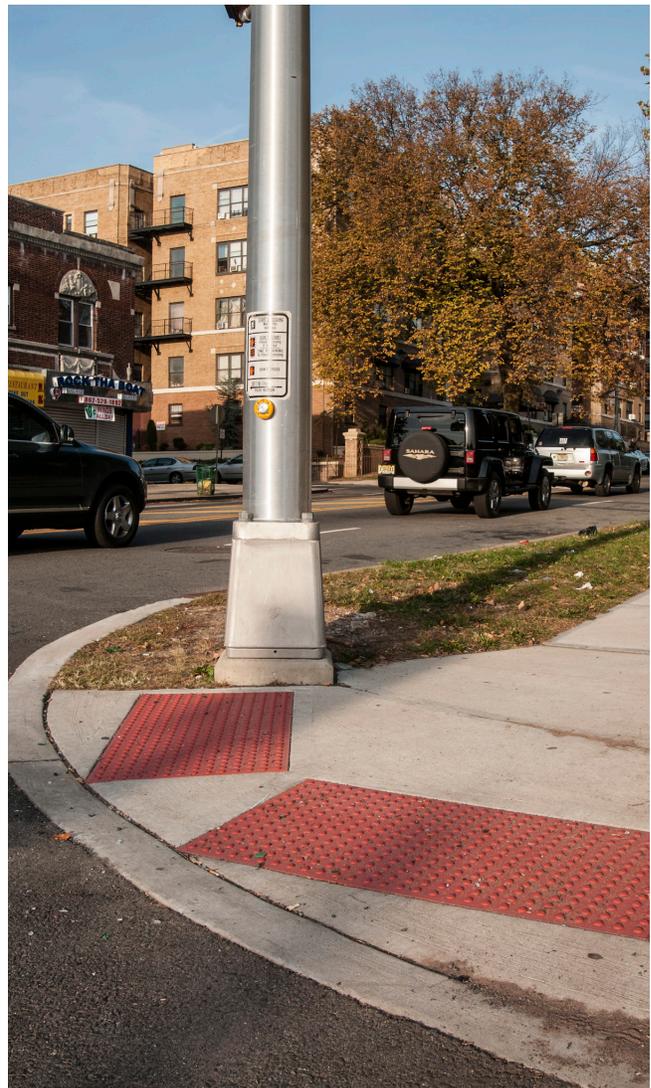
PUBLIC ENGAGEMENT

Human services transportation challenges vary widely among the people who rely upon a network of vans, buses, trains, paratransit vehicles, and dial-a-ride programs to accomplish their everyday tasks. One user may be a frail, elderly woman trying to get to an affordable grocery store, another a veteran who needs to travel to a Veterans Affairs hospital located several counties away, another a single mother who works night shift at a minimum wage job, a patient trying to get to a dialysis appointment, or a wheelchair user who visits her sister on the weekend. A hazardous sidewalk, a non-functioning wheelchair lift, an unhelpful driver, or a confusing schedule could mean losing a job, going without medication, or missing out on time with loved ones.

For the 2017 CHSTP update, NJTPA determined that better understanding these challenges, considerations, and needs would require significant outreach and engagement with stakeholders. While public participation in the CHSTP process is a federal requirement for Section 5310 program funding, NJTPA and the TMAs undertook a robust program of activities that significantly expanded on efforts undertaken in previous NJTPA CHSTP efforts.

A Public Outreach Plan (POP) was developed that provided a systematic and strategic approach for reaching diverse groups of people and interests throughout the region. The primary goals of the POP were to provide timely information and updates throughout the project and to elicit input from a diverse community of people for incorporation into the plan.

After completing customized training on the outreach process, NJTPA and TMA staff members worked collaboratively to reach members of CHSTP target populations and ensure that seniors, individuals with disabilities, representatives of public, private, and non-profit transportation and human services providers, workforce sector representatives, elected officials, key stakeholders, and other members of the public had ample opportunity to participate in the update of the regional CHSTP.

To fully explore the concerns and needs of the CHSTP target populations, four types of public engagement activities were undertaken: focus groups, a survey, community planning sessions, and an Advisory Committee consisting of a broad set of stakeholders. Measurable goals were established to guide efforts to successfully engage the diverse CHSTP target populations, and they were exceeded; nearly 5,000 people were reached through the four components of the CHSTP public engagement effort.

NEEDS IDENTIFICATION AND STRATEGIES

Following the completion of the current conditions analysis and key elements of the public engagement effort, the study team identified needs among transportation disadvantaged populations in the region. Needs are frequently expressed as poor quality of services and infrastructure or the absence of a desired attribute such as inter-county trips; travel to "hub areas" that provide access to multiple services; evening and weekend mobility; enhanced customer experience; better information; and increased overall accessibility. These needs were defined and organized into several categories - space, time, institutional, infrastructure and awareness - that were shared and affirmed by the Advisory Committee.

Nine strategic themes emerged and 33 specific strategies were developed in response to these identified needs. The strategies capitalize on existing assets within the region, highlight opportunities to enhance and extend existing programs, offer possibilities for replication and adapting best practices, and seek to capitalize upon emerging technologies that could be developed to provide additional mobility and access for the one million transportation disadvantaged people within the NJTPA region.
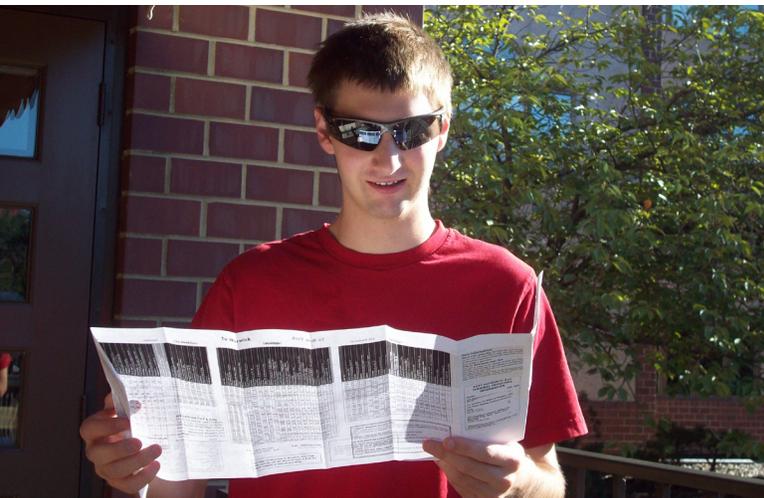
CHAPTER

3

Location 3

FUNDING, COORDINATION & SERVICE INVENTORY

FUNDING, COORDINATION & SERVICE INVENTORY

To help inform the CHSTP, federal programs and funding for human services transportation and state coordination initiatives were examined; 13 county human services transportation plans within the NJTPA service area were analyzed, and an inventory was created to document the available transit and transportation services serving CHSTP Populations.

FUNDING SOURCES

This section identifies key sources of funding available for transportation provision to the target populations of the CHSTP plan. These funding sources provide opportunities to coordinate planning, provide additional training, explore new technologies, and expand available transportation to meet the needs of older adults, veterans, low-income individuals, and persons with disabilities in the NJTPA region. A full description of federal and state funding opportunities can be found in *Technical Memorandum #1, Assess Services and Conditions*.

Current Federal Funding Programs

Enhanced Mobility of Seniors & Individuals with Disabilities Program (Section 5310)

The Section 5310 Program seeks to improve mobility for seniors and individuals with disabilities by removing barriers to transportation service and by expanding transportation mobility options. Projects eligible for funding include capital investment and investment that supports complementary paratransit services beyond the ADA. Funds may be used for projects that exceed ADA requirements including public transportation projects that improve access to fixed route service and decrease reliance on complementary paratransit. Funds are apportioned to each state based on the number of older adults and individuals with disabilities. The federal allocation of Section 5310 funds to New Jersey in FY16 totaled $7.13 million.

Urbanized Area Formula (Section 5307) & Growing States/High Density Formula (Section 5340) Grants

The Urbanized Area Formula Funding (Section 5307) program makes resources available to urbanized areas (Census designated areas with a population of 50,000 or more) and to governors for transit capital and operating assistance, and for transportation related planning in urbanized areas. Activities previously funded under the JARC and New Freedom program are now funded through Urbanized Area Formula grants, and through its sister-program, the Rural Transportation Assistance Program (Section 5311 – see below). Eligible activities include: planning of transit projects or related studies, capital investments for bus and bus-related activities, crime prevention/security and maintenance of passenger facilities, and capital investments for fixed guideway systems. The Growing States and High Density States Formula Program (Section 5340) was established by SAFETEA-LU to apportion additional funds to the Urbanized Area Formula and Rural Area Formula programs. The federal allocation of Section 5307 and Section 5340 funds to New Jersey in FY16 was $396 million.

Rural Transportation Assistance Program (Section 5311)

The Rural Transportation Assistance Program provides capital, planning, and operating assistance to states and federally recognized Indian tribes to support public transportation in rural areas with populations less than 50,000, where many residents often rely on public transit to reach their destinations. It also provides funding for state and national training and technical assistance through the Rural Transportation Assistance Program. Eligible activities include planning, capital, operating, job access and reverse commute projects, and the acquisition of public transportation services. Recipients may now use up to 20 percent of their 5311 allocation (previously 10 percent) for the operation of paratransit service, if certain conditions are met. The FY 2016 allocation to New Jersey for Rural apportionments totaled $3.98 million.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding supports surface transportation projects and related efforts to promote air quality improvements and congestion relief. Funds may be used for a transportation project or program that is likely to contribute to the attainment or maintenance of a national ambient air quality standard, with a high level of effectiveness in reducing air pollution, and that is included in the MPO's current transportation plan and transportation improvement program (TIP). NJTPA's Regional/Local CMAQ Initiatives Programs are supported by federal CMAQ funds allocated to northern New Jersey. FY15 Local CMAQ Initiatives allocation to NJTPA was $5 million.

State Programs

A significant source of funding for New Jersey county community transportation providers is the Senior Citizen and Disabled Resident Transportation Assistance Program (SCDRTAP). Enacted in 1984, the SCDRTAP program is funded with an eight percent tax on New Jersey casino revenue. Seven and a half percent of casino revenue funds were earmarked for transportation for persons with disability and the elderly. Approximately 85 percent of that funding is allocated by NJ TRANSIT to the state's 21 counties using a standardized formula, with the remaining 15 percent devoted to NJ TRANSIT program administration and accessibility projects. The SCDRTAP program quickly became the largest single source of funding for county community transportation agencies, yielding $3 million in 1984 its first year. By fiscal year 2008, the program had yielded close to $37 million.

However, funding from the SCDRTAP program has declined since 2007, first as a result of the national recession and second through increasing competition from gaming in nearby states. Since 2007 transportation funds from this source have decreased by nearly 50 percent to $18.3 million in Fiscal Year 2015.
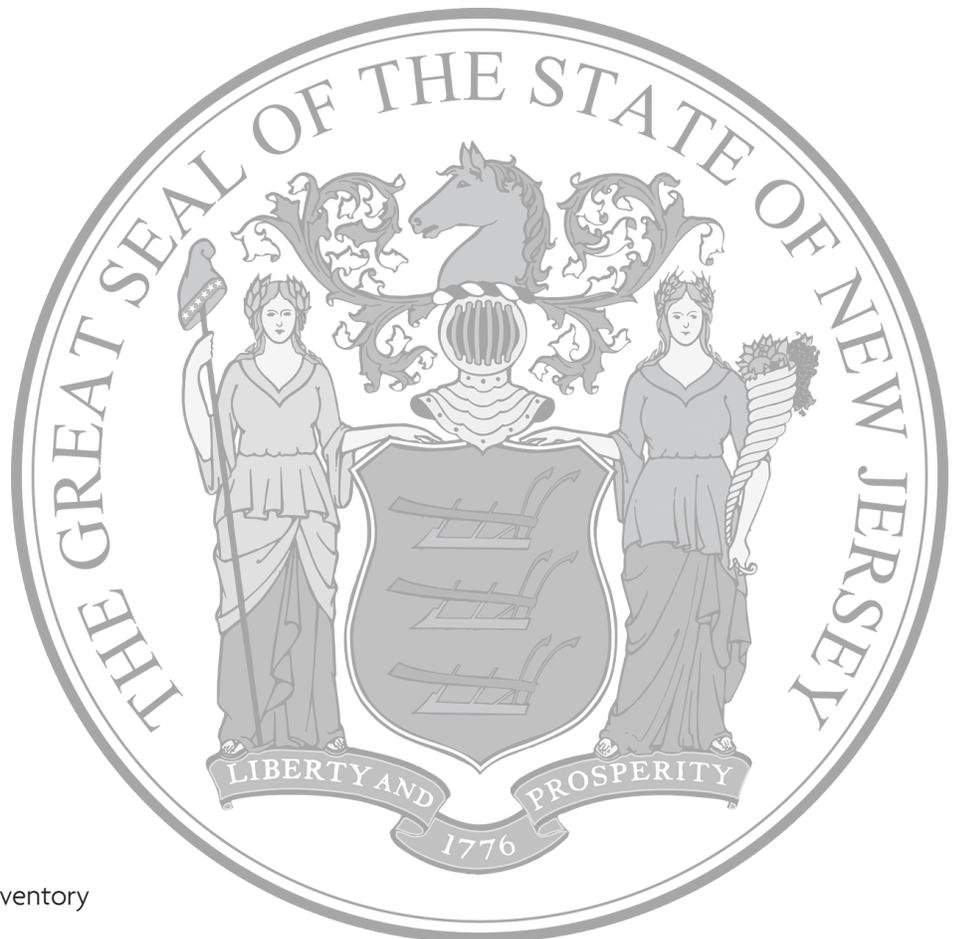
COORDINATION

NJCAM

The New Jersey Council on Access and Mobility Working Group (NJCAM) is an informal network of human services and transportation managers and serves as a coordinating body to identify emerging human services transportation needs and facilitate more efficient human services transportation provision. First established by Governor Corzine in 2007 by Executive Order 87, NJCAM was formally terminated in September 2010 by Executive Order 40.[1] However, a voluntary NJCAM working group continues to meets quarterly with staff support from NJ TRANSIT.

NJ COST

The New Jersey Council on Special Transportation (NJ COST), a statewide advocacy association formed in 1981, offers information and support for community-based transit services. NJ COST provides a forum for the exchange of transportation knowledge and experience throughout the transportation community. NJ COST seeks information and advice from qualified experts to share with members as well as promotes activities to enhance the coordination of transportation services provided by local, municipal, county, regional, and state entities. NJ COST provides information, education, and training to its members, state legislators and government officials.

County Plans

The 2004 Executive Order 13330 – Human Service Transportation Coordination called for federal agencies to improve coordination of transportation services for older adults, persons with disabilities, and low income individuals. This focus on coordination was reflected in the federal transportation appropriations bill, SAFETEA-LU, which mandated local coordination efforts. To meet this directive, each of the 13 counties in the NJTPA region completed its own Human Service Transportation Coordination Plan. These plans documented the transportation needs of their residents with special transportation needs and proposed workable solutions to address these needs. These plans were initially completed in 2007-2008 and have been subsequently updated.

County Processes and Involvement

Much like the tasks contributing to the current NJTPA Regional CHSTP effort, counties undertook public engagement and documentation activities to: 1) inventory available transportation services and identify weaknesses, gaps, and redundancies in service; 2) document and assess the transportation needs of the transportation disadvantaged populations living in each county; and 3) make recommendations to address and to meet identified need in a more effective and efficient manner. To inform this process, counties surveyed stakeholders representing other county offices, local and state government, private nonprofit human service providers, and private and for-profit transportation providers and developed local coordination plans.

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1   Corzine, J. S. (2007). State of New Jersey Executive Order 87. October 26, 2007.

Christie, C. (2010). State of New Jersey Executive Order 40. September 9, 2010.

Needs Identified in County Plans (Service Gaps)

All individuals require mobility that allows them to meet their needs within their own circumstances. The transportation needs of persons with disabilities, older adults, veterans, and people with low income are not dissimilar to other populations. To this end, the county plans suggest transportation services available to the region's special need transportation populations should be:

- *Accessible.* Provide mobility to all people and maximize the use of existing facilities by multiple modes of transportation.

- *Convenient.* Fit well with its users' needs; allow them to participate in activities, and to execute their plans.

- *Well-Connected.* Go where people need and want to go.

- *Reliable.* Service arrives when scheduled and delivers people to their destinations. The service must be resilient so that needs may be satisfied when part of the system is unavailable.

- *Safe and Secure.* Pose little danger to its users, and users should expect to travel and arrive safely at their destination.

- *Affordable.* Priced so that users may utilize it to the extent they need.

- *Timely.* Frequency and duration should not cause an undue burden upon its users.

Typology of Service and Relationship to Place

A review of the county plans suggests three sets of conditions of service that exist in the NJTPA regions:

- *"Transit-rich"* model. Defined by a high level of public transportation service where most of the county is served by NJ TRANSIT (and therefore Access Link ADA Paratransit). County-operated demand response paratransit and other transportation providers supplement services.

- *"Mixed-transit"* model. Public transportation services are typically available in well-populated areas; however, portions of county are not served by NJ TRANSIT. Public transportation services are supplemented by deviated fixed route transportation and demand response paratransit operated by the county and/or other providers. Other transportation providers may also deliver services.

- *"Limited or no transit"* model. These counties have little or no NJ TRANSIT service. County-operated deviated fixed route transportation and demand response paratransit may operate on a limited basis. Other transportation providers may also deliver services.

This typology allows for a better understanding of the conditions that exist in NJTPA region as similarly situated counties often face the same set of challenges.

Identified Service Needs by Type

Gaps in transportation services can be grouped by types:

- **Spatial.** Gaps in the transportation network exist when locations and/or destinations are not served.
- **Temporal.** Gaps occur when service is not available at the times or frequency needed by consumers.
- **Institutional.** Gaps exist when the rules, regulations, and/or requirements that govern transportation service provision create barriers that limit mobility.
- **Infrastructure.** Gaps exist when conditions in the physical network or in technological infrastructure prevent or limit individuals from accessing available transportation options.
- **Awareness.** Gaps occur when providers and consumers lack information.

From this comparison of identified need certain patterns emerge and indicate that consistent needs exist across many of the counties in the NJTPA region:

- The desire to serve a larger geographic region is universal. Counties with comparatively robust public transportation identify underserved and/or isolated portions of their territories that would benefit from service expansion. Counties where service is less prevalent or that lack service, seek these services. All county plans recognize unfulfilled demand for trips beyond county borders. One frequent need that often requires travel outside of the county is the transportation of veterans to/from the VA hospitals in East Orange and Lyons.

- A desire to expand the hours and frequency of service is also widespread. Serving the needs of second and third shift transportation disadvantaged workers is identified in nine of the county plans.[2] Limited or non-existent evening and weekend transportation affects job seekers as well as the quality of life of all populations of interest.

- The county plans frequently cite the need to improve coordination and collaboration among the disparate transportation providers. Specific relationships that hold potential for improving the provision of transportation services include better coordination between NJ TRANSIT and the county transportation systems as well as between county services and municipal services, such Dial-a-Ride and locally provided senior transportation.

- A consistent need to improve awareness of existing services among the targeted population and the public as well as nonprofit human services providers and other stakeholders. Several counties cited a need to improve the marketing of current services.

A detailed account of needs identified in the county plans, and strategies proposed to address these needs, can be found in *Technical Memorandum #1, Assess Services and Conditions*.

Assessing Service Redundancies

Resilient systems — such as, ideally, the system serving the special transportation needs of NJTPA region residents — require some level of redundancy. However, redundancy may call into question the efficient use of resources, especially when multiple transportation services operate in the same geographic area serving similar populations and destinations. Identifying high-frequency and/or highly-desired destinations is one means of understanding the overlapping transportation needs and resources required to meet them.

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2   Counties that identify need for "shift" workers: Bergen, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Somerset, Sussex, and Union.

SERVICE INVENTORY

This section provides an overview of existing public transportation services and human service transportation programs within the NJTPA region. Services are presented in three categories: fixed-route services, paratransit services, and other service providers. NJ TRANSIT is the primary public transportation provider operating in the NJTPA region. The nation's third largest provider, NJ TRANSIT, operates 191 bus routes, nine rail lines, two light rail lines, and ADA Paratransit (Access Link) in the region. NJ TRANSIT's service is particularly dense in the northern, eastern and central portions of the region and is complemented by other providers such as PATH, ferries, county and municipal services, and non-profit agencies. Additional service is provided by direct providers such as taxis, ridesharing services, ride hailing, and non-profit car services that may be staffed by volunteers or paid drivers.

Fixed Route Service

NJ TRANSIT

NJ TRANSIT operates bus, rail, and light rail in much of the NJTPA region. The NJ TRANSIT bus fleet services 12 of the 13 NJTPA counties with 1,870 vehicles, each accessible via either bus lifts or ramps. All buses are equipped with mobility device securement systems. Bus operators are trained on ADA compliance and are required to provide assistance when securing mobile devices. Buses are also equipped with public address systems and priority seating designated nearest the front door. When traveling in or out of the Port Authority Bus Terminal in New York City passengers are required to call for the location of accessible boarding and arrival gates. Recent renovations to the George Washington Bridge Bus Station resulted in all bus gates meeting ADA requirements, so passengers no longer need to make prior arrangements with their carrier.

Rail operations focus on New Jersey's outlying communities and many stations are accessible by elevator, ramp, mini high-level platforms, or portable lift. Accessible stations are denoted on the NJ TRANSIT Rail System map (*http://www.njtransit.com/pdf/rail/Rail_System_Map.pdf*). Accessible features on NJ TRANSIT Rail includes onboard ticket purchases, detectable warning edges, bridge plates to close the gap between platform and train, on board announcements, reserved seating near train entrances, and accessible parking at station parking facilities. As of November 2016, there were 79 accessible commuter rail stations within the NJ TRANSIT system.

NJ TRANSIT operates two light rail systems in the NJTPA region: the Hudson-Bergen Light Rail and the Newark Light Rail. The Hudson-Bergen Light Rail provides a north-south connection between the Hudson County communities of Bayonne, Jersey City, Hoboken, Weehawken, Union City, and North Bergen and connects to NJ TRANSIT rail and bus services and to the PATH system. The Newark Light Rail connects Newark's two rail terminal stations, Newark Penn Station and Newark Board Street Station, and transfers to numerous NJ TRANSIT buses. The Newark Light Rail also connects the City of Newark with Belleville and Bloomfield. As the Hudson-Bergen Light Rail was built after the passage of the ADA in 1990, all stations on the line are accessible to passengers using mobility devices. Fifteen of the Newark Light Rail's 19 stations are wheelchair accessible.[3] In addition, light rail also includes accessible features such as detectable warning edges, accessible on-board areas, station stop announcements, and accessible parking at station parking facilities.

Figure 1 shows fixed route transit availability using ½ mile buffers along NJ TRANSIT bus routes and also ½ mile buffers around the agency's commuter and light rail stations, as well as the corresponding ADA-required complementary paratransit service, Access Link coverage (which extends 3/4 miles from fixed-route transit). As can be seen from the map, fixed route transit is concentrated in the northeastern part of the NJTPA region, but is also available to a lesser extent in Middlesex, Monmouth, and Ocean Counties. In the western area of the region (Hunterdon, Sussex, Warren, and western Morris County), little to no fixed-route transit is available.

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3   Accessible Newark Light Rail stations include: Grove St, Silver Lake, Branch Brook Park, Davenport Ave, Bloomfield Ave, Orange St, Washington St, Newark Broad St, Washington Park, Stadium, Atlantic, and NJPAC. Stations that are not currently accessible are: Park Ave, Norfolk St, Warren St/NJIT, and Military Park.

Figure 1. Actual Area Served by NJ TRANSIT Fixed-Route and Access Link, 2014

Legend

- ▨ **Access Link Coverage**
- ▮ **Half Mile Buffer along Fixed-Route Transit**
- —┼— **Commuter Rail**
- —┼— **Light Rail**
- —— **Bus Routes, 2014**

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014.
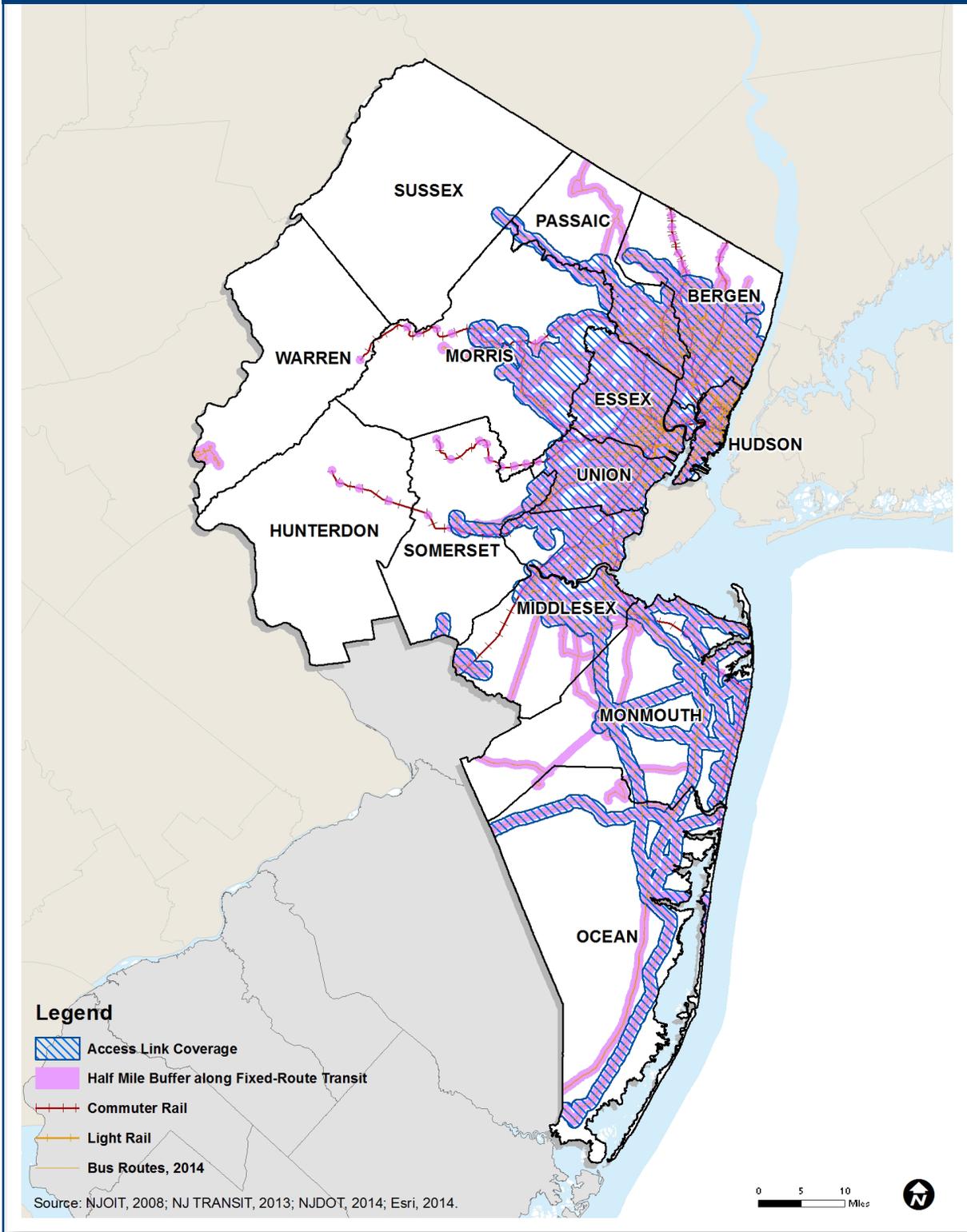
PATH

The Port Authority Trans-Hudson (PATH) system provides rapid transit between Newark, Harrison, Hoboken, and Jersey City and connects these locations with lower and midtown Manhattan. The PATH operates seven days a week on a 24-hour schedule. The following stations offer barrier-free access between the street and the platform: Hoboken, Newport, Exchange Place, Journal Square and Newark in New Jersey and 33rd Street and World Trade Center in New York City. However, four additional Manhattan stations are not accessible. The two New Jersey stations that are not currently accessible are under renovation and should have barrier free access in 2017 (Grove Street Station) and 2018 (Harrison Station).

Ferries

Two commuter ferry providers operate in the region. NY Waterway operates ferries connecting Edgewater, Hoboken, Jersey City, and Weehawken in Hudson County and Middletown (Belford) in Monmouth County with midtown and lower Manhattan. NY Waterway advertises the following terminals as accessible: Edgewater Ferry Landing, NJ TRANSIT Terminal and 14th Street Terminal (Hoboken), Paulus Hook and Port Liberte (Jersey City), Lincoln Harbor and Port Imperial (Weehawken), and Belford. The Liberty Harbor Terminal in Jersey City does not offer wheelchair access.

Seastreak Ferries routes connect Highlands and Atlantic Highlands in Monmouth County with midtown and lower Manhattan. Seastreak Ferries also operates routes between their Monmouth County locations and Hoboken and Jersey City in Hudson County. Seastreak reports that the majority of piers it utilizes are accessible.

Commuter Buses

Other fixed routes services are provided by private carrier commuter bus services. These intercity buses also provide local service on some routes and corridors as the only available fixed route bus service. Currently, none of the private carrier commuter bus services advertise that they operate a fully accessible fleet. Until their fleets become fully accessible, small fixed route over the road bus (OTRB) companies must either provide service in an accessible bus to passengers with

disabilities on a 48-hour advance notice basis or provide equivalent service.

Commuter bus companies operating (and number of vehicles operated) in the NJTPA region include: A&C Bus Corporation (28), Academy Bus (225), AmeriBus (na), Carefree Bus Lines (2), Coach USA (with Community Coach (23), Hudson Transit Lines/Short Line (161), Olympia Trails Bus Company (12), Orange-Newark-Elizabeth Bus Inc. & Independent Bus (52), Rockland Coaches, Inc/Red & Tan Lines (78), and Suburban Transit), DeCamp Bus Lines (57), Lakeland Bus Lines (59), Trans-Bridge Lines (51), and Martz Trailways (50). Details on accessibility requirements for private carriers can be found in *Technical Memorandum #1, Assess Services and Conditions*.

Figure 2 depicts both NJTRANSIT and private carrier routes within the NJTPA region.

Figure 2. Private Carrier Transportation (Commuter Bus)

SUSSEX

PASSAIC

BERGEN

WARREN

MORRIS

ESSEX

HUDSON

UNION

HUNTERDON

SOMERSET

MIDDLESEX

MONMOUTH

OCEAN

Legend

⎯⎯⎯ **Private Carrier Routes**

⎯⎯⎯ **Bus Routes, 2015**

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014.

0   5   10
Miles
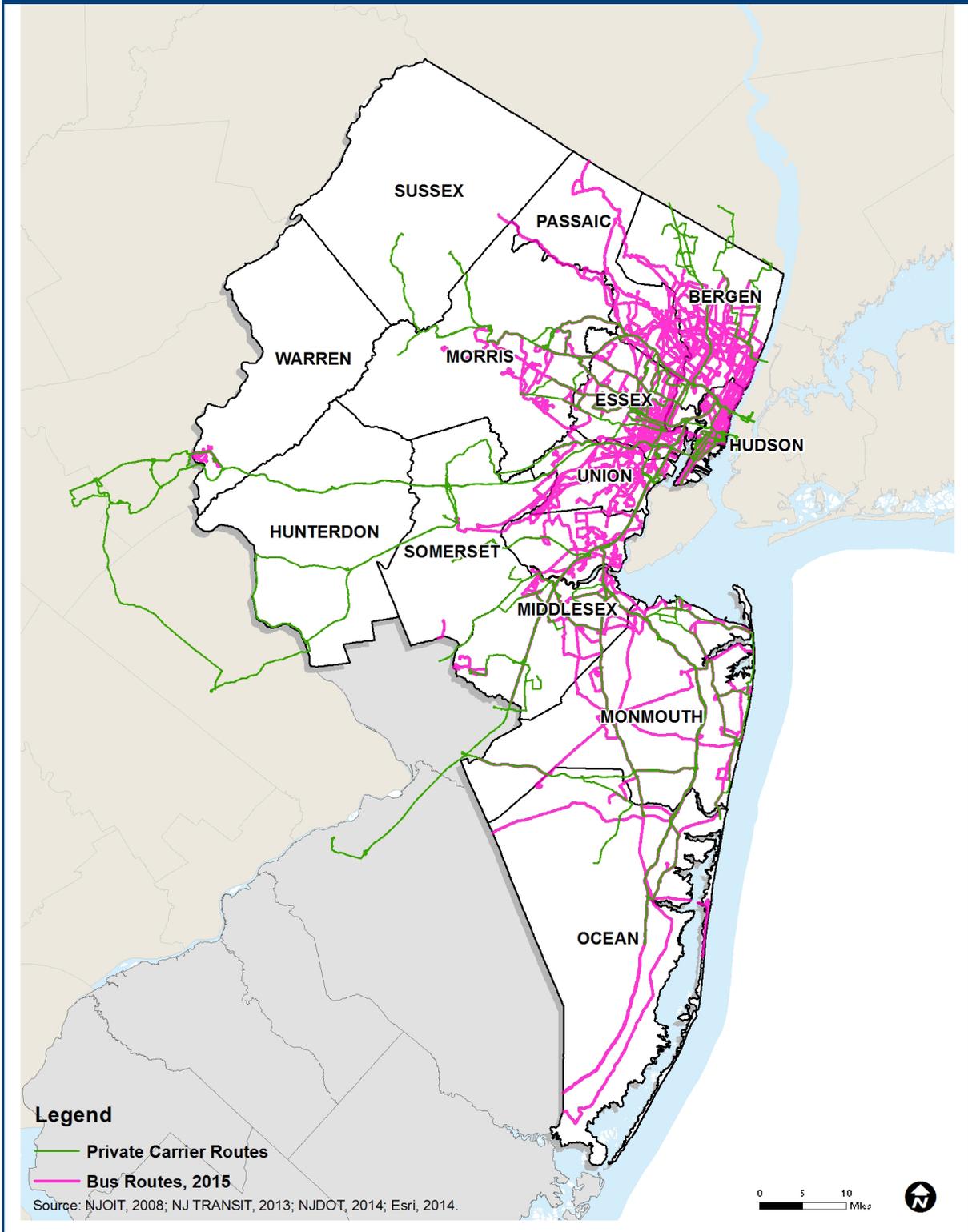
Community Transportation

Community transportation is the family of transportation services, including public and private sources, which serve the mobility needs of all community members. These services are supported through a variety of funding streams, which may include Senior Citizen and Disabled Resident Transportation Assistance Program (SCDRTAP), Section 5310 grant funding, county funding, and private grants, along with additional revenue from fares or donations, contracts, and advertising. Throughout the NJTPA region, county transportation agencies and transportation management associations (TMAs) provide regularly scheduled transportation services in the forms of fixed route service and coinciding paratransit service. Of the 13 counties in the region, eight operate deviated fixed route service through TMAs. Detailed information about the deviated fixed route services in the region can be found in *Technical Memorandum #1, Assess Services and Conditions*.

Figure 3 shows where community transportation services (deviated fixed routes and shuttles) are available in the NJTPA region. At least one community transportation route operates in each of the 13 counties in the region. Several community transportation providers deliver service in locations with little or no NJ TRANSIT service including Sussex, Warren and Hunterdon Counties, and others extend the geographic span of NJ TRANSIT service in locations such as Passaic, Somerset, Middlesex and Ocean Counties.

In addition to deviated fixed route and shuttle services, County paratransit services provide demand response door-to-door services within each of the 13 NJTPA counties. These demand response services effectively "blanket" each county with human service transportation. In addition, many communities offer municipal dial-a-ride or bus services that provide additional mobility for local residents, also with varying eligibility requirements and service parameters.

Municipal Transportation

A number of municipalities in the NJTPA region provide transportation services to their residents. Funded through a variety of sources – including NJ Department of Aging Services funds, local tax revenues, farebox, and private funding – these shuttles are often designed to serve a particular need. This includes senior shuttles in north and central Jersey and links between residential areas and commuter hubs. Several NJTPA region municipalities utilize federally funded vehicles in the transportation operations including the Five Towns Regional Dial-A-Ride (Morris), Lakewood (Ocean), South Orange Village (Essex), Long Beach Island Community Center (Ocean), Fort Lee (Bergen), Carteret (Bergen), Clifton (Passaic), Secaucus (Hudson), Bloomfield (Essex), and West Milford (Passaic). The availability of rail, light rail, bus, Access Link, community transportation, and municipal transportation by municipality can be found in *Technical Memorandum #1, Assess Services and Conditions*.

Figure 3. Community Transportation

Legend

Bus Route, 2015

Community Transportation

Access Link Coverage

Half Mile Buffer along Fixed-Route Transit

Commuter Rail

Light Rail

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014.

SUSSEX
PASSAIC
BERGEN
WARREN
MORRIS
ESSEX
HUDSON
UNION
HUNTERDON
SOMERSET
MIDDLESEX
MONMOUTH
OCEAN

0   5   10
Miles
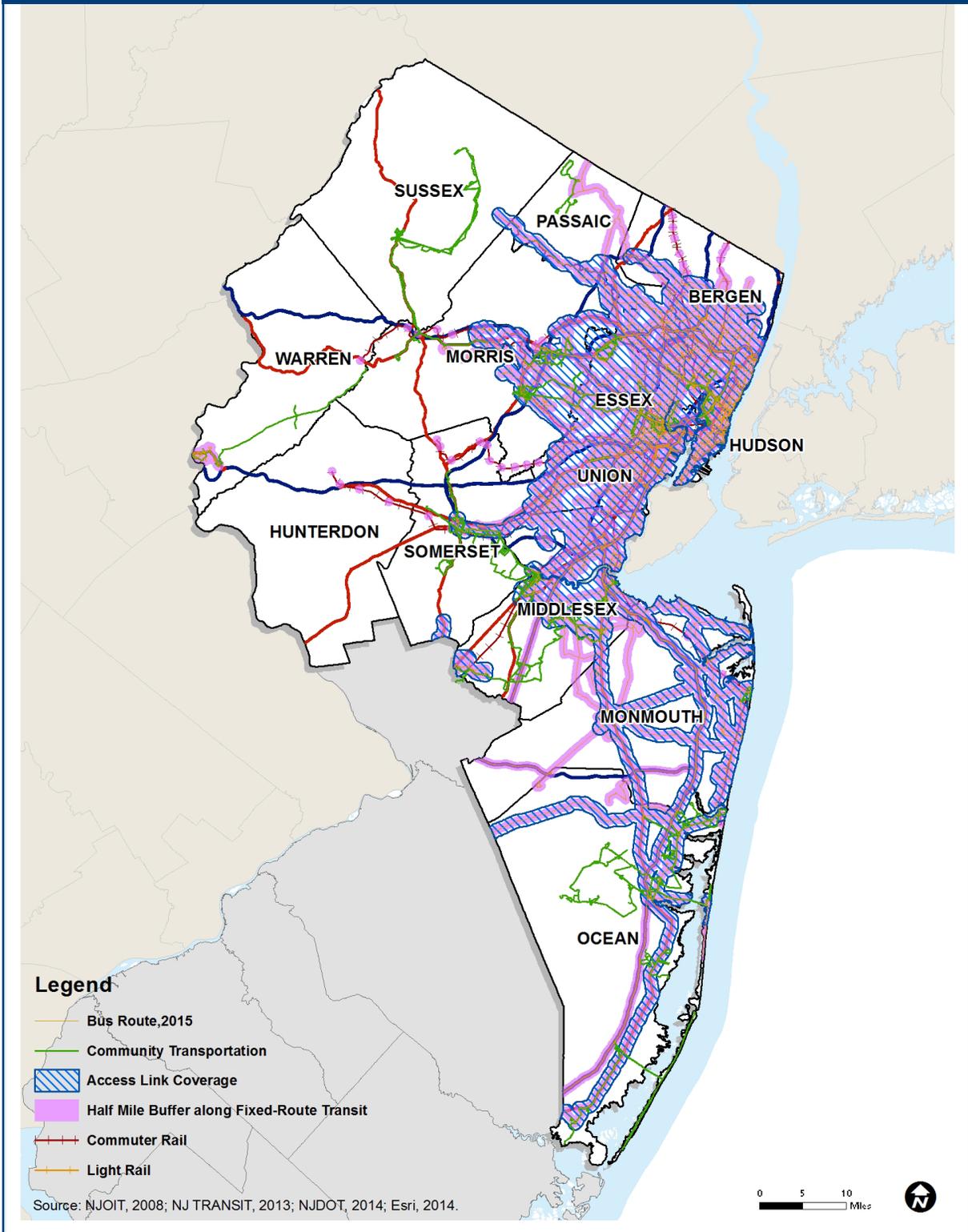
Paratransit Service

ADA Complementary Paratransit - Access Link

Access Link is the ADA-complementary paratransit service provided by NJ TRANSIT to persons with disabilities who cannot use fixed-route transit buses because of their disabilities. The service is only provided to eligible customers to and from areas within ¾ miles of local bus routes. It is a demand-response service for which customers are required to book their trips in advance. The service is provided by private companies on a contractual basis. As of April 2017 there were 45,808 persons with disabilities registered with Access Link in the entire state of New Jersey. There were approximately 450 revenue vehicles in the Access Link fleet, as of December 2015.

Figure 4 shows the drop-offs of Access Link trips within the NJTPA region for a 20-month period between October 1, 2012 and April 30, 2014. Most of the northeastern part of the region is covered by Access Link service because local buses are ubiquitous in the area. However, in parts of Passaic, Morris, Somerset, Monmouth and Ocean Counties, the service is available only in highway corridors where local buses operate. In Sussex, Warren, and Hunterdon Counties the service is not available since NJ TRANSIT local buses do not operate in those counties. As shown in Figure 4, there are parts of the region, especially in Passaic, Morris, Somerset, Middlesex, Monmouth, and Ocean Counties where fixed-route transit is available but Access Link service is not available. Access Link is provided only in areas served by local fixed route buses. Access Link is not provided in areas served exclusively by express bus routes.

About one-third of all Access Link drop-offs within the NJTPA region occur within Essex County, as shown in **Table 1**. Union County (17%) and Bergen County (13%) also account for a substantial number of drop-offs. In contrast, in Somerset and Ocean Counties the number of drop-offs is extremely low, and in Monmouth, Passaic, and Morris Counties, the number is fairly low.

Table 1. Access Link Drop-Offs, October 1, 2012 to April 30, 2014		
County	**Drop offs**	**Percent**
Bergen	139,537	13.2
Essex	340,956	32.2
Hudson	97,419	9.2
Middlesex	95,657	9.0
Monmouth	43,641	4.1
Morris	69,051	6.5
Ocean	17,344	1.6
Passaic	67,488	6.4
Somerset	6,106	0.6
Union	182,585	17.2
Total	**1,059,784**	**100.0**

Source: *NJ TRANSIT, Access Link, 2016*

Figure 4. Access Link Drop-Offs, 2012-2014

Legend

▲ Access Link Drop Off Location

Access

☐ TAZ without Transit Access

▨ TAZ with Transit Access

━━ Interstate/ Toll Roads

━━ US Highways

━━ State Highways

━━ Toll Road

━━ Bus Routes, 2014

┼┼┼ Passenger Rail Lines, 2013

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014.

0   5   10
Miles
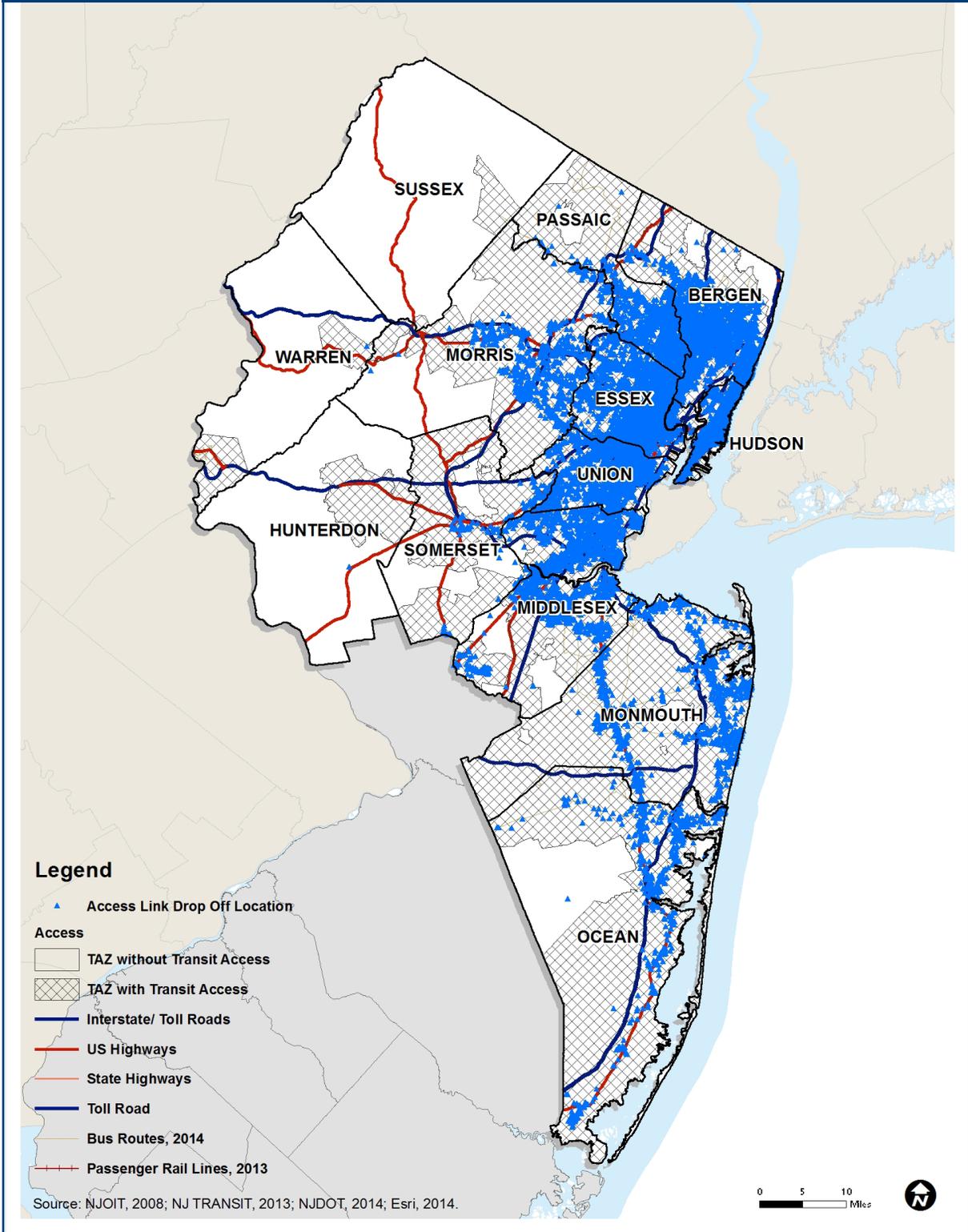
Note: TAZ is a Traffic Analysis Zone, a geographic area with approximately 3,000 people.

Demand Response

All thirteen county transportation providers operate paratransit services. Passengers request a trip by contacting the transportation provider; service varies by county and requires at least one day notice and much as one week notice, with most counties requiring at least two days advance notice. Subscription service is usually arranged for frequent, repeated trips. To increase efficiency and control costs, providers routinely coordinate trips and utilize shared rides to transport passengers between their origins and destinations. Out of county services vary. Some county programs offer no out of county trips, some offer trips only to veteran medical facilities or only for non-emergency medical appointments, while some counties will make trips up to 5 miles outside the county boundary. Passengers must meet eligibility requirements.

In 2015 county paratransit providers supplied over 2.5 million trips for a variety of trip purposes including medical, non-competitive and competitive employment, education, and others. The significance of medical, employment-related trips and other trips can be seen in **Table 2**. Bergen, Somerset, Middlesex and Ocean County account for the largest percentages of the region's county paratransit trips.

Table 2. 2015 County Paratransit Trips - Number of Trips by Purpose										
County	Medical	NC-Emp.	C-Emp.	Recreation	Education	Nutrition	Shop	Other	Total Trips	% by County Total Trips
Bergen	58,864	49,830	12,232	25,873	43,936	65,652	24,743	160,759	441,889	17.5%
Essex	20,925	18,644	107,784	7,740	580	17,408	2,589	35,133	210,803	8.3%
Hudson	71,528	5,307	11,022	11,622	850	2,768	1,256	13,999	118,352	4.7%
Hunterdon	12,945	27,700	21,794	6,960	474	181	8,272	65,964	144,290	5.7%
Middlesex	61,869	27,631	88,275	30,947	28,280	6,556	56,123	96,780	396,461	15.7%
Monmouth	33,605	65,469	1,955	2,128	461	16,561	19,713	176	140,068	5.5%
Morris	24,208	20,684	16,783	1,130	3,483	2,402	2,072	7,666	78,428	3.1%
Ocean	60,701	24,557	4,036	4,437	28,607	10,331	9,314	171,184	313,167	12.4%
Passaic	36,408	14,795	26,043	22,632	0	32,695	11,675	17,449	161,697	6.4%
Somerset	79,826	81,852	12,211	6,457	46	42,252	11,166	180,114	413,924	16.4%
Sussex	17,315	12,213	30,300	629	1,791	2,806	6,379	40,893	112,326	4.4%
Total	478,194	348,682	332,435	120,555	108,508	199,612	153,302	790,117	2,531,405	100.0%
% by Trip Purpose	18.9%	13.8%	13.1%	4.8%	4.3%	7.9%	6.1%	31.2%	100.0%	

Source: *NJ TRANSIT Local Programs Report, FY 2015*

Agency Provided (Non-Profits)

Seniors, individuals with disabilities, and low-income individuals may also have access to a variety of non-profit and for-profit paratransit and ride services; many restrict their transportation services to their clients using agency vehicles to provide trips. Several agencies within the NJTPA region operate substantial fleets, which include federally funded vehicles. Agencies with fleet sizes of 50 vehicles or more include: Cerebral Palsy Association of Middlesex, SCARC, Inc. (Sussex), Arc of Union, Alternatives, Inc. (Somerset), LADACIN Network (Monmouth), and Community Access Unlimited, Inc. (Union).

Other Service Providers

Several other service options exist within the region including brokered transportation services, direct providers such as taxis and vans, ridesharing, ride hailing, and non-profit car services and volunteer ride programs. Transportation brokers arrange trips for clients from a wide assortment of qualified transportation providers. The majority of brokered transportation in the NJTPA region is related to the Medicaid program. Since 2009, LogistiCare has been the designated broker for non-emergency medical trips (NEMT) in New Jersey. Direct service providers may be for-profit entities such as a taxi service, or a non-profit such as ITN North Jersey. Most direct service providers have restricted service areas. The volume of trips provided may be limited, but they nonetheless play an important role in providing transportation for the region's transportation disadvantaged populations. Informal taxi and van services offer for-hire vehicles. Shared-ride services (ride sharing and/or ride hailing) refer to a host of transportation options that link drivers of private vehicles with individuals in need of transportation. Such services include informal carpooling, but also Uber and Lyft which operate similarly to on-demand taxi service, except that drivers utilize their own private vehicles. The region also has several non-profit car services and volunteer driver programs. These programs screen, train, and organize paid and volunteer drivers and offer their services at low cost to transportation disadvantaged populations, typically seniors and the visually impaired.

Analysis of Access to One-Stop Career Centers

An analysis of access to One-Stop Centers was integrated into the inventory of available services in order to identify the needs of individuals seeking employment. One-Stop Career Centers offer services and provide direction for jobseekers through the Department of Labor and Workforce Development. Qualified One-Stop employment counselors provide guidance for jobseekers and other services, such as job training. There are 21 One-Stop Career Centers located in the NJTPA Region, as shown in **Figure 5** and **Figure 6**.

To better understand CHSTP target populations' access to these important resources, One-Stop Career Centers were mapped in relation to available transit service. **Figure 5** shows One-Stop Career Centers in relation to availability of fixed-route transit. A number of the centers are located in the northeastern part of the region, where the transit system is most dense; however two centers – one in Sussex County and the other in Hunterdon County – are located in areas where fixed-route transit is not available at all. These two Centers, along with the One-Stop Center in Warren County are beyond the reach of Access Link service. The centers in Morris, Somerset, Monmouth and Ocean Counties are nominally accessible by transit as they are connected only by specific corridors.

Community transportation routes and shuttles augment NJ TRANSIT services to reach One-Stop Career Centers in Sussex, Hunterdon, and Warren Counties as well as in Morris, Essex, Somerset, Middlesex and Ocean Counties, as shown in **Figure 6**.

The data review analysis also identified the number of persons in the labor force, unemployed persons, and persons with annual income below $15,000 within a half mile of the 21 centers. Higher numbers of people from each category indicate greater accessibility, especially by walking. On this basis, centers in Hudson County seem to have the highest accessibility to the labor force, whereas the centers in Warren, Morris, Hunterdon, and Sussex Counties have the lowest accessibility. Although the number of unemployed persons and persons earning less than $15,000 annually generally correspond to persons in labor force, the center in East Orange, which has high access, and Paterson, which has moderate access, both have a higher volume of persons earning less than $15,000 and unemployed persons relative to their labor force. For additional information see *Technical Memorandum #2, Task 2.2 Review of Relevant Data*.

Figure 5. The One-Stop Career Centers in Relation to Fixed-Route Transit

Legend

- TAZ without Transit Access
- TAZ with Transit Access
- One Stop Center
- 0.5-mile Buffer
- 1-mile Buffer
- 2-mile Buffer
- 5-mile Buffer

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014.
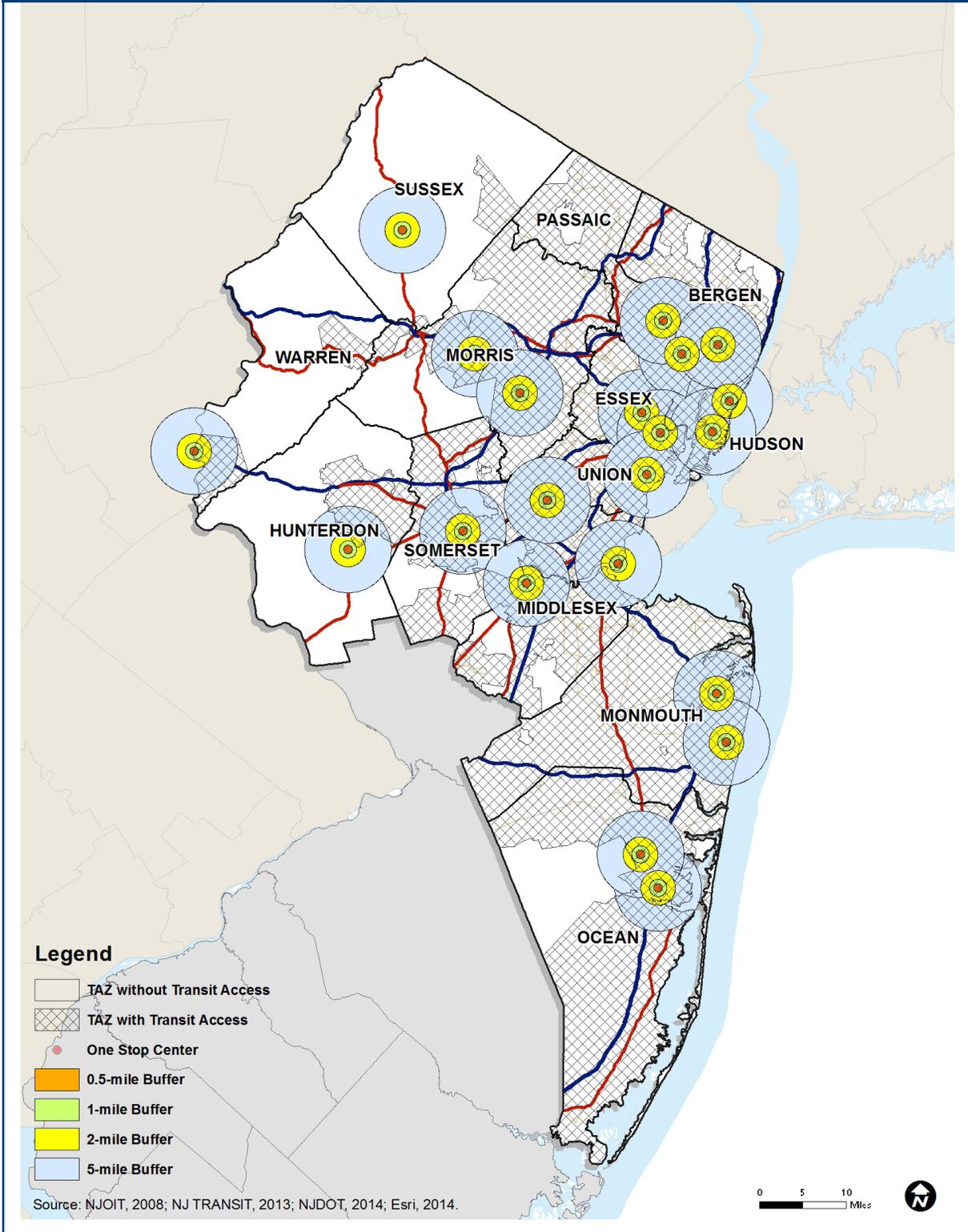
Figure 6. The One-Stop Career Centers in Relation to Community Transportation

Legend

— Community Transportation

� Access Link Coverage

• One Stop Center

■ 0.5-mile Buffer

■ 1-mile Buffer

■ 2-mile Buffer

■ 5-mile Buffer

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014.
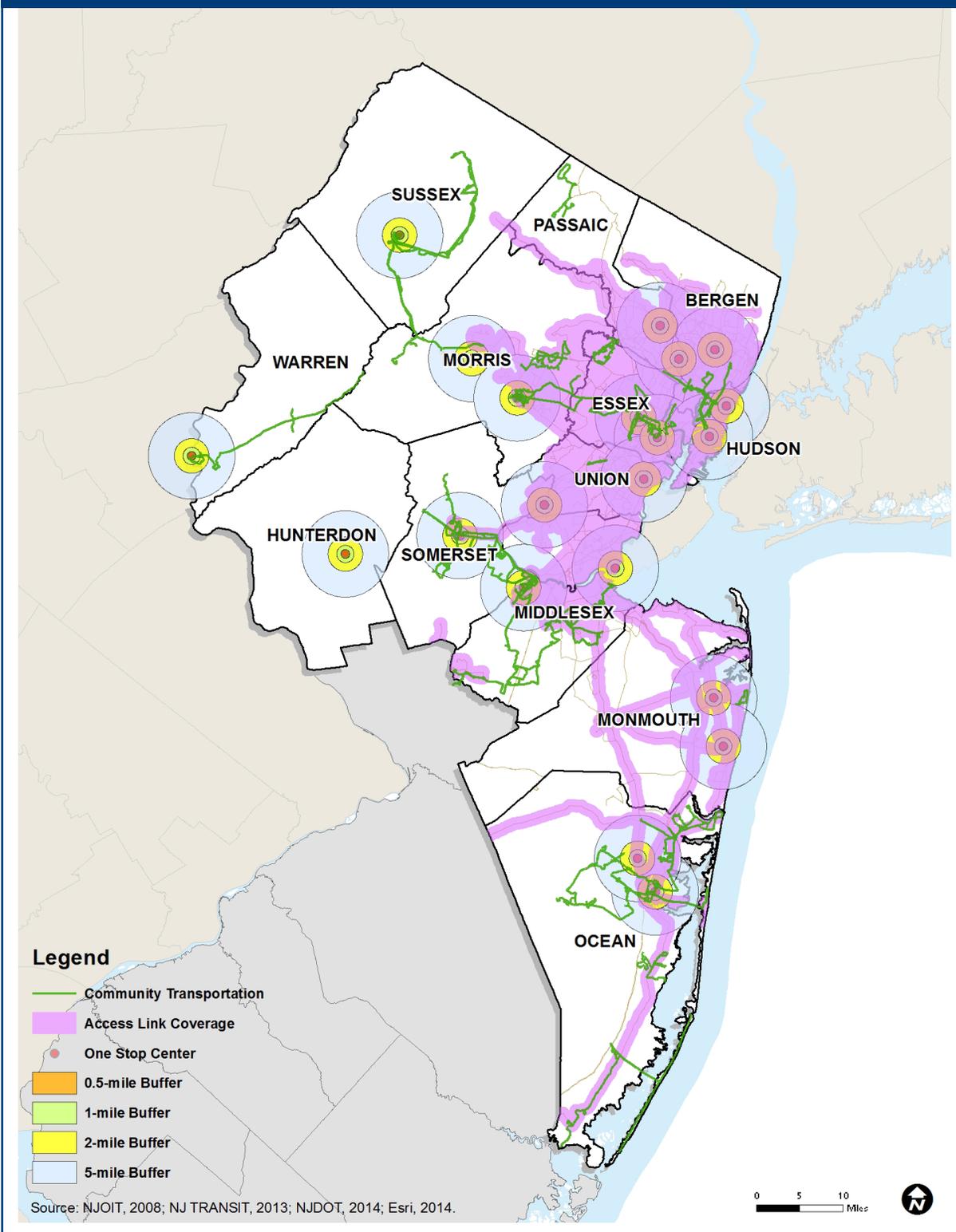
Note: GIS information on Hunterdon County LINK routes was not available from earlier data collection efforts.

CHSTP POPULATION, TRANSIT ACCESSIBILITY AND TRENDS

CHSTP POPULATION, TRANSIT ACCESSIBILITY AND TRENDS

In order to update the NJTPA CHSTP, the most recently available data was reviewed related to demographic trends and transportation habits among the four target populations, which are defined as follows:

- **Seniors:** persons age 65 and older

- **Low-Income Persons:** Two definitions of poverty were used for this analysis: (1) persons from households with incomes less than 100 percent of the U.S. Census Bureau poverty threshold and (2) persons from households with incomes less than 150 percent of the U.S. Census Bureau poverty threshold. The results presented below are based on persons that qualify as low-income according to the 100 percent of poverty threshold definition.

- **Persons with Disabilities (PWD):** persons who report having at least one type of disability and are 18 years and older

- **Veterans:** persons who have served on active duty in the U.S. Armed Forces, Reserves, or National Guard

CHSTP POPULATION IN THE NJTPA REGION

CHSTP target populations make up over 1 million people within the almost 7 million people in the Region; the relative percentage of each group is shown in **Figure 7**.

Figure 7. CHSTP Populations as Percentage of Regional Population, 2014
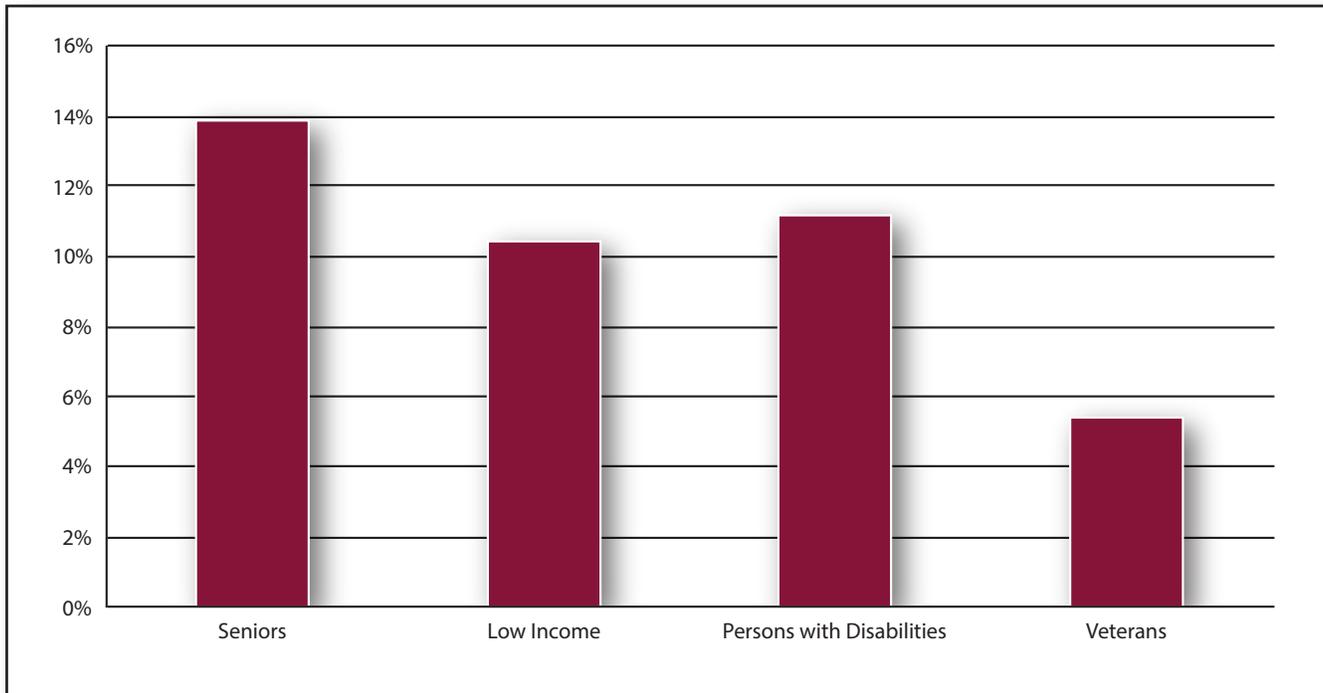
Source: U.S. Census Bureau, ACS, PUMS, 2014

CHSTP Population Overlap

The U.S. Census Bureau's American Community Survey (ACS) Public Use Microdata Sample (PUMS) was analyzed to examine the location of the four target groups at the level of Public Use Microdata Areas, of which there are 56 in the NJTPA region. Use of this data provides the advantage of being able to determine multiple characteristics of a single person. For example, the sample dataset shows whether or not a person who is elderly is also low-income. Therefore, the data can be used to identify people who fit into multiple categories. For example, among veterans in the NJTPA region, 91 percent are also members of another CHSTP target population, especially the 65+ population. Among persons age 65+, 34 percent have disabilities. Due to these overlaps, efforts to facilitate the mobility and access of veterans and persons with disabilities will greatly favor seniors. Among persons in poverty, only 27 percent are also members of another CHSTP target population (seniors, persons with disabilities, and veterans). Therefore, transportation strategies targeting other populations may only have limited effects on persons in poverty. **Table 3** presents the population totals and overlaps among CHSTP populations in the NJTPA Region.

Table 3. Population by CHSTP Group						
	In Poverty	**Disability**	**Age 65+**	**Veteran**	**All Others**	**Total**
In Poverty	------------	103,145	75,035	14,306	511,851	704,337
Disability	103,145	------------	319,976	73,344	164,511	660,976
Age 65+	75,035	319,976	------------	166,555	371,195	932,761
Veteran	14,306	73,344	166,555	------------	24,591	278,796
All others	511,851	164,511	371,195	24,591	------------	1,072,148
Total	**704,337**	**660,976**	**932,761**	**278,796**	**1,072,148**	------------

Source: *U.S. Census Bureau, ACS, PUMS, 2014*

Unique Disadvantaged Persons

Another way to look at the four categories of the target populations would be to view each person as a unique disadvantaged person whether or not he or she belongs to only one group or multiple groups. For this measure, if a person over age 65+ has a disability, he or she would be counted only once as a disadvantaged person instead being counted once as a person age 65+ and another time as a person with disabilities. By eliminating multiple counting, the measure of unique disadvantaged persons can help to provide estimates of number of persons for whom needs has to be estimated. Due to the absence of duplication, the measure can also help to allocate resources appropriately.

Figure 8 shows the number of unique disadvantaged persons at the level of Public Use Microdata Areas (PUMAs), and that a large part of Ocean County, the southern part of Essex County, and the southern part of Passaic County have large volumes of persons belonging to the target groups. The southern part of Middlesex County, parts of Hudson County, and a small part of Bergen County also have larger numbers.

Figure 8. Number of People Belonging to One or More Categories at the PUMA Level

Legend

Transportation Disadvantaged Population of PUMA

- Less than 20,000
- 20,001 - 30,000
- 30,001 - 40,000
- 40,001 - 50,000
- 50,001 and more

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014.
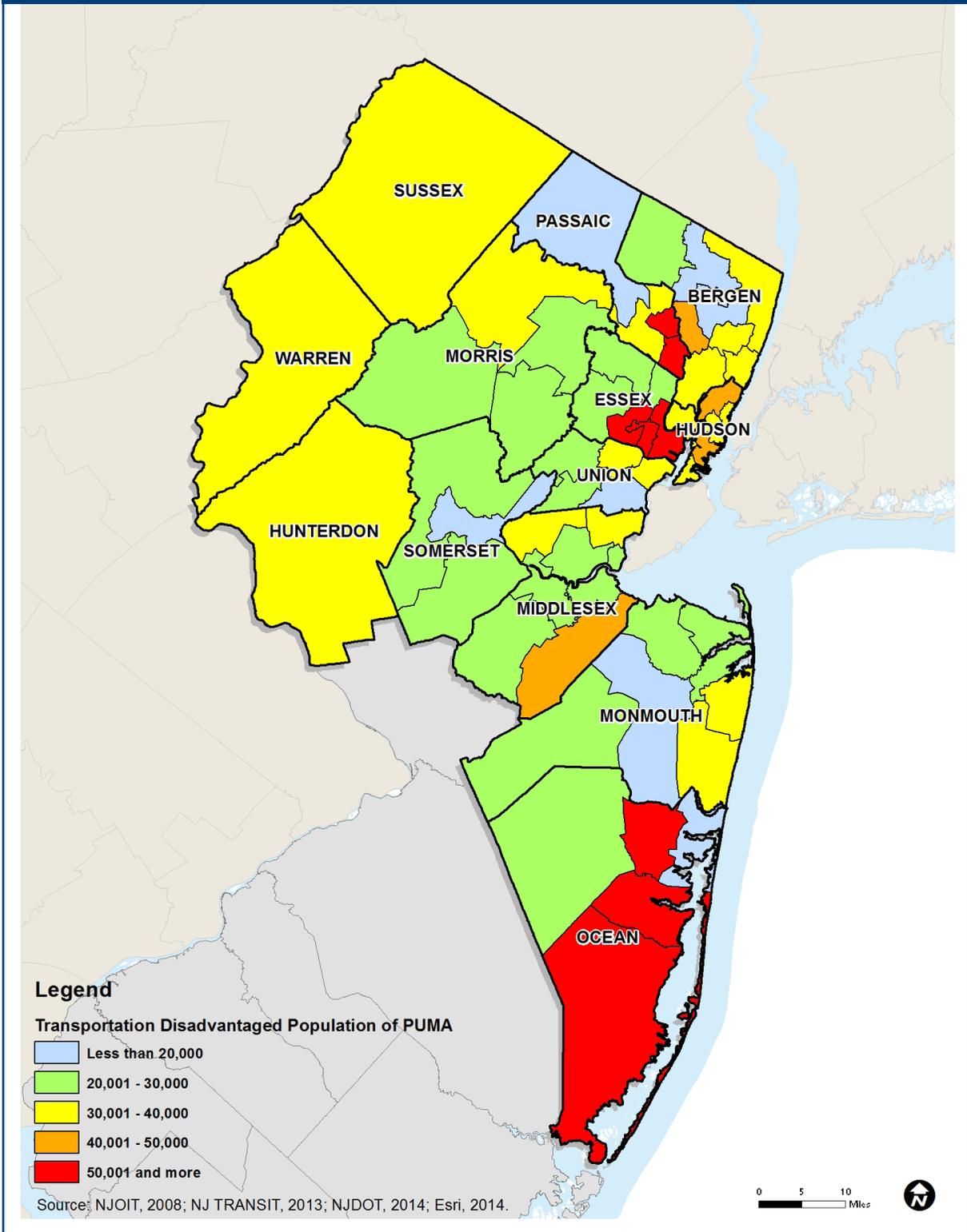
Projected Changes in the CHSTP Population: 2014 – 2045

Human services transportation needs will continue to evolve as the CHSTP populations change over the next decades. The growth of these populations from now until 2045 is expected to vary from area to area. The growth of the senior population in particular is expected to grow dramatically. The current and future geographical distribution of these populations relative to the existing transportation network must be considered when crafting policies and approaches and harnessing new technologies to address transportation need among CHSTP populations.

Key Findings – Demographics and Population Change

Key findings related to CHSTP demographics and population location help inform the strategies recommended in this CHSTP update.

- Among the four target populations, persons age 65+ constitute the largest proportion of the NJTPA population. While they constitute 13.9 percent of total population, persons from poverty households constitute 10.4 percent of all persons, persons with disabilities constitute 11.2 percent, and veterans constitute 5.4 percent. If persons below the 150 percent of poverty income threshold are considered to have low income, the proportion of low-income persons is 17.0 percent.

- Between 2014 and 2045, persons age 65+ may increase by 522,000, or 35 percent. Most of this increase is expected between 2014 and 2030.

- The number of persons from low-income households can be expected to increase by 13.4 percent and persons with disabilities can be expected to increase by 12.9 percent between 2014 and 2045. Forecasting veterans is less relevant since their numbers can change due to significant and unforeseeable external factors.

- Among all counties, Ocean County ranks highest or very high for all four target populations. The county can be expected to add a substantial number of persons in all four groups between now and 2045.

- Highly urban counties such as Essex, Hudson, Passaic, and Union Counties rank very high for low-income persons, whereas Bergen County ranks very high for persons age 65+.

- Essex County has the largest number of persons with disabilities, but Ocean County has the highest proportion.

- Ocean County has the largest number of veterans and its veteran population is substantially larger than all other counties.

- Fixed-route transit is available in large parts of the region where the four target population groups are highly concentrated at present. Among the areas with high concentration, fixed-route transit is not available in the western part of Ocean County, an area adjoining Middlesex and Somerset Counties, and in small clusters in Middlesex, Hunterdon, Warren, and Sussex Counties,

- When one compares the areas where fixed-route transit is currently available to the areas where growth of the four target populations is likely to occur, it becomes evident that some of the areas forecast to experience moderate to high growth in the future do not currently have fixed-route transit. That is particularly the case for persons age 65+. Parts of Sussex, Warren, Morris, Hunterdon, and Ocean Counties likely to experience growth of this population group do not currently have fixed-route transit provided by NJ TRANSIT. The part of Ocean County currently without transit that already has a high concentration of persons age 65+ is also likely to experience high growth of all four target populations.

TRAVEL PATTERNS OF THE TARGET GROUPS

The 2011 NJTPA/NYMTC household survey was also analyzed to gain insight into the travel patterns of persons age 65 and over, low-income persons, and persons with disabilities (The dataset does not identify veterans as a separate group.) The NJTPA survey data can be used to gain broad insights about the travel patterns of the three aforementioned target populations, and also of the general population in the places where these populations are concentrated.

Detailed population data by counties, with forecasts to 2045, along with transit access maps and NJTPA Household Survey trip pattern data can be found in *Technical Memorandum #2, Task 2.2 Review of Relevant Data*.

Trip Frequency

An analysis was undertaken to compare the average number of trips per day by persons age 65+, persons with disabilities, and low-income persons. The results were consistent with expectations for all counties for persons age 65+ and persons with disabilities as persons belonging to these two groups made fewer trips than the general population in all counties. However, for low-income persons, the results were inconsistent, likely due to the small sample size of low-income persons in the dataset for some counties.

According to the NJTPA household survey, all persons in the region make an average of 3.30 linked trips per day. (A linked trip is a combination of unlinked trips. For example, if a person drops off a child at a school on way to work, that is one linked trip even though it includes two unlinked trips.) In contrast, persons with disabilities make 2.31 linked trips, whereas persons age 65+ make 2.94 linked trips, and persons with household income below $15,000 make 2.83 linked trips.

Trip Distance and Duration

The mean trip distance for all trips in the survey dataset for the residents of the NJTPA region is 6.8 miles. In contrast, the mean trip distance for the NJTPA residents age 65+ is 6.3 miles, for persons with lower than $15,000 annual household income is 4.0 miles, and for persons with disabilities is 5.6 miles.

The average trip duration for all trips by NJTPA residents is 22.4 minutes. In contrast, the average trip duration of persons age 65+ is 21.9 minutes, for persons with less than $15,000 household income is 26.6 minutes, and for persons with disabilities is 26.3 minutes.

Since their mean distances are shorter but their mean trip durations are greater, persons from low-income households and persons with disabilities travel at a slower speed; likely due to their greater use of transit. While the trip duration of persons age 65+ is slightly lower than the trip duration of the general population, the average trip duration of persons with less than $15,000 household income and persons with disabilities is significantly higher than the general population.

By comparing average trip distance and trip duration, one can observe that persons with low incomes and disabilities travel at a lower speed than others.

Travel Mode

Table 4 shows the mode distribution for linked trips in the NJTPA survey data. Contrary to popular belief that older adults drive less and use more public transportation, the table shows that more than 58 percent of the trips made by persons age 65+ are made by single occupancy vehicles (SOV) compared to 45 percent of trips by the general population. In contrast, persons with household income below $15,000 and persons with disabilities make significantly lower proportion of their trips by SOV.

Low-income persons make significantly greater proportion of their trips by Local Bus and Walk modes. The largest proportion of trips made by persons with disabilities is made by HOV/Passenger, meaning that their trips are more likely to be made as a passenger of vehicles driven by others than any other mode. They also make a greater proportion of walking trips than the general population.

Table 4. Percent of Trips by Travel Mode, Linked Trips				
Mode	All people	Persons age 65+	Less than $15k income	Persons with disabilities
SOV	45.0	58.2	23.4	21.1
HOV/Driver	16.0	15.2	10.4	8.4
HOV/Passenger	20.5	13.3	20.6	35.0
Local Bus	1.9	2.3	12.0	7.6
Other/Express Bus	1.4	1.4	1.9	2.7
Subway	1.2	0.7	1.2	0.5
Rail	1.2	0.5	0.3	1.0
Walk	8.3	6.5	24.5	11.8
Bike	0.2	0.1	0.8	0.9
School Bus	3.5	0.6	1.2	4.0
Taxi	0.6	1.0	3.0	6.1
Other/Airtrain	0.2	0.2	0.7	0.9
Total	100.0	100.0	100.0	100.0

Source: 2011 NJTPA/NYMTC Household Survey

Trip Purpose

The primary trip purposes of persons age 65+, low-income persons, and persons with disabilities are compared with trip purposes of the general population in **Table 5**. One distinguishing feature of the three target populations is that they make a significantly smaller proportion of work trips. A reason for persons age 65+ making fewer work trips is that many are retired. A reason for persons from low-income households making fewer work trips is that many are students and others are unemployed. Persons with disabilities make fewer work trips because many are not in the labor force.

As expected, persons with disabilities make a higher proportion of trips for health care than two the other groups and the general population. One should note, however, that the higher proportion of trips by low-income persons and persons with disabilities for some purposes (grocery shopping) do not necessarily mean they make a larger number of trips for those purposes than others since, on the whole, they make fewer trips.

Table 5. Percent of Trips by Trip Purpose				
Trip purpose	**All people**	**Age 65+**	**Persons with income below $15k**	**Persons with Disabilities**
Home	37.2	35.2	38.6	37.8
Pick up or drop off	8.6	4.1	8.0	4.0
Work or work-related	15.2	8.5	6.5	5.5
School or school-related	6.8	0.2	7.5	3.7
Grocery/Food Shopping	4.8	9.1	6.9	7.8
Other Routine Shopping	4.5	7.6	4.7	5.8
Shopping for Major Purchases or Specialty Items	0.7	1.5	0.6	1.0
Household Errands	2.7	5.5	2.5	3.1
Personal Business	2.5	4.0	5.7	3.6
Eat Meal Out at Restaurant/Diner	3.3	4.7	2.7	4.2
Health Care	2.3	4.9	3.6	9.4
Civic or Religious Activities	1.2	2.1	1.1	1.8
Indoor or outdoor recreation	3.3	3.7	2.5	3.1
Entertainment	0.8	1.5	0.8	0.6
Social/Visit Friends/Relatives	3.1	4.1	4.7	4.8
Other	3.2	3.4	3.5	3.8
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: *2011 NJTPA/NYMTC Household Survey*

Key Findings – Travel Patterns

- CHSTP target populations travel less than the general population. The target populations make fewer trips on average than the general population.

- Persons from low-income households and persons with disabilities make fewer trips and travel shorter distances at lower speed.

- Persons age 65+ also make fewer trips than the general population, but only slightly.

- While persons from low-income households and persons with disabilities make a smaller proportion of driving trips than the general population, persons age 65+ make a greater proportion of trips by that mode.

- The most common mode of travel for persons from low-income households is walking, followed by driving alone.

- The most common mode for persons with disabilities is to get rides from others, followed by driving alone.

- For large proportions of all three target populations, traveling in an automobile is fairly common, with older adults most frequently driving alone, and low income persons and persons with disabilities traveling as passengers. The fairly common use of private automobiles by the target populations – whether as drivers or passengers – suggests that strategies involving the automobile should be incorporated into the CHSTP Update.

Transit Access Considerations for CHSTP Populations

Based on the previously described findings on travel patterns and population trends, key considerations for the CHSTP target populations are summarized below.

Seniors

- The population of the NJTPA region is about 6.9 million, of which 13.9 percent, or almost one million people, are seniors (65 years or older). Among the 13 NJTPA counties, Bergen County has the greatest number of seniors, followed by Ocean, Middlesex, Essex and Monmouth Counties. However, Ocean County has the greatest *proportion* of seniors relative to the total county population.

- Seniors in the NJTPA region travel less frequently than the general population of the NJTPA region.

- Seniors are more likely to use an automobile than the general population. Among seniors, 58 percent of trips are made by single occupancy vehicles (SOV), compared to 45 percent among the general population of the NJTPA region.

- The proportion of health care trips among seniors (4.9 percent) is more than twice that of the general population (2.3 percent).

- From 2014 to 2045, the population of people age 65 years and older in the NJTPA region is expected to increase by about 35 percent, or more than a half million. The growth in the population of people 65 years and older will constitute almost 64 percent of the total population increase between 2014 and 2045.

- Ocean, Middlesex, Monmouth, Essex, and Bergen Counties are expected to see the largest increases in this population in absolute terms, while Sussex, Warren, and Hunterdon Counties are expected to experience the highest *proportional* increases.

- The areas where the population is currently concentrated are expected to experience the highest growth. However, growth will occur at a moderate rate in Sussex, Warren, Somerset, and Hunterdon Counties. There is expected to be moderate growth in areas without transit access in many parts of these western counties, as well as in Ocean County.

Figure 9 illustrates the projected change from 2014 – 2045 in the number of seniors within a geographic area; the crosshatching in each map indicates Traffic Analysis Zones (areas of approximately 3,000 people) with existing transit access.

Figure 9. 2014 – 2045 Geographic Change for Age 65+

Legend

Access

TAZ without Transit Access

TAZ with Transit Access

Change of Person Age 65+ (2014-2045)

Less than 10

11 - 50

51 - 150

151 - 300

301 and more

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014; ACS 2014

Legend

Access

TAZ without Transit Access

TAZ with Transit Access

Person Age 65+ (2014)

Less than 80

81 - 150

151 - 250

251 - 350

351 and more

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014; ACS 2014

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014; ACS 2014

Low-Income

- Of the total NJTPA region population, 10.4 percent are low-income, defined as living in a household with an income below the poverty line as determined by the U.S. Census Bureau.

- Low-income persons make a significantly lower proportion of their trips by SOV than the general population and seniors.

- Low-income persons are significantly more likely to ride the bus, making over 10 percent of trips by local bus compared to less than 2 percent of the general population.

- Low-income persons are also significantly more likely to walk than any other population group at 24.5 percent.

- According to NJTPA household survey data, persons with household income below $15,000 make fewer trips of less distance and longer duration than the general population.

- The proportions of low-income persons in Ocean and Union Counties are also higher than the regional average. Essex, Ocean, and Passaic Counties are expected to experience the highest increase of low-income persons.

- Most areas forecasted to experience increases in low-income persons are within areas currently serviced by transit, with the most notable exception in Ocean County.
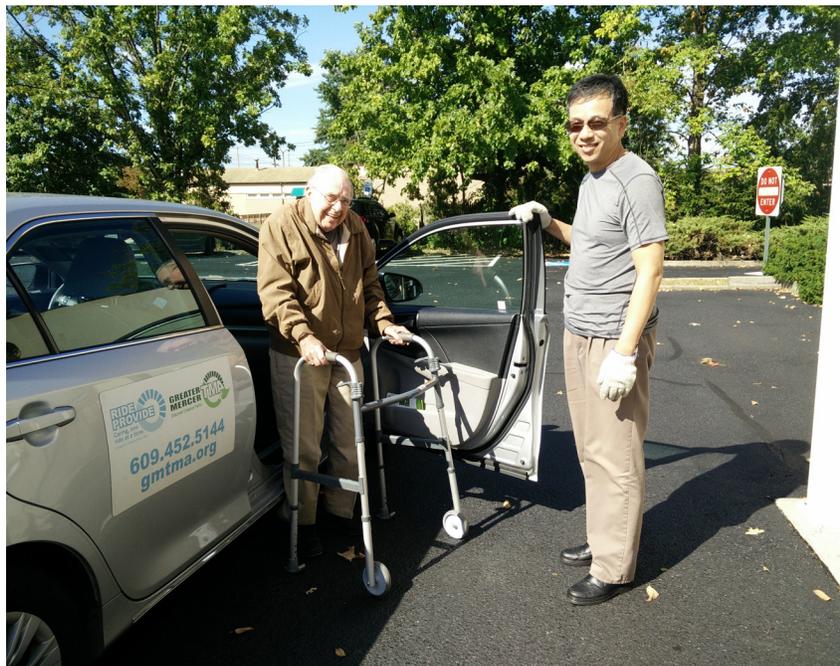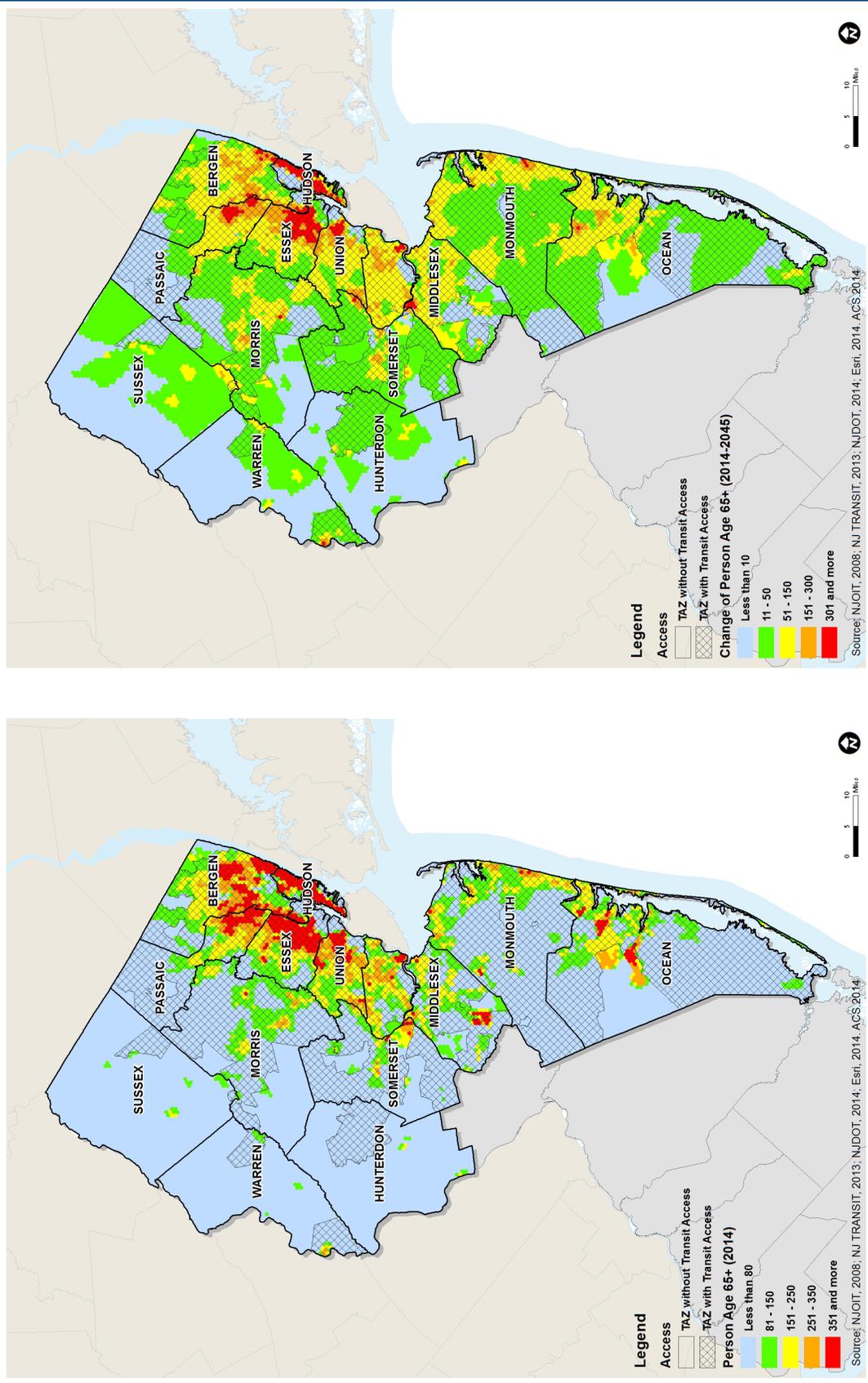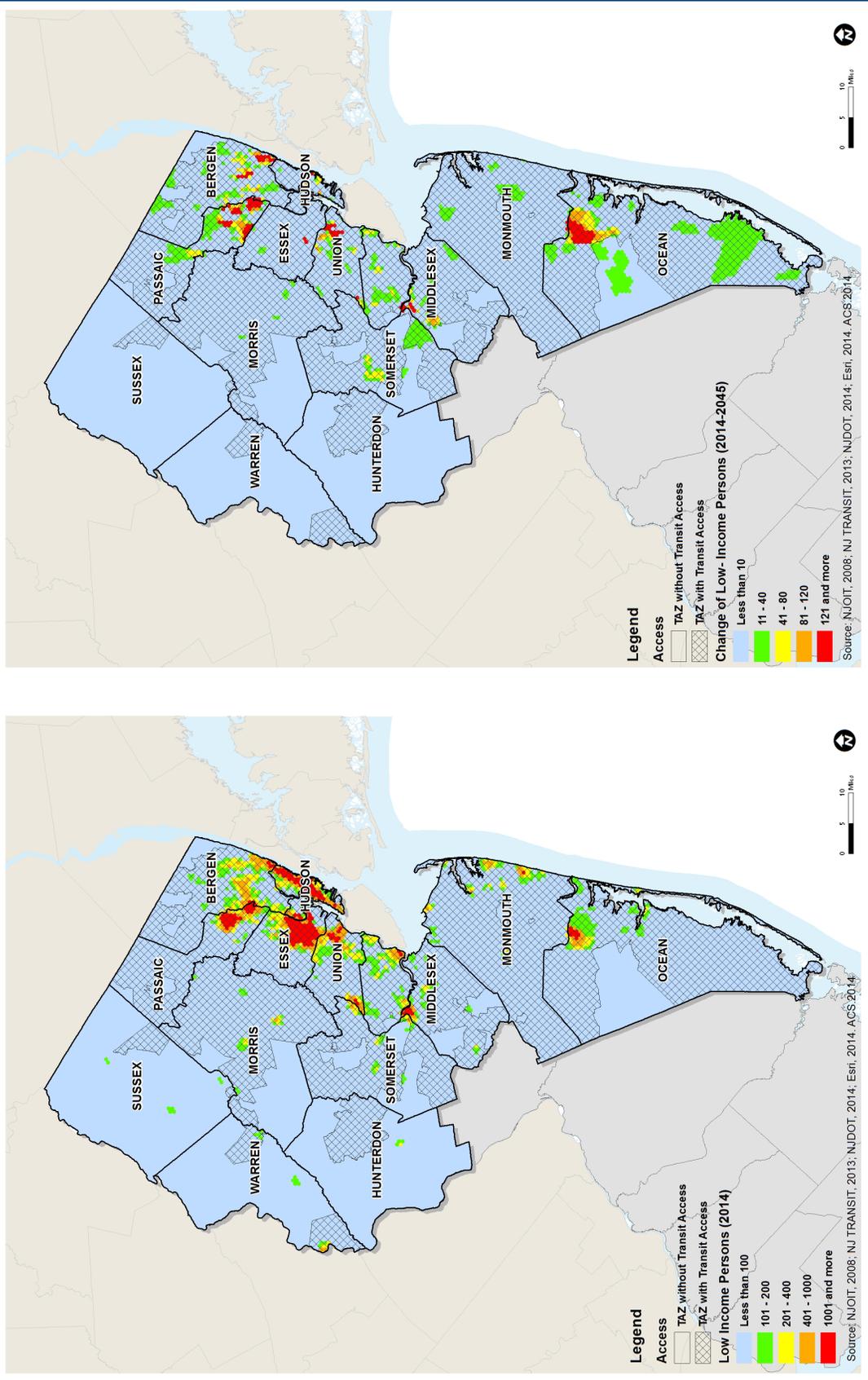
Figure 10 illustrates the projected change from 2014 – 2045 in the number of low-income persons within a geographic area; the crosshatching in each map indicates Traffic Analysis Zones (areas of approximately 3,000 people) with existing transit access.

Figure 10. 2014 – 2045 Geographic Change for Low-Income Persons

Legend

Access
- TAZ without Transit Access
- TAZ with Transit Access

Change of Low- Income Persons (2014-2045)
- Less than 10
- 11 - 40
- 41 - 80
- 81 - 120
- 121 and more

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014; ACS 2014

Legend

Access
- TAZ without Transit Access
- TAZ with Transit Access

Low Income Persons (2014)
- Less than 100
- 101 - 200
- 201 - 400
- 401 - 1000
- 1001 and more

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014; ACS 2014

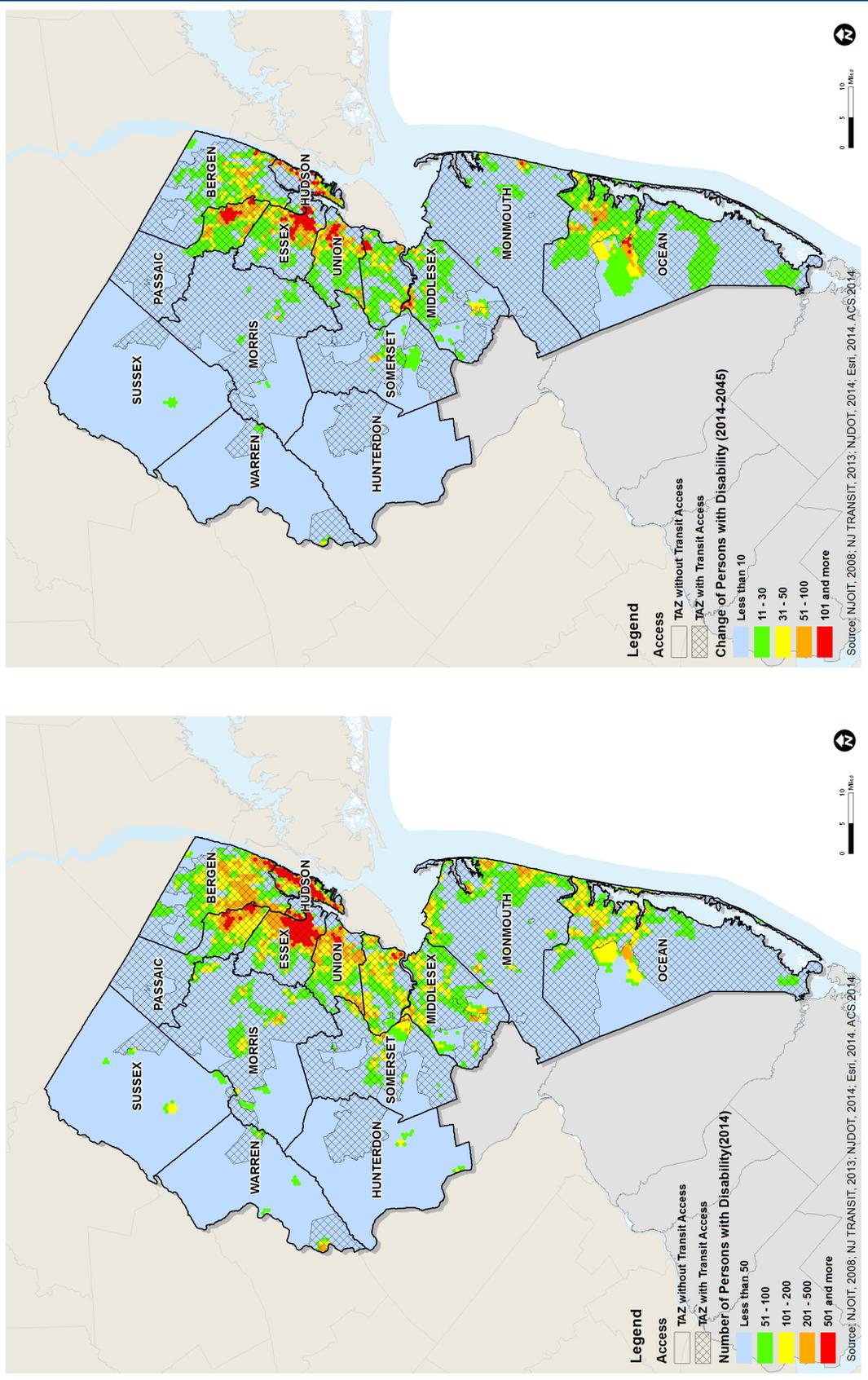*Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014; ACS 2014*

Persons with Disabilities

- In the NJTPA region, a little over 11 percent of the population has disabilities (counting only persons age 18 and over as reported by the U.S. Census). Essex County has the largest number of persons with disabilities (PWD), followed by Ocean, Bergen, and Middlesex Counties respectively. Among these, Essex and Ocean Counties have the highest proportion of persons with disabilities.

- PWD make fewer trips, of greater distance and longer duration than the general population. This suggests that they travel at slower speeds, perhaps due to greater reliance on public transportation and walking.

- The largest portions of trips made by PWD are made as a passenger in a car, followed by driving alone.

- PWD are more likely than the general population to walk, with 11.8 percent of their trips made by foot. PWD are also more likely to ride the bus, with 7.6 percent of trips made by local bus, compare to 1.8 percent for the general population.

- Only 5.5 percent of trips made by PWD are for work, which is a lower proportion than seniors, low-income persons, or the general population.

- Unsurprisingly, the proportion of health care related trips among PWD (9.4 percent) is much greater than for any of the other population categories.

- The future number of PWD cannot be forecast with certainty; however, Ocean and Essex Counties are the most likely to experience the greatest increase in PWD. Union and Passaic Counties are also expected to experience high growth. Some areas of potentially significant growth are located outside of areas with access to transit, most notably in northern Ocean County.

Figure 11 illustrates the projected change from 2014 to 2045 in the number of people with disabilities within a geographic area; the crosshatching in each map indicates Traffic Analysis Zones (areas of approximately 3,000 people) with existing transit access.

Figure 11. 2014 – 2045 Geographic Change for Persons with Disabilities

Legend

Access
TAZ without Transit Access
TAZ with Transit Access

Change of Persons with Disability (2014-2045)
Less than 10
11 - 30
31 - 50
51 - 100
101 and more

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014; ACS 2014

Legend

Access
TAZ without Transit Access
TAZ with Transit Access

Number of Persons with Disability (2014)
Less than 50
51 - 100
101 - 200
201 - 500
501 and more

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014; ACS 2014

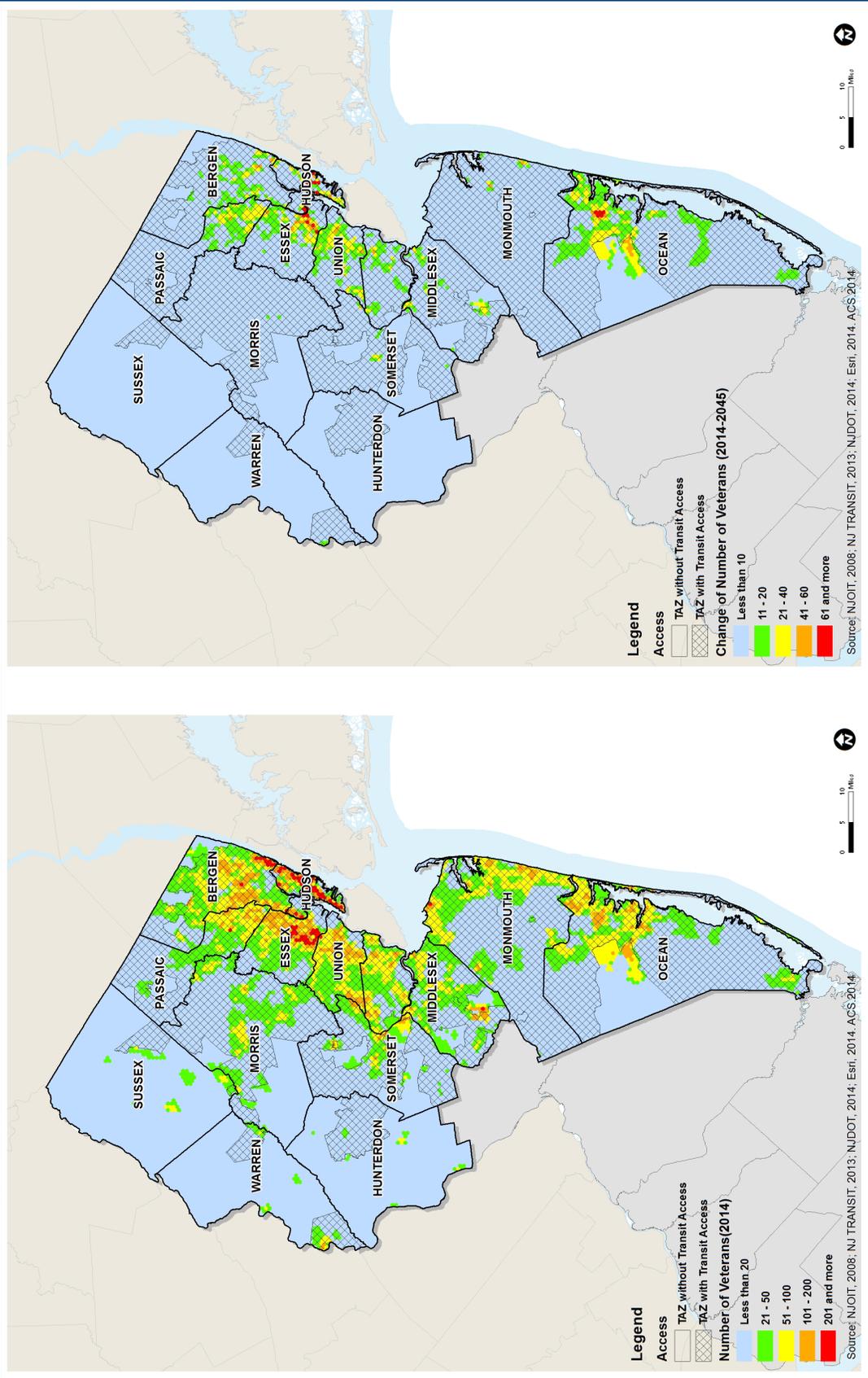*Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014; ACS 2014*

Veterans

- For the NJTPA region as a whole, the proportion of veterans is 5.4 percent, and Ocean, Sussex, Warren, Monmouth, and Hunterdon Counties have significantly higher proportions. Because it is impossible to estimate how many soldiers will participate in future wars, estimates of the future veteran population were made assuming proportions of the total population would remain the same.

- Based on this assumption, Ocean County is expected to experience a substantially greater increase in the number of veterans by 2045 than other counties. Bergen, Essex, Passaic, Middlesex, and Union counties are expected to experience modest growth, while other counties will experience little or no growth in the number of veterans.

- Moderate concentrations of veterans in Sussex, Warren, Hunterdon, Middlesex, and Ocean Counties are in areas without transit access. However, Ocean is the only county that is expected to see significant growth in the veteran population in areas without transit access.

Figure 12 illustrates the projected change from 2014 to 2045 in the number of veterans within a geographic area; the crosshatching in each map indicates Traffic Analysis Zones (areas of approximately 3,000 people) with existing transit access.

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Figure 12. 2014 – 2045 Geographic Change for Veterans

Source: NJOIT, 2008; NJ TRANSIT, 2013; NJDOT, 2014; Esri, 2014; ACS 2014

CHAPTER
5

PUBLIC ENGAGEMENT RESULTS

PUBLIC ENGAGEMENT RESULTS

Four primary methods of public engagement were used to elicit input from transportation disadvantaged populations and stakeholders: focus groups, a regional survey, community planning sessions and the project Advisory Committee. Each component is briefly described and significant findings are highlighted below. For additional detail, please see *Technical Memorandum #3, Needs Identification through Public Outreach.*

FOCUS GROUPS

Through the execution of focus groups, transportation needs, issues, and concerns were captured as directly experienced by the region's seniors, low-income people, veterans, and individuals with disabilities. Participant recommendations for improving the regional fixed-route transit and human services transportation network emerged from these discussions. In the period June to July 2016, a total of three focus group sessions were convened with 37 persons residing in the NJTPA region. These participants represented the study's core populations – persons with disabilities, older adults, veterans, and persons with low-income. To reflect the geographic diversity of the region, there was one session in the primarily rural county of Hunterdon, one in the primarily urban county of Hudson, and one in the primarily suburban county of Somerset. The sessions were conducted by the TMA for each area as follows:

- Hampton Inn (Flemington), Hunterdon County, June 21, 2016, organized by HART TMA
- Hudson County Plaza (Jersey City), Hudson County, July 12, 2016, organized by Hudson TMA
- Bridgewater Township Library, Somerset County, July 18, 2016, organized by RideWise TMA

Participation

Staff from the three above-listed TMAs recruited all participants as follows:

- **Persons with disability** – More than half (54 percent) of all participants reported having one or more difficulties that may affect their ability to attend to personal needs and/or to travel.
- **Older adults** – A quarter of all participants were 65 years of age or older (25 percent).
- **Veterans** – Fourteen participants (39 percent) reported having served in the U.S. armed forces.
- **Low-income individuals** – More than half (52 percent) of all participants reporting income stated a household income of less than $15,000.

Participants in all sessions described the struggles they have in accessing services to differing degrees, with some indicating extremely limited transport options. Participants in the Hudson County group reported using NJ TRANSIT bus and other services regularly, while those in more rural Hunterdon County relied heavily on county paratransit services. Those in suburban Somerset County primarily discussed relying on driving to meet trip needs.

Key Findings

- **"Everything ties into transportation"** was a common sentiment expressed among all participants, despite the varying geographies.

- **Familiarity with Services.** The vast majority of participants stated that they were very (43%) or somewhat (38%) familiar with the public transportation options available in their community. However, nearly one in five participants had limited knowledge of local public transportation modes.

- **Transport Modes Utilized and User Experiences**. Walking was cited by participants as a main mode they usually use to "get around." However, issues related to disability and health concerns often limited participants' ability to walk. Pedestrian infrastructure plays an important role in creating a safe and viable walking environment, and participants identified a "dignity issue" of being forced to walk on roadways without sidewalks with vehicles passing at fast speeds.

- **Driving was common among Somerset County participants.** The positive aspects of driving noted by participants included "convenience" and "freedom."

- **NJT bus service was a common mode used by Hudson participants.** A lack of respect among fellow passengers, inability to see route numbers on buses, buses failing to stop at designated stops, bus drivers turning off onboard audio announcements, overcrowding, and drivers failing to board passengers with mobility devices first were shared complaints.

- **A few Somerset County participants discussed using NJ TRANSIT bus service,** citing the lack of bus stops and shelters in the County and the great walking distance between them as problematic. Several participants also remarked that NJT buses are not reliable and are often late.

- **Hudson County focus group participants praised Access Link** service for its courteous drivers and for offering passengers the freedom to travel for any trip purpose with broad service frequency. One service complaint was that sharing rides increases trip duration; passengers must plan accordingly for longer travel times.

- **All participants agreed that taxi services are cost prohibitive.**

- **Missed Activities Due to Transportation Issues.** All RideWise and Hudson County participants and most of the HART participants reported they have missed a variety of activities due to lack of transportation. Some participants reporting having lost jobs or being unable to secure a job due to their limited transportation options.

- **Veteran Medical Specific Transportation Issues.** The most commonly cited veteran medical transport issue was difficulty accessing VA hospitals in East Orange and Lyons. Veteran participants reported having to devote a full day to their medical appointment due to the length of the trip.

- **Residence Location & Transportation.** Participants in some sessions reported living where they do because of the availability of transit services, including community transit services. Others have considered relocating to an area with more available transit options.

- **Acquiring Transportation Information.** Many focus group participants expressed a preference for internet, newspaper, word of mouth, telephone, and local libraries as means of obtaining transportation information. Participants expressed appreciation for the travel information services offered by TMAs. However, many participants were also unaware of services including Access Link, county paratransit and auto-based options available in their area.

Key Recommendations

Using the summaries of the focus groups sessions, an analysis of recurring themes and concerns was developed. The recommendations below are drawn from participants' discussions and shared experiences.

- Transit service in the region is focused primarily on helping riders access New York City employment destinations. However, low-income participants explained they need to work locally to meet family care needs and avoid more costly transport costs required to access New York City. Local transport options are poor and this issue must be addressed.

- Add evening and weekend services on keys routes serving educational and work destinations.

- Permit bus operators to deviate on all routes. Also, explore the feasibility of implementing more service routes with better frequency, in less well-served counties as well as along amenity rich corridors in more urban areas.

- Implement a pre-paid NJ TRANSIT card.

- Have dispatchers contact county transit customers via cell phone one-hour prior to trip for confirmation, or to notify if they are going to be late. Equip NJ TRANSIT buses with technology that would enable approaching buses to announce their arrival.

- Make more service information available at NJ TRANSIT bus stops, including through Wi-Fi hotspots available at bus stops. Explore the possibility of using advertising revenue to support the costs of erecting and maintaining more bus shelters and stops in the County.

- Make it possible to access transportation information by contacting a one-stop information telephone hotline and web resource.

- Make NJT website more user-friendly and include trip planning for origins/destinations beyond 1-mile from a NJT bus stop. Include links on the NJ TRANSIT website to all local public transit services.

- Make schedules easier to read, enlarge route number signage on buses, and provide additional and better signage for existing shuttle route services.

- Enable Hunterdon County LINK passengers to make reservations and cancelations via the web.

- Add bicycle racks to community transit vehicles.

- Address the issue of poor transportation for veterans in many counties seeking to access services at the Lyons and East Orange VA facilities, as well as at related VA facilities in New York City. Create a "one-call", 24-hour transportation hotline that would offer information and trip scheduling specifically for county veterans.

SURVEY

Through the implementation of a survey, the transportation needs of targeted populations within the NJTPA region were assessed. From mid-August to December 2016, TMAs distributed and collected 4,168 surveys (both via online entries and in hard copy), exceeding the established goal of 2,600 surveys by 60.3 percent. The survey was distributed by TMAs through a variety of methods including: web, mail, in-person distributions, and community planning sessions. The surveys were available in English and Spanish.

The survey covered a range of topics related to demographics, travel habits, barriers to travel, factors that would facilitate travel, and travel information sources. Survey results were analyzed to better understand challenges and preferences among the entire CHSTP population and in the region as a whole, as well as by population group and geographic areas within the region.
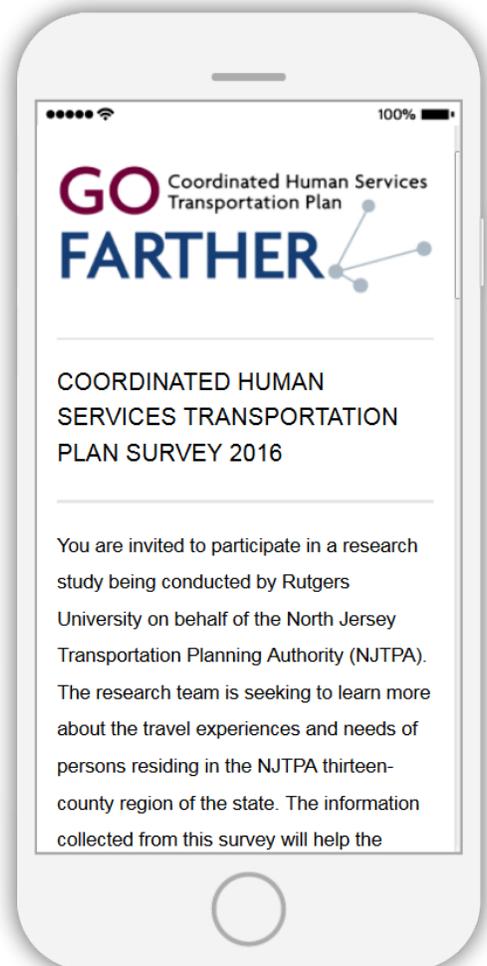
Key Findings

- Of CHSTP survey respondents, almost half reported having at least one disability.

- Survey respondents are highly dependent on the automobile, whether as a driver or a passenger. Only walking comes close to the automobile as a frequent mode of transportation.

- Lack of automobile access appears to be a major impediment to travel.

- A volunteer driver program would be the most popular option for meeting travel needs among the survey respondents, followed by taxi vouchers.

- Bus and train access in place of residence was overwhelmingly the most preferred solution among survey respondents; implying that strategies should focus on making fixed-route service more accessible to these populations.

- A substantial portion of respondents indicate that not having transit to destinations is a factor limiting travel. This suggests that having fixed-route transit and paratransit only in the area of residence may not be adequate to meet travel needs.

- Just over half of all respondents reported that they most frequently travel for medical or dental purposes. However, substantial portions of respondents reported they most frequently travel for a variety of other purposes, including shopping, personal business, and work. This suggests that while meeting travel needs for healthcare purposes should be a priority, traveling for other purposes is also significant.

- Survey results suggest low-income persons face greater and more varied transportation obstacles, and that compared to non-low-income respondents, they would take more additional trips if the required means of transportation were available.

- Travel behavior of people with disabilities differs from all respondents in several regards. People with disabilities are substantially less likely to drive vehicles on their own and slightly more likely to get rides from family members. They are more likely to take Access Link but less likely to walk and take fixed-route transit. They are more likely to make medical trips and less likely to make work trips.

- Preference for bus or train service was especially strong in southern and western areas where fixed route transit service is relatively limited.

- Though not the most frequently preferred transit strategy, having Access Link available appears to have similar importance throughout the region despite current service availability varying significantly between areas within the region.

- Members of CHSTP target population desire, but have trouble accessing, urban, suburban, and rural destinations located throughout the region; however, members of these populations disproportionately seek access to major urban centers and county seats.

- New York City is a desired but inaccessible destination for many members of the CHSTP target populations.

- About 91 percent of survey respondents own a cell phone and over half own a smartphone.

Summary of Survey Responses

Of the total 4,168 surveys received, there were 3,713 valid responses from residents within NJTPA's 13-county area.

Demographic Characteristics, Living Situation, and Disability

Of the 3,138 respondents who provided information on gender, 2,096 (66.8 percent) were female, 1,024 (32.6 percent) were male, and 18 (0.6 percent) were other. As shown in **Table 6**, the proportion of persons age 65+ is very high at 44.3 percent; it is therefore unsurprising that more than 40 percent of the respondents are from household with only one person (often within senior housing or a group home setting).

Table 6. Age of Respondents		
Age	**Frequency**	**Valid Percent**
18-24 years	445	13.9
25-34 years	332	10.3
35-44 years	231	7.2
45-54 years	317	9.9
55-61 years	294	9.2
62-64 years	171	5.3
65-74 years	641	20.0
75 or over	780	24.3
Total	**3,211**	**100.0**

Source: CHSTP Survey, 2016

As shown in **Table 7**, over 27 percent of the survey respondents live by themselves. Living with spouse or partner is also common. The prevalence of respondents living alone indicates that a significant number of the respondents do not have anyone in their households to help them with transportation if they cannot travel on their own. A significant portion of those respondents in senior housing also live in an apartment, as a household of one.

Table 7. Living Arrangements		
	Responses	**Percent**
I Live by myself	1,165	27.6
Live with spouse or partner	873	20.7
Live with parent	672	15.9
Live in senior housing or group home	597	14.2
Live with dependent children (under age 18)	309	7.3
Live with adult children	298	7.1
Live with relatives (other than parents or children)	142	3.4
Live with friends/room mate	85	2.0
Other arrangements	76	1.8
Total responses	**4,217**	**100.0**

Source: CHSTP Survey, 2016

Note that the number of responses to the question on living arrangements (4,217) in the table is larger than total survey responses (3,713) because multiple responses to the question were allowed, and that "Other arrangements" include motel, temporary housing, homeless shelter, etc.

As expected, the reported income of survey respondents is significantly lower than general households in New Jersey, as shown in **Table 8**.

Table 8. Household Income		
Household Income	**Frequency**	**Percent**
Less than $12,000	729	26.2
$12,000 to $14,999	328	11.8
$15,000 to $19,999	377	13.6
$20,000 to $24,999	278	10.0
$25,000 to $49,999	424	15.2
$50,000 to $99,999	386	13.9
$100,000 to $149,999	159	5.7
$150,000 or above	101	3.6
Total	**2,782**	**100.0**

Source: CHSTP Survey, 2016

As shown in **Table 9,** over one-third of the respondents reported living in a household without a vehicle. In contrast, only 11.7 percent of all New Jersey households are without a vehicle (ACS 2015).

Table 9. Number of Vehicles per Household		
Vehicles	**Frequency**	**Valid Percent**
0	1,108	35.6
1	1,099	35.3
2	619	19.9
3 or more	289	9.3
Total	**3,115**	**100**

Source: CHSTP Survey, 2016

Of the respondents, 48.6 percent had at least one disability; of those, over 20 percent reported that their disability results in serious difficulty walking or climbing stairs, as shown in **Table 10**.

Table 10. Disability Type		
	Responses	**Percent of total (3,713)**
Serious difficulty walking or climbing stairs	750	20.2
Difficulty doing errands alone	556	15.0
Serious difficulty remembering, concentrating or making decisions	538	14.5
Deaf or serious difficulty hearing	274	7.4
Other difficulties	230	6.2
Difficulty bathing or dressing	194	5.2
Blind or serious difficulty seeing	180	4.8
Total	**2,722**	**73.3**

Source: *CHSTP Survey, 2016*
Note: *Percentages will not add to 100 since the question allowed multiple responses.*

Obstacles to Travel

More than half (52.7 percent) of all respondents miss trips at least once a week, as shown in **Table 11**. Among those who reported missing trips, the most commonly cited reason is not owning a car (61.5 percent). The unavailability of transit buses or trains to destinations was the third most frequently cited reason for missing trips (28.8 percent), as shown in **Table 12**.

Table 11. Frequency of Missed Trips		
	Respondents	**Percent**
Daily	300	16.0
3-4 times a week	326	17.3
1-2 times a week	364	19.4
3-4 times a month	267	14.2
1-2 times a month	327	17.4
Less than once a month	295	15.7
Total	**1,879**	**100.0**

Source: *CHSTP Survey, 2016*

Table 12. Reasons for Missing Trips			
	Responses	**Percent of all (3,713)**	**Percent of those whose activities were prevented (1,961)**
Do not own a car	1,206	32.5	61.5
Do not have a driver's license	800	21.5	40.8
Transit buses or trains not available to destination	564	15.2	28.8
No one in family/group home to give ride	512	13.8	26.1
Transit buses or trains not available in residence area	461	12.4	23.5
Other reasons	343	9.2	17.5
Transit fare too high	297	8	15.1
No Access Link to destination	286	7.7	14.6
No Access Link in residence area	268	7.2	13.7
Transit stops are not accessible on in need of repair	226	6.1	11.5
No county or municipal paratransit in residence area	196	5.3	10.0

Source: CHSTP Survey, 2016

The respondents who were prevented from making trips due to lack of transportation were asked what would allow them to travel more often. The responses reveal that having access to an automobile would have the greatest impact, as well as having fixed-route buses and trains near their home and to destinations. Access Link and county paratransit would also be beneficial. See **Table 13**.

Table 13. Factors that would Allow More Travel			
Changes that would Increase Travel	**Responses**	**Percent of all (3,713)**	**Percent of those whose activities were prevented (1,961)**
Owning or having a car	1,123	30.2	57.3
Having trains or buses to destinations	806	21.7	41.1
Having train or buses in residence area	704	19	35.9
Having family member, friend, or group home driver give rides	703	18.9	35.8
Having a driver's license	631	17	32.2
Having Access Link in residence area	485	13.1	24.7
Having county or municipal paratransit in residence area	370	10	18.9
Other options	359	9.7	18.3
Lower transit fare	214	5.8	10.9

Source: CHSTP Survey, 2016

In terms of services needed to meet travel need, responses show that a volunteer driver program would be the most popular among the survey respondents, followed by taxi vouchers.

When respondents were asked if they would like to receive training to use public transportation, 4.4 percent reported they had already received training and 25 percent indicated they would like to; a desire for travel training was somewhat greater among low-income respondents (30.7 percent), persons with disabilities (27.8 percent), and veterans (26.6 percent).

Travel Behavior

About 70 percent of the respondents indicated they made trips outside at least once a day during the prior six months. Most frequent modes of travel were by car (driver or passenger), walking and NJ TRANSIT bus; less than 20 percent of respondents indicated that they had used transit rail, and county- and NJ TRANSIT-provided paratransit.

Trip purposes among survey respondents differ significantly from that of the general population with medical trips far exceeding work trips, as shown in **Table 14**.

Table 14. Purpose of Trip		
Trip Purpose	**Responses**	**Percent of all (3,713)**
Medical/dental	1,955	52.7
Shopping	1,727	46.5
Personal business	1,025	27.6
Work	1,008	27.1
Visiting friends and family	764	20.6
Social/recreational	589	15.9
Educational	521	14
Religious	394	10.6
Volunteering	252	6.8
Day program/Senior Center	52	1.4
Other	46	1.2
Job search	12	0.3

Source: *CHSTP Survey, 2016*

Medical trips are more important for respondents age 65+ (67.1 percent) than for all respondents. These survey results suggest that travel needs for healthcare purposes for CHSTP populations should be a priority; however, meeting travel needs for shopping, personal business, visits to friends/family, and recreational/social purposes are also critical.

Compared to others, low-income respondents drive private cars far less often and use transit buses far more often. Low-income respondents also walk and take public transit (bus, rail, light rail) and Access Link more often.

Travel Information

Survey results show that 43.5 percent of respondents depend on family members and friends for transit information

and 27.8 percent depend on the internet. Many also collect information from social service agencies and seniors centers as well as from transit agencies (from schedules and calling).

Destinations that are Difficult to Reach

Of the 3,713 valid survey respondents, 1,335 provided valid responses to a question asking them to identify a town or city they are unable to access due to lack of transportation. Respondents named over 200 municipalities. These included urban, suburban, and rural locations; however, the municipalities are disproportionately located in urban areas, including major urban centers.

Many of these frequently cited locations contain resources that make them important destinations for CHSTP populations, including government offices, One-Stop Centers, college campuses, retail centers, medical facilities and social services. Some key findings from this survey question are:

- Across the NJTPA region as a whole, New York City was the most frequently identified destination, accounting for about 8 percent of total responses.

- Respondents also frequently reported county seats, and were more likely to identify municipalities within their county or nearby counties.

- Many of the most frequently identified municipalities are well-served by transit including some that are major transit hubs, including Newark, Passaic, Paterson, New Brunswick, Toms River, Elizabeth, Jersey City and Morristown. This suggests that the challenges reaching these destinations may be related to distance, inconvenient connections, lack of awareness of available transit services, monetary cost, or lack of first-mile/last-mile connections. Other frequently cited "difficult to reach locations" in the western part of the region included Flemington and Newton.

- Some respondents residing in the western and southern parts of the region reported not being able to able to access destinations in Pennsylvania due to a lack of transportation. Philadelphia and Allentown were the most common destinations identified in Pennsylvania.

COMMUNITY PLANNING SESSIONS

Through the execution of community planning sessions (CPS), TMAs reached the target populations and engaged them in discussions on transit needs, challenges, and strategies. A "Meeting in a Box" kit was prepared which included a suite of materials to guide TMAs in organizing, advertising, hosting, and reporting on CPS. TMAs organized community planning sessions with a "go-to-them" approach by piggybacking on events or venues that already draw large numbers of the targeted population. The CPS was advertised with printed advertisements, social media messaging, email notices, and press advisories. From August to November 2016, the TMAs conducted 46 sessions attended by a total of 860 participants.

Discussions centered on questions pertaining to important destinations, transportation information and services, and participant recommendations for improving the transportation system.

Key Findings

- Access to appropriate transportation is crucial for seeking, securing, and keeping a job.
- Difficulty accessing medical care can have indirect consequences, such as the inability to work.
- CHSTP populations often have difficulty reaching major medical facilities, including VA hospitals.
- Task-specific destinations, such as shopping centers, provide opportunities to meet material needs as well as to escape social isolation.
- Religious and civic-related destinations are associated with a sense of duty as well as opportunities to socialize.
- Centralized localities often offer the CHSTP populations multiple and varied destinations, accessible through a single transit trip.
- Participants expressed frustration at not being able to access inter-county destinations, especially medical destinations.
- Participants use a variety of travel information sources and media, which suggests that transit agencies should provide service information in multiple formats and expand the availability of accurate paper schedules.
- Members of CHSTP populations often wish to avoid burdening friends and families with requests for transportation.

Key Participant Recommendations

Several recurring or otherwise notable suggestions emerged from examination of participant responses to the question, "If you were in charge of transportation, what would you do to make things better?"

- Expanded transit service hours and days, especially evening and weekend service.
- The ridership experience would be enhanced if drivers were more courteous and helpful.
- Increase access to door-to-door or curb-to-curb transit service.
- Transit agencies should consolidate transit service information into a unified source for CHSTP populations.
- Transit agencies should implement a "universal", discounted transit pass as a solution to the challenges CHSTP populations face in making connections.

ADVISORY COMMITTEE

NJTPA also sought the insights and feedback of stakeholders that provide transportation and other services to CHSTP populations. NJTPA established an Advisory Committee (AC) that helped guide the project, reviewed work products, and provided input at key milestones of the project. The committee consisted of 35 representatives from state, county, and local human services agencies, human services transportation providers, the NJ Department of Military and Veteran Affairs, non-profits serving people with disabilities and the elderly, a public housing authority, and the workforce sector. During four meetings held between July 2016 and May 2017, AC members received updates on CHSTP progress and findings, identified potential partners for furthering the planning process, raised transportation-related challenges to serving CHSTP populations, validated service gaps and unmet needs and provided feedback on recommended strategies through interactive polling activities and facilitated discussions.

The organizations listed below were invited to participate in the Advisory Committee:

- » ARC of NJ
- » Bergen County Disability Services
- » Bergen County Workforce Development Board
- » Cross County Connection TMA
- » DAWN Center for Independent Living (CIL)
- » Greater Mercer TMA
- » HART TMA
- » Hudson TMA
- » Keep Middlesex Moving TMA
- » Meadowlink TMA
- » Monmouth County Division of Planning
- » Morris County Engineering and Transportation
- » Morris County Freeholders
- » Newark Housing Authority
- » NJ APSE
- » NJ Commission for the Blind and Visually Impaired
- » NJ Department of Consumer Affairs

- » NJ Depart of Labor & Workforce Development
- » NJ Department of Human Services
- » NJ Department of Military and Veterans Affairs
- » NJ Department of Children and Families
- » NJ Department of Education
- » NJ Foundation for Aging
- » NJ TRANSIT
- » NJ Council on Special Transportation (COST)
- » NJ Developmental Disabilities Council
- » NJ Department of Transportation
- » Passaic County
- » RideWise TMA
- » Somerset County
- » Somerset County Office on Aging
- » TransOptions TMA
- » Urban Mayors Association
- » VA New Jersey Healthcare System

NJTPA REGION HUMAN SERVICES TRANSPORTATION NEEDS

NJTPA REGION HUMAN SERVICES TRANSPORTATION NEEDS

The planning process revealed five types of needs among human services transportation users in the region.

- **Spatial:** Locations and/or destinations not served by the transportation network.

- **Temporal:** Service may exist, but that service is not available at the times or frequency that are needed by consumers.

- **Institutional:** The rules, regulations, and/or requirements that govern transportation service provision create barriers that limit mobility. Some institutional gaps are keenly felt by consumers and other stakeholders, while others may not be readily recognized. For example, consumers may view advanced reservation requirements as an issue but not recognize lack of coordination between transportation services as an institutional gap.

- **Infrastructure:** Conditions in the physical network or in technological infrastructure prevent or limit individuals from accessing available transportation options. Examples of physical network deficiencies include inaccessible sidewalks or lack of benches at bus stops. A poorly timed crossing signal is an example of technological deficiency.

- **Awareness:** Providers and consumers lack information. Providers can better serve consumer needs when properly informed, while underutilization of existing transportation services can occur when consumers and other stakeholders are unaware of available transportation options.

The following section summarizes the major identified human services transportation needs in the NJTPA region within each category. For a more detailed discussion of identified needs and documentation of the analyses and public engagement activities from which each emerged, see *Technical Memo #3, Needs Identification through Public Outreach*.

Spatial Needs

Crossing County Lines

Community transportation services, including deviated fixed-route and demand response services, are often confined to the borders of the provider jurisdiction. Members of CHSTP target populations, who rely on county-provided transportation services, or services provided by non-profits contracting with counties, are often unable to reach nearby destinations in adjacent counties, even if that destination is near their place of residence. This limitation to mobility exists throughout the NJTPA region, but may be more severe in rural and suburban areas. Inability to reach needed medical care in other counties is a major concern, especially among veterans, who often must travel far to access VA hospitals located in East Orange and Lyons.

Hubs Matter

Activity hubs offer access to multiple and varied destinations through a single trip. Human services transportation users often find making local trips in the NJTPA region challenging. This makes it difficult to carry out daily routines like dropping off children at school or childcare before heading to work. Running multiple errands in an area such as a main street or shopping center that contains facilities such as grocery stores, libraries, or laundromats is more manageable than depending on transit to carry out tasks in disparate locations. Urban centers, including county seats and towns serving large rural areas, are important destinations for CHSTP populations in the NJTPA region, offering multiple resources and opportunities in centralized locations.

NYC Focus

Fixed route public transit service in the NJTPA region is largely focused on transporting riders to New York City employment destinations. This NYC orientation makes it difficult for CHSTP target populations to move within the NJTPA region for a variety of local trip purposes like school, work, childcare, and shopping. There are insufficient connection points for intra-regional travel, with transit riders often having to travel from the region to stations in the urban core (such as Newark Penn Station or Secaucus Junction) and then back into the region again to arrive at their final destination. Members of the CHSTP target populations often need to work locally in order to meet family care needs and reduce transportation costs.

First Mile, Last Mile

Lack of feasible transportation connections to distant transit stops can impede mobility. This issue affects transit riders as a whole, but is especially problematic for CHSTP target populations, due to limited physical ability and/or cost barriers. In addition to connections to transit stops, public engagement participants identified a lack of door-to-door transportation services and bus stops in close proximity to places of residence (such as senior centers) and destinations as hindrances to mobility and access.

> *"My daughter had to be transferred from her doctor's office to Robert Wood Johnson (Hospital) in New Brunswick. At the time I did not have a car, and the people that were transporting her from the doctor's office to the hospital were not able to take both me and her father in the ambulance. I had to figure out how I was going to get from Manville all the way to New Brunswick while being stressed about my daughter being sick. I had to walk from Manville to Somerville, and from Somerville I had to take the train to Newark and then back to New Brunswick and then walk from there to the Children's Hospital. I had to wait a whole hour to come back [from Newark]. It was terrifying because I was thinking what if my daughter didn't make it. And there's no [cell phone] service on the train."*
>
> **- Focus group participant**

Temporal Needs

Additional Evening/Weekend Service

Limited transit availability on the weekend and during the evening prevents members of CHSTP target population from accessing a variety of destinations including shopping destinations and religious services. Throughout the region, the availability of transportation on the weekends and during evenings is critical for low-income workers, who are more likely to work weekends or second and third shifts.

Travel and Wait Times

Paratransit wait times and travel times can be particularly burdensome. For example, Access Link clients must make a reservation at least one day prior to the trip and pick-up times can be up to 20 minutes prior to or after the designated time. Users of some county bus services may find themselves riding the bus for as many as three hours to cover distances that would take a half hour or less in a car. Increased transit frequency would permit more flexibility in trip planning and lead to shorter wait times.

> *"I lost a really good job because of that [lack of service on weekends and night]. If I walked I would have had to leave three or four hours earlier, but then I would have no one to watch my children those extra three or four hours before I get to work.*
>
> *- Community planning session participant*

CHSTP target population members often rely on automobiles and private services to access destinations at times when transit is unavailable, infrequent or inefficient. This might entail members of CHSTP populations taking costly taxi trips, driving themselves though doing so may be unsafe, or feeling they are burdening friends and family members who give them rides.
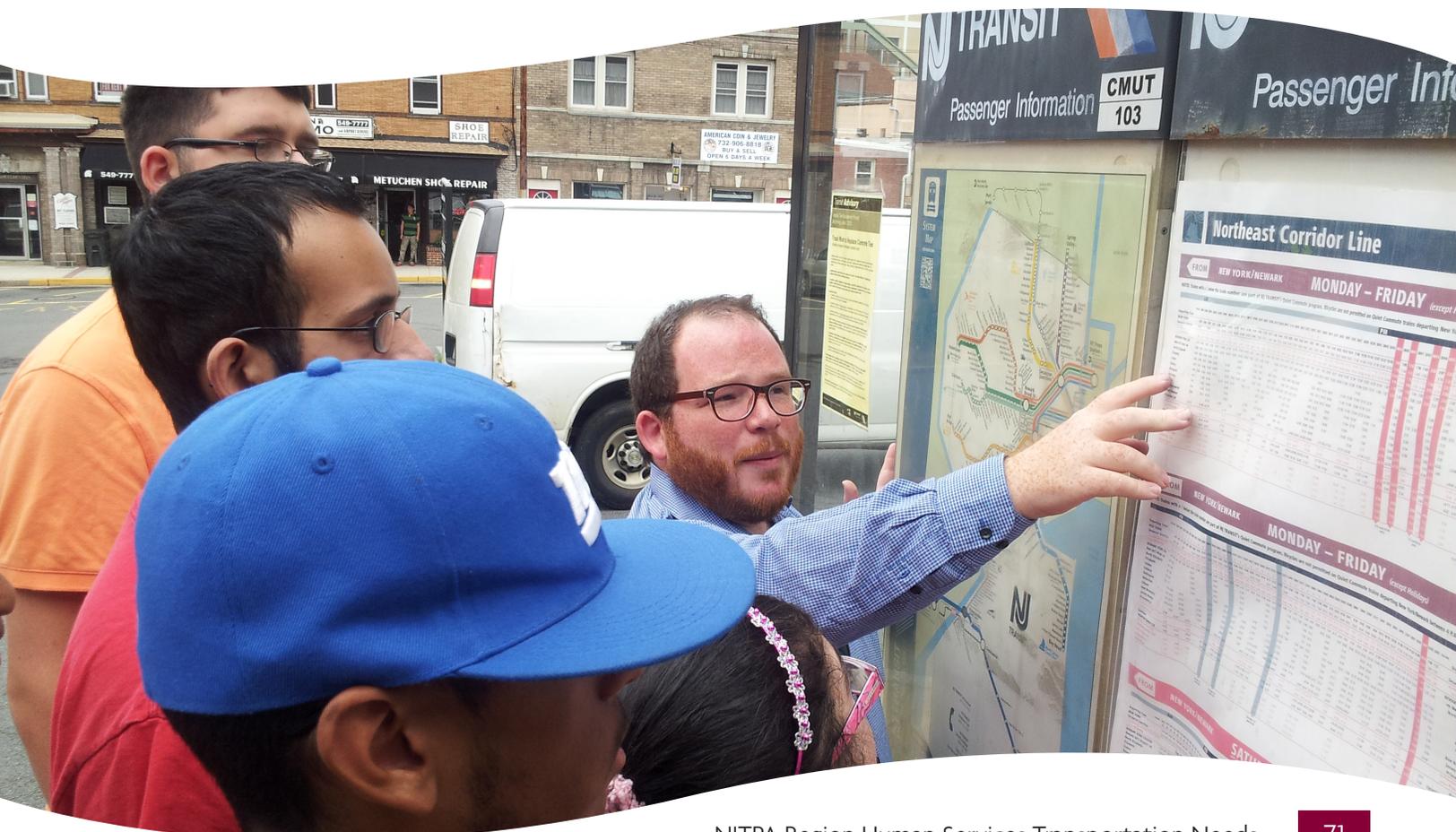
Institutional Needs

Coordination

CHSTP target populations frequently rely on transportation services provided by a wide array of organizations often working independently of each other with disparate missions, organizational capacity, clientele, and geographic service areas. This leads to inefficiencies and creates an often unwieldly transportation network for those people reliant on transit and paratransit. A lack of coordination of routes and schedules also makes transit connections more challenging for customers. Improving the network may entail collaboration among paratransit service providers, coordination of county, municipal, and NJ TRANSIT services and routes, integration of cross-county services, and synchronizing schedules between service providers.

Driver Training, Performance, and Retention

Driver performance is a major determinant of trip quality, and transit agencies should ensure drivers are consistently delivering service as required by the Americans with Disabilities Act (ADA). Human services transportation users reported that drivers sometimes do not operate vehicles safely and do not always stop at designated stops. Some users feel that drivers and dispatchers require additional and improved training. Paratransit providers in the region face challenges in recruiting and retaining qualified drivers; a shortage of qualified drivers sometimes leads to cancelled trips.

Customer Service and Experience

Passengers may feel a sense of indignity if treated disrespectfully, or with indifference by drivers, dispatchers, or fellow passengers. To effectively serve CHSTP target populations, agency personnel, drivers and dispatchers should not only fulfill the requirements of ADA compliance but also remember that passengers are customers and thus maintain a respectful, helpful, and safe atmosphere. Some users believe that drivers and dispatchers should be more culturally sensitive in their interactions with customers. Passengers sometimes do not feel respected by other riders and are often frustrated by lack of real-time updates or confirmations. There is also concern, especially among seniors, that drivers do not operate vehicles safely.

> *"Drivers should ride the bus as passengers – so they can see what passengers go through!"*
>
> *- Community planning session participant*

Fare Payment

The lack of an integrated fare payment system between service providers is an impediment when using transit services; it exacerbates the challenge of making transit connections between providers. Currently NJ TRANSIT does not make available a prepaid interagency pass and requires exact change from passengers boarding local buses. Lack of a prepaid pass leads to missed opportunities for integrating fares and services across the NJTPA region and between the NJTPA region and New York. Implementing prepaid pass technology would also present an opportunity to establish universal discount programs for certain populations, such as people with disabilities.

Fare Subsidies

The cost of transportation may sometimes inhibit travel among human services transportation users. While the cost of taxis and ridesharing is especially prohibitive, even fares for some bus services may be too costly for low-income persons. Participants in public engagement activities called for transit fare subsidies across the board, including subsidies for ridesharing services and senior discounts for taxis.

Flexible Services

Transit service restrictions on clientele and trip purposes can be a barrier to mobility. These restrictions may be based on federal, state, or local government or service provider regulations, policies, or procedures. Members of CHSTP target populations are sometimes excluded from taking advantage of certain services because they do not meet qualifications, such as having a specific disability or living within a targeted area, even though the vehicle may have available capacity. In some cases, fares for county services are based on household income or trip purpose, such as medical appointments. Paratransit services have geographical restrictions; for example, as an ADA complementary paratransit service, Access Link only serves areas within a three-quarters mile radius of NJ TRANSIT bus routes or light rail stations.

An increase in non-profit car services that may use paid or volunteer drivers, subsidized taxis, and ride hailing services could provide more flexible means of transportation with less qualification-based restrictions. Other desired, flexible means of transportation emerged from the CHSTP planning process, including group ride and charter services, as well as jitneys and "Spanish" taxis, though there are concerns over driver vetting for these more informal modes. **Figure 13** highlights travel options that would help meet travel needs.

Figure 13. Options that Would Meet Travel Needs among Survey Respondents
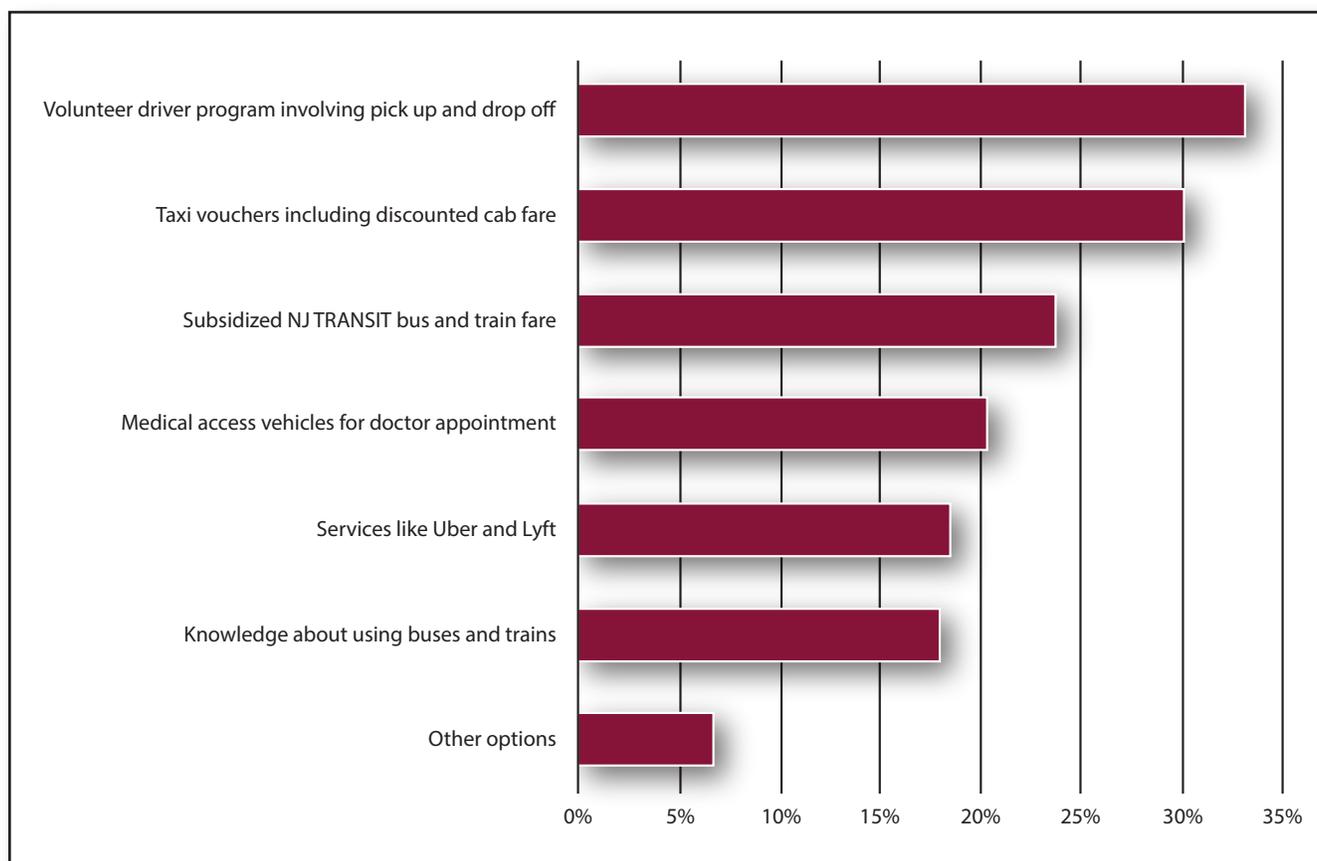
Source: CHSTP Survey, 2016

Infrastructure Needs

Repairs and Updates

There are significant human services transportation infrastructure repairs and updates needed in the NJTPA region. In particular, there are concerns among users over the poor quality or lack or pedestrian infrastructure, such as sidewalks, curb cuts and crosswalks, transit stops that are not accessible or in good repair, and a need identified in county human services transportation plans to replace aging county paratransit vehicle fleets.

New Technology

Improving and introducing new technologies could enhance coordination and reliability of services and improve the customer experience of riders. In addition to integrated fare payment, county plans call for improving operational tools for routing, scheduling, GPS, and billing functions among community providers, as well as improving or augmenting reservation and communication software. Many beneficial and available technologies are not currently employed in the region or are not used appropriately or consistently; barriers to adoption may include such considerations as significant capital investments, expanded operational collaboration, or the creation of new business processes.

Accessibility

Built environment and vehicle conditions in the NJTPA region do not consistently facilitate transit access. Many accessibility needs are related to infrastructure repairs and updates, such as improving pedestrian facilities and equipping vehicles, including paratransit vans, with functioning wheelchair lifts. Human services transportation users, especially those with disabilities, often experience difficulty walking to and waiting at transit bus stops due to distance or lack of appropriate pedestrian infrastructure. Many areas lack Complete Street elements that provide safe and convenient access to all users. Municipal transportation and non-profit vehicles are not always properly equipped to serve persons with disabilities.

Customer Convenience

Quality of infrastructure also impacts customer experience, in terms of convenience, comfort, safety, and a sense of dignity. Human services transportation users would benefit from more and improved customer amenities, such as more and conveniently located sheltered bus stops, clearer transit stop signs, benches, and more visible signage on buses.
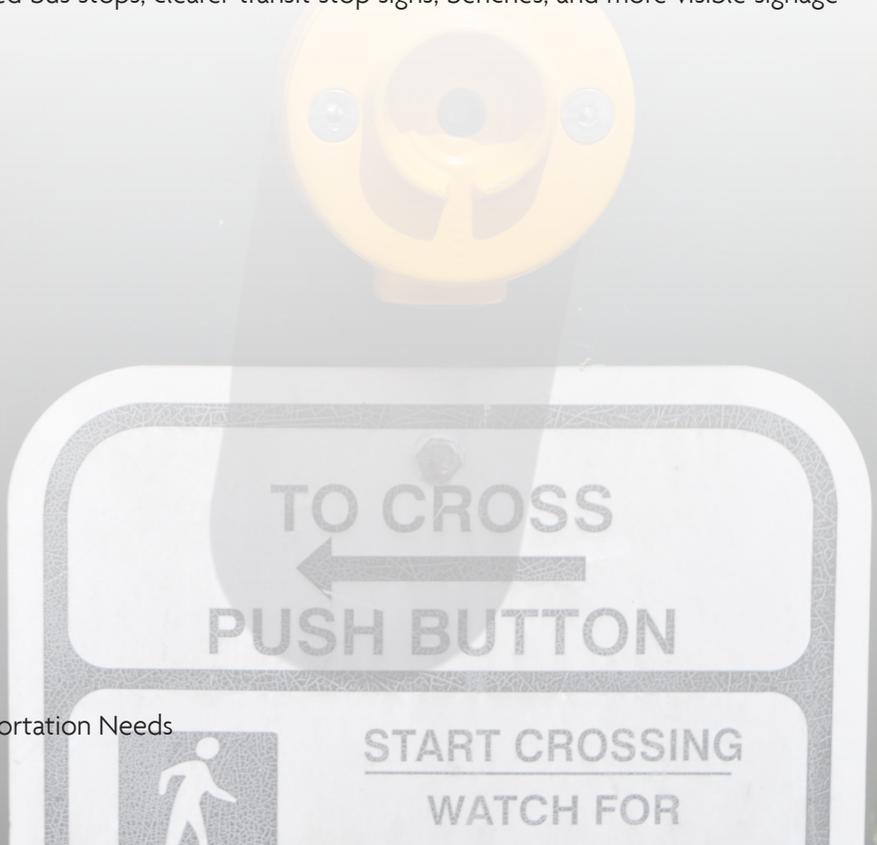
Awareness Needs

Many to One (Many Services....One Customer)

Each transit and human services transportation provider in the NJTPA region provides its own source of service information, which can make trip planning complex and frustrating. However, local governments, other service providers, and service users in the region continue to urge for the creation of a centralized information source that includes all modes of transit, human service transportation, and paratransit services, regardless of funder (e.g., private, public, contract carrier, county, municipal, non-profit).

One to Many (One Customer...Many Service Possibilities)

Coupled with the need to provide a unified information source is the need to effectively disseminate that information in suitable media to the diverse CHSTP target populations. Human services transportation users obtain travel information from a variety of sources and media, including the internet, paper schedules, newspapers, word of mouth, libraries, calling dispatchers, and others, as seen in **Figure 14** below. While many service users find travel information online, a substantial portion of riders continue to rely on paper schedules but often have difficulty obtaining them. Spanish-language travel information is generally available in the NJTPA region, but service providers should also accommodate the needs of other Limited English Proficiency (LEP) populations. Furthermore, members of CHSTP target populations are not always aware of available transportation services or how to use them. Service users would benefit from the development or expansion of marketing activities, as well as training and education on how to access available transportation services.

Figure 14. Information Sources Used by Survey Respondents
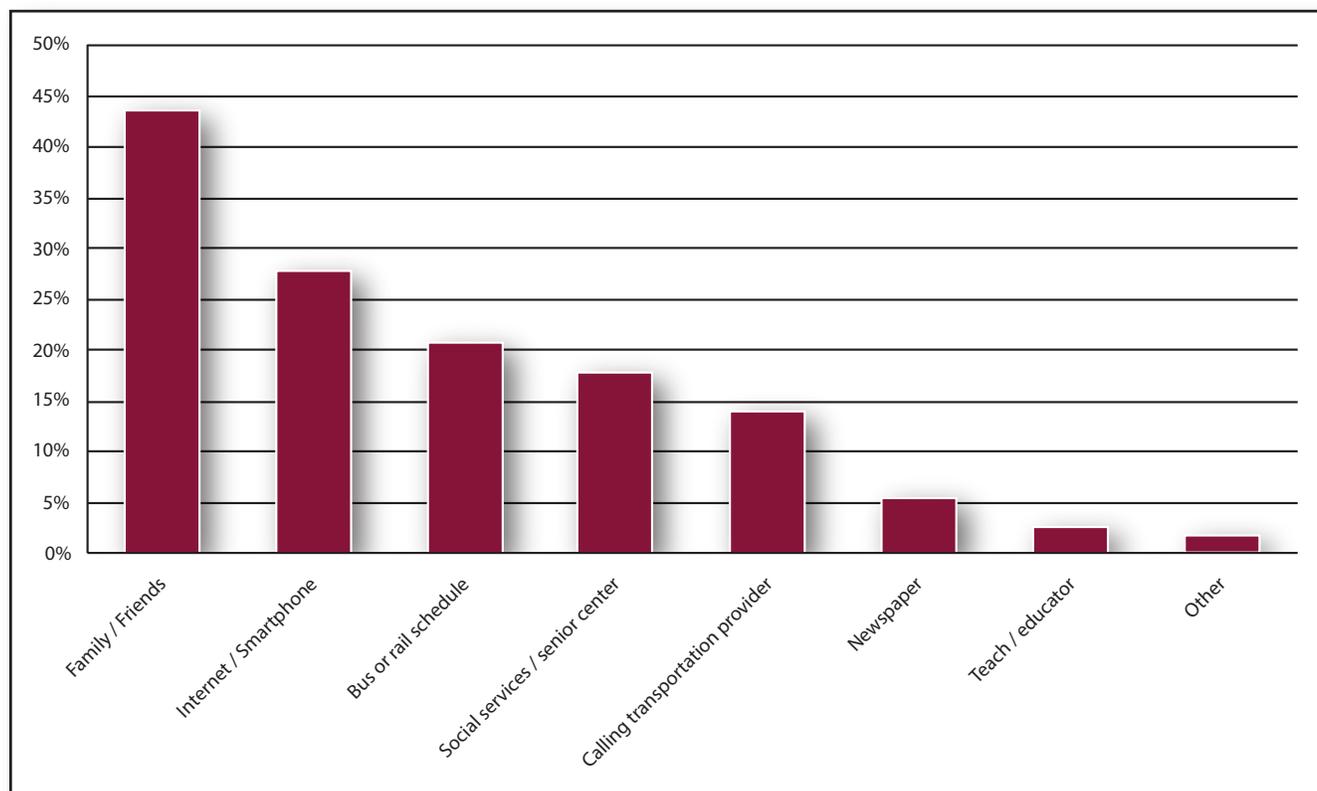
Source: CHSTP Survey, 2016

Extra Help

Some passengers have particular assistance needs. These "extra help" needs are not necessarily system-wide institutional or infrastructure issues and some cannot be addressed merely through the development and implementation of broad, system-wide policies. Rather, effectively addressing these needs requires that human services transportation providers respond to user needs and adopt a customer-service orientation at all levels of the organization from decision-makers to drivers and dispatchers.

Many of the challenges identified by public engagement participants, such as difficulty planning trips, walking to transit vehicles, boarding in a wheelchair, and carrying bags, indicate a need for assistance. More than 40 percent of survey respondents reported living alone or being from one-person households, and about 30 percent mentioned having difficulty using at least one transportation mode because of disabilities.

"Extra help" needs might include help boarding and disembarking from vehicles, help with shopping bags, more comfortable seats and smoother operation of vehicles, consistently polite and helpful drivers, proactive use of bus kneeling capability, or allowing paratransit vehicles to pull into driveways. Human services transportation users would like to have access to a more convenient means of making paratransit reservations, such as creation of an online portal, as was recently implemented for Access Link with Access Link Online.

Service users would also benefit from opportunities for assisted transportation, including those customers who cannot get from their residence to the vehicle. Assisted transportation may entail a peer providing companionship, a family member or caregiver accompanying the passenger at no charge, a driver providing assistance, or a volunteer accompanying a patient on a medical trip. While assisted transportation is generally allowed in the NJTPA region, transit agencies and non-profits do not currently take measures to provide or facilitate these services. Furthermore, there is limited awareness among CHSTP target populations about opportunities for this type of help.

Due to limited opportunities for customer input, there is currently insufficient understanding among service providers of the particular "extra help" needs of human services transportation customers. Inversely, riders may not be sufficiently aware of available services and rules, requirements, and policies to effectively provide input and make best use of services. There is a need for education and training on transit and paratransit system use. Education and training should extend not only to customers, but also to case managers as well as transit agency staff.

Photo courtesy of Nick Romanenko

CHAPTER
7

STRATEGIES AND RECOMMENDED ACTIVITIES

STRATEGIES AND RECOMMENDED ACTIVITIES

Nine strategic themes were designed to address the transportation needs of CHSTP target populations. The following themes emerged from public engagement activities held throughout the planning process, input from the Advisory Committee and experienced transit users, a study of county human services transportation plans, and a review of innovative practices.

- Increasing Auto Connections with Assistance
- Reducing Financial Barriers
- Coordinating Regional Destinations
- Improving Customer Experience
- Enhancing Communication
- Infrastructure Improvements
- Enhancing and Expanding Service
- Promoting Mobility on Demand
- Incentivizing Operational Coordination

The following section describes these strategic themes and presents recommended activities within each theme. An example of an innovative approach that has been successfully implemented in the NJTPA region or other areas of the country accompanies each theme and set of recommendations. For a detailed description of each strategic theme and additional featured examples, see *Technical Memorandum #4, CHSTP Population Needs and Recommended Strategies*.

Realization of these strategic themes will entail overcoming funding and institutional challenges. Some recommendations require large capital investments and others significant new technology. Most of the recommendations will require cooperation and coordination not only between multiple transportation agencies and jurisdictions, but also between the transportation sector and other sectors serving CHSTP populations, such as One-Stop Centers, Veterans Affairs, social service agencies and non-profits. Some recommended activities require cooperation between public and private sector entities, such as TNCs, real estate developers, and private companies employing low-income workers.

Overcoming these jurisdictional and sectoral divides will require ongoing coordination, policy development, and a focus on implementation. This process has started through the CHSTP update process, and its momentum could be leveraged through ongoing and expanded engagement with stakeholders, providers, policy makers and users in the region. One model, from the Pacific Northwest, of this type of ongoing service and policy effort focused on transportation disadvantaged populations is presented within the recommended activities that follow.

Increasing Auto Connections with Assistance

Increasing auto connections with assistance involves the use of automobiles to help connect older adults to destinations. There are several different models for providing auto connections with assistance, including the use of subsidized taxi services, vouchers, non-profit car services with paid or volunteer drivers, or "on-demand" dedicated car services for pick-up to destinations. Some "on-demand" private services have emerged that accommodate advanced bookings, door-to-door service, multiple stops, wait and return, and extra care personal assistance. Scheduling and pick-up may be arranged with or without use of smart phone "apps" through direct phone inquiries. This theme addresses spatial and temporal needs of older adults and persons with disabilities by providing flexible service that can reach numerous destinations.

As determined by survey data, over 50 percent of respondents indicated that owning or having a car would increase travel. Along with its high desirability, the importance of providing transportation by automobile helps to reduce travel times and make formerly inaccessible locations accessible by eliminating problems of first mile, last mile gaps. By providing concierge assistance, models in this strategy also address the digital divide and difficulties managing new technologies felt by older generations. Auto connections with assistance also provide a sense of dignity to the customer by providing a reliable and comfortable transit option. Assisted auto connection strategies are replicable, scalable, and some are already functioning within the NJTPA region.

Recommended activities

- **Promote and expand existing concierge ride hailing scheduling services that do not require a smart phone.** Connect customers through means other than a smart phone with concierges who dispatch drivers and act as customer service to facilitate scheduling of services in advance. Local examples include TransOptions TMA facilitating a pilot between the TriTown 55+ Coalition and GoGo Grandparent, and Meadowlink TMA introducing the new senior-focused Ryde4Life effort.
- **Expand and replicate existing cab subsidy programs for older adults.** Offer pre-registered clients a specified number of subsidized trips per day.
- **Expand and replicate existing non-profit car services with paid or volunteer drivers for senior citizens and persons with disabilities.** Riders book in advance to match available drivers to individual journey needs. The program is offered to registered members with per journey charge. Local examples include Meadowlink TMA Community Cars program and ITN North Jersey. Implementation of this activity could be furthered by addressing perceptions of increased insurance cost and liability for volunteer drivers.
- **Provide door-to-door service and driver companions.** Drivers act as companions for clients and remain with them until they are back home. This activity could be supported by securing funding and supporting program development.

North Brunswick Senior Cabs

North Brunswick Senior Cabs provides subsidized cab rides for older adults in the township. The program was implemented in May of 2016 when the Township of North Brunswick shifted funding formerly used for a senior bus service to provide subsidized cabs to qualified clients. While much of the cost is absorbed by the municipality, clients pay a $1.50 one-way fare for a trip anywhere within the township and $2.50 one way fare for medical trips up to 10 miles outside of the township. Older adults age 62+ and disabled residents without other means of transportation qualify for the program, which averages a ridership of 1,000 rides per month and has a total of 524 registered older adults as of 2017. Overall, the program successfully provides flexible service and lends a degree of freedom to riders that heavily rely on human service transportation for their daily transportation needs.

Reducing Financial Barriers

Reducing financial barriers is about increasing access to a variety of modes of transportation that are typically unavailable to low-income populations due to financial constraints. This can be achieved through several models, including subsidies or fare reduction for qualifying individuals riding transit. Another model is increasing access to automobiles facilitated through donations to non-profit organizations or financial aid for automobile repairs. Reducing financial barriers addresses institutional needs for low-income persons by offering more affordable transportation options.

In survey responses, community planning sessions, and focus groups, there was overwhelming support for taxi and TNC subsidies, in addition to overall lower fares. This strategy directly impacts individuals in the target group by providing access to transportation when personal finance is a barrier. In addition to lower fares, survey respondents expressed a desire for access to low cost vehicles. Models for this strategy are found across the country and could be readily implemented, provided there is funding available.

Recommended activities

- **Survey auto-based mobility strategies designed to serve low-income people for potential replication/ adaptation in the NJTPA region.** Auto-based assistance programs are designed to support income eligible households in acquiring safe, reliable transportation so adults may get to and from work. This approach helps low-income adults access employment by coordinating the purchase of affordable, used vehicles, offering financial assistance for vehicle repairs and providing general financial management skills training.

- **Identify best practices for implementing rider fare relief programs.** A fare subsidy for low-income riders could be implemented through a region-wide fare card, if available, or through coupons that can be used while purchasing a ticket. Incorporate this fare subsidy into screening for other age-, disability-, or income-based benefits carried out by social service agencies, such as county Aging, Disability and Resource Centers and county social services intake processes. Educate social service agency staff to connect clients to reduced fare applications.

- **Facilitate use of reduced fare program for older adults and customers with qualifying disabilities.** A reduced fare for these populations could be provided through passes and existing technologies, such as a personalized fare card which could be used for bus, subway, and rail service. Design the fare card system to accommodate people without access to a credit card.

> *Reduced Fare, EasyPay MetroCard*
>
> Reduced-Fare MetroCards are distributed by New York MTA to qualifying individuals, including older adults age 65+ and persons with qualifying disabilities. The Reduced-Fare MetroCard provides a reduction of half the base fare and is valid on most MTA services. Passengers may also use the EasyPay card option, which functions like a normal fare card with the added benefit of simplified payment through automatic refills when the card balance drops below $10. Customer costs are never more than $60.50 per billing cycle (half the cost of the $121 30-day unlimited pass), through automatic conversion to an unlimited pass whenever the required number or rides is fulfilled. The EasyPay system effectively streamlines payment, providing a monthly, refillable pass that does not burden the rider with the need to buy a discounted ticket for each trip.

Coordinating Regional Destinations

Coordinating regional destinations aims to maximize resources by identifying common destinations of the target populations. This can be achieved by organizing service to medical facilities on set days of the week, providing dedicated service to veteran medical facilities, and identifying communities with a high concentration of residents in the target population. By analyzing and providing services based on target population density and common destinations, agencies can shift resources for more effective use, reduce customer travel time, and improve the customer's ability to get to their desired destination. This theme serves older adults, veterans, and low-income individuals by addressing spatial, temporal, and institutional needs. Engaging elected officials will be critical to implementing this approach.

Coordinating regional destinations addresses a variety of needs within the region, including a lack of transit near rider destinations, as illustrated by survey data, and the desire to reduce transit travel time as expressed in the community planning sessions and focus groups. By grouping destinations desirable to the target populations, agencies may reduce travel time and service redundancy while getting riders to previously unserved destinations.

Recommended activities

- **Coordinate multi-county trips to regional destinations and medical centers.** Facilitate knowledge sharing around successful inter-county travel programs in New Jersey. Secure funding and support program development.

- **Coordinate among 55+ communities within Ocean, Middlesex, and Somerset Counties.** Conduct market research and operations studies to identify communities, including concentrations of existing 55+ communities, and opportunities for transit coordination. Evaluate and integrate available local (municipal and county) services. Promote local services to developments where members of CHSTP target populations reside. Include consideration of current transit access and anticipated future demand in the approval process for new 55+ residential developments.

- **Expand dedicated services to VA medical centers and local providers of VA services.** Provide subsidized out-of-county trips for veterans to VA medical facilities on a prescheduled basis. The service would be provided through inter-county collaboration and could be funded through county, state, or federal governments. This activity can be supported by informing veterans about available transportation options, educating clinic staff members on veterans' transportation needs, and by incentivizing coordination among counties of trips to and from specialized medical facilities.

Ocean Ride Veteran Transportation

Ocean Ride provides regularly scheduled, long-distance transportation service for Ocean County veterans to access the major, in- and out-of-county VA medical facilities across New Jersey and Pennsylvania. Trips are free to veterans and reservations are required in advance. In addition to veteran-dedicated cross-county service, the organization also provides service with Vetwork, a local non-profit agency to provide supportive services to local veterans such as employment opportunities, counseling, housing opportunities and limited transportation. By understanding the need for dedicated veteran services in Ocean County, which is home to 44,153 veterans, Ocean Ride has provided streamlined, reliable service to highly desired locations resulting in rides for 3,257 veterans over a distance of 64,205 miles in 2016. Through scheduled trips, demand is shaped around available resources, which creates efficiency and allows for passengers to plan their trips and care around the available resource.

Improving Customer Experience

Improving customer experience involves providing training to operators and services to passengers that promote human dignity and rider satisfaction. Models for improving customer experience include providing operator training beyond ADA sensitivity, collecting information into a convenient portal for customer use, and creating a universal payment system across agencies and/or a pre-paid fare card. This theme addresses all target populations by easing institutional barriers to better serve customers.

Riders of human service transportation may require extra attention, support, and/or information to travel independently. Providing operational staff with additional training so they may provide this extra level of service was a desirable strategy identified throughout the public outreach effort. This sentiment was also echoed by the advisory committee as a call for treating customers with dignity. This can result in target populations being served cost effectively and efficiently on fixed-route bus and rail systems.

Recommended activities

- **ADA+ sensitivity training for operators.** Beyond compliance training for ADA, provide customer service training focused on better serving targeted populations through increased disability awareness, a focus on courtesy, cultural sensitivity and diversity, and offering customers accessibility features.

- **Coordinate travel information.** Collect information about multiple agencies and modes of transportation – including NJ TRANSIT fixed-route, private carrier, commuter buses, and scheduled county services – under one website umbrella creating centralized and easy communication. Facilitate streamlined access to make trip planning easier to attract optional riders, not only the transit dependent. (The njfindaride effort, currently maintained by the NJ 211 partnership, has collected much of this information, which can be accessed at www.njfindaride.org.)

- **Implement a universal payment/pre-paid card.** Implement a fare card that can be used on multiple transit services throughout the region. The pre-paid card can be swiped and automatically charged the appropriate amount when the passenger boards the vehicle or purchases a ticket at a window or kiosk. Review successful grant applications for universal payment systems in other jurisdictions, and examine mode and approach for potential local adaptation/replication.

Simply Get There – Atlanta Regional Commission

Simplygetthere.org is a one-click site for customers to plan their trips through driving, biking, specialized services, vehicles for hire, and public transit. The program was first piloted in 2015 and successfully created a centralized online resource for all modes of transportation in the Atlanta metro area, with a specific emphasis on options for individuals with disabilities, chronic medical conditions, lower income individuals, older adults, and veterans. The project was initially framed with a "universal design" approach in the hopes that providing traditionally underserved individuals with a comprehensive tool for transportation that would also better serve the general population. When customers use the site they have options to indicate their age, if they are eligible for paratransit, if they are a veteran, if they require wheelchair accommodations, and if they need assistance from their front door, allowing the site to customize their travel experience around their needs. In the future, the Atlanta Regional Commission hopes to build upon the existing trip planning interface to include the ability to book trips or buy tickets online.

Enhancing Communication

When accurate information is disseminated strategically, it is easier for customers to get what they need to plan and execute their trips. Enhancing communication can be achieved by providing more information at transit stops, using larger graphics and text on transit materials and signs, ensuring correct audio announcements or visual cues on-board to alert riders of upcoming stops, and including route maps on signage. It can also be advanced through holistic marketing of services, strategic schedule dissemination, and live customer assistance throughout peak hours of operation. In addition, customer education through travel training and concierge trip planning services can increase awareness of local and regional services, simplify transit use, and increase customer confidence when using transit. This theme directly serves all target populations by addressing institutional and awareness needs.

Enhancing communication leverages the capital investment in ADA accessibility already made for fixed route NJ TRANSIT rail, light rail, and bus service, building on the region's existing strengths. Enhancing communication simplifies multiple systems, empowers users with additional information, and may enable them to be less dependent on more expensive demand response services. This model also allows customers to plan trips incorporating all available resources by offering broader choices and more flexibility. Finally, this model treats passengers as returning customers who need reliable information resources to plan trips.

Recommended activities

- **Launch holistic, multi-dimensional regional marketing of services to CHSTP populations.** Increase visibility of CHSTP focused services and programs. Present accessible fixed route and human services transit information at conferences targeting professionals who work with CHSTP populations, and events of interest to target populations, such as the Disability Pride Parade, Abilities Expo, and NJ Foundation on Aging Annual Conference. Expand distribution of paper schedules at target locations, especially in areas identified as places respondents have a hard time reaching, such as NYC, Morristown, New Brunswick, Newark, Elizabeth, Paterson, Clifton, Toms River, Asbury Park, Newton, and Flemington. Provide clear signs, news announcements, and visual on-board LCD screens to indicate current location and the next two stops. Conduct market research and in-field observations to ensure schedules and en route travel information meets user requirements.

- **Provide live customer service during peak travel hours.** Increase staffing at NJ TRANSIT customer service lines to provide assistance during peak hours of transit, which can begin as early as 6:30 a.m. and run as late as 7:30 p.m. Current NJ TRANSIT main line call center hours are 8:30 a.m. to 5 p.m. daily. Alternatives to augmenting NJ TRANSIT staffing could include "live" customer service using remote operators or collaborating with TMAs.

- **Expand existing public outreach campaigns to improve pedestrian safety.** Build on the NJTPA Street Smart effort by focusing implementation in communities with significant concentrations of CHSTP populations. Conduct outreach to identify opportunities for safer streets for walking and connecting to available transit options.

- **Address busy signal & excessive wait times for phone reservations.** Support efforts to reduce customer wait times such as the recent implementation of "Access Link Online".

- **Increase and enhance information at transit stops and key destinations.** Implement smart bus shelters and information kiosks with free Wi-Fi, including digital displays for information like next bus arrival, weather, and public safety alerts. Increase font sizes and create clear signage with route maps. Pilot stops with enhanced information in partnership with private funders and targeted municipalities.

- **Provide travel training & concierge assistance.** Travel training can be held in group and one-on-one settings and followed by concierge service with personal trip planning. This activity can be supported by stabilizing and expanding funding streams and seeking support from state agencies that serve CHSTP populations that could use fixed-route transit. Provide travel education to professionals serving CHSTP populations, such as case managers and One-Stop staff. Launch TMA outreach effort to spread awareness of training availability.

Smart Cities – Chicago

The partnership between the City of Chicago and AT&T to pilot smart bus shelters and information kiosks with free Wi-Fi offers a notable model for providing more information to customers at transit stops. As a part of two major programs, AT&T's Smart Cities initiative and Chicago's Array of Things program, the pilot will monitor movement across the city with the hopes of using the data to provide innovative and elegant solutions to transit in the future. The piloted bus shelters include digital displays that have information such as the next bus arrival time, weather, and public safety alerts. The shelters also provide intelligent lighting for increased safety and customer comfort and USB charging stations. The pilot will begin in early 2017 and last three to twelve months. In addition to bus shelters, the program will also implement 5 CIVIQ WayPoint smart screens kiosks around the city that provide free Wi-Fi and information about local attractions and activities. In the future, the City of Chicago hopes to use this feature to provide information about public transit or activate a TNC trip, providing more information and greater access to mobility options. AT&T provides the management and advisory services, coordinates hardware design and integration, and provides a single interface to collect the real-time data from the smart shelters and kiosks.

Infrastructure Improvements

Infrastructure improvements provide better customer access to transit services not only while on-board, but also by addressing environmental barriers that impede the passengers' ability to get to transit options. Such improvements could include new or better bus stops, benches, shelters and sidewalks, but also prioritizing the physical location of such structures to aid target populations. Other models for infrastructure improvement include more accommodations for wheelchairs through better policy and implementation as well as on-board enhancements. While infrastructure improvements generally improve quality of life for everyone, they have a particularly profound impact on the needs of older adults and persons with disabilities.

This strategic theme was identified in all dimensions of public outreach, cuts across the entire geography, and provides an opportunity to address regional circulation by working with planners at the region's 13 counties. It builds upon the connection between the built environment and the ability of customers to access fixed route transit. In addition to the built environment, existing accessible features also need to be reliable, both at transit stops and en route. This approach builds off of the existing Complete Streets and Street Smart NJ efforts, which have increased awareness and sensitized communities in the NJTPA region regarding the benefits of pedestrian safety improvements and better and safer transit access.

Recommended activities

- **Install and improve bus stops, benches, shelters & sidewalks to facilitate pedestrian movement and transit use.** Make pedestrian infrastructure improvements to enhance safety through pedestrian refuge islands, greening of medians, and other traffic calming measures. Conduct studies of where benches could be installed or replaced, focusing on locations within a quarter mile of hospitals, municipal facilities, senior centers or other destinations relevant to CHSTP target populations. Provide training and technical assistance to promote better attention to land use, transit access, and local plans for target populations. Secure funding and support program development for infrastructure investments, potentially involving developers and other private partners.

- **Develop a comprehensive bus stop/shelter policy for placements and maintenance.** Organize discussions between stakeholders to identify obstacles and opportunities for consistent siting, provision, and maintenance of bus stops and shelters along NJ TRANSIT routes.

- **Improve accessibility and accommodations for wheelchair use in the bus and rail transit system.** Improve training on onboard accessibility features for operators; provide additional education for land use planners on improving accessible path of travel to transit stops, potentially working with the League of Municipalities and APA-NJ. Implement an NJ TRANSIT courtesy campaign implemented in partnership with bus operators and train conductors.

- **Prioritize projects and funding to target areas of need.** Incorporate prioritization criteria into local and regional planning processes to strategically direct projects and funding for bus stops, shelters, and other appropriate facilities to areas with high concentrations of transit dependent CHSTP populations.

NYC Safe Streets for Seniors

NYC DOT's Safe Streets for Seniors Program seeks to provide a safe environment for seniors to access transit through pedestrian improvements. Projects to improve safety include extended crossing times at intersections, new traffic signals, pedestrian safety islands, curb extensions, pedestrian intervals, and turn restrictions. The program has produced positive initial results, with a decrease in older adult fatalities of 17 percent from 2008 to 2012. The NYC DOT also runs the CityBench program, an initiative to increase and improve public seating with input from the general public. Residents can request a bench online by providing their personal information, bench location, preferred bench type, preferred bench orientation, and any additional comments. The program has already installed 1,500 benches with the goal of installing 600 additional benches.

Enhancing and Expanding Service

The enhancing and expanding service strategy aims to fill both spatial and temporal service gaps through additional services and institutional coordination. One model is expanding night and weekend service with a particular emphasis on second and third shift workers, a growing workforce in New Jersey. Other opportunities occur through the coordination of routes to connect additional services and job training sites. Enhancing and expanding service also incorporates rider input, focusing on target locations (such as senior centers, veteran hospitals, or New York City for paratransit users) to maximize improvements. This strategy serves all members of the target population by addressing spatial, temporal, and institutional needs.

Currently, most of the county-based paratransit in the NJTPA region focuses on Monday through Friday service during business hours. However, as the CHSTP population expands, demand for service increases in the evening and weekend hours. This need is further exacerbated by the decentralized nature of low-wage job opportunities, which tend to be located in suburban areas and not on the fixed route grid. In addition to its popularity with members of the CHSTP Advisory Committee, this strategy is fueled by input from close to 5,000 CHSTP public outreach participants and is responsive to their needs. With an existing orientation of service around medical trips, there is a high demand for other trip destinations with additional service hours.

Recommended activities

- **Evaluate routes and services based on customer needs.** Use passenger input to identify where operational adjustments may make a significant difference in the mobility and access of targeted populations. Continue to convene CHSTP Advisory Committee and leverage the stakeholders to create an ongoing advisory body to explore service enhancements and route adjustments, policy and implementation, and prioritize projects for funding. Study and promote the economic benefits of transit-rich settings (e.g., employee retention, improved customer access) to employers and the importance of CHSTP population mobility and access to economic development. Support and increase the visibility of existing TMA initiatives.

- **Expand night and weekend service.** Operate services in late evening to fill a critical need for transit dependent, night-shift workers, including shuttle services that connect commuters between their homes and transit stations or other destinations.

- **Explore feeder services and first-mile/last-mile strategies to expand fixed route transit services.** Engage with contract transportation solution providers to help people find and maintain employment by operating in transit poor areas where service may not be available or in off peak hours. Consult with Pearl Transit (a non-profit providing transit service to employment sites and child day care in Camden and Gloucester counties) to identify best practices.

- **Assess transit access to One-Stops and emerging employment sites in the region.** Evaluate path of travel and level of transit service available to transit hubs and One-Stop centers in NJTPA region and to employment sites for proposed service enhancements. Assess access and work with employers to identify opportunities to augment existing services by providing support for connections to employment sites.

Special Needs Transportation Committee: Puget Sound Regional Commission

The Puget Sound Regional Commission is an approach designed to engage traditionally underserved populations in planning and implementing program activities that recognize their needs and result in meaningful outcomes for all participants. The Special Needs Transportation Committee advises the Transportation Operators Committee on special needs transportation and transit, including updates to the region's CHSTP Plan and prioritization of projects for funding. Members of the committee include transit operators, representatives from paratransit services, senior centers, local American Indian tribes, and housing authorities. The group meets quarterly to discuss elements of the area's comprehensive plan, submit materials for grant competitions, update the service inventory, identify funding opportunities, and facilitate public outreach through the lens of serving CHSTP populations.
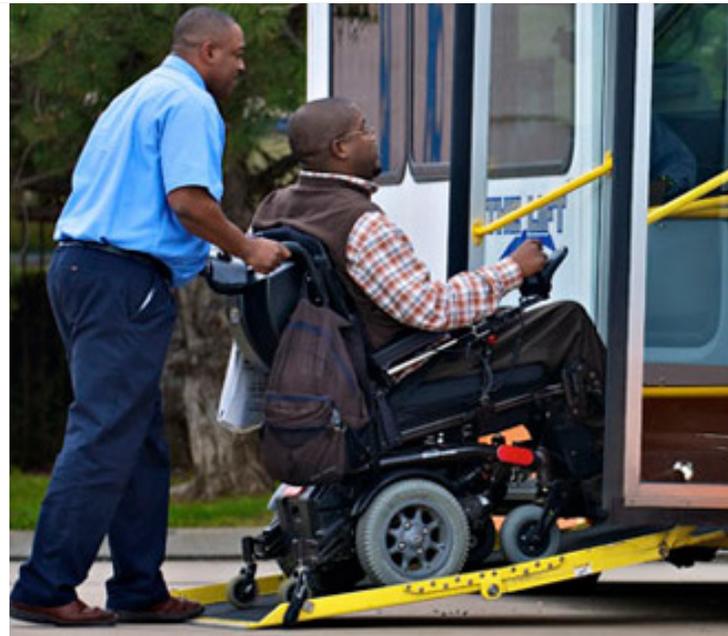
Promoting Mobility on Demand

Mobility on demand expands upon the need for real time service by capitalizing on the growing partnerships of public agencies and transportation network companies. Examples include TNC partnerships with medical facilities, subsidized services, and the use of accessible TNC vehicles by public agencies, among others. These partnerships benefit the target population by providing flexible, on demand service that can address first-mile, last-mile needs and potentially work in tandem with fixed route transit. Promoting mobility on demand serves older adults, veterans, and persons with disabilities by addressing spatial, temporal, and institutional needs.

Providing automobile travel was identified as an overwhelmingly popular strategy throughout the public outreach portion of the project. The strategy leverages the existing presence of Uber and Lyft in the region, as well as the additional TNCs anticipated entering the greater New York marketplace. This strategy also provides a major benefit to customers in terms of time saved in transit and preservation of dignity. It naturally complements the limitations of existing service and the significant number of individuals in NJTPA region who do not live in walking distance to fixed route transit. TNC service is still evolving, and public providers should continue to explore ways to collaborate that can realize cost savings and meet operational requirements.

Recommended activities

- **Expand availability of accessible TNC vehicles.** Facilitate connections between CHSTP stakeholders and TNCs to explore implementation of emerging new services such as cashless payment, real-time GPS so others, such as case managers, agency staff and loved ones, can track the trip, wheelchair accessibility, and voice over technology for the blind and improved audio for those with hearing impairments.

- **Subsidize TNC rides for medical trips.** Build support among stakeholders for replicating or adapting existing programs in which medical centers subsidize rides with TNCs. In a modification to typical TNC applications, users can designate a specific pick-up and drop-off zone. Hospital employees are present in the zones to help patients in and out of their vehicles, providing necessary extra assistance.

- **Partner with TNCs.** Foster partnerships between public agencies and nonprofits serving CHSTP target populations and TNCs in order to provide clients demand responsive services with trained drivers. Explore potential of TNC linkages between NYC and New Jersey for members of CHSTP target populations. Facilitate connections between stakeholders in low density transit locations and TNCs.

Hackensack UMC & Uber Team Up

Beginning in April of 2016, Hackensack UMC and Uber entered a partnership aimed at decreasing patient's missed appointments and providing cost and time-sensitive rides home through a designated ride service to the hospital. By responding to increasingly short hospital stays, the Hackensack UMC and Uber partnership provides patients an efficient way to get home that does not rely on the availability of a patient's family or friends. The partnership has resulted in designated pick-up and drop-off zones at the hospital, staffed by hospital employees to help patients in and out of their vehicles. Riders may order an Uber through the Uber application, Hackensack UMC's web page, or with assistance from hospital staff providing ease of use for those who may not own a smart phone. The hospital hopes to build further access for low-income individuals in the future though need-based subsidies.

Facilitating Operational Coordination

Incentivizing operational coordination seeks to reduce redundancies in service and optimize existing resources through interagency coordination. This can be achieved through several models including data visualization that aids in identifying existing services and redundancies, shared vehicle maintenance, linkage of stations of disparate transit corridors, and through partnerships that promote the use of county vehicles in off-peak time periods. This theme serves all of the target populations by addressing institutional barriers in service provision. Engaging elected officials will be critical to implementing this approach.

Incentivizing operational coordination meets the institutional needs of the region by providing better information about the numerous existing services provided by the region's various agencies. Through increased collaboration and coordination, the region could better manage services and resources, reduce redundancies, establish new connections, create efficiencies in routes, and provide a better customer experience, by serving highly desirable destinations in a more streamlined manner. These actions have direct implications on issues of access and ridership that could improve the quality of service for the targeted population.

Recommended activities

- **Connect transit stations on different corridors.** Facilitate cross-county regional mobility by linking stations on different rail lines through the implementation of new or modified county shuttle routes and non-profit transportation services.

- **Encourage existing shared maintenance and service programs.** Promote shared services among public and non-profit transportation operators, including shared use and maintenance of transportation infrastructure and fleets. Create partnerships that promote the use of county vehicles in off peak hours.

- **Develop data visualization tools to improve coordination.** Map routes via GIS to identify service redundancies and improve efficiency. This activity is being implemented by Cross County Connection TMA and NJTPA through a data mapping tool pilot project. The mapping tool facilitates both transit system planning and individual user trip planning.

Data Visualization: Cross County Connection TMA

Cross County Connection TMA is mapping fixed transportation routes and services, using GIS software to identify service gaps and redundancies. The resulting maps will be used to address institutional needs by providing better information for agencies, allowing coordination of schedules and routes between municipalities, counties, TMAs, and other regional actors. This tool provides a more in-depth understanding of how the coordinated human services transportation works in the region and offers the opportunity to identify gaps in service, with the hope of expanding and improving these services. Visually representing coordinated human services transportation affords policy makers the necessary tools to improve services in the NJTPA region. In the future, this tool could be expanded to cover the NJTPA region or even the entire state of New Jersey, promoting not only interagency coordination, but also possibly helping customers visualize and plan their own trips more effectively in the future.

CHAPTER
8

IMPLEMENTATION

IMPLEMENTATION

This report concludes with a list of the 33 recommended activities designed to advance each of the nine strategic themes. **Table 15** shows each recommended activity along with information to guide implementation. The table categorizes the activities into short and mid-range (5+ years) timeframes and identifies potential implementation partners and funding/resources. Some recommended activities build on existing programs, projects, and resources in the NJTPA region and are readily implementable. These five actions are categorized as "Leveraging Existing Assets" and are listed first and **highlighted** within the table. Some activities require additional research or inquiry, as indicated in the last column. The table also identifies which target populations will primarily benefit from each recommended activity.

Table 15. Recommended Activities Implementation Guide

Strategic Theme	Action	Targeted Population — Older Adults	Persons with Disabilities	Lower Income	Veterans	Partners	Funding / Resources	Time Frame — Short term	Midrange	Additional Research Needed
Increasing Auto Connections with Assistance	Concierge ride hailing scheduling without smart phone	•	•			- Foundations - Human service non-profits - Medical centers - Private providers (GoGoGrandparent) - Senior centers - TMAs - TNCs	- Foundations - Private entities	•		
	Cab subsidies for older adults	•				- Foundations - Human service non-profits - Municipalities - NJ Division of Aging Services - NJTPA - Private carriers (bus/taxi/TNC) - Senior centers - TMAs	- Foundations - Municipalities - Public-private entities - Title III Older Americans Act	•		
	Non-profit car services with paid and volunteer drivers	•	•			- County agencies - County agencies - Faith-based communities - NJTPA - Private providers (ITN) - Senior centers - TMAs	- Foundations - MOD Sandbox - National Center for Senior Transportation - NJ Office of Faith Based Initiatives - Sec. 5310	•		
	Door-to-door service with driver companions	•	•			- Faith-based organizations - Human service non-profits - Medical centers - Private providers (Envoy America) - Senior centers - TMAs	- Foundations - NJ Office of Faith Based Initiatives - Private entities - United Way		•	

Strategic Theme	Action	Older Adults	Persons with Disabilities	Lower Income	Veterans	Partners	Funding / Resources	Short term	Midrange	Additional Research Needed
Reducing Financial Barriers	Access to inexpensive vehicles	•		•		- Anti-Poverty Network - County college system - County services - Human service non-profits - Job training sites - Vocational schools	- United Way - Vehicle donations		•	✓
	Reduced fare for older adults and people with disabilities	•	•			- NJ TRANSIT / Access Link - NJTPA - TMAs	- NJ Div of Aging Services - NJ Div of Developmental Disability - NJ Div of Disability Services - NJ Div of Vocational Rehabilitation Services - NJ TRANSIT / Access Link	•		
	Rider fare relief program			•		- Anti-Poverty Network - County providers - County social services offices - Human service non-profits - NJ TRANSIT - NJTPA - TMAs	- NJ Dept of Human Services - NJ Dept of Labor & Workforce Development	•		
Coordinating Regional Destinations	Coordinating multi-county trips to regional destinations and medical centers	•	•	•	•	- County providers - County freeholders - Medical centers - NJ TRANSIT - NJTPA - TMAs	- Counties - Insurance companies - Medicaid - Medical centers - NJJARC - Rides to Wellness - State and federal VA		•	
	Coordination among 55+ communities within Ocean, Middlesex, and Somerset Counties	•				- Condo and homeowner associations - County planning offices - County providers - Frequent destinations - Municipalities - NJ Div of Aging Services - NJTPA - Senior centers - Senior residential developments - TMAs	- Sec. 5310 - Aging & Disability Transportation Center - NJ Div of Aging Services - Title III Older Americans Act		•	✓

Strategic Theme	Action	Older Adults	Persons with Disabilities	Lower Income	Veterans	Partners	Funding / Resources	Short term	Midrange	Additional Research Needed
Coordinating Regional Destinations	Expanding dedicated services to VA medical centers and local providers of VA services				•	- County freeholders - County providers - County Veteran Bureau - Human service non-profits (Vet Works) - NJTPA - TMAs - VA hospitals & clinics	- Counties - Foundations - National Veteran Affairs - NJ JARC - NJ Office of Veteran Affairs - Rides to Wellness - Sec. 5310	•		
Improving Customer Experience	ADA+ sensitivity training for operators		•			- Aging and Disability Resource Centers - County providers - Elected officials - NJ TRANSIT - NJTPA - TMAs - Transit unions	- Project ACTION - RTAP - Sec. 5314(b) - Human Resources & Training - Target population	•		
	Coordinated information: Inclusive of NJ TRANSIT fixed-route, private carrier, commuter buses, scheduled county services	•	•	•	•	- Commuter bus operators - County providers - Elected officials - Human service non-profits - Municipal services - NJ TRANSIT - NJTPA - Private carriers - TMAs	- Accessible Transportation Technologies Research Initiative (ATTRI) - Rides to Wellness - Sec. 5312 - Public Transportation Innovation - Sec. 5314 (a) - Technical Assistance & Standards Development - Veterans Transportation & Community Initiative	•		
	Universal payment/pre-paid fare card	•	•	•	•	- Elected officials - NJ TRANSIT - NJTPA - NY MTA - NYMTC - Port Authority / PATH - TMAs	- ATTRI - NJ TRANSIT - NJTPA - NYMTC - NY MTA - Port Authority / PATH - Sec. 5312 - Public Transportation Innovation		•	✓

Strategic Theme	Action	Targeted Population				Partners	Funding / Resources	Time Frame		Additional Research Needed
		Older Adults	Persons with Disabilities	Lower Income	Veterans			Short term	Midrange	
Enhancing Communication	**Holistic, multidimensional regional marketing campaign**	•	•	•	•	– County ADRC – County providers – NJ 211 – NJ TRANSIT – NJTPA – Public libraries – TMAs	– NJ Dept of Human Services – NJ TRANSIT – NJTPA	•		
	Live customer service during peak travel hours	•	•	•	•	– NJDOT – NJTPA – NJ TRANSIT – TMAs	– NJ TRANSIT	•		
	Pedestrian safety public outreach campaigns	•	•	•	•	– Chambers of Commerce – Community based organizations – Faith-based organizations – Main Street organizations – Medical centers – Municipalities – NJ TRANSIT – NJTPA – Public libraries – Schools – Senior centers – TMAs	– FHWA – NJ Dept of Community Affairs – NJ Div of Highway Traffic Safety – NJDOT – NJTPA	•		
	Address busy signal & excessive wait times for phone reservations	•	•	•	•	– NJ TRANSIT	– NJ TRANSIT	•		
	More information at transit stops and key destinations	•	•	•	•	– NJ TRANSIT – NJTPA – Private partners – Municipalities – Elected officials	– ATTRI – Private entities (AT&T, Optimum, etc.) – Smart Cities Challenge grant – Sec. 5312 - Public Transportation Innovation	•		

Strategic Theme	Action	Older Adults	Persons with Disabilities	Lower Income	Veterans	Partners	Funding / Resources	Short term	Midrange	Additional Research Needed
Enhancing Communication	Travel training & concierge assistance	●	●	●	●	- Medical centers - NJ 211 - NJ Dept of Children & Families - NJ Dept of Education - NJ Dept of Human Services - NJ Div of Vocational Rehabilitation Services - NJ TRANSIT - NJTIP @ Rutgers - NJTPA - TMAs	- Sec. 5310 - Casino revenue - Foundations - NJ Div of Vocational Rehabilitation Services - NJ Dept of Human Services - NJ Dept of Education	●		
Infrastructure Improvements	Bus stops, benches, shelters & sidewalk improvements to facilitate pedestrian movement and transit use	●	●	●	●	- Municipalities - NJ TRANSIT - NJDOT - NJTPA	- CMAQ - Highway Safety Improvement Program - Ladders of Opportunity - NJ Bicycle & Pedestrian Resource Center - NJ Local Aid - NJ Safe Routes to School - NJ Transportation Alternatives Program	●		
	Comprehensive bus stop/shelter policy for placements and maintenance	●	●	●	●	- Municipalities - NJ DOT - NJ TRANSIT - NJTPA	- NJ DOT	●		✓
	Improve accessibility and accommodations for wheelchair use - on board and environmental path of travel to transit		●			- Municipalities - NJ League of Municipalities - NJ TRANSIT - NJDOT - NJTPA - Planners (state, county & munici-pal) - Unions	- CMAQ - Highway Safety Improvement Program - NJ Bicycle & Pedestrian Resource Center - NJ Local Aid - NJ Safe Routes to School - Sec. 5314 (b) - Human Resources & Train-ing	●		
	Prioritize projects and funding to target areas of need	●	●	●	●	- NJTPA - NJ TRANSIT/Access Link	- Ladders of Opportunity - Sec. 5310		●	

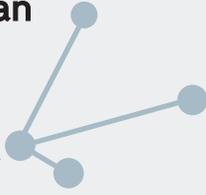| Strategic Theme	Action	Targeted Population				Partners	Funding / Resources	Time Frame		Additional Research Needed
		Older Adults	Persons with Disabilities	Lower Income	Veterans			Short term	Midrange	
Enhancing and Expanding Service	**Evaluate routes and services based on customer needs**	●	●	●	●	- County agencies - Human service non-profits - NJ TRANSIT - NJTPA - TMAs	- NJTPA - NJ TRANSIT - Sec. 5310	●		
	Expand night and weekend services			●		- County providers - NJ TRANSIT - Private employers - TMAs	- County funds - NJ Dept of Human Services - NJ JARC - Private employers	●		
	Feeder services and first-mile/last-mile strategies to expand fixed route transit services (e.g. to reach jobs & training sites)			●		- County providers - Job training sites - NJTPA - Private carriers (bus/taxi/TNC) - TMAs	- CMAQ - Ladders of Opportunity - NJ JARC - Private Employers - Sec. 5311 - Workforce Development Boards		●	
	Transit access to One Stops and emerging employment sites in region			●		- NJ Dept of Labor & Workforce De-velopment - NJ TRANSIT - NJDOT - NJTPA - Private Employers - Workforce Development Boards	- NJ Business Action Center - NJ Department of Labor and Workforce Development - NJDOT - NJTPA - Private Employers	●		
Promoting Mobility on Demand	Accessible TNC vehicles		●	●		- TNCs - NJTPA - NJ TRANSIT/Access Link - TMAs - County providers	- TNCs to incentivize providers - County vehicles used in off hours	●		
	Medical trips - subsidized TNC rides	●	●	●	●	- TNCs - Medical centers - Foundations - NTJPA	- Rides to Wellness grant - Foundations - Insurance companies - Medical centers	●		

Strategic Theme	Action	Older Adults	Persons with Disabilities	Lower Income	Veterans	Partners	Funding / Resources	Short term	Midrange	Additional Research Needed
Promoting Mobility on Demand	Partnerships with TNCs	•	•	•	•	- Medical centers - Municipal/County Offices on Aging - NJ TRANSIT/Access Link - NJTPA - Senior centers - TMAs - TNCs	- Counties - MOD Sandbox - Municipalities - Sec. 5310 funding - Title III Older American Act	•		
Facilitating Operational Coordination	Connect transit stations on different corridors	•	•	•	•	- County providers - NJ TRANSIT - NJTPA - Private employers - TMAs	- Counties - Private employers - Sec. 5311		•	
	Shared maintenance services	•	•	•	•	- County providers - NJ TRANSIT - NJTPA - TMAs	- Sec. 5310 - Sec. 5311		•	
	Data visualization to improve coordination & facilitate customer trip planning	•	•	•	•	- County providers - Cross County TMA & other TMAs - NJ TRANSIT - NJTPA	- NJ TRANSIT - NJDOT - NJTPA		•	✓

APPENDIX A: ABBREVIATIONS AND ACRONYMS

ACS	American Community Survey
ADA	Americans with Disabilities Act of 1990
ADRC	Aging and Disability Resource Center
ATTRI	Accessible Transportation Technologies Research Initiative
CHSTP	Coordinated Human Services Transportation Plan
CMAQ	Congestion Mitigation and Air Quality
DCF	Department of Children and Families
DDD	Division of Developmental Disability Services
DDS	Division of Disability Services
DHS	Department of Human Services
DMHAS	Division of Mental Health and Addiction Services
DVRS	Division of Vocational Rehabilitation Services
FAST Act	Fixing America's Surface Transportation
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
JARC	Job Access and Reverse Commute Program
MAP-21	Moving Ahead for Progress in the 21st Century Act
MOD Sandbox	Mobility on Demand Sandbox research effort
MPO	Metropolitan Planning Organization
NJCAM	New Jersey Council on Access and Mobility
NJDOT	New Jersey Department of Transportation
NJTIP	New Jersey Transportation Independence Program @ Rutgers
NJTPA	North Jersey Transportation Planning Authority
NYMTC	New York Metropolitan Transportation Council
PANYNJ	Port Authority of New York and New Jersey
PATH	Port Authority Trans-Hudson
Project ACTION	Project Accessible Community Transportation in Our Nation
PWD	Person with a Disability
RTAP	Rural Transit Assistance Program
RTP	Regional Transportation Plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SCDRTAP	Senior Citizen and Disabled Resident Transportation Assistance Program
SOV	Single Occupancy Vehicle
TAZ	Traffic Analysis Zones (geographic areas of approximately 3,000 people)
TNC	Transportation Network Company
TIP	Transportation Improvement Program
TMA	Transportation Management Association
US DOT	United States Department of Transportation
VA	Veterans Administration
VTC	Alan M. Voorhees Transportation Center, Rutgers, The State University of New Jersey

GO

Coordinated Human Services Transportation Plan

FARTHER

NJTPA

NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

RUTGERS

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