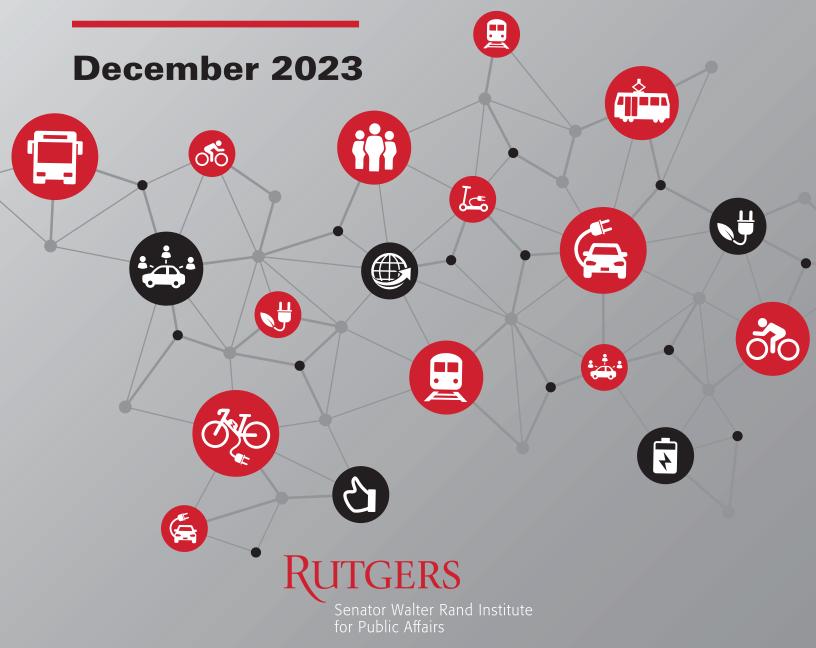
# TRANSPORTATION ACCESSIBILITY IN SOUTHERN NEW JERSEY

Barriers, Effects, and Considerations



## Inside front cover Intentionally left blank

#### **TABLE OF CONTENTS**

- **03** A. Executive Summary
- 05 B. Defining Equitable Transportation Access
- **07** C. Report Methods
- 09 D. Key Findings
  - i. Modes of Transportation and How People Get Around in Southern New Jersey
  - 11 ii. County-Specific Transportation Data
  - **13** iii. The Current Impact of Transportation Infrastructure
  - 19 iv. Transportation During COVID-19
  - v. Managing Transportation Accessibility and Barriers at the Individual and Community Levels
- 24 E. Current Transportation Projects in Southern New Jersey
- 27 F. Conclusion and Future Directions
- 29 G. References

## Blank behind TOC Intentionally left blank

## ABOUT THE SENATOR WALTER RAND INSTITUTE FOR PUBLIC AFFAIRS

The Senator Walter Rand Institute for Public Affairs (WRI) at Rutgers-Camden has been a long-standing and trusted regional community partner for over 20 years. WRI honors former Senator Rand's dedication to Southern New Jersey and exists to produce and highlight community-focused research and evaluation leading to sound public policy and practice in the region. With that as a foundation, WRI convenes and engages stakeholders in making the connections across research, policy, and practice in support of Camden City and Southern New Jersey residents. Using social science research methods, WRI specializes in transforming data into actionable information across a variety of areas, including workforce development, education, transportation, and public/population health. WRI reinforces and amplifies Rutgers' research, teaching, and service goals by connecting the multidisciplinary expertise of faculty to regional problems, developing research and professional skills in students, and linking the resources of higher education to communities in Southern New Jersey.

#### Leadership

Mavis Asiedu-Frimong, JD, MPH, Director mavis.asiedufrimpong@rutgers.edu

Kristin Curtis, MA, Associate Director of Research krcurtis@camden.rutgers.edu

Celine Thompson, Ph.D., Senior Education Project Administrator celine.thompson@rutgers.edu



## SENATOR WALTER RAND AND HIS TRANSPORTATION LEGACY



Senator Walter Rand was a household name in Southern New Jersey politics and a leader in the city of Camden. Senator Rand first became a member of the New Jersey Assembly in 1975 and remained there until 1982. Senator Rand was then elected to the State Senate, where he remained until 1995. Senator Rand, in his first year as a senator, was appointed chair of the Transportation committee, a responsibility not often given to freshman senators. During his time in the New Jersey legislature, Senator Rand sponsored a set of laws that led to the creation of the Transportation Fund in 1984. Senator Rand also authored the bill that led to the creation of the South Jersey Transportation Authority in 1991; the bill aimed to help with transportation projects in six Southern New Jersey counties. Senator Rand believed that the progress of the city of Camden and Southern New Jersey depended largely on transportation infrastructure and economic development working in tandem to spur community development. His commitment to and

impact on transportation in the region was so significant that the principal transportation center in Camden City is named after him (the Walter Rand Transportation Center). This legacy further led to the creation of a research center at Rutgers University – Camden, the Senator Walter Rand Institute for Public Affairs (WRI) in 2000.

#### **WRI Report Authors**

#### **WRI Staff**

Devon Ziminski, M.S. | Senior Research Project Administrator, Project Lead

Celine Thompson, Ph.D. | Senior Education Project Administrator

Carla Villacis, M.A. | Research Project Coordinator

#### **WRI Student Staff**

Matthew Brodsky

Joseph Johnson, M.A.

Oguz Kaan Ozalp, M.S.

Ryan Pletcher, M.A.

Kelsey Woodard, M.A.

Katie Wisniewski, M.A.

Shibin Yan, M.A.

#### A. EXECUTIVE SUMMARY

The goal of this report was to use existing primary and supplementary secondary data from a variety of WRI's research projects to outline, explore, and highlight the role of public transportation, especially in places where it is lacking, in Southern New Jersey communities. The findings and discussion go beyond existing quantitative data to explain the where, why, and how of transportation access for Southern New Jersey residents. Using guiding frameworks from transportation accessibility and transit insecurity principles, this report contextualizes the importance and role of public transportation in the region.

WRI researchers synthesized ten years of previously collected WRI data across 10 projects. Researchers reviewed and analyzed themes that highlight how Southern New Jersey residents mobilize themselves, what barriers residents face in transportation options, the effects of these gaps, and how residents and communities work around transportation gaps and support initiatives for continued development. Data drawn from projects includes information across Southern New Jersey: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, and Salem counties.

The report also includes supplemental secondary data that contextualizes existing transit modes and routes in Southern New Jersey, and highlights current and future regional transportation initiatives that support residents' needs.

WRI's review and analysis of transportation related data from past and current projects revealed multiple themes around transportation in Southern New Jersey:

#### Modes of Transportation across Southern New Jersey

Southern New Jersey residents most frequently rely on personal vehicles for transportation, and a smaller base rely on public transit options (e.g., rail lines and buses). Other transit modes include private efforts (e.g. taxis, Uber/Lyft), organization-sponsored shuttles (e.g., 54/40 Community Shuttle, Movidcare (formerly LogistiCare<sup>1</sup>), and walking and bicycling. Data revealed how transportation options, and travel distances between transportation pick up spots/hubs, varies between rural and urban communities.

#### How Current Transportation Infrastructure Affects People - Barriers & Considerations

Access to and use of public transportation remains a challenge for many Southern New Jersey residents. Barriers related to cost, distance, reliability and frequency of transit options were chronicled across the data. Residents across counties experience challenges with long commutes, unreliable or inconsistent transit times, and a lack of available and convenient options. Data across reports revealed how a dearth in transportation access and/or high costs of transportation limited residents' access to various basic services and needs, many of which are directly tied to social determinants of health (e.g., limited access to health care, food, employment, and housing).

#### Managing Transportation Accessibility and Barriers at the Individual and Community Levels

Data revealed how residents who are transit insecure engage in "work-arounds" to manage transportation for their families to work, school, and social service programming. Many examples arose of how people and organizations develop alternative systems/practices to meet transportation needs. Much of the data illustrated how, in Southern New Jersey, private entities (government, businesses, nonprofits) have supplemented public transit options (e.g., for rides to medical services or general transportation routes) and how some transit solutions may lie in connecting informal and formal transit options, public-private solutions, as well as building/relocating services and job opportunities closer to existing transit lines.

#### **Transportation During COVID-19**

Data also showed how COVID-19 widened transportation availability gaps and shifted residents' transportation and travel patterns during this time, particularly with the rise of telehealth and teleworking.

The report also highlights multiple current transportation projects underway, such as the reconstruction of the Walter Rand Transportation Center, the Glassboro-Camden Line, the Camden Loop, and other projects. Both longer term and more recent collaborative efforts are in progress to bolster the region's transit infrastructure.

Overall, findings from this report contribute to existing evidence around public transportation options across Southern New Jersey, while adding particular insights around how people are affected by limited accessibility and highlighting initiatives that may help increase accessibility. Southern New Jersey has pockets of rural, suburban, and urban communities, and the process of addressing transportation challenges, needs, and opportunities across the region's diverse communities should be informed by the direct experiences of people affected. This report provides such information as a foundation for conversations to continue to address regional transportation needs and opportunities in ways that align with and are responsive to residents' needs.

## B. DEFINING EQUITABLE TRANSPORTATION ACCESS

Transportation is a social determinant of health, and affects other social determinants by increasing or limiting access to services and destinations (National Center for Mobility Management, 2023; U.S. Department of Health and Human Services, 2023). **Transit equity** is achieved when there is fairness in mobility and accessibility that meets the needs of all community members (U.S. Department of Transportation, n.d.).

Transit equities and inequities are described in various terms:

- Transportation/transit deserts are places where the supply of public transportation options does not
  match demand. Prior research has designated transit deserts across New Jersey as census tracts that
  are not within five miles of a train station (Peters et al., 2021).
- Transportation/transit disadvantaged refers to individuals, such as those with disabilities, older adults, or people who do not own a vehicle, who experience low mobility and accessibility compounded by their geographic status (Watkins et al., 2021).
- Transportation insecurity/ transit insecure is the inability to "consistently access or afford a reliable transportation system, leading to demonstrable negative impact on a person or community." (Nathan-Roberts et al., 2021, p.1). Prior research has illustrated four primary factors that contribute to a person being transit insecure: (1) income level, (2) travel distance, (3) travel duration, and (4) accessibility (Nathan-Roberts et al., 2021).



Factors that contribute to transit equity/inequity include accessibility and mobility.

Accessibility is how easily an individual can reach a destination by a (or multiple) transit mode(s) (El-Geneidy & Levinson, 2006). It considers land use and transportation performance in the ability to access destinations and resources. An individual's travel time between home, their transit mode of choice, and work, as well as the number of stops and frequency of transit, is an example of employment accessibility (Watkins et al., 2021).

**Mobility** is the ability to move, and relates to how individuals are able to travel or move to access destinations for employment, health care, food, etc. When individuals can travel somewhere faster in terms of distance, they are considered to have a higher level of mobility, compared to lower mobility, where significant time and resources are used to travel relatively short distances (El-Geneidy & Levinson, 2006).

Accessibility and mobility are dependent on the transit modes that are available and affordable to individuals and communities. For example, individuals coming from lower-income households may have fewer transportation options, due to not owning a vehicle, and also may not be able to afford to live in areas with better access to public transit (Peters et al., 2021). Socioeconomic status and residential location together affect mobility and accessibility.

The following report sections will use these terms as a framework for understanding direct data from Southern New Jersey residents that highlight the challenges and barriers residents face related to transportation equity.

#### C. REPORT METHODS

The data in this report represent findings across a range of primary data collection efforts and WRI research projects in the Southern New Jersey region. WRI researchers reviewed 10 WRI projects and associated data from 2012 – 2022, with the majority of data coming from projects from 2019 – 2022. Data from WRI projects focused on Atlantic, Burlington, Camden, Cumberland, Gloucester, and Salem counties, and additional insights from these counties and Cape May and Ocean counties were gleaned from regional and/ or statewide data collection projects. While each specific project ranged in scope and content area, data involving transportation was collected and synthesized in all of them.

This report focuses on data from community surveys, interviews, and focus groups across projects. There were a range of survey, interview, and focus group questions that touched on transportation themes. While some project questions directly asked about transportation, many related questions garnered responses from participants that connected their experiences directly to transportation access and barriers. Sample survey, focus group, and interview questions included:

- How often are you able to get a ride when you need one? (response options: never, rarely, sometimes, most of the time, always, I don't ever need a ride)
- When you need to get somewhere, how do you usually get there? (response options: drive my car, bike, borrow a car, walk, get a ride from a family member or friend, take public transportation, take a taxi, use some other way)
- Over the last 2 months, how did you normally get your groceries? (response options, select all that apply: walked, biked, or drove myself; a family member or friend drove me; public transportation (bus, train, etc); paid someone to take me (Uber, Lyft, taxi, acquaintance, etc); used medical transportation service; used special population transportation service (e.g., service for older adults); other; did not require transportation)
- In the last year, which of the following have you used to get to your medical appointments? (response options, select all that apply: walked, biked, or drove myself; a family member or friend drove me; public transportation (bus, train, etc); paid someone to take me (Uber, Lyft, taxi, acquaintance, etc); used medical transportation service; used special population transportation service (e.g., service for older adults); other; did not require transportation)

- What does this community have "going for it" with regard to meeting the health care needs of its residents? (open-ended)
- What gaps in services or resources are there relating to health? Relating to transportation? (open-ended)

To synthesize existing transportation data from our work, WRI researchers engaged in open-coding for transportation-related content, and, following creation of key themes around transportation, engaged in another round of thematic coding to isolate each theme for analysis. The main findings section represents the analysis from these qualitative themes. Many of these projects also included a quantitative primary data collection component, and the findings section also includes the high-level frequency and descriptive statistics around transportation that was available and relevant from the selected projects. Additionally, past projects and this report include publicly available data (e.g., from the U.S. Census, New Jersey Department of Transportation) to provide background context for findings. Together, this data combined provides a nuanced understanding of the transportation barriers in Southern New Jersey and how residents are affected by those barriers.

#### D. KEY FINDINGS

#### **How People Get Around: Modes of Transportation in Southern New Jersey**

If you're not on the main road and you miss the bus, that's it. You won't be getting there." (-Community Member, Senator Walter Rand Institute for Public Affairs report, 2021a)

In Southern New Jersey, transportation options include both public transportation systems like NJTRANSIT and RiverLine, as well as private options like personal cars, ride-sharing services, and rides from family and friends<sup>2</sup>. The public transportation provider, New Jersey Transit Corporation (NJ TRANSIT), operates three modes of transportation: rail, bus, and light rail. The railway network in Southern New Jersey consists of three major railroads, while Northern New Jersey has 14.

Residents use a combination of transportation options, including the region's public transportation systems, private transportation systems, and alternative organization-based transportation entities. Table 1 shows the modes of travel used when traveling to work in Southern New Jersey.

Driving alone is the most common mode of travel to work in all counties in Southern New Jersey, with this form of transportation utilized most frequently in Salem County (82.6%) and least frequently in Atlantic County (76.3%). Carpooling is the second most common mode of travel to work in the region, with the highest percentage of this mode of transportation occurring in Camden County (9.5%) and the lowest percentage occurring in Ocean County (7.1%). This indicates that a large portion of residents in Southern New Jersey are using private vehicles to commute to work. Data from WRI research has illustrated that residents who have difficulties accessing public transit often need to use multiple forms of private transportation, such as taxis, ride-sharing apps (Uber/Lyft), personal cars, rides from family or friends, and/or private company or nonprofit-provided transportation to mobilize themselves (Senator Walter Rand Institute for Public Affairs, 2021b).

The minimal usage of public transit, with the highest percentage being in Camden County (6.6%) and the lowest in Salem County (0.8%), is far lower than the average level for New Jersey as a whole (10.8%), highlighting that South Jerseyans are more reliant on private transportation than public transit. WRI research also shows that, for people who can easily access them, public buses are a practical option for grocery shopping, accessing social services, and commuting to work (Senator Walter Rand Institute for Public Affairs, 2020c, 2022a, 2022d).

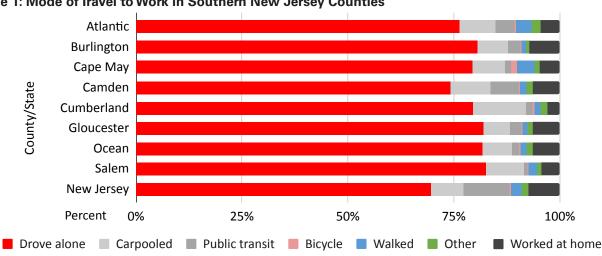


Table 1: Mode of Travel to Work in Southern New Jersey Counties

Source: U.S. Census Bureau. (2020). 2015-2019 American Community Survey 5-Year Estimates.

<sup>&</sup>lt;sup>2</sup> An interactive South Jersey Transportation Map can be accessed here (Cross County Connection, 2023).

Additionally, some private entities and government supported entities (e.g., health care institutions, companies, and/or nonprofits) provide transportation for specific populations (e.g. older adults) and/or for specific purposes (e.g. rides for patients to get transportation for a surgery or medical appointment). Camden County provides shuttle transportation for older adults and residents with disabilities to take them to hospitals or care centers (Senator Walter Rand Institute for Public Affairs, 2021a). Similarly, Atlantic County also offers medical transit options like Modivcare (formerly LogisticCare) or MedExpress³ to support residents getting to their medical appointments on time (Senator Walter Rand Institute for Public Affairs, 2022a). Some counties, such as Gloucester County, have expanded ride-sharing services like Uber Health to better serve older adults and individuals with disabilities (Senator Walter Rand Institute for Public Affairs, 2022c).

A component of transit accessibility is cost, and the Housing and Transportation Affordability Index (HTA) was created by the Center for Neighborhood Technology to measure the affordability of housing and transportation for households in urban areas in the United States. Table 3 on the HTA Index shows that the residents of Southern New Jersey counties spend an average of 48% to 58% of their income on housing and transportation combined. On average, housing costs make up 26% to 33% of their income, while transportation costs make up 19% to 27%. The highest transportation percentage is seen in Cumberland County (27%), while the lowest is found in Ocean County (19%). Overall, the data suggest that transportation costs are a significant portion of residents' income in Southern New Jersey, with most of the population spending 48% or more of their income on housing and transportation combined.

H+T **Atlantic** Housing Burlington **Transportation** Cape May County / State Camden Cumberland Gloucester Ocean Salem **New Jersey** 0 0.2 0.4 0.6 8.0

Percent of Income

Table 2: Cost of Transportation as a Percent of Income in Southern New Jersey Counties

Source: Center for Neighborhood Technology. (2020)<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> MediExpress and Modivcare are health care companies that provide medical transportation services to Southern New Jersey residents, including routine check-ups, diagnostic tests, and treatment for minor illnesses and injuries.

<sup>&</sup>lt;sup>4</sup> Specific data sources from the Center for Neighborhood Technology include: 2015 – 2019 American Community Survey 5-Year Estimates; 2019 Longitudinal Employment-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES); 2019 Consumer Expenditure Survey; 2019 National Transit Database

#### **County-Specific Transportation Data**

While many WRI projects span multiple counties, WRI's review also highlighted available county-specific transportation data.

In **Atlantic County**, about half (49%) of participants in a recent community health needs assessment reported that the lack of transportation was a barrier to accessing health care in their communities. Over one-quarter (27%) of residents were concerned both about lack of public transportation to health facilities, and just under 20% were concerned about lack of public and private medical transportation (Senator Walter Rand Institute for Public Affairs, 2022a). To understand what transportation methods were currently used, WRI asked community survey respondents to select all forms of transportation they had used to receive health care in the past year. Most respondents (84%) reported that they had transported themselves at least once (drive, walk, or bike), but many also relied on others at some point for transportation, including family and friends (16%), public transportation (7%), paid services like a taxi, Uber, or Lyft (6%), or medical transport (3%) (Senator Walter Rand Institute for Public Affairs, 2022a)<sup>5</sup>.

As reported by **Burlington County** survey respondents, focus group participants, and key informants, transportation was the second-most-identified barrier to accessing services in the county (Senator Walter Rand Institute for Public Affairs, 2020a). Fifty-four percent of survey respondents identified transportation as a barrier to services. Many focus group participants reported that the most affordable housing in Burlington County was in areas with the least access to public transportation (Senator Walter Rand Institute for Public Affairs, 2020a). Similarly, 63% of survey respondents reported that transportation was a barrier to accessing food services. Roughly 30% percent of respondents identified transportation as a barrier faced when accessing community safety services, while 46% of survey respondents identified transportation as a barrier to accessing domestic violence services (Senator Walter Rand Institute for Public Affairs, 2020a).

In **Camden County**, thirty-nine percent of survey respondents reported transportation being a barrier to accessing health services. Across other services, transportation was reported as a barrier for employment and career services (46%), child care services (37%), services for families caring for a child of a relative (21%), behavioral and mental health services for children (35%), behavioral and mental health services for adults (40%), substance use

disorder and prevention services (36%), domestic violence services (28%), parenting skills services (35%), legal and advisory services (29%), community safety services (23%), and food services (41%) (Senator Walter Rand Institute for Public Affairs, 2021a).

In **Salem County**, over 50% of survey respondents identified transportation as a key barrier to accessing services), and over 70% of respondents indicated that transportation was a barrier to accessing free or low cost healthy food, specifically (Senator Walter Rand Institute for Public Affairs, 2020c).

Across **Burlington**, **Camden**, **and Gloucester Counties**, 40% of community members reported that lack of transportation was a critical barrier to health care (Senator Walter Rand Institute for Public Affairs, 2019a). In addition, 33% of residents in Burlington and Gloucester counties and 23% of residents in Camden County reported that public transportation was a resource missing from their communities. This county-based difference likely reflects the wider availability of public transportation services in Camden County. In Burlington County, only 6% of community members typically attended health care visits in some way other than driving themselves, and 14% of community members in Camden County and 12% of community members in Gloucester County reported that they did not usually drive themselves to the doctor (Senator Walter Rand Institute for Public Affairs, 2019a).

Overall, 50% of residents reported in a recent community survey across **Cumberland, Gloucester, and Salem counties** that lack of transportation was a barrier to health care, and transportation was the second-largest barrier identified in the community survey (the largest barrier was out-of-pocket costs). Residents were concerned about both the lack of public transportation to health facilities (42%) and medical transportation (30%) (Senator Walter Rand Institute for Public Affairs, 2022c). Concerns about transportation were much higher in Cumberland and Salem Counties than in Gloucester County. Cumberland County residents were twice as likely as Gloucester County residents to name transportation as a barrier to health care, and nearly 70% more likely to see public transportation as a health resource missing in their community.

#### The Current Impact of Transportation Infrastructure

For some people, transportation and where they live is a barrier. This is usually true for poor people. If you live in an area between the Black Horse Pike [covering portions of Route 168, Route 42, Route 322, and Route 40] or White Horse Pike [Route 30], it's hard to get to services in those in between municipalities (-Community Member, Senator Walter Rand Institute for Public Affairs report, 2021a).

Community members and service providers WRI spoke with pointed out gaps in the available modes of transportation – including public and private transit – and how these gaps in services affect residents' daily activities, such as getting groceries, attending medical appointments, and going to work.

#### **Cost of Public and Private Transportation**

Transportation is an issue also. . . . Not everybody has a car, and even if you do, that gets expensive. It's not just gas, it's car insurance and AAA (American Automobile Association) and all the extras. So [residents] might sacrifice their vegetable intake to save money by not driving to a grocery store further away. (-Community Member, Senator Walter Rand Institute for Public Affairs report, 2019a)

Personal vehicles remain an essential commodity for Southern New Jersey residents, but some research participants noted that they don't have a car because they do not have or cannot afford insurance, a license, or other required necessities (e.g., maintenance costs) (Senator Walter Rand Institute for Public Affairs, 2021b). Households that have either one car or no car often utilize taxis, and the cost of taxis and other private ridesharing services add up quickly for those that need frequent transportation to medical appointments or have additional obligations for transporting children. A resident noted that, "treatment-wise, there are no available treatment facilities [near here]. . . . The treatment places are in Essex or Bergen County. The only way to get . . . up there is rideshare apps, and for one person, that's almost \$300" (Senator Walter Rand Institute for Public Affairs, 2022a).

The cost of public and private transportation can compound access challenges. In Atlantic County, about one in four (28%) research participants reported that they had relied on someone else for transportation to the health care at least once during the past year, and those needing this transportation assistance tended to be among groups experiencing disadvantage. For example, participants whose household income was less than \$50,000 were almost **four times** as likely to need transportation help as those whose household income was \$100,000 or greater (46% and 12%). Those reporting any chronic health conditions were **twice** as likely to need transportation help as those without any chronic health conditions (29% and 14%) (Senator Walter Rand Institute for Public Affairs, 2022a).

#### **Availability of Public Transportation**

There are stretches of roads where there's not even access to the buses. There's a shuttle that you have to pay for and it doesn't run all the time. I think transportation has always been an issue for our county [Atlantic], because our county is so big and that it's always been an issue. (-Community Member, Senator Walter Rand Institute for Public Affairs report, 2022a).

Availability of public transportation is essential to accessing health care, employment, and other basic needs. Research suggests that for individuals with limited economic resources, a lack of transportation to provider visits and pharmacies may be a significant barrier to care that can alter health outcomes (Syed et al., 2013). Both residents and service providers expressed concerns about transportation challenges across all eight Southern New Jersey counties. One person shared, "I think transportation needs to be improved

in my area. There are not a lot of options for those who do not own a car. Even connections from uptown to downtown are difficult" (Senator Walter Rand Institute for Public Affairs, 2022a).

#### **Distance and Travel Time to Destinations**

1 live in Egg Harbor Township. There's stretches of some of these roads where there is no access to buses. There is a shuttle, but you have to pay for it (-Community Member, Senator Walter Rand Institute for Public Affairs report, 2022a).

The current public transportation system in Southern New Jersey has been described in WRI research as infrequent and often too distant to meet community members' needs. One participant shared, "I think one of the biggest barriers down here is that we are rural... when I lived in [Philadelphia], public transportation was always within a block or two, and then you figured out where you were going. The current public transportation system is infrequent, and it leaves people like mothers and children having to walk miles for connecting transportation. It's a major barrier" (Senator Walter Rand Institute for Public Affairs, 2022a). Transportation can also be a challenge in terms of time – many participants noted that their travel time to medical appointments was regularly over 20 minutes.

Available doctors across the region are often also geographically far from their patients, leaving those without reliable transportation further disadvantaged. As shown through the below table, Atlantic, Cape May, Cumberland, Gloucester, Ocean and Salem Counties exceed the United States and New Jersey average population to primary care provider ratio (University of Wisconsin & Robert Wood Johnson Foundation, 2022).

Table 3: Ratio of Population to Primary Care Physicians in Southern New Jersey Counties

RATIO OF POPULATION TO PRIMARY CARE PHYSICIANS				
County	Ratio			
Atlantic	1,250:1			
Burlington	1,150:1			
Camden	980:1			
Cape May	1,700:1			
Cumberland	2,300:1			
Gloucester	1,760:1			
Ocean	2,390:1			
Salem	2,840:1			
NJ	1,170:1			
U.S.	1,310:1			

Source: University of Wisconsin & Robert Wood Johnson Foundation - County Health Rankings. (2023)

One participant noted that, "most of the time, specialist-type services are not easily accessible. You have to leave the town or go to Philadelphia." Another participant indicated that the travel distance, combined with limited transportation options, reduces their ability to keep up with medical needs, observing that the compounding challenge is "how often you have to go to [the] doctor. You can do it once, but you can't continue to go to doctors that are so far away." (Senator Walter Rand Institute for Public Affairs, 2022c).

#### Frequency and Reliability of Public Transportation

Transportation is . . . a real problem. If you don't have your own vehicle, then your ability to get to any of the services that are available is relying on public transportation . . . there is very minimal public transportation or resources that are provided through programming that, again, are being stretched thin because there's only so much to go around (- Community Member, Senator Walter Rand Institute for Public Affairs report, 2022c).

Data from WRI reports highlighted that for residents who miss a specific time or even a connection for a bus, the next bus time or bus stop location is often a fair amount of time or substantive distance away. The current public transportation network often has no direct path to a health care facility, store, or to some employment locations. One Burlington County community member further specified, "there are only three buses here... if you do catch the bus, you have to plan a day or two in advance and then plan your route. But if it's spur of the moment, you have to wait an hour" (Senator Walter Rand Institute for Public Affairs, 2019a).

The below table outlines current transit access considerations across Southern New Jersey, highlighting disparate levels of access across a range of transportation metrics compared to the state average (AllTransit, 2023). All Southern New Jersey counties except for Camden and Atlantic Counties have a lower TM Performance Score than the state average, meaning that these counties have less transit connectivity, access to jobs via transit, and less frequency of transit service than other counties across the state. With regards to the TCI (Transportation Connectivity Index), all Southern New Jersey counties minus Camden County have a lower than state average in the number of bus routes and train stations within walking distance for households within a U.S. Census designated block group.

**Table 4: Current Transit Access in Southern New Jersey Counties** 

COUNTY	TM PERFORMANCE SCORE <sup>6</sup>	TCI <sup>7</sup>	J0BS <sup>8</sup>	TRIPS/WEEK <sup>9</sup>
Camden County	5.2	4.6	145,662	930
Atlantic County	3.8	2.9	27,039	804
Gloucester County	2.8	1.5	35,967	356
Burlington County	2.7	1.9	27,142	271
Cumberland County	2.3	1.2	10,664	354
Cape May County	2.1	1.2	7,277	206
Salem County	1.8	1	5,664	150
Ocean County	1.6	0.8	13,032	178
New Jersey	3.7	3.6	117,389	811

Source: Center for NeighborhoodTechnology, AllTransit™ Rankings. (2019)

<sup>&</sup>lt;sup>6</sup>TM Performance Score: AllTransit™ Performance Score (with values from 0 to 10) is a weighted sum of transit connectivity, access to land area and jobs, and frequency of service, where the higher the number the better the transit service.

**TCI (Transportation Connectivity Index)**: TCI is based on the number of bus routes and train stations within walking distance for households in a given U.S. Census block group scaled by the Frequency of Service, with values from 0 to 100 and the higher the score the more transit connections.

<sup>&</sup>lt;sup>8</sup>Jobs (The Number of Jobs Within 30-minute Ride): Jobs is the optimal number of jobs accessible within a 30 minute transit commute on average for households.

<sup>&</sup>lt;sup>9</sup>Trips/Week (Transit Trips per Week within ½ Mile): Trips/Week is the number of transit trips inside (or within a ½ mile) of an average U.S. Census block group.

#### Transportation and the Social Determinants of Health

Alongside general infrastructure-related barriers around transportation availability, cost, frequency, and duration - much WRI data spoke to specific ways that transportation accessibility affected social determinants of health: health care, employment, food access, and social activities and social services. This connection was exemplified through one community member's sentiment that, "there's a reason that Salem County and Cumberland County are constantly at the bottom of the health rankings. . . .[A] part of that has to do with transportation . . . because there really just isn't the infrastructure. Unless you have a vehicle, you're at the mercy of the lack of public transportation that exists in that area. They are very rural areas, so access to a lot of things like health care and food are limited" (Senator Walter Rand Institute for Public Affairs, 2022c).

#### **Health Care**

The specialist doctor for my son is in Egg Harbor. My husband takes me because public transportation is too much. They used to provide transportation, but it was very difficult and I had to wait a long time. Medicaid used to cover the transportation for the appointments. My husband has to miss work when he takes us to appointments but he makes it work. He said his son's appointments are more important so he does not mind (-Community Member, Senator Walter Rand Institute for Public Affairs report, 2021b).

Community members noted difficulty with maintaining quality ongoing care when they were unable to make it to regular appointments with their doctor(s) stemming from a lack of transportation. With providers and specialists who were often farther away (and sometimes even out-of-state), reliance on public transport, when available, translated into longer travel times than private transportation and often created a reduction in the window of time community members could access vital services (Senator Walter Rand Institute for Public Affairs, 2020a, 2022c).

These access challenges were reported to be particularly critical for individuals utilizing behavioral and mental health services (Senator Walter Rand Institute for Public Affairs, 2020a). One community member shared that "kids that need inpatient care just get sent home because they can't commute 50 miles. That is scary for kids and families being so geographically far" (Senator Walter Rand Institute for Public Affairs, 2022a). Others spoke about the difficulty of traveling at least an hour to therapist appointments with a high needs child (Senator Walter Rand Institute for Public Affairs, 2020a). Residents also discussed the lack of inpatient facilities for substance use in Atlantic County, specifically, with people being referred for treatment in Monmouth County and being unable to travel to a closer facility or travel back and forth readily between the counties. For emergencies, one Salem County resident discussed the lack of reliable transportation to the closest hospital and how many community members went to the more conveniently-located urgent care instead (Senator Walter Rand Institute for Public Affairs, 2022c).

Many residents expressed appreciation for and use of available public and/or private medical transportation services (e.g., Modivcare, MedExpress); they also noted that sometimes these services did not always provide timely transportation (e.g., irregular pick up/drop off intervals, late services) or required reservations days to a week in advance, leading patients to involuntarily miss and sometimes intentionally skip their appointments (Senator Walter Rand Institute for Public Affairs, 2022a).

See the "Transportation during COVID-19" section for discussion of telehealth.

#### **Food Access**

Where I live there are a lot of elderly who wouldn't leave their houses [during COVID-19].... I would tell the [service provider] ladies that I needed extra food to give to the elderly because they couldn't come out or didn't have a method of transportation (-Community Member, Senator Walter Rand Institute for Public Affairs report, 2021b).

Accessibility to high quality and nutritious food is often difficult for some individuals living within Atlantic, Salem, Cumberland, and Gloucester counties. Residents who are without a private form of transportation in these areas are disadvantaged when shopping for food due to the inaccessible distance to a grocery store (Senator Walter Rand Institute for Public Affairs, 2022e, 2022f). In Salem County, for example, residents without cars were constrained to shopping at the local Dollar Store or small corner stores, or had to take the bus to Walmart (Senator Walter Rand Institute for Public Affairs, 2020c). And in Camden County, one resident noted that "in the City [of Camden], residents have to go all the way to Cherry Hill for . . . stuff like Wegmans and ShopRite. The Camden City residents [are] left with Price Rite and dollar stores" (Senator Walter Rand Institute for Public Affairs, 2021a).

While some reliable, free, private transportation options are available, they are not always open to all community members; a Gloucester County community member noted that older adults and individuals with disabilities have a designated bus service that will pick them up and take them to stores, while there is no comparable service for members of the general public (Senator Walter Rand Institute for Public Affairs, 2019a).

Residents within walking distance face other considerations, as many retailers in close proximity (often corner stores) do not offer the freshest or healthiest options, and residents without transportation visiting pantries or stores on foot were limited to what they could carry home (Senator Walter Rand Institute for Public Affairs 2021a, 2022b).

Particularly during COVID-19-related food shortages, transportation barriers often left community members without recourse when retailers with grocery options within transit access were understocked, and the confluence between the pandemic and transportation-related access to food disproportionately affected older adults (Senator Walter Rand Institute for Public Affairs, 2022b).

#### **Employment**

There's just not a lot of jobs around here for everyone. Most of the jobs around here are at diners or the Dollar General. Industry jobs are far away, so then transportation comes into play (-Community Member, Senator Walter Rand Institute for Public Affairs report, 2022d)

Across counties, data from WRI illustrated how inequitable public transit access at times influenced the ability to secure and maintain employment. In Burlington and Camden counties, community residents WRI spoke with discussed how community members were sometimes unable to attend job fairs or job training sessions that counties orchestrated due to limited transportation access (Senator Walter Rand Institute for Public Affairs 2020a, 2021a).

As previously mentioned around accessing health care, a lack of public transportation presented a unique issue for families who shared a "family" car. The car was often used by one adult as transportation to work, while another household adult, often mainly responsible for homecare and childcare, had to seek alternative forms of transportation, wait for the car to become available, or find someone else to drive them places (Senator Walter Rand Institute for Public Affairs, 2021b). One community member spoke about employees' options in the absence of a personal vehicle, "you know, you usually have to pay somebody to take you to work or, and if they don't feel like going in there, you missed a day or you're getting fired" (Senator Walter Rand Institute for Public Affairs, 2022d).

Distance to employers also arose as a common theme among research participants. One person noted that for those coming in and out of a Moorestown company location, there is no public transit easily accessible to the site and many people had to drive themselves (Senator Walter Rand Institute for Public Affairs, 2022d). One community member noted that their availability to work is limited to areas where a bus would go. Another shared, "I wanted my job to be close to where I live, so I do want to be in the Camden area, that way I would be able to take public transportation back and forth. But I also needed to be on a bus route or a train route. That way I wouldn't have to order an Uber or Lyft every day to work. So that was really what I was looking for." (Senator Walter Rand Institute for Public Affairs, 2022d). In Salem County, for example, many larger regional employers are inaccessible by the single bus line in Salem, which does not offer any stops outside the county (Senator Walter Rand Institute for Public Affairs, 2020c). To fill employment and transportation gaps, employers are considering private transportation options such as Uber or Lyft as part of employee/new hire packages to support employees who may need assistance getting to work or until they can afford their own vehicle (Senator Walter Rand Institute for Public Affairs, 2022d).

#### **Social Activities and Social Services**

Burlington County is fairly large with towns spread out... our services are typically localized in one place - if you live on the outskirts, it's hard to get there [to social services services]

(-Community Member, Senator Walter Rand Institute for Public Affairs report, 2020a).

Transportation access also, at times, limited community members' ability to attend community events and other programming offered by organizations throughout the region. Several families expressed that distance and inaccessible transportation deterred them from engaging in collaborative programming, such as English learning classes or enrichment activities for their children. One Cumberland County service provider shared, "we have some Family Success Centers within Inspira [Health]. I see all the time that they have monthly or weekly nutrition classes or invite people to cook healthy meals with them. Sometimes they have family focused things and classes that show resources available. But sometimes they're not in prime locations. So, they have resources, but it just might be the transportation part" (Senator Walter Rand Institute for Public Affairs, 2022c).

Transportation barriers also imposed a unique cost related to education, especially where unforeseeable situations such as student illness or behavioral difficulties required immediate and unplanned transportation to and from school. One community member expressed the hardship they experienced as a result of being called to their child's school for behavioral concerns: "when [my eldest son] was going to regular school, I'd get called to come to school like eight times a week. He used to throw things, so they called me over to help clean up after him. I was spending so much money on taxis that we didn't have money for food. I wanted to die" (Senator Walter Rand Institute for Public Affairs, 2021b). In another case, a family member pointed out that her son relied on a friend to transport him to a work-study program in another town (Senator Walter Rand Institute for Public Affairs, 2021b).

Multiple examples from WRI research projects revealed the benefits of institutions and social service agencies being on or near public transportation routes. As one participant noted, "the services are 'all clumped in one area'. There are no barriers if you're in the City of Camden. But there are barriers in the entire county that make it harder to access things if you have to go into the City." (Senator Walter Rand Institute for Public Affairs, 2021a). Some recommendations offered by research participants were to strategically locate various social services throughout the counties (e.g., along publicly accessible transportation routes) (Senator Walter Rand Institute for Public Affairs, 2021a).

#### **Transportation During COVID-19**

[My father] was just so scared and nervous just going out to work every day. He had to get on public transportation to go to work... (- Community Member, Senator Walter Rand Institute for Public Affairs report, 2022b)

The COVID-19 pandemic decreased public transportation availability and usage, influenced how social service organizations addressed certain resident concerns, and increased the role of telehealth.

#### Decrease in Availability and Usage of Public Transportation

Social distancing protocols and lockdown orders during the pandemic reduced available public transit for residents. One research participant noted that the Atlantic City jitneys were shut down during the height of the pandemic, and at the time of the project's data collection in summer 2022, not all of the jitneys were back to pre-pandemic operations (Senator Walter Rand Institute for Public Affairs, 2022a). The participant elaborated that you may have to wait 30 to 45 minutes for a shuttle, and they are always full. NJTRANSIT also paused multiple bus routes in South Jersey during the pandemic, including seven weekday-only bus routes (Wilson, 2020).

Data from WRI projects also highlighted how residents struggled to get a ride at higher rates during the pandemic than prior to the pandemic (Senator Walter Rand Institute for Public Affairs 2022e, 2022f). Data from a four-county project (Atlantic, Cumberland, Gloucester, and Salem) showed there was a 13% increase in people who were never able to find a needed ride from before the pandemic (prior to March 2020) to during the height of the pandemic (April 2020 - April 2021) (Senator Walter Rand Institute for Public Affairs 2022e, 2022f).

The stay-at-home orders at the start of the pandemic (March 2020 - June 2020) reduced the use of public transportation for residents and their families that were able to work from home, had children in virtual school at home, and/or refrained from using public transportation for safety reasons. June 2020 data from NJTRANSIT revealed a 27% drop in NJTRANSIT ridership (73% retained ridership) from March to June 2020 among Southern New Jersey bus riders, compared to a 37% drop (63% retained ridership) for Northern New Jersey bus riders during the same time period (NJTRANSIT Market Research, 2020).

Data showed that people expressed concern over the potential exposure to COVID-19 when riding public transportation to work and appointments (Senator Walter Rand Institute for Public Affairs 2022b). This fear of exposure, and potential lack of available personal transportation, made it a challenge for residents needing to travel to work or buy essential items as they did not want to risk taking public transportation and exposing their loved ones to COVID-19. Participants from a state-wide data collection project during this time reported they found it challenging to hold a job and felt discouraged from applying to other jobs because of concerns about unreliable transportation options (Senator Walter Rand Institute for Public Affairs, 2022b). Some participants found it difficult to commute to their current job or find both a new job and reliable transportation to a new job during this time.

#### Role of Telehealth and Teleworking

Throughout the pandemic, telehealth provided a way for residents unable to access reliable transportation to receive health care services. Telehealth helped residents save on travel time and costs, and prevented potential COVID-19 exposure. While telehealth eliminated the need for transportation to certain types of medical appointments, members of the community also reported varying degrees of satisfaction with telehealth services.

One resident mentioned that despite losing the connection from in-person medical treatment, it was "a solution for them" and removed the stress of needing a ride from a family member or paying for an Uber

(Senator Walter Rand Institute for Public Affairs, 2022a). One health care provider shared, "[telehealth] has helped so many of our participants, and I think moving forward [it] will continue to be a great thing for them and their time and their resources" (Senator Walter Rand Institute for Public Affairs, 2022b).

Some residents mentioned that telehealth did not offer the same level of treatment compared to in-person services and indicated that they would have preferred in-person interactions at medical appointments in some instances (Senator Walter Rand Institute for Public Affairs, 2022c). Other participants discussed how some residents do not have reliable access to internet/technology to access telehealth services consistently, one community participant sharing that if someone "didn't have a good Wi-Fi connection, and ... didn't have a vehicle – which a lot of Salem residents can't or aren't able to have," they "really didn't have a large resource to pull from for help" (Senator Walter Rand Institute for Public Affairs, 2022b).

Related to telehealth, teleworking increased during the pandemic for some people and sometimes removed transportation considerations. One research participant explained how the pandemic opened the doors for businesses to enable remote work and offered avenues for job seekers to live in areas that don't have a job related to their skill set and find a remote job that does (Senator Walter Rand Institute for Public Affairs, 2022d). It is important to note that remote work is not available to all, and largely depends on the industry, individual employer preferences, and availability of reliable internet/technology access at home.

Overall, there were mixed perspectives on the potential advantages and disadvantages of transitioning health care and work to online as a way to increase transportation access, with this spectrum encapsulated by a community member: "it was hard on seniors for technology, but great for transportation issues. They did not need to come in person...[for] those with transportation issues or who don't want to come at night, this was helpful" (Senator Walter Rand Institute for Public Affairs, 2022a).

### Managing Transportation Accessibility and Barriers at the Individual and Community Levels

Data from WRI showed that Southern New Jersey residents and service providers expressed a range of experiences with public transit access and use. As shown throughout other sections, a pattern that arose from the data is residents engaging in transit "workarounds" to carry out daily activities and responsibilities. For example, in lieu of a personal car, residents sometimes ask neighbors and acquaintances with vehicles to give them rides for routine activities. At times, residents cope with lack of transportation options by simply limiting their activities to the areas that they can access. This may present as choosing employment or services that are within walking or biking distance, within a public transit route, or that have established carpooling or shuttle services (Senator Walter Rand Institute for Public Affairs, 2022d). Residents may also organize their grocery shopping around nearby corner stores or convenience stores, which may result in more frequent trips, fewer price point options, and less access to healthy food choices (Senator Walter Rand Institute for Public Affairs, 2022c). Residents may also limit their health care visits to emergencies only and delay or suspend necessary screening and treatments due to the distance to available providers (Senator Walter Rand Institute for Public Affairs, 2022a, 2022a, 2022c). Ultimately, many Southern New Jersey residents face these tradeoffs on a regular basis, and the potential influence on their well-being and quality of life further highlights how transportation serves as a key social determinant of health.

Beyond individual workarounds, another important theme that arose from the data was how transportation gaps, particularly public transportation gaps, are often filled by private entities and nonprofits. For example, many existing community transportation shuttles serve critical and specific resident needs (e.g., a weekly grocery shop run for older adults, or drop off and pick up for appointments at specific hospitals/outpatient clinics/doctor's offices for certain patients).

There have also been multiple collaborative county and nonprofit efforts to provide additional transportation services that supplement the public transportation infrastructure and existing medical transportation. At times, these services are limited to specific populations (e.g., older adults), or for specific reasons (e.g., ride to a surgery), leaving a transportation gap for community residents who need transportation to go about their daily activities (e.g., to take children to school or appointments, pick up prescriptions, attend behavioral or physical therapy appointments, etc). There were multiple examples from WRI data across projects that highlighted nonprofits filling in these gaps to provide direct service routes for families and residents to complete daily, essential errands and activities, such as picking up food from the food bank or dropping a family member at a social or educational activity.

#### **CROSS COUNTY CONNECTION**

Cross County Connection is the designated Transportation Management Association (TMA) for a seven-county Southern New Jersey region: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem. Cross County Connection assists local governments, schools, businesses, social service organizations, residents and employees with mobility needs by fostering the implementation and use of sustainable transportation modes.



Cross County Connection TMA, a non-profit organization, was formally incorporated in 1989 through the efforts of a group of Southern New Jersey business leaders, local government officials, New Jersey Department of Transportation (NJDOT) and NJ TRANSIT, to address mobility issues in the region. Cross County Connection's programs and services include the implementation and promotion of commute alternatives designed to address the mobility needs of those without a private vehicle, reduce traffic congestion and improve air quality.

Today, Cross County Connection is a full-service transportation organization offering a wide variety of programs, services, and resources to Southern New Jersey businesses, local governments, schools, residents, and employees. Cross County Connection provides assistance with commute alternatives such as public transit, shuttle services, carpooling, vanpooling, bicycling and walking. Additional services include public transit travel training, bicycling and walking safety education programs for schools, assistance with electric vehicle charging infrastructure, bicycle and pedestrian infrastructure planning and grant assistance and more. A full range of the commuter services CCCTMA supports can be viewed at their website<sup>10</sup>.

<sup>&</sup>lt;sup>10</sup> Cross County Connection Transportation Management Association website <u>www.driveless.com</u>

With support from the Pascale Sykes Foundation's South Jersey Strengthening Families Initiative<sup>11</sup> and NJ TRANSIT, CCCTMA and its partners established three community shuttles in Southern New Jersey. The English Creek-Tilton Road shuttle and the Route 54/40 community shuttles serve Atlantic County and began operations in 2012 and 2016, respectively. The Pureland East-West community shuttle in Gloucester County began operations in 2016. The three shuttle services are designed to primarily provide transportation to worksites and connect with NJ TRANSIT bus and rail services, providing access to the region-wide network. However, they also provide much needed access to social services, medical and educational destinations.

Numerous prior surveys with riders highlighted that the majority of riders (63%) use the shuttles for employment, followed by medical uses (32%) and social services uses (27%). The majority of riders reported that the shuttles improved their access to employment (65%) and social services (63%). Seventy-one percent of the riders reported that the shuttle made it extremely easy to get where they needed to go, and 73% stated that transportation was no longer a problem. A comparison between surveys of riders over the years revealed the shuttles improved access to employment and social services (Senator Walter Rand Institute for Public Affairs, 2022e, 2022f).

The Pureland Industrial Complex in Gloucester County contains over 150 different companies employing over 4,500 area residents and has engaged with shuttle programs to transport employees to and from the complex over the last several years. As one research participant noted, "I've seen local residents on Facebook say 'the bus doesn't come by my way' or 'I can't get a job in [Pureland Industrial Complex]' which is in Gloucester County, which is 15 minutes from us. They can't even get the bus out there from 15 minutes away because there are third shift jobs available in [Pureland] but the bus doesn't run overnight. So that's you know, that's a major challenge right there" (Senator Walter Rand Institute for Public Affairs, 2022d). The most recent effort around transit to/from the complex was led and continues to be supported by Cross County Connection's Pureland East-West Community Shuttle (Cross County Connections, 2023). The shuttle has connections with multiple NJ TRANSIT bus lines, highlighting CCCTMA's continued efforts to directly connect southern New Jersey residents with transportation access to employment and other essential services. The shuttle has been fare-free since COVID-19<sup>12</sup>.

Throughout 2022-2023, CCC TMA worked with Via Transportation and the South Jersey Transportation Planning Organization (serving Atlantic, Cape May, Cumberland, and Salem counties) to gauge the feasibility of microtransit

<sup>&</sup>lt;sup>11</sup> Pascale Sykes Foundation website <a href="https://pascalesykesfoundation.com/">https://pascalesykesfoundation.com/</a>

<sup>12</sup> Pureland East-West Community Shuttle Fares/Transfers https://www.driveless.com/pureland-east-west-community-shuttle/

as a viable alternative service model for the Route 54/40 Community Shuttle and the surrounding service areas. Due to the rural nature of the service area, the feasibility study showed that the shuttle's ridership would increase significantly with a semi-demand responsive microtransit model than the current fixed route model. CCCTMA is currently seeking funding opportunities for a microtransit pilot project of the Route 54/40 community shuttle.

While data around private and nonprofit organizations' capacity for providing transportation (e.g., through budgets and operations that provide Uber or Lyft passes, and/or having a designated driver or organizational vehicle) for residents varied, additional data highlighted the steps individual staff at nonprofit and private organizations across Southern New Jersey took to fill public transportation gaps; themselves at times providing transportation to health care, school and extracurricular activities in places where transportation is inaccessible. Service providers we spoke with discussed how they drove clients to various appointments, and staff confirmed that this is a service they provide based on their own personal capacity and availability (e.g., using their own personal vehicles) (Senator Walter Rand Institute for Public Affairs, 2020b). Unsurprisingly, this informal organization-driven type of transportation support increased significantly during the COVID-19 pandemic as service provider staff worked together to provide delivery services for goods during the pandemic for those who did not have transportation available. During the spring and summer of 2020, nonprofit staff and community members volunteered to deliver food to individuals lacking transportation or who were afraid to take public transportation (Senator Walter Rand Institute for Public Affairs, 2020b).

Since then, some private and nonprofit organizations have continued to or been able to support resident/client transportation through existing organizational vehicles, transit programs, or new grants. Some organizations are building transportation costs (e.g., to provide resident/client transportation to organizational programming and to access services through Uber/Lyft passes, operational dollars, or hiring drivers) into grant proposals and operational budgets.

## E. CURRENT TRANSPORTATION PROJECTS IN SOUTHERN NEW JERSEY

Like all regions, Southern New Jersey faces nuanced and localized considerations in its efforts to support accessible transportation for all residents. Strides have been made to increase access and provide affordable transit options for community residents, and there are currently multiple projects in the planning stages and already underway that build on the existing progress across the region.

#### What is microtransit?

Recent developments in the transportation space have focused on microtransit options. While microtransit is a relatively new term, it generally refers to "flexible transit," and fits between private individual transportation (e.g., cars) and public mass transit (e.g., buses). Microtransit provides riders with ondemand transit services through both fixed and flexible routes and schedules. The service is a technology-enabled transportation method that uses on the ground information to group passengers into shared rides based on where demand is (American Public Transportation Association, 2023).

Microtransit can increase services in hard-to-reach areas, convert fixed-routes into on-demand services, and increase mobility for certain populations (e.g., older adults, people with disabilities, and people who work-late shifts or have unpredictable schedules). Challenges potentially include the capital costs to operate microtransit options and providing equitable access if the service depends on mobile app access, bank accounts, or credit cards for payment (N-Catt, 2023).

Atlantic City Expressway Expansion: The expansion of the Atlantic City Expressway aims to widen the Expressway to three lanes from mile marker 31 westbound to the end of Route 42 in Gloucester Township. Currently, parts of the expressway only have two lanes. The project will cost \$180 million, and funding will come from 2020 toll increases. The project is expected to be completed in 2031 (Brunetti Post, 2022; South Jersey Transportation Authority, 2022).

Camden City Loop: In July 2023, Camden City, Camden County officials, and Camden Community Partnership rolled out a new Camden City transit service—Camden Loop. The service is an app (and phone number) that provides rides around Camden City for \$2 on weekdays. The service operates 6 a.m. to 8 p.m. and aims to give local residents an affordable way to access transportation in places where gaps in local bus and light rail service exist within the city (Goldberg, 2023; Perez-Castells, 2023; TAPintoCamden, 2023).

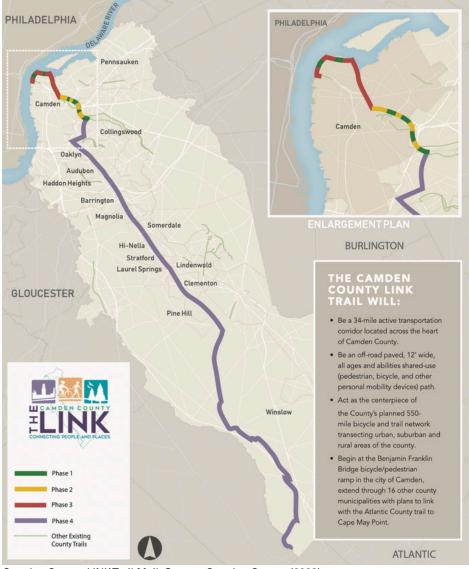




Glassboro-Camden Line (GCL): A future Glassboro-Camden passenger line will create 14 stations along a railway currently used only for freight. Between Glassboro and the Walter Rand Transportation Center in Camden City, there will be stations at Rowan University, Cooper University Health Care, and Campbell's Soup Company in Camden City. In November 2022, this project received \$200 million for preliminary engineering and design, project management, and land acquisition. In December 2022, the Delaware River Port Authority (DRPA) approved a \$56.6 million contract with South Jersey Transit Partners (Fitzgerald, 2022; Higgs, 2022). The project is expected to be operational by early 2028 if it receives the necessary funding, with an anticipated total cost of \$1.8 billion (Fitzgerald, 2022).



**LINK Trail**: Camden County will build a 34-mile foot and bike trail from the Benjamin Franklin Bridge in Camden City to Winslow Township in Gloucester County. The trail will then dovetail to trails that lead into Atlantic and Cape May Counties, ending in Cape May, and connecting Philadelphia to Cape May County and the larger 850-mile Circuit Trails Network<sup>13</sup> throughout the Southern New Jersey and Greater Philadelphia regions. Multiple pedestrian bridges will be included in the construction, and it is funded by the county and the U.S Department of Transportation's RAISE program<sup>14</sup> (Kummer, 2023).



Camden County LINKTrail Mail. Source: Camden County (2023).

<sup>&</sup>lt;sup>13</sup> Circuit Trails Network website <a href="https://circuittrails.org/home/">https://circuittrails.org/home/</a>

<sup>&</sup>lt;sup>14</sup> About RAISE Grants, U.S. Department of Transportation <a href="https://www.transportation.gov/RAISEgrants/about">https://www.transportation.gov/RAISEgrants/about</a>

Walter Rand Transportation Center Improvements and Renovations: In Camden City, the Walter Rand Transportation Center received \$250 million in funding from NJ TRANSIT in 2021 to improve the station significantly. Governor Phil Murphy has said the funding will "provide better connectivity between PATCO, Speedline, and the Riverline" and "improve flow for the more than two dozen NJ TRANSIT bus lines." The project will provide room for independent bus services, parking, and electric vehicle charging stations. Additionally, the project will explore transit-oriented development, including adjacent housing, office, and retail space (Burns, 2021). No direct timeline has been announced yet, and the project is currently in the design concept phase (Burns, 2021; NJ TRANSIT, 2023).



Additional Initiatives: Additional projects in the region will make improvements to existing transportation infrastructure. Lane widening of the New JerseyTurnpike from interchange 1 through 4 (running from Salem County to Burlington County), costing \$1.5 billion, with funding from bond proceeds for the New Jersey Turnpike Authority, is underway. The project is expected to start in 2026 and be completed by 2040. The ongoing construction to connect I-295 through I-76/NJ Route 42 expects to cost \$60 million from the NJ Department ofTransportation and is expected to be completed by 2031 (DVRPC Regional Project Lists, 2023). The Atlantic City NJTRANSIT line is also receiving funding to make enhancements at Atco, Cherry Hill, and Lindenwold stops, and is procuring five locomotives and 20 commuter rail vehicles costing a combined \$307.6 million. The expected completion for both the enhancements and procurement of locomotives is 2050. NJTRANSIT also aims to create new bus rapid transit from Avondale Park and Ride and Delsea Drive to Center City in Philadelphia, requiring \$53.9 million to be operational (DVRPC Regional Project Lists).

Legislation was introduced in both the New Jersey Senate (S3567) and Assembly (A5233) in early 2023 that would establish a grant program to provide workforce shuttles and cover transportation costs. It would appropriate \$10 million in federal funds and as of early fall 2023 is under consideration within the Senate Transportation committee and was referred to the Assembly Transportation and Independent Authorities Committee (NJ Legis. Senate, 2023).

Additionally, the New Jersey Fiscal Year 2024 (FY2024) budget includes \$137 million in new funding from the Debt Defeasance and Prevention Fund to match federal funding earmarked for transportation-related capital investments (e.g., rail improvements).

#### F. CONCLUSION AND FUTURE DIRECTIONS

#### **Future Directions**

The goal of this report was to use WRI's primary data and supporting secondary data to outline, explore, and highlight transportation access and barrier considerations throughout communities in Southern New Jersey, and outline both existing and future potential strategies that seek to address them. The findings and discussion in this report add to existing public data to explain the where, why, and how transportation affects Southern New Jersey residents using their voices and experiences. This report provides a foundation for future conversations around regional transportation needs that align with residents' perspectives.

Additional research is needed to assess how existing and forthcoming transportation efforts meet community resident needs. For example, prior research has highlighted the value of transportation services in rural communities and found positive net benefits for transportation services overall (RWJF County Health Rankings, 2022). Based on WRI research and conversations with multiple regional partners, areas and considerations for future research that support county, organizational, population-based, and/or regional needs and decision-making include:

- Transportation-related needs assessments
- Community-based recommendations on filling transportation gaps (e.g., initiatives for development, continuation, expansion, or discontinuation). In September 2023, WRI received a Rutgers New Jersey State Policy Lab grant to identify community priorities and policy recommendations around transportation gaps identified through data collection in Camden County. Information from this study will support targeted, community-based, and informed transportation-related decision and policymaking in an area of disproportionate need (Shapiro, 2023).
- Specific project and/or program evaluation (e.g., microtransit initiatives)
- Additional assessment(s) of the transportation landscape by population segment, narrower geographic location, or issue area (e.g., further analysis on the role of transportation in workforce development).

The South Jersey Transportation Planning Organization's (SJTPO) Regional Transportation Plan 2050 (2021) has also outlined five critical issues that South Jersey faces regarding transportation and that would be ripe for future research:

- 1. Federal and state funding imbalances
- 2. Municipality cost burdens for transportation projects
- 3. Inequitable access to mobility
- 4. Regulatory burdens
- 5. Considerations of rising sea levels, increased storm severity, and increases in rainfall that put coastal infrastructure at risk for damage

Engaging in additional research can help track and evaluate programs to understand what transportation elements are needed, how transportation services are operating, and residents' perceptions of those services. Future work can also increase collaboration across entities and improve planning for further funding initiatives and programs that aim to serve Southern New Jersey residents.

Currently, WRI is in discussions with regional transportation and planning entities on collaborative research projects and grant applications, and WRI welcomes new ideas and avenues for collaborations on grants, research, and transportation initiatives. These ideas can be formulated in partnership with multiple

collaborators at Rutgers University and Rutgers University - Camden; at the municipal, county, and state level; and with nonprofit and private community entities. Together, WRI partnerships and research projects can continue to elevate issues pertinent to Southern New Jersey through research and engagement.

#### **Conclusion**

WRI's review and analysis of our transportation-related data from our past and current projects revealed multiple transportation themes around transportation in the region. Overall, it was clear that access to and use of public transportation remains a challenge for many Southern New Jersey residents, and these challenges may hinder transit equity goals. Data from this report adds to the body of evidence around the role of transportation access in affecting residents, demonstrating its ties to well-being and the social determinants of health. Existing and future initiatives at the community, public, and private levels to expand transit avenues and address transportation access will continue to support the region's move towards transit equity.

#### G. REFERENCES

AllTransit. (2023, August 15). AllTransit Rankings. https://alltransit.cnt.org/rankings/.

American Public Transportation Association. (2023). Microtransit. <a href="https://www.apta.com/research-technical-resources/mobility-innovation-hub/microtransit/">https://www.apta.com/research-technical-resources/mobility-innovation-hub/microtransit/</a>

Brunetti Post, M. (2022, October 20). South Jersey Transportation Authority lauds upcoming widening of Atlantic City Expressway. *Press of Atlantic City*. <a href="https://pressofatlanticcity.com/news/local/south-jersey-transportation-authority-lauds-upcoming-widening-of-atlantic-city-expressway/article-82295b1c-4fcb-11ed-b0dd-2784b8d341ae.html">https://pressofatlantic-city-expressway/article-82295b1c-4fcb-11ed-b0dd-2784b8d341ae.html</a>

Burns, K. P. (2021, February 17). *Downtown Camden transportation hub to get major overhaul. WHYY.* https://whyy.org/articles/camdens-walter-rand-transportation-center-to-get-major-overhaul/

Camden County. (2023). LINK trail. https://www.camdencounty.com/service/parks/cross-county-trail/

Capuzzo, J. (2019, March 12). What's being done to help NJ's food desserts?. *NJ Monthly.* https://njmonthly.com/articles/politics-public-affairs/nj-food-deserts/

Census Reporter (n.d.). Southern New Jersey. <a href="https://censusreporter.org/">https://censusreporter.org/</a>

Cross County Connection (2020). NJTRANSIT Ridership Survey Findings for South Jersey. *Cross County Connection's COVID-19 Newsletter Series*. <a href="https://myemail.constantcontact.com/COVID-19-s-Impact-on-South-Jersey-Public-Transit-Ridership.html?soid=1133471738286&aid=pfiWdqXhrL8">https://myemail.constantcontact.com/COVID-19-s-Impact-on-South-Jersey-Public-Transit-Ridership.html?soid=1133471738286&aid=pfiWdqXhrL8</a>

Cross County Connection. (2023) Pureland East-West Shuttle. <a href="https://www.driveless.com/pureland-east-west-community-shuttle/">https://www.driveless.com/pureland-east-west-community-shuttle/</a>

Cross County Connection. (2023). South Jersey Transportation Map. <a href="https://ccctma.maps.arcgis.com/apps/webappviewer/index.html?id=8bf62b17539444ad859fafe63294dd6d">https://ccctma.maps.arcgis.com/apps/webappviewer/index.html?id=8bf62b17539444ad859fafe63294dd6d</a>

Deka, D. (2022). Trip deprivation among older adults in the context of the capability approach. *Journal of Transport Geography*, 100, 103325.

Delaware Valley Regional Planning Commission (DVRPC). (n.d.). CONNECTIONS 2050 Explorer. ArcGIS StoryMaps. <a href="https://storymaps.arcgis.com/stories/27846f901f214a03a4b017339b7b6e91">https://storymaps.arcgis.com/stories/27846f901f214a03a4b017339b7b6e91</a>

El-Geniedy, A. M. & Levinson, D. M. (2006). Access to Destinations, Development of Accessibility Measures. Minnesota Department of Transportation, Research Services. https://www.lrrb.org/pdf/200616.pdf.

Ewing, R & Kreutzer, R (2006). Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-ND Core Committee 2006. <a href="http://www.usgbc.org/resources/understanding-relationship-between-public-health-and-built-environment-report-prepared-lee">http://www.usgbc.org/resources/understanding-relationship-between-public-health-and-built-environment-report-prepared-lee</a>.

Ewing, R., Schieber, R.A. &, Zegeer CV. (2003). Urban sprawl as a risk factor in motor vehicle occupant and pedestrian fatalities. *American Journal of Public Health* 2003;93:1541-5. <a href="http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.93.9.1541">http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.93.9.1541</a>.

Federal Highway Administration. (2009). Summary of Travel Trends: 2009 National Household Travel Survey. FHWA-PL-11-022. http://nhts.ornl.gov/2009/pub/stt.pdf

Fitzgerald, T. (2022, November 2). Long-sought Glassboro-Camden rail line took a step forward. Will it get built?. *The Philadelphia Inquirer*. <a href="https://www.inquirer.com/transportation/glassboro-camden-rail-line-transit-gloucester-county-20221102.html">https://www.inquirer.com/transportation/glassboro-camden-rail-line-transit-gloucester-county-20221102.html</a>.

Goldberg, T. (2023, July 13). Camden rolls out a new transportation option. *NJ Spotlight News*. <a href="https://www.njspotlightnews.org/video/camden-rolls-out-a-new-transportation-option/?trk=feed-detail\_main-feed-card\_feed-article-content">https://www.njspotlightnews.org/video/camden-rolls-out-a-new-transportation-option/?trk=feed-detail\_main-feed-card\_feed-article-content</a>

Higgs, L. (2022, December 19). \$56M contract approved to design proposed Camden-Gloucester light rail line. *NJ.com*. https://www.nj.com/news/2022/12/56m-contract-approved-to-design-proposed-camden-gloucester-light-rail-line.html

Kummer, F. (2023, July 3). Camden County gets \$19M toward building 34-mile trail starting at Ben Franklin Bridge. *Philadelphia Inquirer*. <a href="https://www.inquirer.com/news/camden-county-link-trail-philadelphia-capemay-20230703.html">https://www.inquirer.com/news/camden-county-link-trail-philadelphia-capemay-20230703.html</a>

National Center for Mobility Management (2023). <a href="https://nationalcenterformobilitymanagement.org/transportation-and-social-determinants-of-health-destinations/">https://nationalcenterformobilitymanagement.org/transportation-and-social-determinants-of-health-destinations/</a>

Nathan-Roberts, D., Friedman-Biglin, N., Chen, A. & Karagoel, I. (2021). No Ticket To Ride: A Systematic Definition of Transit Insecurity. *Mineta Transportation Institute*. <a href="https://rosap.ntl.bts.gov/view/dot/56981">https://rosap.ntl.bts.gov/view/dot/56981</a>

N-Catt (2022, May 24). Microtransit: What is it and why is it used? Factsheet. <a href="https://n-catt.org/guidebooks/microtransit-what-is-it-and-why-use-it-factsheet/">https://n-catt.org/guidebooks/microtransit-what-is-it-and-why-use-it-factsheet/</a>

New Jersey Legis. Senate S3567. Reg. Sess. 2022-2023 (2023). https://legiscan.com/NJ/bill/S3567/2022

NJTRANSIT Market Research (2020). COVIDTravel Survey #2 (Conducted June 22 to July 3, 2020): Survey Findings. NJTRANSIT Market Research. <a href="https://myemail.constantcontact.com/COVID-19-s-Impact-on-South-Jersey-Public-Transit-Ridership.html?soid=1133471738286&aid=pfiWdqXhrL8">https://myemail.constantcontact.com/COVID-19-s-Impact-on-South-Jersey-Public-Transit-Ridership.html?soid=1133471738286&aid=pfiWdqXhrL8</a>

Noland, R.B, (2021). Mobility and the effective reproduction rate of COVID-19. *Science Direct*. <a href="https://www.sciencedirect.com/science/article/pii/S2214140521000104?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S2214140521000104?via%3Dihub</a>

US Census Bureau. (2019). Quick Facts: New Jersey. <a href="https://www.census.gov/quickfacts/fact/table/NJ/SBO001217">https://www.census.gov/quickfacts/fact/table/NJ/SBO001217</a>

Perez-Castells, A. (2023, July 13). Camden residents can now travel around the city for just \$2 a ride. *Philadelphia Inquirier.* <a href="https://www.inquirer.com/transportation/camden-loop-rideshare-minivan-20230713.">https://www.inquirer.com/transportation/camden-loop-rideshare-minivan-20230713.</a>

Peters, R. J. & Gordon, C.E, and Flanagan, R.M. (2021). The Road to Equitable Transportation Policy in New Jersey: An Assessment of Cost Burdens, Gaps in Mobility and Recommendations for Reform. *The Garden State Initiative*. <a href="https://www.bls.gov/cex/research\_papers/pdf/peters-gordon-flanagan-equitable-transportation-policy-nj.pdf">https://www.bls.gov/cex/research\_papers/pdf/peters-gordon-flanagan-equitable-transportation-policy-nj.pdf</a>

Pisarski A. (2006). Commuting in America III: The Third National Report on Commuting Patterns and Trends. <a href="http://onlinepubs.trb.org/onlinepubs/nchrp/CIAIII.pdf">http://onlinepubs.trb.org/onlinepubs/nchrp/CIAIII.pdf</a>

Price, A & Godwin, A (2012, January 16). Mapping Transportation and Health in the United States. *Planetizen*.http://www.planetizen.com/node/53728.

Pucher, J., Dill, J. & Handy, S. (2010) Infrastructure, programs, and policies to increase bicycling: an international review. *Preventive medicine*;50:S106-S125. <a href="http://www.ncbi.nlm.nih.gov/pubmed/19765610">http://www.ncbi.nlm.nih.gov/pubmed/19765610</a>.

Pureland East-West Shuttle. (2023). Cross County Connection. <a href="https://www.driveless.com/pureland-east-west-community-shuttle/">https://www.driveless.com/pureland-east-west-community-shuttle/</a>

University of Wisconsin Population Health Institute: School of Medicine and Public Health, Robert Wood Johnson Foundation. (2022). County Health Rankings & Roadmaps. <a href="https://www.countyhealthrankings.org/app/new-jersey/2020/rankings/cumberland/county/outcomes/overall/snapshot">https://www.countyhealthrankings.org/app/new-jersey/2020/rankings/cumberland/county/outcomes/overall/snapshot</a>

Rutgers University School of Planning and Public Policy and Alan M. Voorhees Transportation Center. (2012). Connecting to Jobs by Connecting to Transit: Final Report. <a href="https://vtc.rutgers.edu/wp-content/uploads/2012/12/Connect2TransitFinalReport.pdf">https://vtc.rutgers.edu/wp-content/uploads/2012/12/Connect2TransitFinalReport.pdf</a>

Senator Walter Rand Institute for Public Affairs. (2023). About Us - History & Senator Rand, Senator Walter Rand Institute Website. https://rand.camden.rutgers.edu/about/senator-rand/

Senator Walter Rand Institute for Public Affairs. (2022a). AtlantiCare Community Health Needs Assessment 2022-2024, Senator Walter Rand Institute. <a href="https://www.atlanticare.org/assets/documents/for-our-community/programs/community-health-needs-assessments/wri\_atlanticare\_chna\_2022-2024\_final.pdf">https://www.atlanticare.org/assets/documents/for-our-community/programs/community-health-needs-assessments/wri\_atlanticare\_chna\_2022-2024\_final.pdf</a>

Senator Walter Rand Institute for Public Affairs. (2020a). Burlington County Needs Assessment 2020. *County Human Services Advisory Council*, New Jersey Department of Children and Families. <a href="https://www.nj.gov/dcf/about/divisions/opma/docs/Burlington.County.Needs.Assessment.Report.2020.pdf">https://www.nj.gov/dcf/about/divisions/opma/docs/Burlington.County.Needs.Assessment.Report.2020.pdf</a>.

Senator Walter Rand Institute for Public Affairs. (2021a). Camden County Needs Assessment. *County Human Services Advisory Council*, New Jersey Department of Children and Families. <a href="https://www.nj.gov/dcf/about/divisions/opma/docs/CamdenCountyNeedsAssessmentReport2020.pdf">https://www.nj.gov/dcf/about/divisions/opma/docs/CamdenCountyNeedsAssessmentReport2020.pdf</a>

Senator Walter Rand Institute for Public Affairs. (2022b). Community Conversations: Pandemic Perspectives, NJ's COVID-19 Storytelling Project. *New Jersey YMCA State Alliance*. https://www.njymca.org/clientuploads/CommunityConversations/NJYSACommunityConversations-FinalReport.pdf

Senator Walter Rand Institute for Public Affairs. (2019a). Community Health Needs Assessment: South Jersey Health Collaborative. Senator Walter Rand Institute for Public Affairs. <a href="https://rand.camden.rutgers.edu/community-health-needs-assessment/">https://rand.camden.rutgers.edu/community-health-needs-assessment/</a>

Senator Walter Rand Institute for Public Affairs (2019b). Inspira Health Network Community Health Needs Assessment, 2019–2021. *Senator Walter Rand Institute for Public Affairs*. <a href="https://www.inspirahealthnetwork.org/sites/default/files/CHNA">https://www.inspirahealthnetwork.org/sites/default/files/CHNA</a> 2019 2021 WRI Final 0.pdf

Senator Walter Rand Institute for Public Affairs. (2022c). Inspira Health Community Health Needs Assessment, 2022-2024. *Senator Walter Rand Institute for Public Affairs*. <a href="https://www.inspirahealthnetwork.org/sites/default/files/WRI">https://www.inspirahealthnetwork.org/sites/default/files/WRI</a> Inspira Health CHNA 2022-2024 FINAL.pdf

Senator Walter Rand Institute for Public Affairs. (2020b) Listening, providing, evolving: How direct service organizations in southern New Jersey are changing to meet community needs, and adapting themselves, during the COVID-19 pandemic. Senator Walter Rand Institute for Public Affairs. <a href="https://rand.camden.rutgers.edu/2020/12/21/wri-working-paper-listing-providing-evolving/">https://rand.camden.rutgers.edu/2020/12/21/wri-working-paper-listing-providing-evolving/</a>

Senator Walter Rand Institute for Public Affairs. (2020c). Salem County Needs Assessment 2020. *County Human Services Advisory Council*, New Jersey Department of Children and Families, <a href="https://www.nj.gov/dcf/about/divisions/opma/docs/Salem%20County%20Needs%20Assessment%20Report%202020.pdf">https://www.nj.gov/dcf/about/divisions/opma/docs/Salem%20County%20Needs%20Assessment%20Report%202020.pdf</a>

Senator Walter Rand Institute for Public Affairs. (2022d). Seeking Work in Southern New Jersey. *A Rowan University/Rutgers Camden Board of Governors Initiative*. <a href="https://drive.google.com/file/d/1w4kDJQtYANRDJWDejck-zlmHLUFN9bZc/view">https://drive.google.com/file/d/1w4kDJQtYANRDJWDejck-zlmHLUFN9bZc/view</a>.

Senator Walter Rand Institute for Public Affairs. (2022e). South Jersey Strengthening Families Initiative: Final Evaluation Report 2012-2022, *Pascale Sykes Foundation*. <a href="https://drive.google.com/file/d/17ZlgBLWkBG">https://drive.google.com/file/d/17ZlgBLWkBG</a> <a href="https://drive.google.com/file/d

Senator Walter Rand Institute for Public Affairs. (2022f). Strengthening Families Initiative Evaluation Semi-Annual Report Summaries, 2022. *Pascale Sykes Foundation*. <a href="https://drive.google.com/file/d/1r5usK\_JOlkc-qaHY4AmB5hg3t5uG2dtU/view">https://drive.google.com/file/d/1r5usK\_JOlkc-qaHY4AmB5hg3t5uG2dtU/view</a>

Senator Walter Rand Institute for Public Affairs. (2021b). Whole Family Culturally Responsive Approach Evaluation, South Jersey Strengthening Families Initiative. *Pascale Sykes Foundation*. <a href="https://drive.google.com/file/d/1208FrQEy9DJtUyuBbE1gW2HPYCfxauD/view">https://drive.google.com/file/d/1208FrQEy9DJtUyuBbE1gW2HPYCfxauD/view</a>

Shapiro, S. (2023). The New Jersey State Policy Lab Announces Ten New Research Projects. <a href="https://policylab.rutgers.edu/the-new-jersey-state-policy-lab-announces-ten-new-research-projects/">https://policylab.rutgers.edu/the-new-jersey-state-policy-lab-announces-ten-new-research-projects/</a>

South Jersey Planning Transportation Organization (SJPTO) (2021). Regional transportation plan 2050: Moving South Jersey Forward. <a href="https://www.sjtpo.org/wp-content/uploads/2021/01/Final-RTP-2050">https://www.sjtpo.org/wp-content/uploads/2021/01/Final-RTP-2050</a> 1.25.2021.pdf.

South Jersey Transportation Authority (SJTA) (2022). Atlantic City Expressway Third Lane Widening MP31.60 to MP44.20 - Concept Development Study. <a href="https://www.sjta.com/sjta/pdfs/widening/PIC\_ACE%20">https://www.sjta.com/sjta/pdfs/widening/PIC\_ACE%20</a> MP31-MP44\_slides.pdf

Star-Ledger Guest Columnist. (2021, November 14). The cost of public transit in New Jersey is being paid by those with the least access to it. *The Star-Ledger*. <a href="https://www.nj.com/opinion/2021/11/the-cost-of-public-transit-in-new-jersey-is-being-paid-by-those-with-the-least-access-to-it-opinion.html">https://www.nj.com/opinion/2021/11/the-cost-of-public-transit-in-new-jersey-is-being-paid-by-those-with-the-least-access-to-it-opinion.html</a>

Star-Ledger Guest Columnist. (2021, August 6). New Jersey, we need to fight for our fair share in the infrastructure bill. *The Star-Ledger*. <a href="https://www.nj.com/opinion/2021/08/new-jersey-we-need-to-fight-for-our-fair-share-in-the-infrastructure-bill-opinion.html">https://www.nj.com/opinion/2021/08/new-jersey-we-need-to-fight-for-our-fair-share-in-the-infrastructure-bill-opinion.html</a>

State of New Jersey (2023). Governor Murphy Signs Fiscal Year 2024 Budget into Law. <a href="https://www.nj.gov/governor/news/news/562023/20230630f.shtml">https://www.nj.gov/governor/news/news/562023/20230630f.shtml</a>

TAPintoCamden (2023, July 15). Need a Ride? New On-Demand Camden Loop Vans Get You There for \$2. https://www.tapinto.net/towns/camden/sections/green/articles/need-a-ride-new-on-demand-camden-loop-vans-get-you-there-for-2

- U.S. Department of Health and Human Services (2023). Transportation Models Rural Health Information Hub. <a href="https://www.ruralhealthinfo.org/toolkits/sdoh/2/built-environment/transportation">https://www.ruralhealthinfo.org/toolkits/sdoh/2/built-environment/transportation</a>
- U.S. Department of Transportation. (n.d.). Transportation Equity: What is Equity in Transportation? https://www.planning.dot.gov/planning/topic\_transportationequity.aspx#:~:text=Equity%20in%20 Transportation%3F,What%20is%20Equity%20in%20Transportation%3F,needs%20of%20all%20 community%20members.

Xia, T., Zhang, Y., Crabb, S., & Shah, P (2013).. Cobenefits of Replacing CarTrips with Alternative Transportation: A Review of Evidence and Methodological Issues. *Journal of Environmental and Public Health*, 797312. <a href="http://www.hindawi.com/journals/jeph/2013/797312/">http://www.hindawi.com/journals/jeph/2013/797312/</a>.

Watkins, K.E., McDonald, N., Bardaka, E., Steiner, R., Bejleri, I., Berrebi, S., & Alakshendra, A. (2021). Changing Access to Public Transportation and the Potential for Increased Travel. Southeastern Transportation Research, Innovative Development and Education Center. <a href="https://rosap.ntl.bts.gov/view/dot/57431">https://rosap.ntl.bts.gov/view/dot/57431</a>

Wilson, C. (2020, March 27). Reduced NJ transit bus schedule announced over coronavirus concerns. *Northjersey.com*. https://www.northjersey.com/story/news/transportation/2020/03/27/reduced-nj-transit-bus-schedule-announced-due-coronavirus/2916330001/.

Veler, J. (2020). Salem County Needs Assessment 2020. *County Human Services Advisory Council*. New Jersey Department of Children and Families. <a href="https://www.nj.gov/dcf/about/divisions/opma/docs/Salem%20">https://www.nj.gov/dcf/about/divisions/opma/docs/Salem%20</a> County%20Needs%20Assessment%20Report%202020.pdf

Via Transportation. (2023). What is Microtransit? https://ridewithvia.com/resources/articles/what-is-microtransit/

## Inside back cover Intentionally left blank

## RUTGERS

Senator Walter Rand Institute for Public Affairs

411 Cooper Street Camden, NJ 08102 (856) 225-6566 wrand@camden.rutgers.edu

rand.camden.rutgers.edu



