



**TDOT**  
Department of  
Transportation



# Mobility and Accessible Transportation Strategic Plan

Planning for the Future

Tennessee Department of Transportation | March 31, 2022



## OFFICE OF MOBILITY AND ACCESSIBLE TRANSPORTATION STRATEGIC PLAN

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## MOBILITY AND ACCESSIBLE TRANSPORTATION STRATEGIC PLAN

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### PLANNING FOR THE FUTURE

The Mobility and Accessible Transportation Strategic Plan includes the State of Tennessee’s mission, goals, and priorities for supporting transportation services that provide mobility while making effective use of existing dollars and resources.

Strong local transportation services promote balanced communities and reliable access to the opportunities and programs that support quality of life in Tennessee. With this plan, the Tennessee Department of Transportation (TDOT) and its partners establish a pathway to integrated policies and cooperative activities that foster a flexible and comprehensive transportation program. It will help give local transportation providers the tools and direction to close gaps and prepare for the future. Through this effort, Tennesseans will gain transportation independence that supports livability in their communities. This is a five-year initial plan.

Realizing the importance of access to transportation, the Council on Developmental Disabilities, the Arc of Tennessee, Disability Rights Tennessee, and TDOT successfully worked with Tennessee lawmakers to create and establish the Tennessee Accessible Transportation and Mobility Act of 2020. The Act pertains to improving access to transportation for older adults and individuals with disabilities. This Act, the first of its kind in the country, opened doors to sustainable expansions and improvements in accessible transportation for communities and individuals throughout Tennessee.

The State is poised to make the intentions of the Act a reality through TDOT and a statewide mobility management program. The Act provides direction for incorporating certain functions into the mobility and accessibility plan, including:

- ◆ Relationships between State government agencies as they pertain to transportation;
- ◆ Existing mobility management structures for older adults, individuals with disabilities, and the general public; and,
- ◆ Advancements in technology and creative service structures utilized by public transit systems.

Improving access to transportation service within the current fragmented approach presents many challenges and will require transformational changes to achieve optimal results. Tennessee’s timing for moving forward in its implementation of plans to increase accessibility is timely on a national perspective as well as a local one. The Coordinating Council on Access and Mobility (CCAM), an interagency federal initiative that supports states and their localities in developing coordinated human service delivery systems, notes “Increased accessibility is an expansion of transportation options that result from coordination among Federal and state funding recipients.”

Federal and State support is a critical element in success. Alignment of policies at the Federal level will aid State-level agencies in development of their own coordinated goals and policy alignment activities. On October 1, 2020, the U.S. Department of Transportation's Federal Transit Administration (FTA) provided clear direction and support for States and localities when it released of a Final Report of the CCAM. The report identifies challenges and barriers to improving access to transportation for people with disabilities, older adults, and individuals of low income. The report also outlines activities the CCAM has undertaken to improve coordination across federally-funded transportation services for these populations.

The need to fully utilize and embrace mobility management activities and technology improvements works in conjunction with establishing coordinated transportation goals. These improvements will drive effectiveness of human service agencies, private, non-profit, and public transportation services, and efficiency of Tennessee's financial resources. The demand for accessible transportation will continue to surpass resources, so it is vital that mobility management activities include making sure that vehicles are available in adequate supply in the community, including wheelchair accessible vehicles, and that they are fully utilized. Consolidation of long-distance trips from multiple to fewer providers, when feasible will help to maximize vehicle and driver time. Coordination of training and vehicle maintenance between multiple organizations, when practical, will improve the consistency of performance and customer service. Finally, collaboration on effective marketing strategies and coordinated outreach will enhance the public's awareness of transportation services throughout the State.

Tennessee is a great place to live and work. With transportation services available in every county, residents in all communities have options. The existing services are the foundation for the State to promote a new and better way to support its residents. Legislative direction to coordinate transportation can unite a broad collaborative of transportation providers, health and human service agencies, customers, and stakeholders in designing local, regional, and statewide solutions to fit Tennessee's community needs and visions.

By working collectively, stakeholders can identify and strategically apply resources to overcome the gaps and challenges in access to transportation that exist even with the plethora of service modes and options. These mobility challenges keep transportation providers from hiring enough drivers to meet demands and prevent passengers from having a ride when they need it. In addition, the challenges keep a person with a disability or mobility limitation from leaving home because the extra assistance they need getting to and from their destination is not available, and many other realities.

Cooperation, leadership, knowledge, planning, and trust within the State-level partners and among other stakeholders are the key pillars for success in this journey for improved access and mobility throughout Tennessee.

## PLANNING PRINCIPLES

This Mobility and Accessible Transportation Strategic Plan includes a number of key principles:

- ❖ **Taking an Integrated Approach among State Departments that serve older adults, individuals with disabilities and the general public and, therefore, have shared priorities.** The concepts discussed in this strategic plan go beyond the any single State department. The State is incorporating priorities of multiple departments to find transportation solutions rather than continuing to develop targeted solutions in isolation for individual programs. Collaboration among the State agencies will allow for the development of viable solutions and efficiencies.
- ❖ **Aligning policies at the State, regional, and local level to better support access to community resources.** The delivery of transportation services is largely influenced by Federal funding requirements and State and local decisions. Local transportation policies and decisions are influenced by economics, user demographics, and the preferences of administrators and leaders. Transportation services can be as much about organizational culture and local resources as about policies. These factors must be considered when moving toward greater levels of cooperation and collaboration.
- ❖ **Maximizing the existing transportation infrastructure and services to strengthen travel opportunities.** While the Tennessee Accessible Transportation and Mobility Act of 2020 focused on improving access to transportation for older adults and individuals with disabilities, the State understands that it will gain momentum by first removing barriers and supporting innovations and service enhancements through the existing public, private, non-profit, and human service agency transportation programs. The solutions that are appropriate for older adults and individuals with disabilities, also improve transportation for users.
- ❖ **Delivering Customer Focused Transportation.** Coordinated design thinking from State, regional and local partners, and users of accessible transportation will ensure that services are always developed and delivered with a customer focus.
- ❖ **Managing performance of funding programs.** More than 130 Federal grant programs support transportation for the public or people who meet specific eligibility requirements. Historically, in Tennessee and nationally, these funding programs have been planned and delivered in silos resulting in significant overlap in the services being funded. The State will work toward structured cost allocation or cost sharing practices that comply with Federal and State funding requirements, encourage fund braiding, and also allow transportation providers to maximize use of resources.

## METHODOLOGY

The approach to the strategic plan and needs assessment encompassed opportunities for input from stakeholders representing organizations that serve older adults and individuals with disabilities, their consumers, and members of the public. The planning process also included discussions and surveys of transportation providers and local public entities. Demographic research and review of prior plans complemented the input received from various stakeholders. This multi-faceted approach was

selected because it provided the broadest opportunity for input and analysis while meeting project timelines. The implementation phase of the plan and refinements to the strategic plan itself will continue over the coming year with larger progress over the duration of the plan horizon.

### **Stakeholder Involvement**

The Strategic Plan is built upon public and stakeholder input as well as an assessment of existing services and demographic conditions. Key stakeholder and public involvement activities were structured around the following activities:

- ◆ Monthly Transportation Workgroup meetings
- ◆ Interviews with key stakeholders
- ◆ Transportation Provider Survey
- ◆ Public Needs Assessment Survey
- ◆ Nine Regional Focus Groups to discuss transportation needs
- ◆ Public Transit Provider Focus Group

Appendix A and B contain full copies of the provider and public needs surveys.

### **Related Planning Efforts**

The strategic plan would be incomplete if developed in isolation from other related studies and ongoing efforts. Therefore, the process incorporated a review of local and statewide planning efforts that include transportation needs assessments. Related plans reviewed for this process included but were not limited to Regional and Local Coordinated Public Transit-Human Service Transportation Plans, Tennessee Senior Volunteer Transportation Network Annual Report and Summary Report, and Tennessee Commission on Aging and Disability Plan (TCAD) 2017 – 2021. Additionally, there was the consideration of national transportation initiatives and studies conducted at the federal level by the Coordinating Council on Access and Mobility (CCAM).

Goals and strategies included in this plan also coincide with TDOT's ongoing statewide procurement of transit technology, including trip planning software. The software will ultimately support the State and transit agencies in efforts to address the mobility needs of riders locally, regionally, and statewide.

### **Demographic and Socio-Economic Conditions Analysis**

Analysis of needs and gaps in service includes a statewide review of key demographic and socio-economic factors that influence a person's likelihood to need and use transportation services. Demographic analysis includes resources such as U.S. Census Bureau, Longitudinal Employer-Household Dynamics (LEHD), and samples of major destinations served by public transportation providers and human service agency programs. Data is compiled and analyzed to reveal potential levels and types of need and to help quantify the potential unmet demand for transportation.

## Gaps Analysis

The gaps analysis compares the demographic and socio-economic drivers of demand with the existing transportation options and resources. The research identifies the temporal and spatial gaps that result in diminished opportunities for older adults and individuals with disabilities to access transportation resources. Gaps are further perpetuated by the driver shortages faced by transit systems throughout the state and country. In some cases, additional service could be provided to address gaps if transit systems had the necessary staffing levels.

## Implementation of the Plan

Successful implementation of the plan will rely on continued involvement from key stakeholders at all levels of government as well as other interested parties and users of accessible transportation. Transportation providers and other stakeholders will expect to see efforts made to reduce the barriers and challenges to transportation and mobility brought forward in this plan and named in the goals and priorities. TDOT will be a leader and partner by continuing collaborative efforts rather than imposing decisions in isolation. The dialogue initiated from this planning process will continue, and stakeholders must proactively and cooperatively work together to address identified needs and challenges.

## **MISSION STATEMENT**

**Provide resources and expertise for expanding and improving accessible transportation and mobility across the state.**

## **GOALS**

TDOT and the Transportation Workgroup have identified five goals.

- 1. Expand Access:** Support local solutions for expanding access to transportation services.
- 2. Service Solutions:** Identify the areas where barriers to transportation overlap and develop solutions that meet travelers' needs.
- 3. Collaboration:** Establish a structure and collaborative culture that maximizes financial resources for transportation across multiple programs and departments.
- 4. Technology Solutions:** Prioritize user-focused public information systems and transit technology tools to diversify access to services.
- 5. Communication:** Facilitate communication and coordination between transportation providers and users for a more seamless mobility network.



In conjunction with these strategic goals, the State will embrace mobility management activities and technologies that will maximize resources and expand service.

The following chapter summarizes the existing transportation resources across Tennessee. Subsequent chapters provide a broad assessment of unmet transportation needs and gaps in services identified through stakeholder involvement activities and demographic analysis. The final chapter identifies action steps and objectives for achieving the strategic goals.

## EXISTING TRANSPORTATION SERVICES

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These transportation services are part of Tennessee’s accessible transportation network.

**Public Transportation** services are the heart of the state’s transportation network. With various modal options, public transportation providers in Tennessee offer options for anyone in their service areas including fixed routes and demand response services. Public transportation is available in all 95 counties. Public transportation in rural Tennessee is provided through Human Resource Agencies (HRAs) that have a regional service area. Public transportation in urban areas typically serves one city or county.

Specialized transportation programs and services offered by other agencies were created to address transit gaps, and meet specific needs of riders. These include trips with origins or destinations outside of the public transit bus routes and ADA paratransit service area boundaries; door-through-door trips for people with mobility limitations preventing them from accessing public transit; on-demand transportation for trips that cannot be scheduled in advance or to address the need for travel directly from origin to destination; and/or group trips to meet agency program client needs.

**Human resource agencies (HRAs)** have developed specialized transportation programs to fill gaps and unmet transportation needs. HRA transportation programs provide rides to individuals who meet specific eligibility requirements such as older adults, individuals with disabilities, and/or people with low incomes. They are operated by public or private non-profit organizations that provide transportation as an ancillary service to their clients or an eligible segment of the population. An example of an HRA program is vehicles operated by senior centers to bring passengers to/from nutrition sites and/or to run errands. These trips are typically operated within a limited geographic service area immediately surrounding the senior center and with limited hours of operation. Some, but not all, of these programs have wheelchair accessible vehicles.

In the case of senior nutrition program transportation, the service is funded, in part, with Federal Older Americans Act funds that are allocated through the Administration on Aging to the Tennessee Department of Human Services and then passed through for senior services. Some programs also utilize Federal Transit Administration (FTA) Section 5310 Grant Program funding to purchase vehicles for transporting seniors.

**Non-emergency medical transportation (NEMT)** for Medicaid eligible trips is also funded through the Department of Human Services.

**Veterans** have access to transportation programs that are funded locally or at the Federal level.

Many **Government or Private Non-Profit** agencies provide transportation with specific eligibility requirements because other available transportation programs do not meet the transportation needs of an identified group of people or serve a certain trip purpose. These agencies often operate services with specialized aspects such as volunteer drivers, drivers with additional training for unique

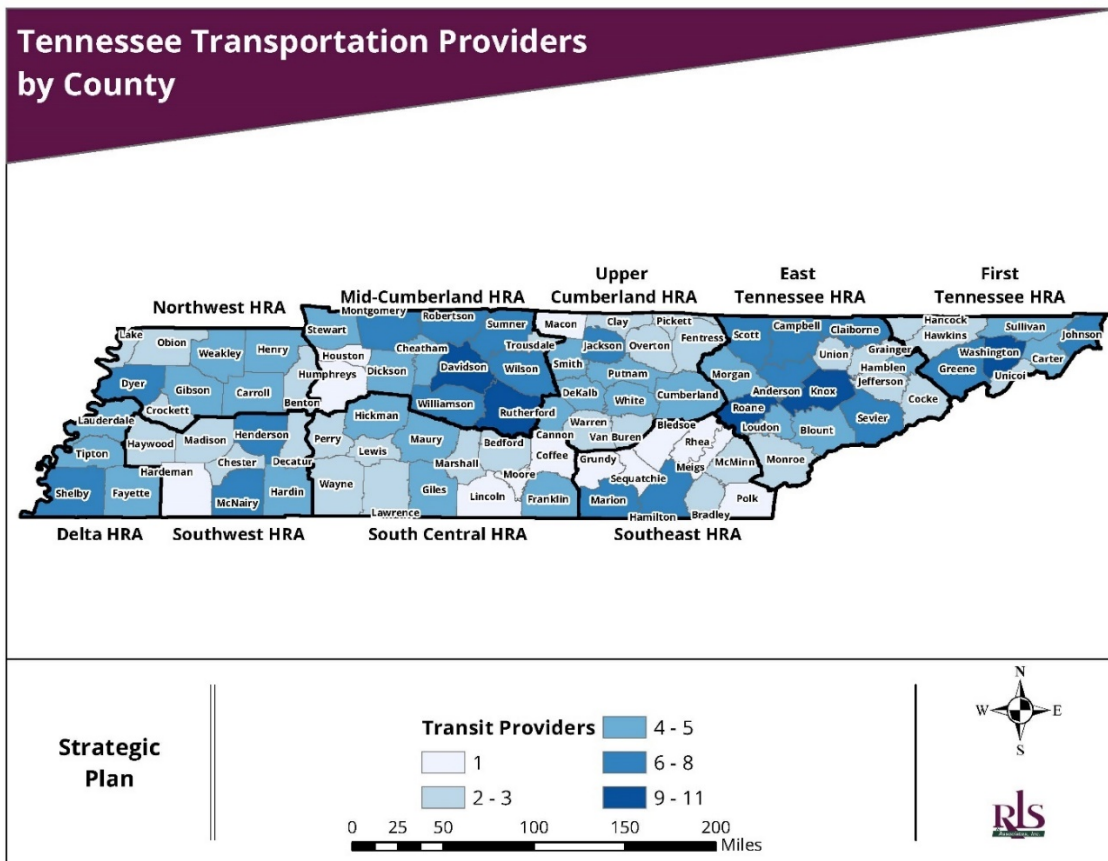
passenger requirements, or single passenger per trip services for passengers that may need a direct trip due to health or other conditions. The MyRide TN program in Tennessee is an example of a successful senior-friendly volunteer transportation program for older adults. MyRide TN was initiated and funded through the TCAD and Older Americans Act funds.

Finally, **private transportation** services such as taxis, medical transportation services, and transportation network companies (TNCs)/rideshare services (e.g., Uber and Lyft) provide specialized transportation for older adults and individuals with disabilities as well as for the general public. Private companies exist on passenger fares and/or contracts with public or private entities.

Together, this network of transportation options supports mobility in Tennessee for trips that are not completed with a personal vehicle, friend or family member.

Exhibit 1 illustrates the number of transportation providers serving the general public, older adults, and/or individuals with disabilities in each county. The map does not include all private transportation providers because no reliable data source is available to accurately account for them. It is also noted here, that some transportation providers operate within service area boundaries that are multi-county or limited to portions of a county (i.e., city limits). For the purpose of illustrating the presence of transportation services, each provider operating within a county is counted.

**Exhibit 1: Number of Transportation Providers by County**



## EXISTING PUBLIC AND AGENCY TRANSPORTATION STRUCTURE

### Rural and Urban Public Transit and Human Resource Agency Transportation

Tennessee has organized rural transportation and state-funded human services programs through nine Human Resource Agencies (HRAs). TDOT is the direct recipient of rural public transit (Section 5311) funding from the Federal Transit Administration (FTA). The HRAs are subrecipients of Section 5311 funding which must be matched by local dollars to create an operating budget for the transportation program.

Each HRA covers a multi-county region throughout the entire state and, in addition to providing public transportation, they also serve as centralized administration and information resources for multiple human services programs. Within the geographic boundaries of each HRA region there may be one or more public transportation service, non-emergency medical transportation (TennCare), volunteer transportation, programs for older adults and individuals with disabilities, children and youth programs, community intervention, or other services.

Large urban areas with a population of 200,000 or more are direct recipients of Federal Transit Administration (FTA) funds for public transit (Section 5307). While large urban areas are located within the boundaries of the HRAs, transit services in the large urban areas are administered, operated and funded separately from the HRAs.

There are Federal, State and local resources invested each year in Tennessee to make transportation possible in rural and urban areas. Local funding for public transit services is most often derived from local governments or tax levies which require the transit services to remain within a specific jurisdiction. The funding amounts below are reported by the National Transit Database (NTD) in 2019 by urban and rural public transportation providers.

**Table 1: 2019 Total Public Transit Revenue by Provider Type**

HRA Region	Rural Transit	Urban Transit Operators	Grand Total
<b>Delta Human Resource Agency</b>	\$2,320,153	\$65,406,361	\$67,726,514
<b>East Tennessee Human Resource Agency</b>	\$14,935,955	\$28,789,394	\$43,725,349
<b>First Tennessee Human Resource Agency</b>	\$4,741,626	\$12,393,969	\$17,135,595
<b>Mid-Cumberland Human Resource Agency</b>	\$6,927,561	\$156,898,302	\$163,825,863
<b>Northwest Tennessee Human Resource Agency</b>	\$5,329,266		\$5,329,266
<b>South Central Tennessee Development District</b>	\$8,466,744		\$8,466,744
<b>Southeast Tennessee Human Resource Agency</b>	\$5,959,498	\$25,890,224	\$31,849,722
<b>Southwest Human Resource Agency</b>	\$3,390,048	\$3,569,740	\$6,959,788
<b>Upper Cumberland Human Resource Agency</b>	\$5,954,822		\$5,954,822
<b>Grand Total</b>	<b>\$58,025,673</b>	<b>\$292,947,990</b>	<b>\$350,973,663</b>

## **Transportation for Older Adults and Individuals with Disabilities**

In addition to public transportation and human service agency programs operated through HRAs, the Tennessee Commission on Aging and Disability (TCAD) provides services or funding to support transportation for older adults and individuals with disabilities. TCAD offices are organized with the same nine geographic regional boundaries as HRAs. Within each region, TCAD has designated an Area Agency on Aging and Disability (AAAD). These AAADs plan and provide programs and services for older Tennesseans and individuals with disabilities.

TCAD provides a wide range of programs that promote health, dignity, independence, and security. TCAD is an information resource for transportation and it administers the MyRideTN program. Funding for the MyRideTN project includes Title III B of the Older Americans Act, a grant awarded by the Davidson County Chancery Court, and Part III from the Senior Trust/Ekler Trust settlement. MyRideTN is a senior-friendly volunteer transportation service. Volunteer drivers use their personal vehicles to carry Tennesseans who are age 60 or older and can walk independently with assistance from walkers or canes but do not drive. Knox County's MyRideTN service is the only county with accessible vehicles for individuals who use a mobility device. Trips are provided to medical appointments, grocery stores, and other locations. MyRideTN is not yet available in every county, but is available in portions of every TCAD/HRA geographic region.

TCAD also provides the aging nutrition program at more than 200 congregate settings (including senior centers and housing) as well as to homebound seniors. These local senior services programs are eligible for, and some receive, FTA Section 5310 Program grants. The grant funds are eligible for vehicle purchases and replacements to support transportation for older adults, individuals with disabilities and people with low incomes.

There are also senior centers and councils on aging in Tennessee that operate separately from TCAD and can be county- or local government-funded. These centers are also eligible for, and some receive, FTA Section 5310 Program grants.

Section 5310 Program grants for programs serving rural and small urban communities are administered through the TDOT Office of Mobility and Accessible Transportation. Section 5310 Programs in large urban areas are administered by the Metropolitan Planning Organization or urban transit systems.

In 2021, Tennessee's Section 5310 program apportionment for rural areas was approximately \$2.1 million. The apportionment for small urban areas was approximately \$1.4 million. The combined allocation to Tennessee's larger urban areas was \$2.8 million.<sup>1</sup>

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<sup>1</sup> The Federal Transit Administration defines a larger urban area as having a population of 200,000 or more. Small urban areas have a population between 50,000 and 199,999. Rural areas have populations of less than \$50,000.

### **Non-Emergency Medical Transportation**

TennCare is Tennessee’s Medicaid program. Services include non-emergency medical transportation (NEMT) for eligible individuals. To receive NEMT through TennCare, a person must meet the income and resource limits of the program. TennCare transportation is included in the family of services administered through most HRAs. NEMT transportation services are operated through contracts with private or non-profit transit services and on public transit.

### **Private and Non-Profit Transportation**

Throughout Tennessee there are private, for-profit and private, non-profit agencies that operate transportation for older adults, individuals with disabilities, the general public, and/or NEMT. These agencies typically operate based on fees paid by the rider, contracts with publicly funded organizations, or contracts with private employers or insurance companies. Private and non-profit operators are a key part of the transportation network in Tennessee because they can often design services to fit a specific need (i.e., late night/shift work, on-demand service, smaller vehicles).

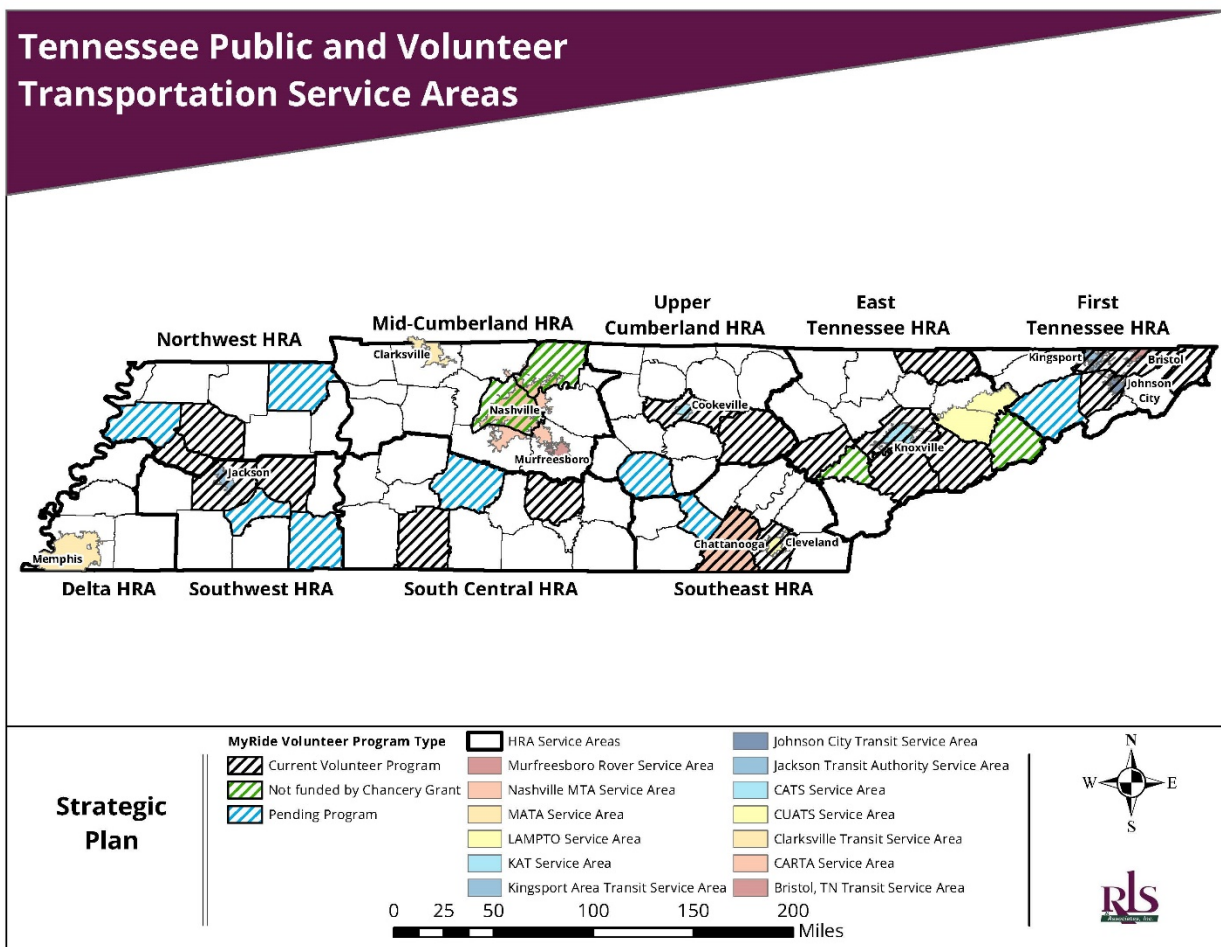
Traditionally, private transportation providers have had limited availability of wheelchair accessible vehicles for services other than NEMT. This fact is partially due to the expense of operating and maintaining a vehicle with a ramp or lift compared to the demand for that vehicle. However, wheelchair accessible private transportation services are slowly becoming more common, particularly in urban areas. The private transportation options for individuals who need a wheelchair accessible vehicle are very limited, which creates a gap in access to important regional destinations.

## **A SERVICE AREA VIEW OF TRANSPORTATION**

Utilization of transportation services is different between urban, suburban, and rural areas for a few reasons. Urban areas are likely to have more service options with longer hours and more service days than rural areas. Urban areas typically have more services because there are more people and destinations in urban areas (or higher levels of demand per hour and day). Urban area service providers typically operate within the geographic boundaries of their city or region, whereas rural transit operations may include large geographic services areas with multiple counties.

The map shows the transportation services in rural and urban general public transit agencies and volunteer programs within the state. Volunteer transportation services for older adults are not available in every county and urban area, but the number of programs continues to grow. The HRA boundaries on the map represent rural transportation service areas for each region. Jurisdictional service area boundaries such as municipal or county lines are the geographic boundaries for urban public transit systems. Jurisdictional boundaries are driven mainly by the sources of local funding that are used by the transit operators.

**Exhibit 2: Transportation Service Areas Map**



When the rural transit operator and the urban transit operators are not permitted to provide a trip that crosses a jurisdictional boundary, the passenger must transfer from one provider to another at the service area boundaries. Alternatively, they may use a private transportation operator or human service agency to complete the entire trip if such resources are available. For example, if a person living in an exurban or suburban area needs to travel to the regional hospital that is within the city, they may not be able to complete the trip using public transit. In such cases, the individual must look for an alternative option that may have a higher cost (such as Uber/Lyft or a taxi) or may not even exist.

Table 2 lists the percent of area outside of the urban transit system service areas and is covered by rural transit or other transportation programs.



**Table 2: Counties and Percent of Area Outside of Urban Transit Service Areas**

<b>HRA Region</b>	<b>Percent of Area Outside of the Urban Public Transit Service Areas; served by Rural Public Transit</b>
<b>Delta Human Resource Agency</b>	68%
<b>East Tennessee Human Resource Agency</b>	85%
<b>First Tennessee Human Resource Agency</b>	74%
<b>Mid-Cumberland Human Resource Agency</b>	36%
<b>Northwest Tennessee Human Resource Agency</b>	100%
<b>South Central Tennessee Development District</b>	77%
<b>Southeast Tennessee Human Resource Agency</b>	86%
<b>Southwest Human Resource Agency</b>	100%
<b>Upper Cumberland Human Resource Agency</b>	92%

**Urbanized Area Boundaries and Service Area Gaps**

There are several areas in Tennessee where focus groups identified that they are unable to travel between urban and rural areas. For example, Knoxville Area Transit provides service within the City of Knoxville, but not to the edges of the metro/urbanized area. The HRA operating in the region brings people from rural areas into the urban area but does not operate trips with a beginning and end inside the urban area. Consequently, people who live within the urbanized area but outside the city limits are left without a public transportation service option. In some cases, and for people who meet the eligibility requirements, suburban senior centers and other human service or non-profit agencies will address this gap. For people who do not meet the eligibility requirements, private transportation is sometimes an option but at a higher fare.

**Service Options**

An individual’s ability to choose the transportation option that suits their needs is integral to community inclusiveness and livability. The volume of transportation service options in each region varies but generally includes representation from the following types of service:

- ◆ Demand response, door-to-door public transit for general public ridership, including wheelchair accessible transportation
- ◆ Fixed route public and ADA complementary paratransit services
- ◆ Non-Emergency Medical Transportation (NEMT) for eligible members of the public enrolled in Medicaid and particular state health plans
- ◆ Human Services Transportation
  - Door-to-door or curb-to-curb transportation for eligible residents of a particular community or members of a community center, open to a segment of the general public (e.g., veterans, seniors, individuals with a disability)
  - Client-based transportation for individuals enrolled in a particular service program—not open to the general public



- Volunteer transportation provided by unpaid drivers, sometimes using their personal vehicles, designed for a target segment of the public (e.g., seniors)
- ◆ On-demand or same-day private transportation, including taxis and Uber/Lyft-type companies that can be scheduled through an app or a phone call
- ◆ Vanpools and carpools
- ◆ Volunteer services
- ◆ Intercity bus service including Greyhound

Table 3 summarizes the types of services offered by transportation providers in Tennessee 3. The numbers reflect the number of service provider organizations in each Human Resource Agency (HRA) region sorted by the type of transportation they provide.

**Table 3: Organizations Providing Transportation in Each Region, by Service Type**

Human Resource Agency (HRA) Region	Number of Counties	Older Adult or Individual with Disability Only	Other Client-Only Programs including NEMT	Rural Public Transit	Urban Public Transit	Private (i.e., Taxi, Lyft, Uber)	Volunteer (limited eligibility)
Delta HRA	4	10	5	1	1	2+	1
East Tennessee HRA	16	9	3	1	2	Multiple	7
First Tennessee HRA	8	8	1	1	3	Not Reported	4
Mid-Cumberland HRA	13	3	2	1	4	Not Reported	3
Northwest Tennessee HRA	9	7	2	1	0	Not Reported	2
South Central HRA	13	6	2	1	0	9	3
Southeast Tennessee HRA	10	7	31	1	2	7	2
Southwest HRA	8	3	2	1	1	1	2
Upper Cumberland HRA	14	6	2	1	0	16	4

Source: RLS & Associates, Inc. Provider Inventory, 2021

Rural and urban public transit and most private transportation providers counted in the table are open to the general public. All other service providers in the table have eligibility restrictions based on age, disability, trip purpose, or another qualifying condition (i.e., veteran). Typically, eligibility restrictions are directly tied to the funding used to support the service or to an agency-specific policy. Transportation providers with eligibility restrictions limited to older adults, individuals with

disabilities, or other purpose-driven or client-only services in each region could include some or all of the following organizations:

- ◆ Senior or nutrition centers
- ◆ Faith-based organizations
- ◆ Human service agencies
- ◆ Veteran transportation services
- ◆ Food banks or community-based programs
- ◆ Emergency Medical Services
- ◆ Non-Emergency Medical Transportation (NEMT)
- ◆ Hospital or medical/dental programs

All regions have one rural public transit provider, the HRA. The HRA administers or directly operates transportation within each of its counties and throughout the region. Urban public transit is available in each of the state's urban areas.

## PUBLIC TRANSPORTATION UTILIZATION BY REGION

Analysis of ridership by region is an indicator to measure the current and projected level of demand for services. The ridership numbers reported in Table 4 are from the National Transit Database (NTD) for 2019 and the 2020 Section 5311 applications. Because the human service agencies such as senior centers and disability work sites do not report to NTD or TDOT, the total number of trips per region is actually larger than reported in this chart. However, the data in this chart is useful for comparative analysis. Table 4 shows that in regions where fixed route transit service available, the use of demand response service is a small percentage of the overall trips provided, ranging from three percent in Mid-Cumberland to 24 percent in First Tennessee.

**Table 4: Public Transportation Ridership by Region**

<b>Regions</b>	<b>Demand Response Trips</b>	<b>Fixed Routes (Motor Bus) Trips</b>	<b>Sum of Total Trips</b>	<b>Percent of Demand Response</b>
Delta	253,927	5,846,425	6,100,352	4%
East Tennessee	478,747	2,685,291	3,180,513	15%
First Tennessee	241,655	779,916	1,011,039	24%
Mid-Cumberland	581,600	10,142,247	19,492,234	3%
Northwest	190,294		190,294	100%
South Central	269,009	409,526	678,535	40%
Southeast	202,994	2,239,903	2,442,897	8%
Southwest	122,979		122,979	100%
Upper Cumberland	227,551		227,551	100%
<b>Grand Total</b>	<b>2,568,756</b>	<b>22,103,308</b>	<b>33,441,856</b>	

### Fixed Route and Demand Response Ridership Trends

There are some regions that have high enough ridership to support fixed route service, which is often operated with larger vehicles. Other regions operate only demand response transportation in their largely low-density service areas. Fixed route public transit services carry more passengers per hour than demand response services. But like interstates, the fixed routes cannot reach every corner of every community, whereas demand response services do have that flexibility. The combination of service modes, and the inclusion of human service agency, volunteer, and private transportation is important to meeting the variety of transportation needs.

The NTD provides data going back several years, allowing a look at trends in ridership over time. The following tables provide information on ridership trends over a five year period.

**Table 5: Ridership Trends 2014-2019, Fixed Route**

Fixed Route Trips	2014	2015	2016	2017	2018	2019	Trend	Growth
Mid-Cumberland	10,182,323	10,300,281	10,061,422	9,793,061	10,235,165	10,142,247		(40,076)
East	2,781,044	2,891,168	2,821,364	2,657,150	2,634,231	2,685,291		(95,753)
First	907,014	832,599	822,425	828,866	780,366	779,916		(127,098)
Southeast	2,721,024	2,703,223	2,674,688	2,512,973	2,363,673	2,239,903		(481,121)
Delta	8,007,888	7,864,427	7,556,637	7,040,046	6,373,091	5,846,425		(2,161,463)
Southwest	569,539	557,071	524,771	466,377	433,653	409,526		(160,013)

Urban NTD reports on demand response ridership in regions with urbanized areas shows more variety in the trends. First Tennessee and Southeast regions experienced large growth over the years shown, while Southwest and East TN HRAs fluctuated but remained fairly level. Mid-Cumberland and Delta HRA regions experienced decline in their demand response trips.

**Table 6: Ridership Trends 2014-2019, Demand Response**

Demand Response Trips	2014	2015	2016	2017	2018	2019	Trend	Growth
First	69,986	75,050	76,545	248,508	244,709	231,123		161,137
Southeast	71,610	73,810	73,629	75,607	76,217	81,282		9,672
Southwest	36,891	34,459	41,853	37,904	36,512	37,277		386
East	496,084	511,099	506,035	487,635	486,735	495,222		(862)
Mid-Cumberland	587,521	620,085	568,114	576,599	588,767	554,037		(33,484)
Delta	243,486	233,048	205,839	195,623	194,694	192,927		(50,559)

Some changes in ridership trends are related to changes in transportation service levels as well as several external factors, including population growth or decline, aging population, or economic changes. The following section compares changes in population by region with public transit ridership.

**COMPARISON OF RIDERSHIP AND POPULATIONS**

The population of individuals age 65 and older and individuals with disabilities under age 65 were combined to create a special populations (SP) number for sampling of transportation demand and utilization across the regions. The number of demand response (DR) trips provided in each region

(urban and rural areas) is compared to the special population, for a per capita measure. Fixed Route trips are also divided among the total population for a general per capita measure.

Trips per capita indicate the number of public transportation trips that a person takes per year within each region. For example, the public transportation ridership in the Delta HRA region equates to every person riding public transit 9.32 times in a year. The range of trips per capita in Tennessee’s HRA regions varies from 0.49 in Southwest HRA to 25.53 trips in the Mid-Cumberland HRA. For the specialized population using demand response transportation, the trips per capita ranges from 1.49 in Southwest HRA to 7.87 in First Tennessee HRA.

**Table 7: Demand Response, Fixed Route, and Total Trips per Capita and per Special Population**

HRA Region	DR Trips per Capita	DR Trips per SP	Fixed Route Trips per Capita	Total Trips per Capita
<b>Delta Human Resource Agency</b>	0.35 ●	2.44 ●●	8.97 ●●	9.32 ●●
<b>East Tennessee Human Resource Agency</b>	0.90 ●●●	4.40 ●●	14.42 ●●●	15.33 ●●●
<b>First Tennessee Human Resource Agency</b>	1.56 ●●●	7.87 ●●●	13.15 ●●●	14.71 ●●●
<b>Mid-Cumberland Human Resource Agency</b>	0.67 ●●	6.39 ●●●	15.20 ●●●	25.53 ●●●
<b>Northwest Tennessee Human Resource Agency</b>	0.77 ●●	1.93 ●	0.00	0.77 ●
<b>South Central Tennessee Development District</b>	1.04 ●●●	5.72 ●●	5.70 ●	6.74 ●●
<b>Southeast Tennessee Human Resource Agency</b>	0.72 ●●	6.86 ●●●	7.66 ●●	8.38 ●●
<b>Southwest Human Resource Agency</b>	0.48 ●	1.49 ●	0.00 ●	0.49 ●
<b>Upper Cumberland Human Resource Agency</b>	0.60 ●	1.57 ●	0.00	0.60 ●
<b>Grand Total</b>	<b>7.09</b>	<b>38.68</b>	<b>65.10</b>	<b>81.85</b>

The different transit utilization levels may also be attributable to variations in economic conditions such as higher automobile ownership and lower demand for transportation across the state. It may also be attributable to the geographic distribution of available transportation services, convenience, accessibility, and affordability of those services. Other barriers to accessing transportation, such as lack of sidewalks lack of information/awareness of available transportation services, also impact utilization.<sup>2</sup>

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<sup>2</sup> A sidewalk inventory was not included in the scope of work for this assessment because it can more effectively be conducted at a local level. However, considering sidewalk access in local plans to improve access to transportation resources is included in recommended goals and action steps.

## **GAPS IN ACCESS TO TRANSPORTATION SERVICES**

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This analysis focuses on the geographic and temporal gaps in access to transportation services for older adults and individuals with disabilities. Tennessee's Office of Mobility and Accessible Transportation (OMAT) has established strategic goals to improve mobility outcomes across the state. By evaluating the gaps in service – comparing conditions across the state to the goals that have been set through the needs assessment and strategic planning process – OMAT can systematically prioritize planning activities and funding levels necessary to improve mobility.

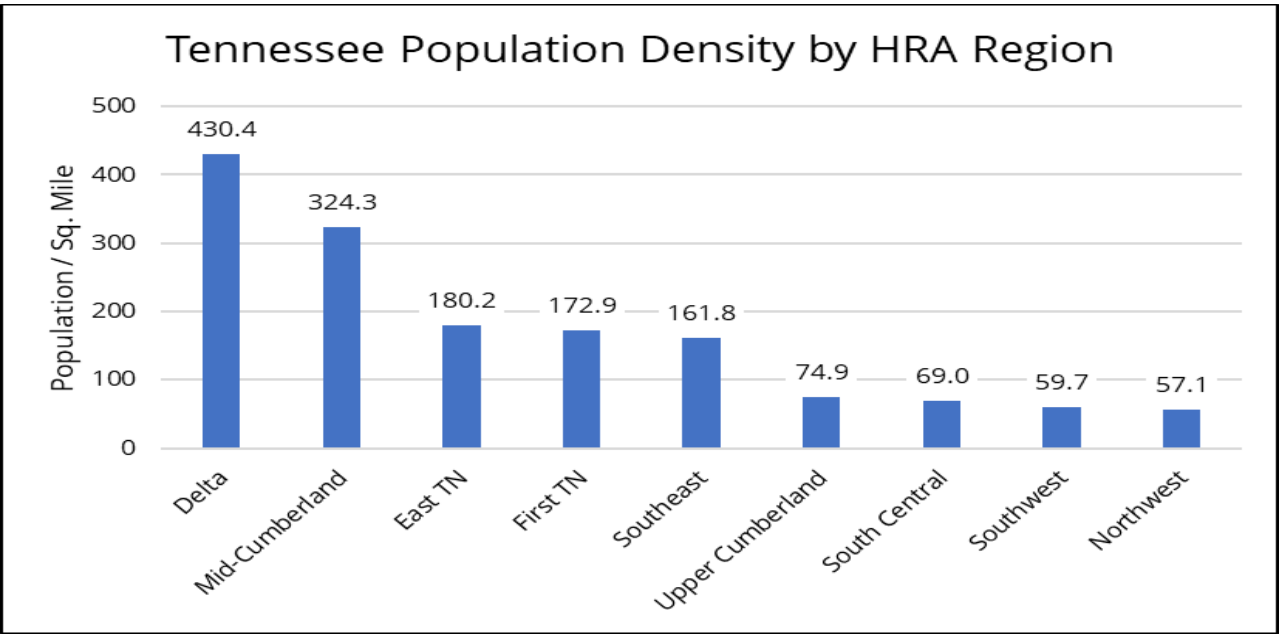
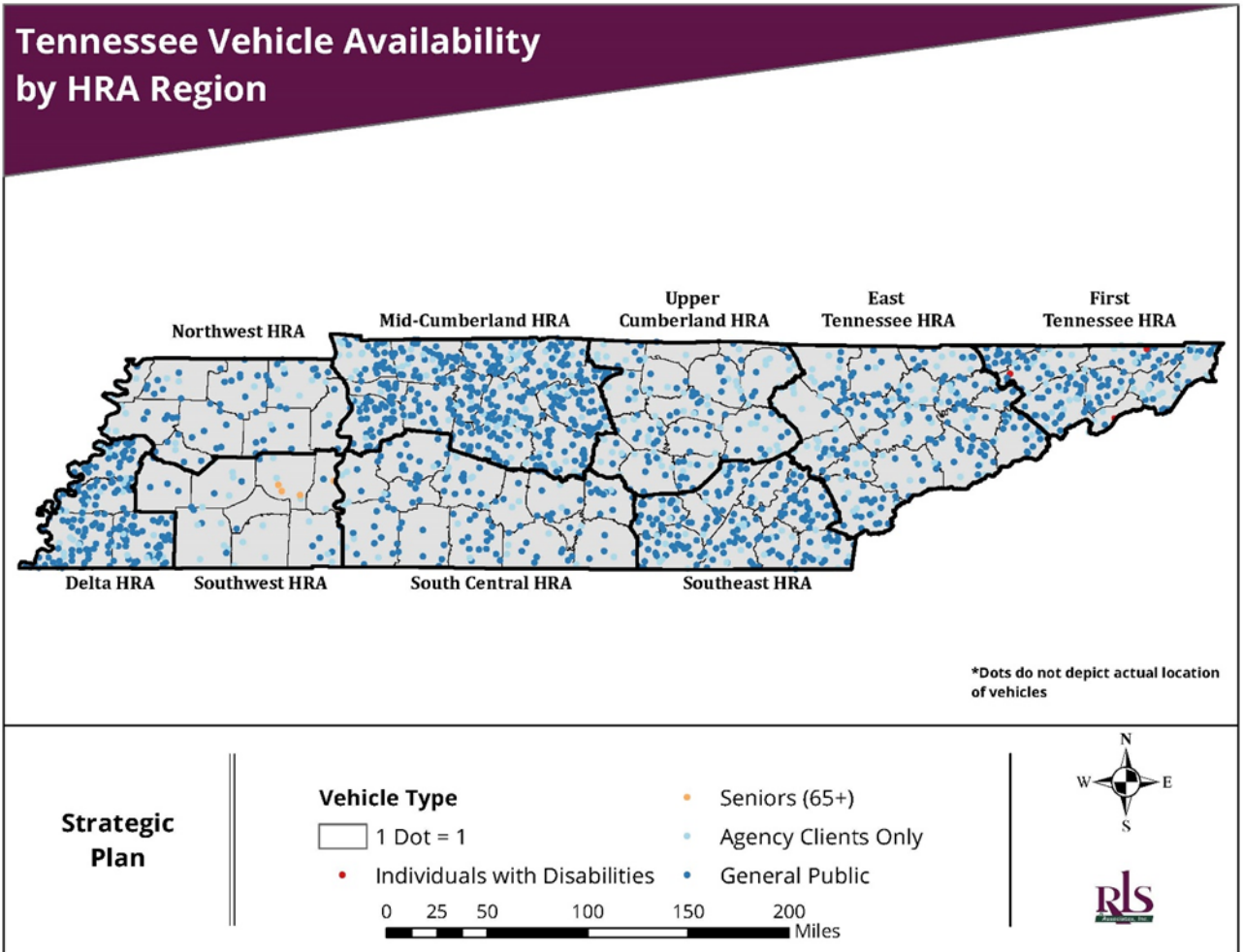
### **Geographic Distribution of Services**

The number of vehicles operated by the public and human service agency organizations listed above are depicted in Exhibit 3. It is useful to consider the volume of vehicles compared the population density of each region because TDOT and local transportation providers strive to operate fleet sizes that are appropriate for the level of demand likely to be generated from their service area population.

The Delta HRA has the highest regional population density (population per square mile). It also appears to have a high density of vehicles available for public transit and human service agency programs. Mid-Cumberland HRA has the second highest population density and the second highest density of available vehicles. East TN, First TN, and Southeast HRAs have similar population densities to one another. First and Southeast HRAs have similar regional densities of available vehicles to one another but East TN HRA appears to have lower densities of vehicles. Northwest, South Central, Southwest, and Upper Cumberland HRAs also serve regions with population densities similar to one another and the lowest regional densities in the state. Likewise, these regions have the lowest densities of vehicles. It would appear that Southwest and Northwest HRA regions have lower densities of available vehicles compared to South Central and Upper Cumberland.

Research indicates the possibility that demand for service exceeds vehicle availability in the East TN, Northwest, and Southwest HRA regions. However, vehicle availability is only one of several factors in the gaps analysis. The socio-economic and geographic conditions of the region as well as the modes of service and hours of operation for those providers also play significant roles in gaps analysis. The data provided here is a look from a high level. Ridership analysis in each region and county will provide more specific information. Some information is included in this report. Additional local studies conducted as part of locally developed transportation plans or Coordinated Public-Human Services Transportation Plans will also provide a valuable resource for understanding local gaps in access to transportation.

Exhibit 3: Vehicle Availability by HRA Region



Exhibits 4 and 5 capture the ratio of public and human service agency vehicles to the per capita population of older adults (Exhibit 4) and individuals with disabilities (Exhibit 5). This step in the analysis highlights the impact of the differences in service for rural and urbanized areas.

The counties shaded in dark blue have the lowest number of vehicles per older adult or individual with disabilities. The counties shaded in orange and red colors have the highest ratio of vehicles per older adult or individual with disabilities. The maps indicate that the rural/lower density counties of northwest, west, and southern Tennessee generally have a higher ratio of vehicles to older adult or individual with disability. Conversely, the more densely populated counties of northern, central, and eastern Tennessee have lower ratios of vehicles to individual. An important factor in this analysis is that fewer vehicles are needed to serve areas with higher population densities because the trips are frequently shorter and more densely populated areas can be served with fixed route vehicles that carry higher numbers of passengers per trip compared to vehicles operating in rural areas where trip distances are longer and there are fewer passengers transported per vehicle.

**Exhibit 4: Ratio of Older Adult Population to Vehicle, by County**

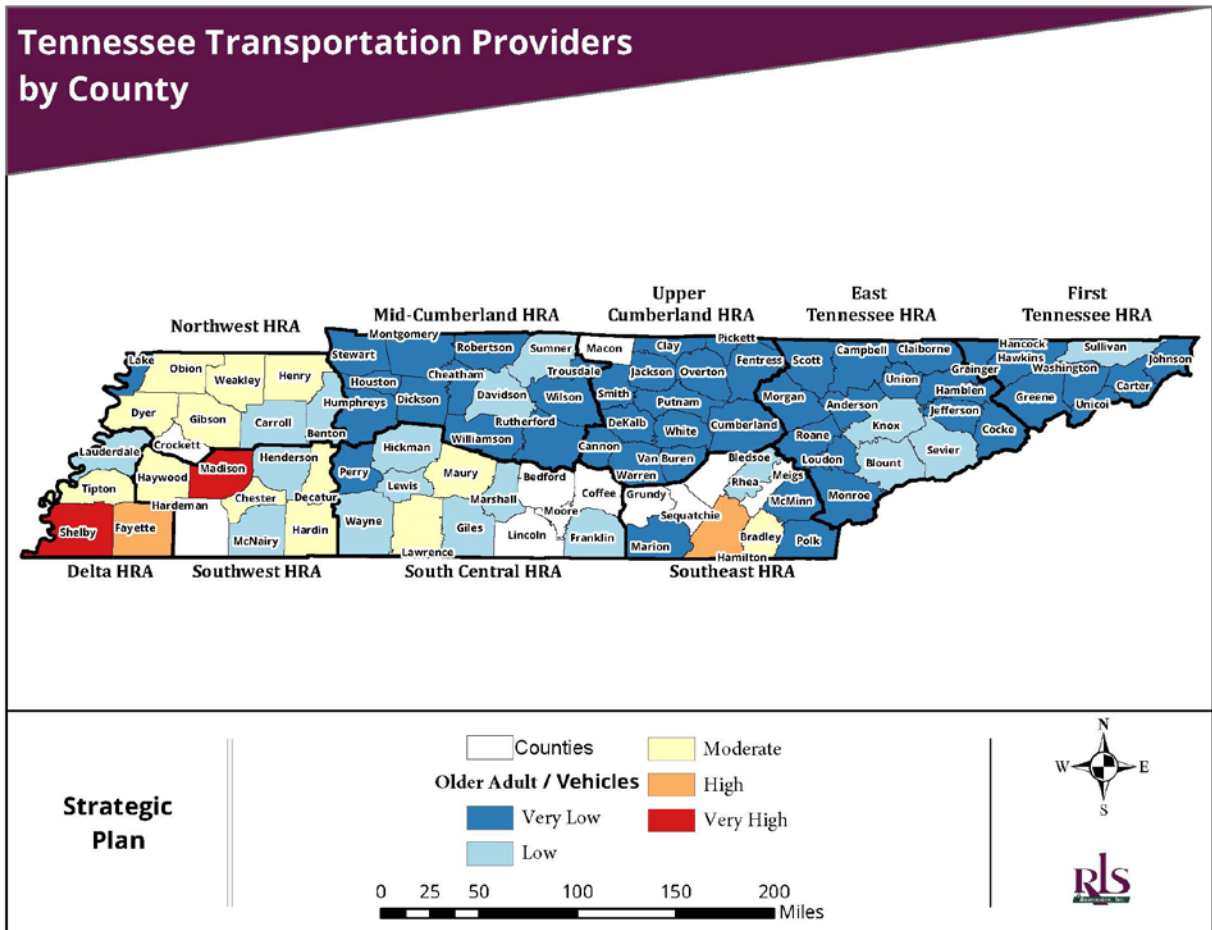
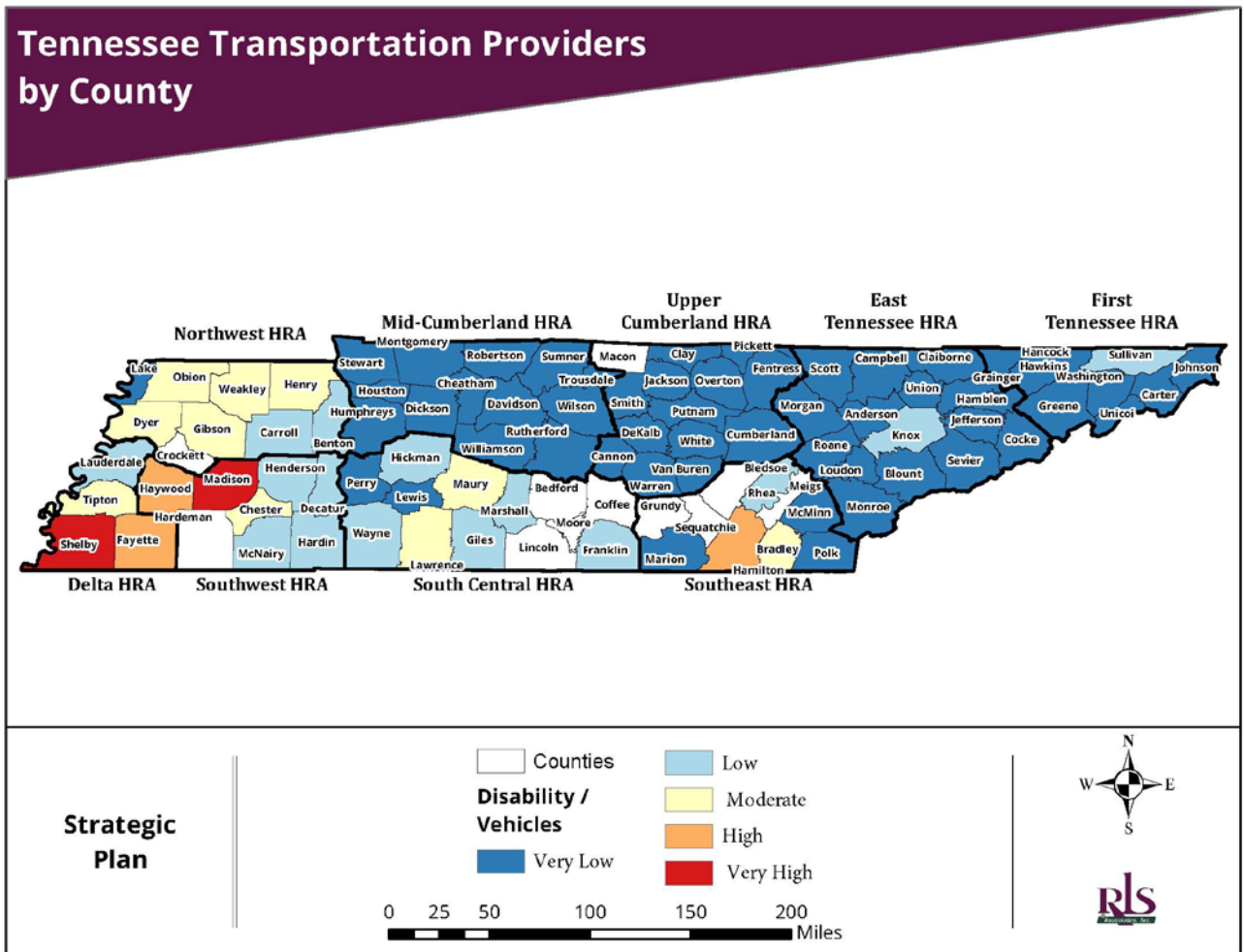




Exhibit 5: Ratio of Individual with Disability to Vehicles, by County



**Temporal Gaps in Access to Services**

Public and human service agency transportation programs offer limited hours or days of service, which is largely driven by funding and staff limitations.

- ◆ Nineteen of the 55 transportation providers that participated in this study start their weekday service between 6:00 AM and 7:00 AM and end between 6:00 PM and 7:00 PM, creating a gap for third shift workers, early morning medical appointments, or evening errands.
- ◆ Eleven providers end their service between midnight and 1:00 AM with various start times between 4: 00 AM and 9:00 AM.
- ◆ One service, Knox County Community Action Commission, provides demand-response transportation 24 hours a day.
- ◆ Many private transportation services, including taxi companies and transportation network companies (i.e., Uber and Lyft), also operate 24-hours a day. Private transportation options typically have a higher out of pocket cost for the rider which may make it an unaffordable or unsustainable option for people earning entry-level wages. Also, most private transportation operators do not have wheelchair accessible vehicles or have a very limited number of

accessible vehicles which further limits the options for after-hours service to individuals using a mobility device.

The transportation providers' daily hours of operation are available by region in Appendix E. Urban providers are more likely to start earlier and end later than the rural providers. Urban transit systems operate more trips per hour and typically have the demand necessary to make extended hours of service affordable for the agency. The majority of rural providers have hours between 6:00 AM and 7:00 PM.

### **Weekend Transportation**

Eight public transportation providers offer service on Saturdays. These are urban public transit systems, with the exception of a deviated fixed route service offered in four Upper Cumberland counties. Saturday start times range from 4:30 AM to 10:00 AM and end times range from 4:00 PM to 12:30 AM. At the extremes, Chattanooga operates 19 hours/day on Saturdays, while Murfreesboro Rover offers seven hours of service. All eight providers offer both fixed route and demand response service.

Sunday hours generally follow the same pattern as Saturday, or are even more limited. Four providers offer transit service on Sunday: Chattanooga (CARTA), Knoxville (KAT), and Nashville (WeGo/MTA). One provider, Memphis Area Transit Authority (MATA), offers only their Riverfront shuttle on the weekends.

## **CONCLUSION**

The most significant unfilled gaps in transportation are in the following categories:

- ◆ Trips needed during early morning or night time hours and on weekends are often not possible because there are no transportation services available.
- ◆ Trips that require a vehicle to cross jurisdictional boundaries, such as traveling from a rural to an urban area often require the passenger to transfer from one provider to another or use a higher priced transportation provider that can complete the trip (i.e., taxi or other on-demand service).
  - The availability of wheelchair accessible vehicles operated by private operators is limited and/or may be unaffordable for low-income households.

The inventory of available transportation services verifies that most public and human service agency transportation options are between 6:30 AM and 6:30 PM on weekdays. The most significant gaps in access to services for older adults and individuals with disabilities occur during the remaining hours of the day and include trips for the purpose of socialization, second, third, and swing-shift jobs or part-time jobs, and personal care or shopping trips. This gap is greatest in rural and suburban areas, as there are fewer providers that serve non-traditional business hours.

Adequate transportation for older adults and individuals with disabilities requires a family of resources. Public transportation service in Tennessee is available in every county and city. The HRA structure which coordinates administration and oversight of regional public transportation and other human service agency resources is a significant advantage to TDOT and its partner agencies as they seek opportunities to address gaps in service. And, private or volunteer transportation options are available in some, but not all areas of the State.

Public transit is designed to serve the most significant needs of the general public. As such, it must be funded and operated, at minimum, at levels necessary to meet the majority of medical, employment, and human service agency trip needs, which occur during typical business hours. Transportation services designed to meet the specific needs of older adults and individuals with disabilities often have smaller levels of funding available and therefore must also be designed with the intent to meet the most significant needs. There are day-to-day trip needs for older adults and individuals with disabilities that cannot be met by these core services. Smaller programs such as volunteer transportation and private taxi or other on-demand transportation services can help fill the gaps left by the larger public programs, but they are offered at a higher price to the passenger and may not have wheelchair accessible vehicles.

Some potential solutions for filling the remaining gaps in transportation include maximizing the use of private, non-profit, and volunteer transportation programs. For example, some of the transportation providers, particularly the HRAs, have Medicaid brokerage accounts that are required to provide service on a 24/7 basis. These trips may be provided by the HRA in-house or may be contracted to providers including other nonprofits, taxis, and private transportation companies. Because these operators are required to be available to meet TennCare NEMT trip demand, they are also partners in filling the gaps in available services during the hours when public transit services are not operating.

Volunteer transportation programs also have more flexibility around service hours than public transit systems. Volunteer programs are only limited by the availability of volunteers. Volunteers who are willing and able to drive at night or on the weekends, or are willing to take long-distance trips, could help fill the gaps left by public transit services during evenings, nights and on weekends.

Finally, private transit providers including taxis, Uber and Lyft also provide an option to fill late night and weekend gaps in service for passengers. However, those vehicles are typically not wheelchair accessible and would not address gaps for individuals requiring an accessible vehicle.

It is impossible to quantify the number of trips that are going unserved statewide because demand can be influenced by economic factors, changes in population, and personal choices of the riders. At the local level, demand can be more accurately measured and addressed based on a combination of population projections and coordinated planning for land use and mobility planning. At the state level, the various programs that support older adults and individuals with disabilities can continue to provide guidance and funding that supports the coordinated planning efforts at regional and local levels.

## NEEDS ASSESSMENT

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Despite the State’s comprehensive supply of transportation services, unmet transportation needs remain. This chapter describes how the State solicited public and stakeholder input and analyzed the input to determine the nature or cause of the identified needs. Next, the State evaluated if the identified needs are reasonable to meet within their mission and, if so, how to address them through existing or expanded resources.

The needs assessment is intended as a resource to guide decision making around the State’s opportunities for mobility management. It can also assist in informing the State’s prioritization of transportation funding and future studies that support progress toward the State’s collaborative efforts in improved mobility and accessible transportation throughout Tennessee.

### STAKEHOLDER INPUT – FOCUS GROUPS

Nine virtual focus groups were held over three weeks, several with breakout sessions to make sure large attendance didn’t interfere with discussing individual and community needs. One meeting was facilitated for each of the State’s HRA regions. Each meeting was facilitated by the consulting team and TDOT. In total the meetings attracted 228 attendees (see Table 8). These sessions allowed for dedicated time to delve into regional issues and specialized transportation challenges faced by older adults and individuals with disabilities.

**Table 8: Virtual Focus Group Attendance**

HRA Regions	Date and Time	Attendees
Southwest	2/11/2021, Noon	15
East	2/11/2021, 5:30 p.m.	35
Mid-Cumberland	2/12/2021, Noon	44
First TN	2/16/2021, Noon	13
Southeast	2/16/2021, 5:30 p.m.	36
Upper Cumberland	2/18/2021, 12:30 p.m.	23
South Central	2/19/2021, Noon	23
Delta	2/22/2021, 5:30 p.m.	9
Northwest	2/23/2021, 5:30 p.m.	19
Transportation Providers	3/8/2021, 10:00 a.m.	11
<b>Total Attendance</b>		<b>228</b>

\*Some attendees joined multiple focus groups.

### Needs and Challenges Identified in by Stakeholders

Participants were asked to discuss their transportation challenges and unmet needs, and then to suggest potential solutions that they believe to be most appropriate. The most commonly indicated

needs and challenges faced by attendees are listed below in order of most to least often mentioned. The complete list of stakeholder feedback is available in the Appendix C.

- ◆ In every region, stakeholders expressed the need for **expanded services**; more and/or varied transportation options, particularly in rural areas; more frequency of fixed route service; and more vehicles (and drivers) to provide scheduled ride and on-demand service.
- ◆ Many communities in and around urban areas are left unserved because of **jurisdictional service area boundaries** honored by the transit systems – particularly suburban and exurban job centers.
- ◆ Stakeholders also indicated that there are gaps in access to transportation for younger adults or individuals who are not clients of particular agencies. The gaps are created by **eligibility requirements** that are typically tied to local agency policies or Federal funding requirements.
- ◆ **Personal assistance** is needed for individuals who have difficulty navigating a trip on their own. This higher level of assistance is not needed for every passenger but it is the difference between being able to travel or staying home for some. The types of extra assistance mentioned during the meetings included:
  - escorts or travel companions;
  - assistance getting from the door of the pick-up or drop-off location to/from the vehicle;
  - assistance with through-the-door service by providing assistance from inside the pick-up and through the door of the drop-off location;
  - assistance getting on and off the vehicles;
  - assistance with packages or special shopping runs;
  - family access with multiple kids or when using a car seat; and,
  - crisis services for emergency weather (bringing supplies) or emergency health conditions (stretcher service, waiting in pain for an ‘advance schedule’ ride, and rides home after discharge).
- ◆ **Regional, intercounty, and out-of-state** transportation is a challenge, including getting between rural destinations which are far away and may require a higher fare that is unaffordable for the passenger; getting from rural areas into a central city for services; and finding work across a city/county/state line and not being able to get there.
- ◆ In most rural areas of Tennessee, regional transportation is available but the public **misperception** may be that services do not exist, are available only to those who meet certain eligibility, or are too expensive.
- ◆ Trip scheduling discussions raised the need for **on-demand transportation** so that passengers can make same-day trips. Most demand response transportation services require a reservation at least one day and sometimes several days in advance of the trip.
- ◆ **Reliability** of transportation was raised repeatedly as a concern. Passengers need on-time service, especially when traveling to and from work or for medical appointments.
- ◆ Passengers need transportation that is **flexible** enough to allow them to run multiple errands, even when sharing rides. Chaining trips (ex. going to multiple medical providers on a trip to the city, getting prescriptions after a doctor’s appointment, running several errands) would help passengers complete necessary errands in a single day. Currently, the travel time or wait time for a vehicle can make the trip so long that only one appointment can be accomplished.

- ◆ **Customer service** is also an issue. Concerns were expressed about schedulers/dispatchers not being helpful, and there was a frequent concern from people scheduling trips to work that they will be bumped due to prioritized medical trips.
- ◆ Accessible **community infrastructure** is needed such as sidewalks, crosswalks, accessible bus stops/pads/shelters, accessible traffic signals, curb ramps and other ramps for access to buildings.
- ◆ Funding for service included discussion around providing a **living wage to retain drivers** as well as **driver pay comparable with similar industries**, and the need for coordination to match funding from different programs (Temporary Assistance to Needy Families (TANF) for example, or insurance benefits), and addressing funding match dictating service boundaries.
- ◆ Availability of service **information** was lacking. Access to online scheduling or a one-call service is needed for people with visual impairments and others with disabilities
- ◆ Greater access is needed to **wheelchair-accessible vehicles** with ramps or lifts, particularly for use by volunteer programs and TNCs. Individual households that need access to a wheelchair-accessible vehicle have limited transportation options if they do not have a personal vehicle available or individuals cannot drive.

Other important issues that were frequently mentioned included:

- ◆ **Communication and coordination** between providers would improve service.
- ◆ **Volunteer programs** need additional drivers and a way to accommodate wheelchair-users.
- ◆ **Political climate** that ignores or de-prioritizes transit and other public transportation creates underfunding. Information is needed to address lack of government/political support and demonstrate the value (and underfunding) of public transit.

The challenges and barriers to coordinating transportation from the providers' perspective and the challenges to mobility for passengers are important factors in the development of coordinated transportation strategies.

### **Potential Solutions**

Potential solutions discussed by the focus groups addressed many of the issues and challenges presented above. The HRA and urban public transportation providers, volunteer programs, private operators and other participants were active in the group discussions, sharing their concerns and hopes for improvements. Some ongoing coordination efforts were mentioned, such as partnerships between city and regional services, coordinated technology development and purchases, and transfer points between some agencies. Working with businesses on rideshare, vanpool and sponsored bus transportation was suggested. The idea of creating policy and addressing insurance issues to allow providers to loan or share vehicles would increase transit capacity.

Volunteer recruitment and service provision will look different following the COVID-19 pandemic, and participating stakeholders broadly supported expanding volunteer services throughout the State. The

volunteer programs need flexibility to fit the different demands in counties and regions, and perhaps the supplement of paid drivers and wheelchair accessible vehicles. Working with faith-based partners to create transportation networks was also recommended. One participant warned against replacing the responsibility of the State to support and subsidize permanent and sustainable transportation solutions with volunteer enthusiasm, which ebbs and fades.

Working with planning, development, and builders' organizations was suggested to incentivize sidewalk development and expedite implementation of ADA transition plans that would address some infrastructure issues.

Several groups discussed public private partnerships and private sector investment as a lever to break down service barriers and overcome the restrictions of Federal or local tax funding. Voucher programs are also leveraged in other areas of the country to overcome poverty and isolation.

Traditional and online scheduling needs could be met with a one-call, one-click solution. On-demand options need to be fostered, along with more robust travel training. Common community services such as 2-1-1 telephone helpline would be a good fit for partnership, as their call-takers are trained in triaging calls and assessing multiple needs. A point person was recommended for funding, grants, and matching programs.

Other non-traditional and innovative suggestions included:

- ◆ Working with trade schools and truck driver training programs to add second shift bus driver practicums as part of their curriculum, or drive a passenger van in an internship arrangement.
- ◆ Expanding Micro-transit options and Mobility as a Service (MaaS) in neighborhoods rather than restoring fixed routes after the COVID pandemic.
- ◆ Involving media in an organized transit voices campaign.
- ◆ Creating and marketing a statewide transportation logo or brand that would make transportation options easily identifiable.
- ◆ Creating rural hubs where transfers and services could be gathered regularly.
- ◆ Re-evaluating the rural/urban division of services and funding.
- ◆ Directly coordinating with dialysis centers and health care providers to improve service and scheduling.
- ◆ Working through Health Department officials to study transportation in a 'social determinants of health' framework which is a holistic approach to assessing and understanding key societal conditions and systems that directly and indirectly impact the health of all persons.
- ◆ Conducting a market study for on-demand wheelchair accessible service.
- ◆ Studying the impact of livable wages for drivers and potential offsets for business and non-profits to make up revenue.
- ◆ Working with the Tennessee Department of Safety and Homeland Security's Tennessee Highway Safety Office on their Older Driver Programs.



## **Partner Organizations**

The focus groups discussed potential partner relationships, and identified some organizations that would be useful allies in building mobility. Several groups discussed having a structure like the Governor’s Council on Disability Issues. The organizations and people mentioned included:

- ◆ People with Disabilities, and people closely associated with disability services;
- ◆ Seniors and people closely associated with senior services;
- ◆ Engineers;
- ◆ Transportation providers;
- ◆ Economic development organizations;
- ◆ Medical service providers;
- ◆ People from the business community; and
- ◆ Influencers, people with social connections.

Another suggestion was to have a user focus group that would meet to advise the State twice a year.

Other suggestions on partners included the following organizations, in no particular order:

HRA providers	Chambers of Commerce
MyRide programs	National Federation for the Blind
Area Agency on Aging	Major companies
Department of Mental Health and Substance Abuse in each county	TN Sherriff’s Association
Department of Public Health	Disability Rights of Tennessee
Mayors, Commissioners, and Elected Officials	TN Office of the Courts
Empower TN (Center for Independent Living)	Department of Education
SeniorRide Nashville	TN Association of Mental Health Organizations
Metropolitan Planning Agencies, Regional Planning Commissions, Councils of Government	TN Association of Alcohol, Drug & other Addiction Services
SmileOn60+	Department of Labor and Workforce Development
BCBS Blue Care, United Health and other Managed Care Organizations	TennCare
	Veterans Associations

## **Role of the Office of Mobility and Accessible Transportation**

The focus groups suggested a variety of roles for the new office in implementing mobility improvements across the state. The need to improve both the variety and consistency of services provided in all regions indicated an oversight role. Establishing communication and complaint resolution centers that are separate from the transit providers was recommended. Understanding the differences and integration of Federal Transit Administration (FTA) Section 5310 and Section 5311 funded programs and communicating the value of those programs to the legislature were discussed, and helping to ensure the voices of transit



users are heard at the legislature and Governor's level. There was a desire to see accountability set at the highest levels to address the identified transportation needs.

Being able to secure community and State resources was also identified as a role for the State, building partnerships with the goal of generating or connecting funding streams, and breaking down silos and policy barriers.

Creating analysis tools was identified as another task, and also focusing community investment and development of sidewalks, trails and accessibility infrastructure.

## TRANSPORTATION NEEDS SURVEY INPUT

Survey data were collected through two online surveys. One **provider survey** was directed to organizations that purchase, provide, or fund transportation for older adults, individuals with disabilities, and/or the general public. Another **traveler survey** was available to the general public but directed toward individuals using one or more of the public or human service agency transportation programs.

A comprehensive inventory of public and human service agency transportation providers was utilized to distribute the provider survey. Therefore, the provider survey results include information from all organizations that chose to participate. In total, approximately 78 individuals representing 67 different organizations participated in the transportation provider survey. Private transportation providers are included in the survey results. However, no comprehensive inventory of private transportation providers exists in the state. Therefore, representation from private providers is not as comprehensive as that of publicly funded organizations.

A separate public needs assessment traveler survey was distributed to agencies and focus group participants with a request to share the survey with clients and users of their services. The populations

of particular interest in the traveler survey research could not be derived entirely from registers or rosters, which meant a probabilistic sampling design could not be used. Likewise, neither funding nor time would allow for a statistically valid survey of the entire state population. As a result, the survey data reflects the experiences of those who responded to the survey, as opposed to being representative of the population of interest. As of March 11, 2021, 659 individuals responded to the public survey. The survey will remain open until April 1, 2021.

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*“I have no one to take me anywhere during the day during the week. I live with a family member who works and is only available on weekends when some of the services I need are not available.”*

*-Survey Respondent from  
Maury County*

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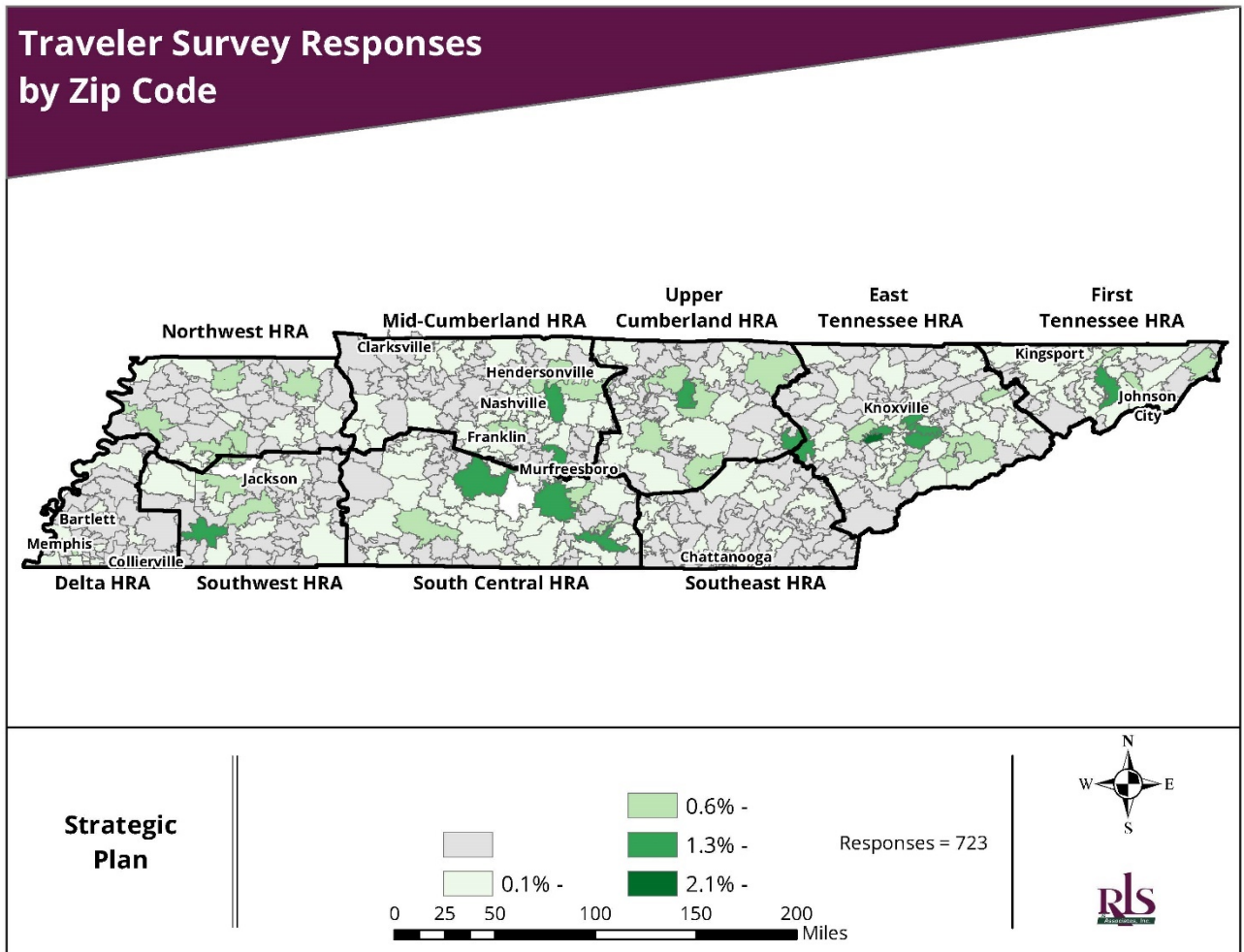
### Location of Traveler Survey Respondents

Participants in the traveler survey were invited to provide their zip codes. The following map illustrates the locations where survey respondents lived. The most substantial participation came from within the following regions:

- ◆ Southwest HRA
- ◆ South Central HRA
- ◆ Mid-Cumberland HRA
- ◆ Upper-Cumberland HRA
- ◆ East Tennessee HRA

All HRA regions are represented in the survey, but responses from some regions are minimal, and others are not represented. Efforts were made to encourage participation from the under-represented areas.

**Exhibit 6: Survey Responses by Zip Code**



**Household Income**

A significant number of survey respondents live below the Federal Poverty Level. More than half of the respondents from households with one adult earned a household income below the Federal Poverty Level. Approximately one quarter of households with two or three adults earned incomes below the Federal Poverty Level. Approximately 43 percent of households with four adults earned less than the Federal Poverty Level. On average, survey respondents lived in households with three adults.

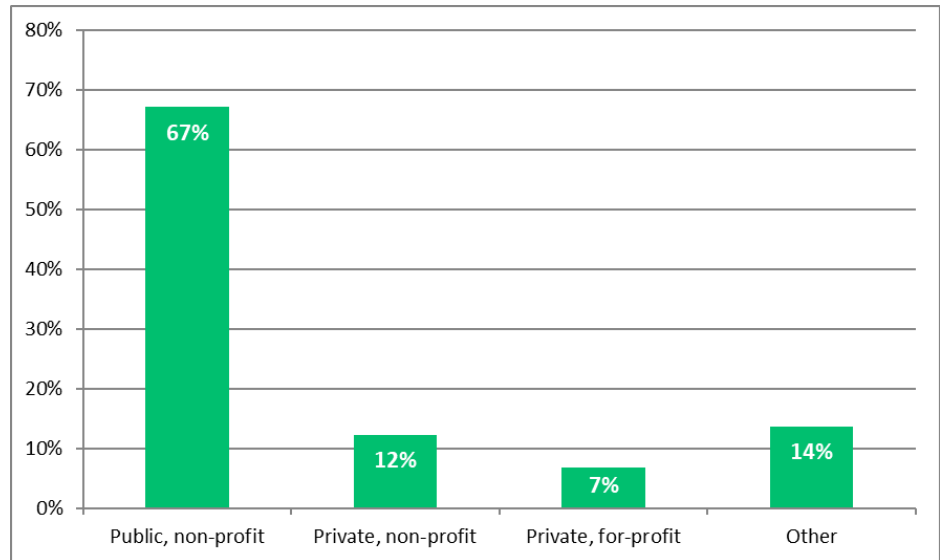
**Table 9: Traveler Survey Respondent Household Income and Size**

Number of Adults per Household	Federal Poverty Level	Respondent Households Below 100% of Federal Poverty Level (Approximately)
One Adult	\$23,606	55%
Two Adults	\$31,894	24%
Three Adults	\$40,182	28%
Four Adults	\$48,470	43%

\*Source of Federal Poverty Level: TN Department of Health Income Guidelines

## Transportation Provider Survey Characteristics

Approximately 67 percent of transportation provider's that participated in the provider survey represent public, non-profit organizations (e.g., government or human service agencies). Private, non-profit organizations (e.g., community-based non-profits) make up



12 percent (9 respondents) of the responses. Private, for-profit organizations (e.g., taxis) account for seven percent. Organizations that selected "other" types of authority include quasi-governmental organizations, local governments, and State government programs (14 percent).

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*"I often think about the people with more needs than I have. If I see this is a problem, what about them? I often consider moving, and the primary reason is lack of transportation options."*

*-Survey Respondent from Davidson County*

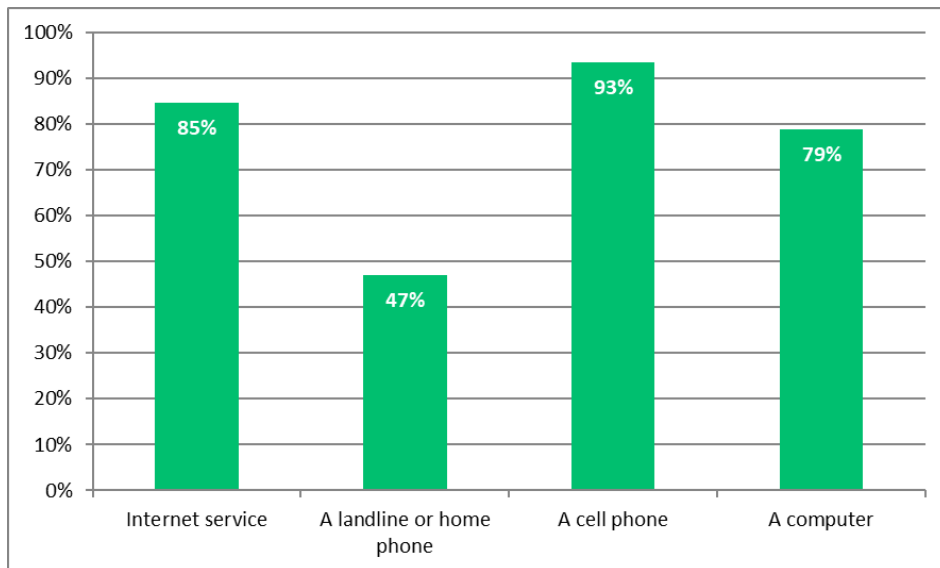
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## PUBLIC TRAVELER SURVEY NEEDS ASSESSMENT

The following charts and tables illustrate transportation-related characteristics of public traveler survey respondents.

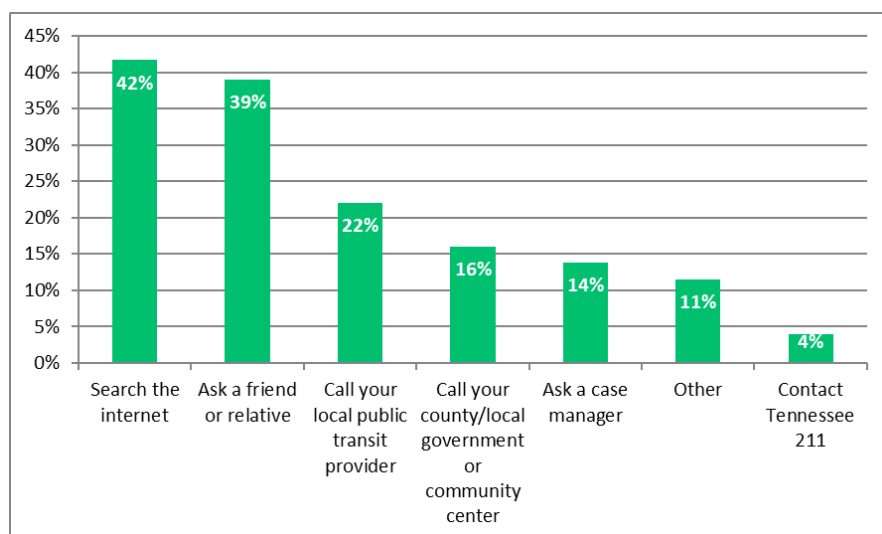
### Regular Access to Technology

Nearly all survey respondents (93 percent) have regular access to a cell phone. Seventy-nine percent have access to a computer and 85 percent have internet service. The fact that 93 percent of respondents have regular access to a cell phone is indicative of a shift toward mobile devices and internet-based search capabilities. (n=648)



### Information Resources

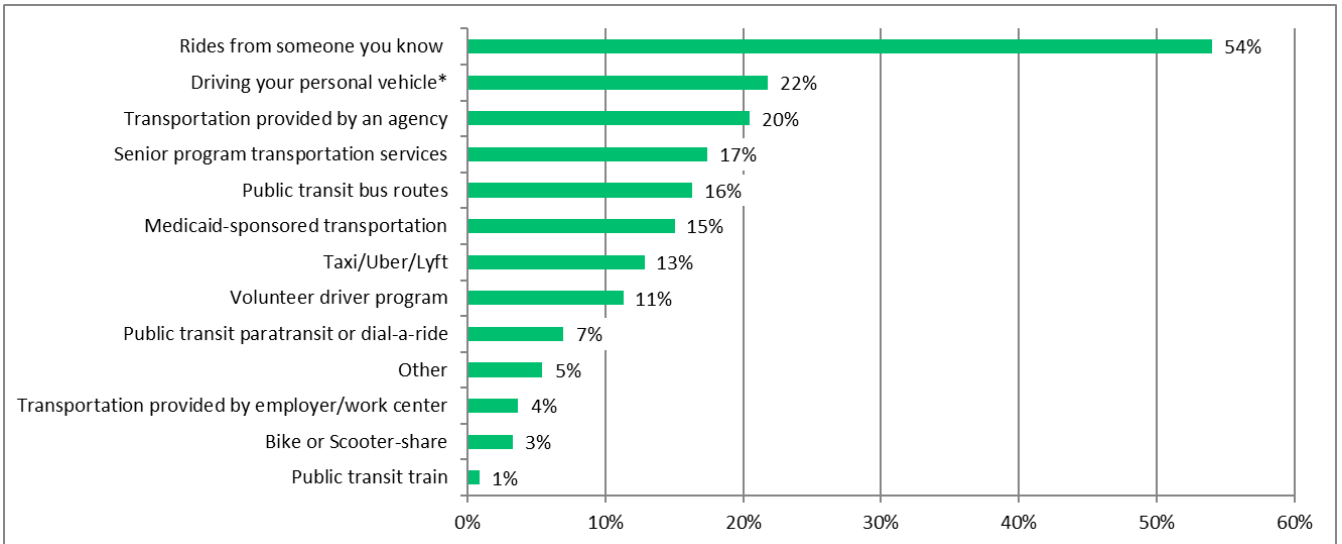
When asked how they find information about available transportation services, most respondents search the internet or ask a friend or relative to help. Other common resources included calling the local public transit provider, county/local government or community center, or asking a case manager. Approximately four percent of respondents contact Tennessee 211. (n=636)



## **Modes of Transportation**

More than one-half of survey respondents indicated that the single mode of transportation they use is their personal vehicle. The needs assessment looked at those who sometimes or always do not drive themselves; all results below are for the 41 percent of respondents who do not drive themselves. Factoring out exclusively driving a personal vehicle, the most commonly selected mode of transportation (54 percent of the 41 percent) was getting a ride from someone they know (i.e., friends or family). Approximately 22 percent sometimes drive a personal vehicle but also frequently use other modes of service. Twenty percent use transportation provided by an agency. All other modes of transportation received less than 20 percent of responses. "Other" response included walking and riding with a parent.

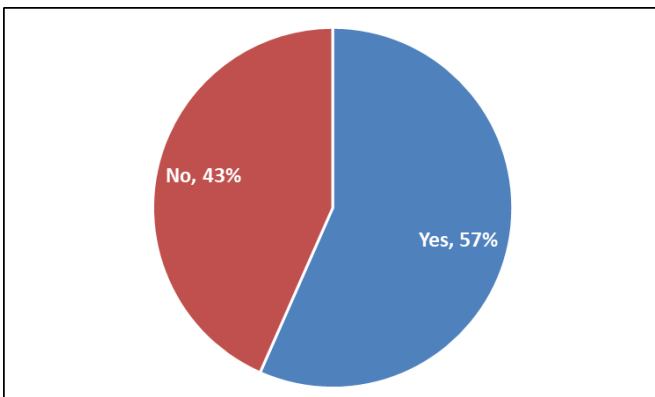
### **Most Common Modes of Transportation**



\*Includes respondents who indicated that they drive a personal vehicle and use other services as their primary mode of transportation. Percentages add up to more than 100% because respondents could select multiple answers.

Even with the numerous modes of transportation used, more than half (57 percent) of non-drivers indicated that sometimes they need a ride and do not have one. (n=355)

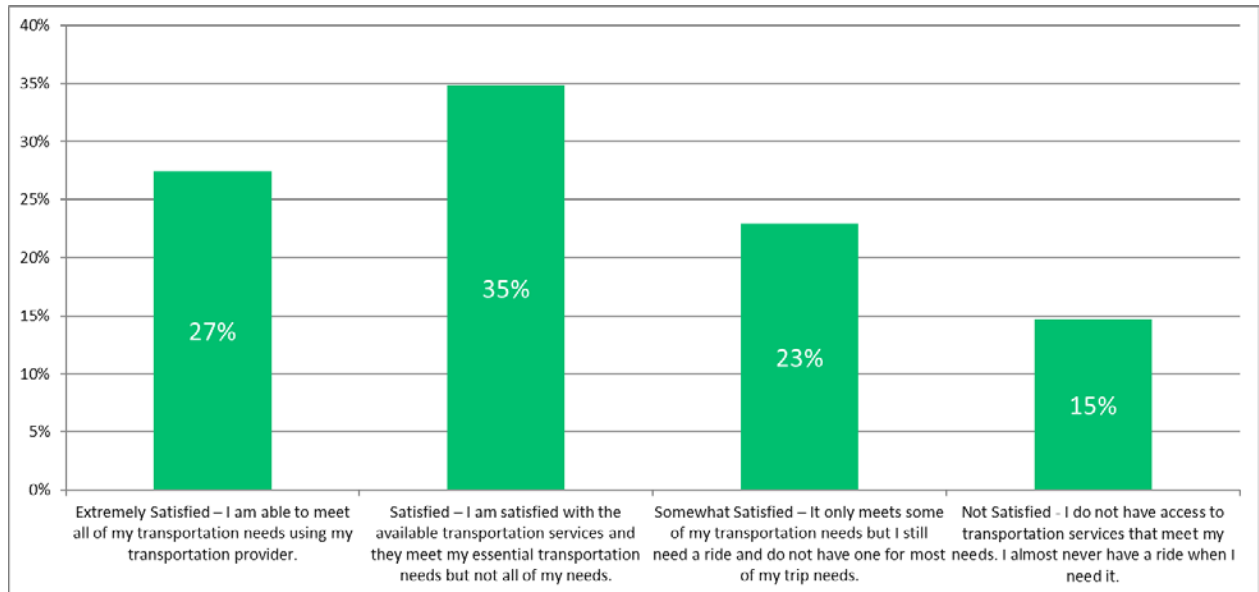
### **Do You Ever Need A Ride and Not Have One?**



### Satisfaction with Transportation Services

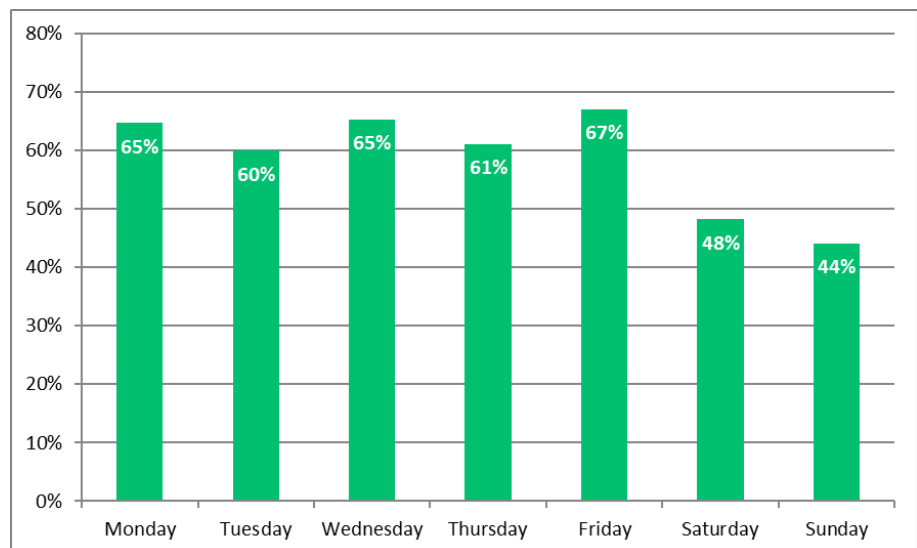
Again, after filtering out respondents who only drive, survey results indicate that 35 percent of remaining respondents are satisfied with the available transportation services and those services meet essential transportation needs but not all transportation needs. Another 27 percent stated that the transportation services they use meet all of their transportation needs. Conversely, 23 percent stated that the transportation services they use only meet some of their transportation needs, and they must find other options for most of their transportation needs. Fifteen percent indicated that they do not have access to transportation services that meet their needs, and they seldom have a ride when they need it. (n=353)

### Level of Satisfaction with Existing Transportation Services



### Days and Times When A Trip Is Needed and Not Available

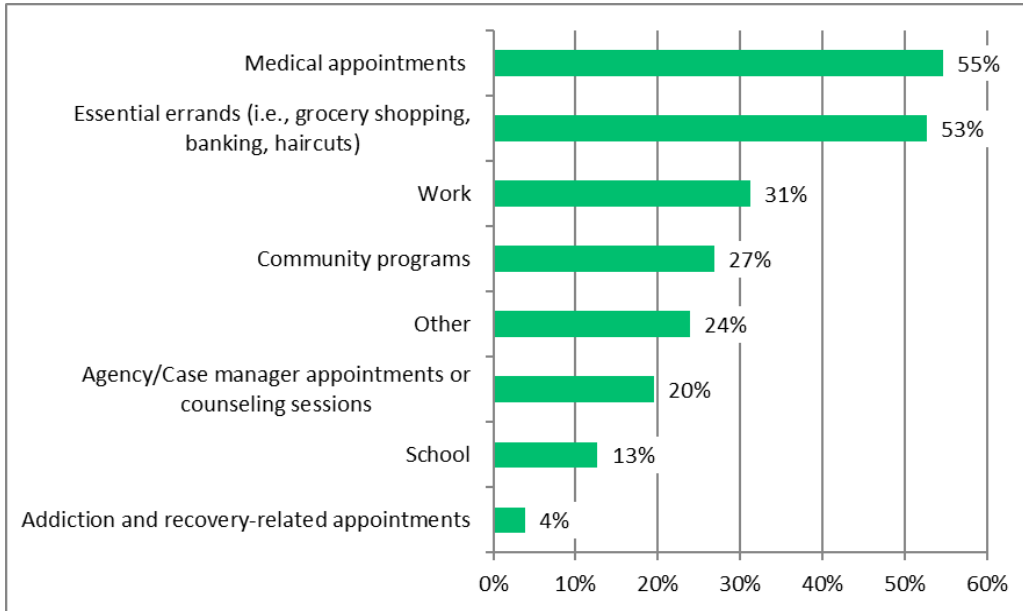
The time of day when trips are needed but not available ranges throughout the day but a significant number are during mid-morning to evening hours. Unmet trip needs occur every day of the week, and most often on weekends. Forty-four percent to Forty-eight percent of non-drivers have unmet trip needs on weekends. During weekdays the range is from 60 to 67 percent.



### Trip Purposes

Non-drivers were also asked to indicate where they need to go but do not have a ride. Each person could select more than one answer. Medical appointments, essential errands, and work were the trip needs that most often go unserved. (n=205)

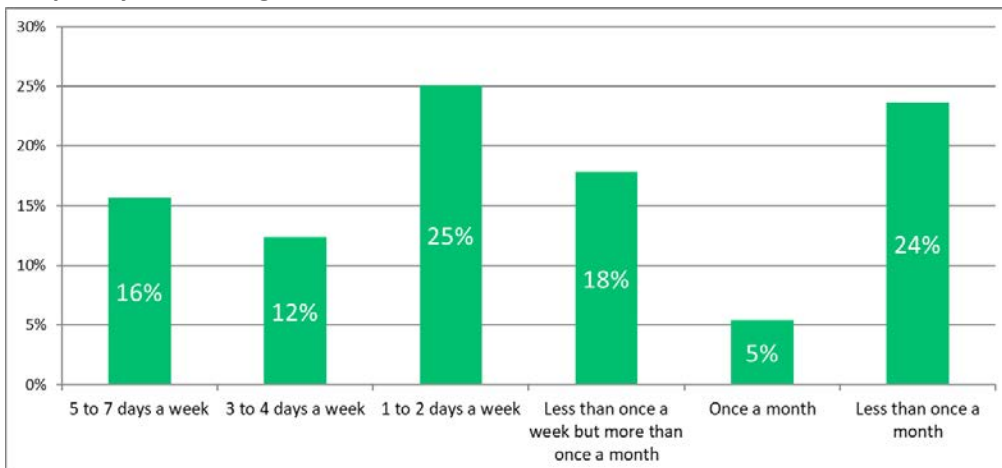
### **Most Unserved Trip Purposes**



### Asking a Friend or Family Member for Transportation

Some non-drivers ask a friend or family member to drive them to an errand or essential trip. This occurs at least weekly for more than half of the respondents (53 percent) and as often as daily for a quarter of respondents (52 percent). The remaining respondents (48 percent) indicated this occurs at least monthly (23 percent) or less than once a month (24 percent).

### **Frequency of Needing to Ask for a Ride**

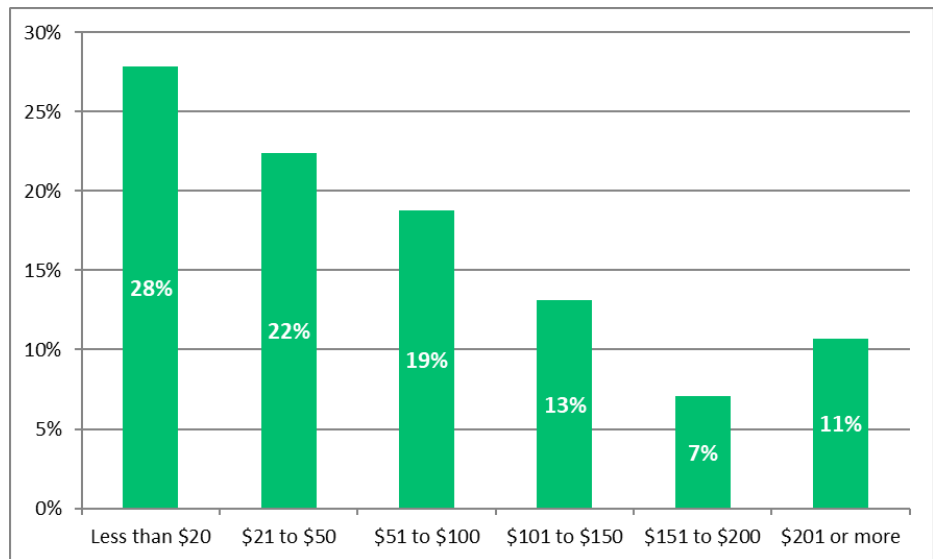




## Personal Transportation Expenses

Everyone must monitor their personal transportation budget. As previously mentioned, a significant number of survey participants are living below the Federal Poverty Level. Agency-sponsored transportation services are often provided by the agency at no cost to the rider. Public transportation fares are relatively low compared to private operators that rely on fare income and therefore must charge a higher rate. However, the needs assessment indicates that the lower cost options are not always available or do not meet every need.

Approximately 28 percent of non-driver survey respondents spend less than \$20 per month on transportation. Another 22 percent spend \$21 to \$50 per month. On the higher end, 19 percent are spending \$51 to \$100 per month on transportation, and 31 percent spend more than \$100 per month. (n=495)



## Specific Transportation Needs

All survey respondents were invited to list specific transportation challenges or unmet needs that they experience. A complete list of responses is included in Appendix D. In summary, the comments addressed user concerns about safety when walking to/from the bus stop; lack of reliability; and limited access created either by the transportation providers hours of operation or the level of personal assistance provided by drivers.

## **COORDINATED PUBLIC TRANSIT - HUMAN SERVICES TRANSPORTATION PLANS**

Organizations receiving Federal Transit Administration (FTA) Section 5310 funding must complete locally developed Coordinated Public Transit Human Services Transportation Plans (CPT-HSTPs) and update those plans on regular intervals. Through these plans, local stakeholders develop coordinated goals and strategies to address identified needs and gaps in transportation for older adults and individuals with disabilities. Many plans also include transportation needs and goals for general public service. The needs identified in Tennessee CPT-HSTPs were considered as part of this Strategic Plan Needs Assessment. Transportation needs identified in Tennessee CPT-HSTPs have a local or regional focus and differ across the State. Primarily, the identified needs pertain to breaking down jurisdictional boundaries that limit where vehicles can travel or organizational policies that limit rider eligibility. Access to employment, particularly second and third shifts, was also frequently noted in the regional plans.

## TRANSPORTATION DEMAND ANALYSIS

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### DEMOGRAPHIC AND SOCIO-ECONOMIC CONDITIONS

Transportation users include people who choose to use public transportation and people who ride because it is their only option. The former most often, but not always, live in urbanized areas where fixed route bus service and other transit options are available. Riders that participate in human service agency programs may also choose to use their transportation. People who use transportation services because they do not drive and/or have limited mobility options may rely on mass transportation, friends, family, or programs for support. High quality services benefit all communities and travelers.

Certain demographic and socio-economic conditions often predict levels of demand for transportation services. Typically, age, income, households with one or zero vehicles, and disability status are strong indicators of transportation demand. These factors also often determine the user's eligibility for human service agency, non-profit, or specialized public transportation services. Likewise, high population densities often generate the highest levels of demand for transportation services. For example, higher population density in urban areas create higher demand for transportation compared to rural areas where population density is lower. The higher demand and higher density areas can be more effectively served with routes that operate on a fixed schedule and with larger vehicles and the volume of trips can also support private, on-demand services such as Taxis, and Transportation Network Companies (i.e., Uber and Lyft). In rural areas, the distance between trip origins and destinations is typically longer and there are fewer people and fewer travel options, making use of advance reservation service, smaller vehicles, and customized trips more necessary.

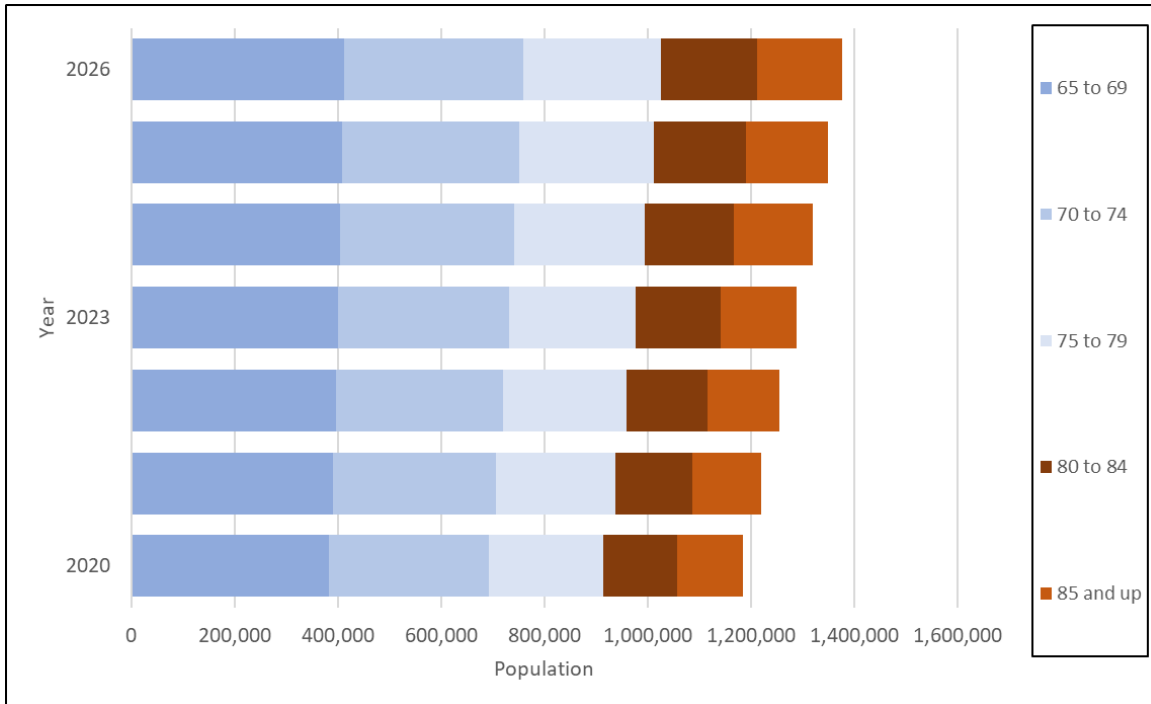
For this study, older adults are defined as individuals age 65 and older. Older adults have a higher likelihood of using public or human service agency transportation programs or relying on friends or family members to drive them to appointments or daily errands. Income is also an indicator of a person's need for public or human service agency transportation because these services are often more cost-effective than owning and operating a car.

Mobility limitations caused by a disability are also indicators of a person's likelihood to use specialized transportation, including vehicles that are wheelchair accessible or services that pick-up/drop-off at the curb or door, or have a bus stop within ¼ mile or less of the person's residence. Accurately measuring the geographic densities of individuals with mobility limitations is challenging because the U.S. Census Bureau does not segregate the nature of a person's disability. Therefore, data includes all types of disability reported to the Census, even if it does not involve a mobility limitation. Furthermore, the smallest level of data about the geographic location of individuals with disabilities is the Census Tract level.

## Older Adult Population

Individuals age 65 and older make up approximately 17 percent of Tennessee’s total population. By 2026, this age group will reach 20 percent of the State’s total population. When analysis is expanded to include individuals age 60 and older, the larger age cohort makes up nearly one quarter of Tennessee’s population. As the population of older adults increases, it is likely that the demand for accessible transportation will also increase. With access to appropriate transportation, older adults are more likely to have the option to continue living independently in their homes and communities.

**Exhibit 7: Population Projections for Ages 65 and Older, 2020 through 2026**



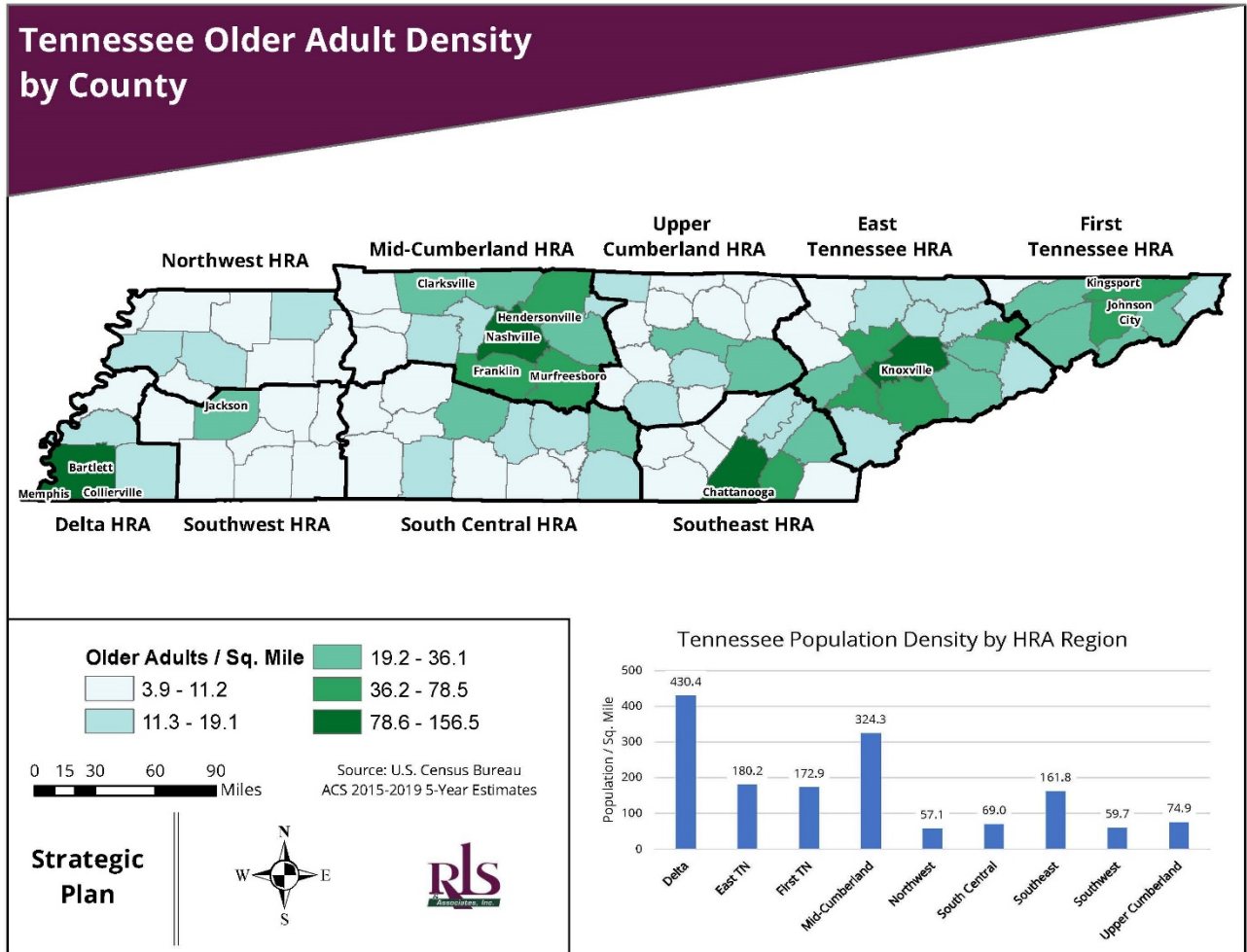
Source: Boyd Center for Business and Economic Research, University of Tennessee, Knoxville - October 2019. Projections are based on 2018 American Community Survey, 5-Year Estimates.

When looking at the percent of the population age 65 and older by HRA region, American Community Survey data indicates that between 16 and 21 percent of the population in each multi-county region is age 65 or older.

Exhibit 8 illustrates the population densities per square mile of older adults. High densities in the urban areas are consistent with higher overall population density. The counties surrounding Chattanooga, Nashville, Memphis, and Knoxville have moderate population densities. More counties within the First Tennessee Human Resource Agency (HRA), East Tennessee HRA, and Mid-Cumberland HRA have higher densities of older adults compared to other HRAs. Northwest HRA, South Central HRA, and Upper Cumberland HRA counties range from moderately low to low densities. Higher densities of older adults are one indicator of the potential for additional resources and/or modes of service appropriate for higher-density areas (i.e., services operated on fixed schedules or short-distance on-demand trips). The densities of older adults are low in many of the rural counties. Still, transportation needs faced by older

adults in rural areas place a high demand on the transportation providers because they require providers to drive longer distances for two or three passengers per vehicle. In the more densely populated areas, it is possible to serve five or more people at a time with a single vehicle.

**Exhibit 8: Older Adult Population per Square Mile**

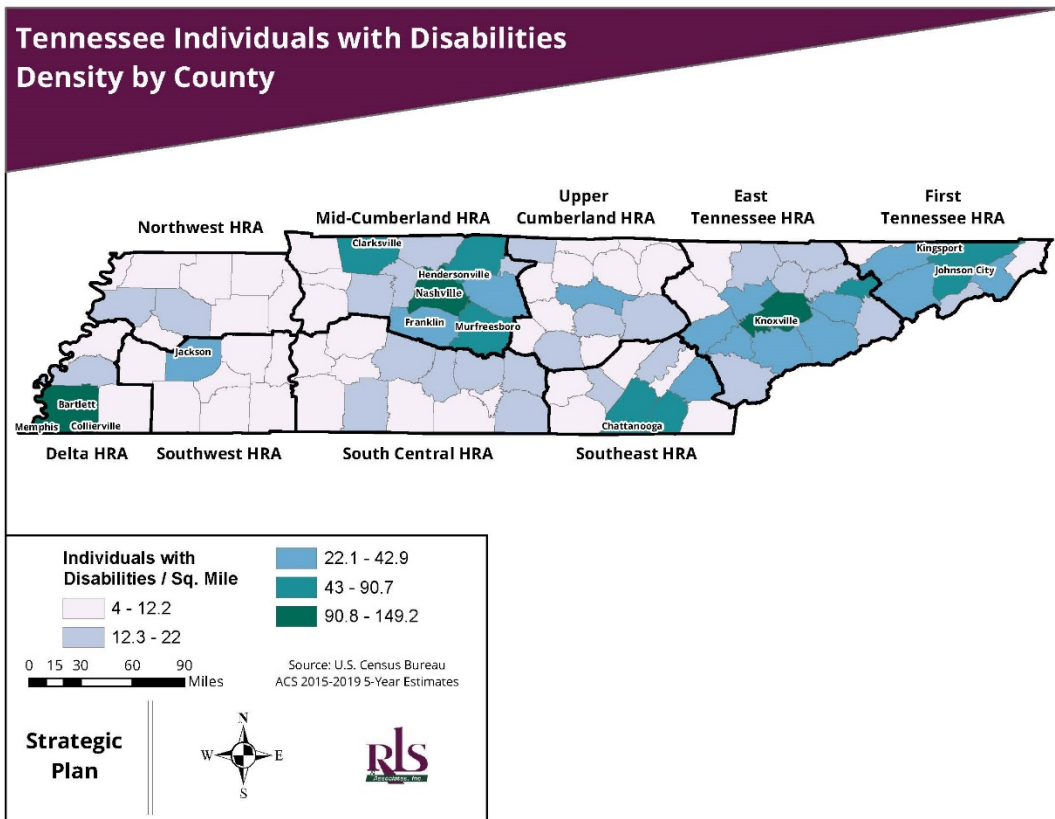


## Individuals with Disabilities

Approximately 15 percent of Tennessee’s total population has a disability, according to the American Community Survey (ACS) 2019 1-Year Estimates. The older adult population has a higher percentage of individuals with disabilities than younger groups. ACS questions about disability include hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty. Respondents who report any one of the six disability types are considered by the Census to have a disability. While the ACS definition of a disability does not directly correlate to a person’s need for transportation, it is the most reliable data available.

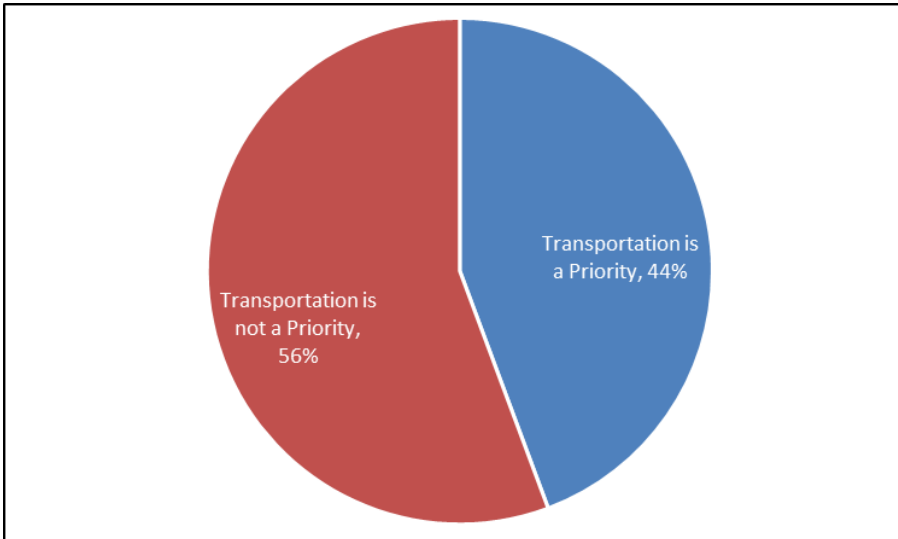
Exhibit 9 illustrates the population density per square mile of individuals with disabilities. Similar to the older adult densities, the urban areas have the highest densities of individuals with disabilities as well as the highest population density overall. The Northwest HRA, South Central HRA, and Upper Cumberland HRA counties have the lowest total population per square mile and have only moderately low to low densities of individuals with disabilities. Conversely, Mid-Cumberland HRA, East Tennessee HRA, and First Tennessee HRA have several counties with high to moderately high densities. The Delta HRA region has the highest total population per square mile of all regions; most of the population is around the Memphis area.

**Exhibit 9: Individuals with Disability Population per Square Mile**



A transportation needs assessment conducted by the Tennessee Council on Developmental Disabilities found that transportation is a priority for nearly half of the 729 survey respondents who have a disability or have a family member with a disability.

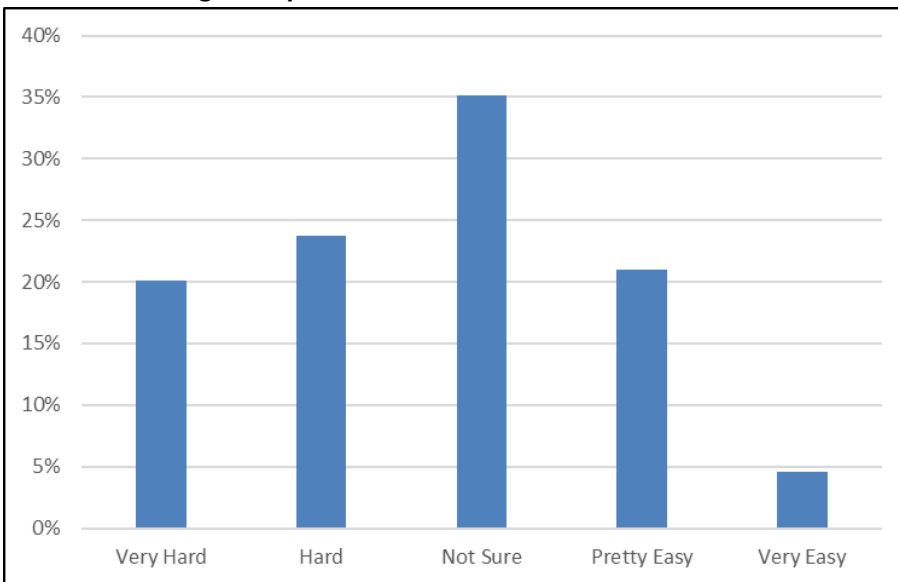
**Exhibit 10: Transportation Priority**



Source: Transportation Needs Assessment Survey, TN Council on Developmental Disabilities, Feb. 2021

Approximately 43 percent of the Council on Developmental Disabilities survey respondents felt that using local transportation services was hard or very hard. Approximately 25 percent felt that using transportation was pretty easy or easy. Other respondents were not sure.

**Exhibit 11: Using Transportation Services**

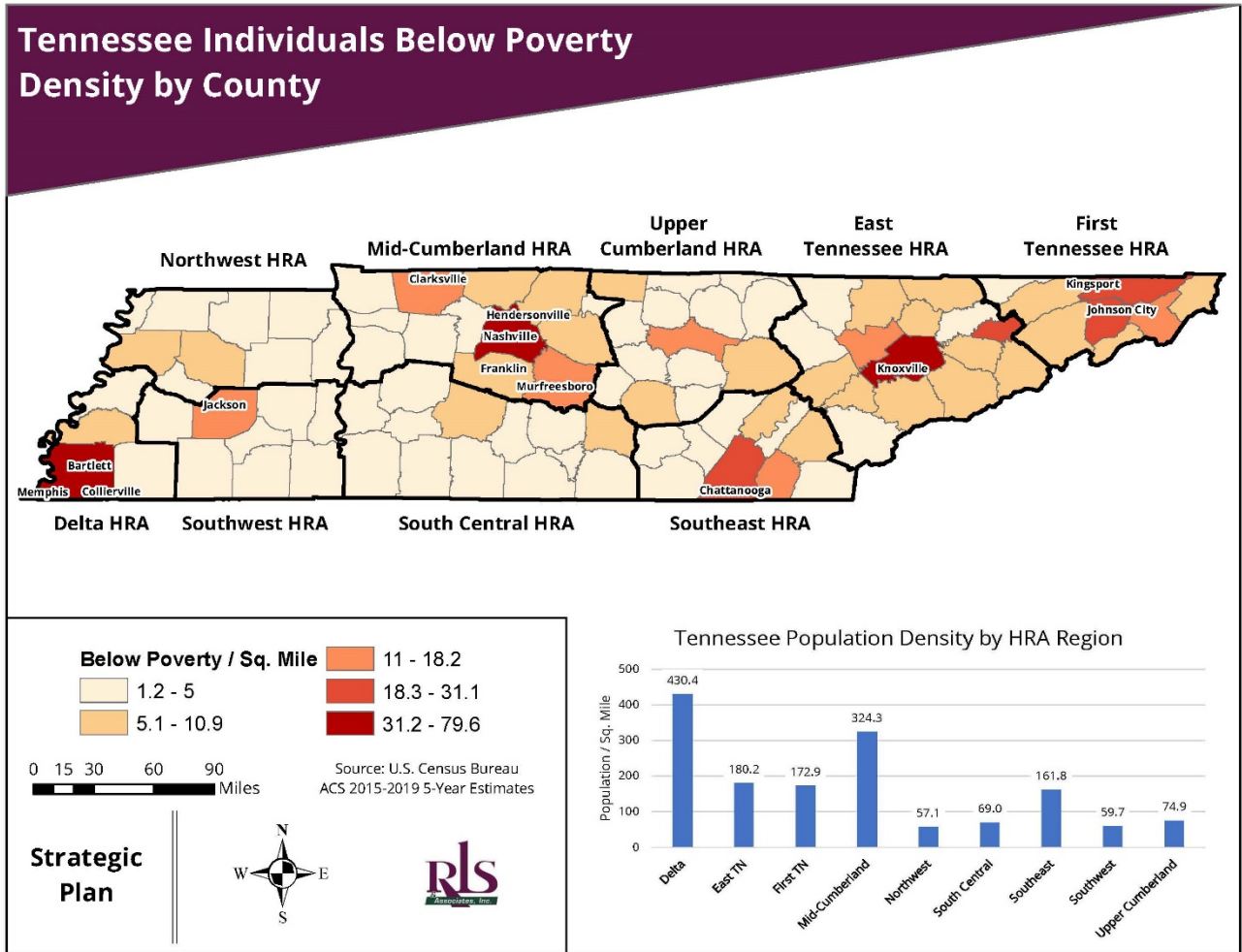


Source: Transportation Needs Assessment Survey, TN Council on Developmental Disabilities

**Poverty**

Densities of individuals living below poverty are highest in the urban areas of Memphis, Nashville, and Knoxville. Jackson, Chattanooga, Johnson City, and Kingsport have moderately high densities as well. Exhibit 12 illustrates the density per square mile of individuals living below poverty throughout the state.

**Exhibit 12: Individuals Below Poverty per Square Mile**



**Employment**

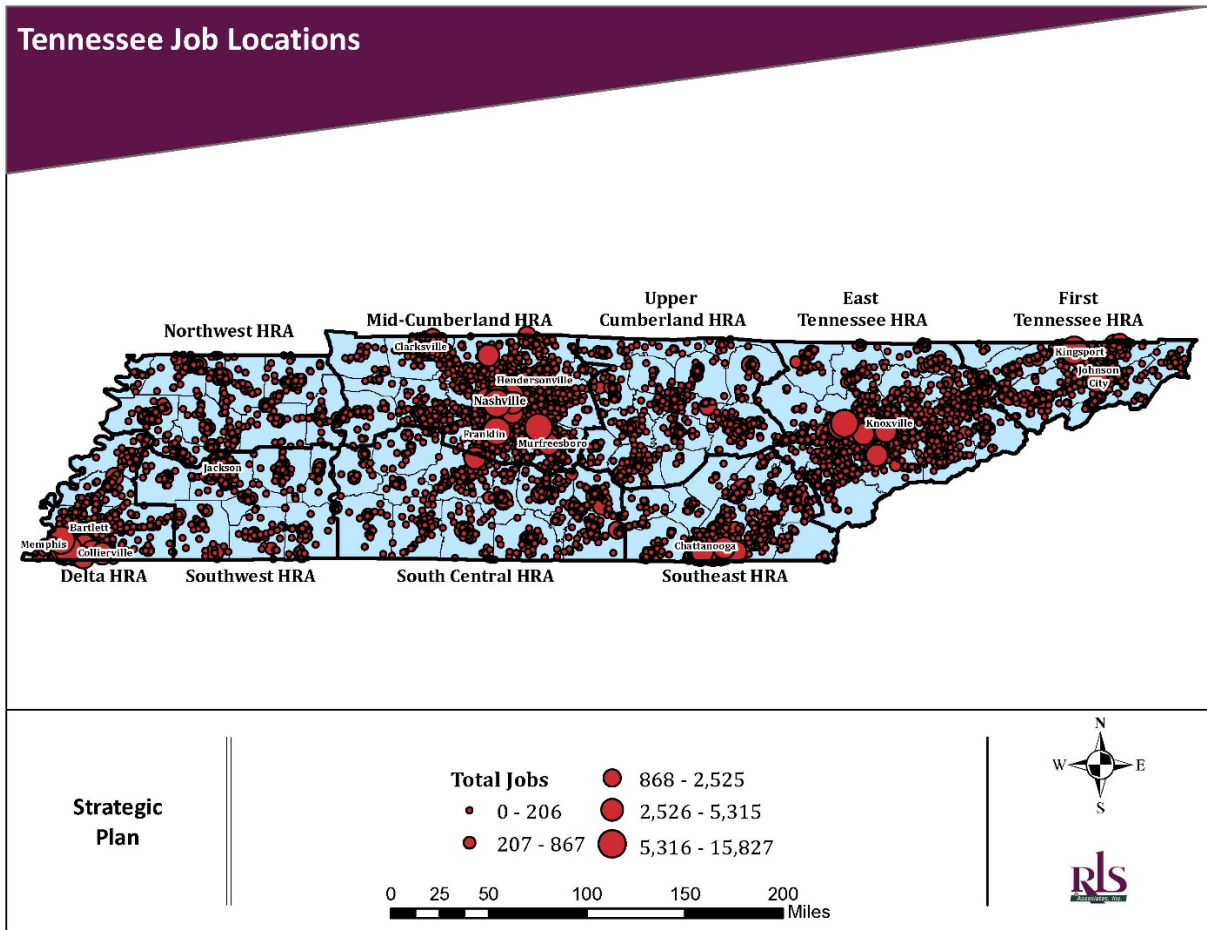
Transportation to and from work on a regular and reliable basis is one of the most significant transportation challenges faced by individuals who do not drive or do not have access to a reliable car. Regular transportation must be affordable, reliable, and safe. For some people with mobility limitations, the vehicles must also be accessible and/or operated by drivers with specialized training. The Tennessee



jobless rate in January 2021 was 5.1 percent. This rate is just 1.4 percentage points higher than the statewide rate for January 2020, months before COVID-19 impacted the economy.<sup>3</sup>

The following exhibit illustrates the distribution of jobs in Tennessee. Urban areas have higher concentrations of employment compared to rural areas. However, each county has employment opportunities. Continuing research at the regional or local level will identify if these job locations are within public transit service area boundaries.

**Exhibit 13: Job Locations**



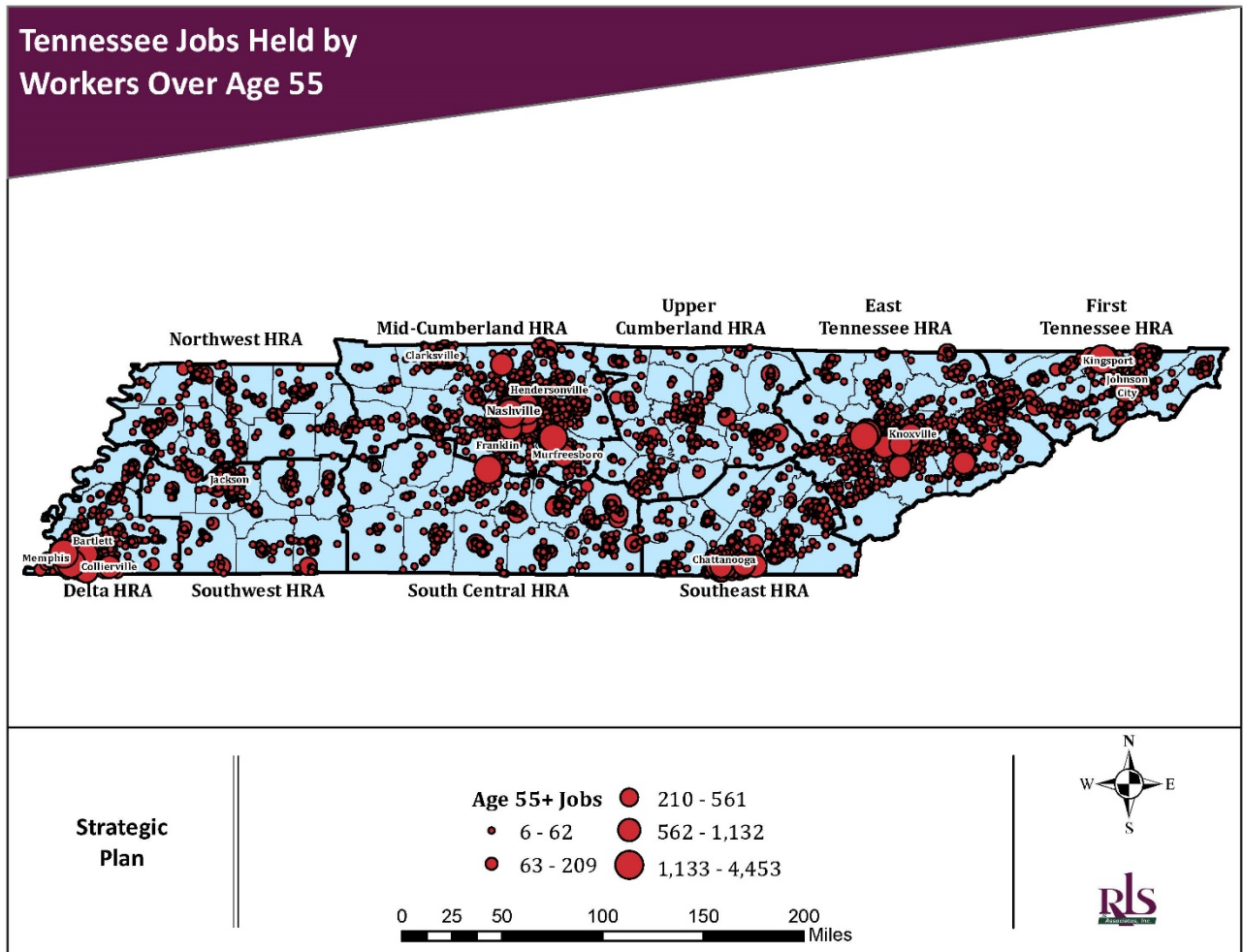
The following map illustrates the location of jobs filled by individuals age 55 and older.<sup>4</sup> At the statewide view, the distribution appears to be similar to total jobs, except for some slightly higher concentrations appearing in some rural counties. Additional analysis at the regional level will examine the relationship between where higher densities of older adults live and the location of jobs. This data will shed light on the potential commuter needs for this population group.

<sup>3</sup> Department of Labor and Workforce Development, Thursday, March 11, 2021.

<sup>4</sup> LEHD data is not available in a data set for age 65 and older.

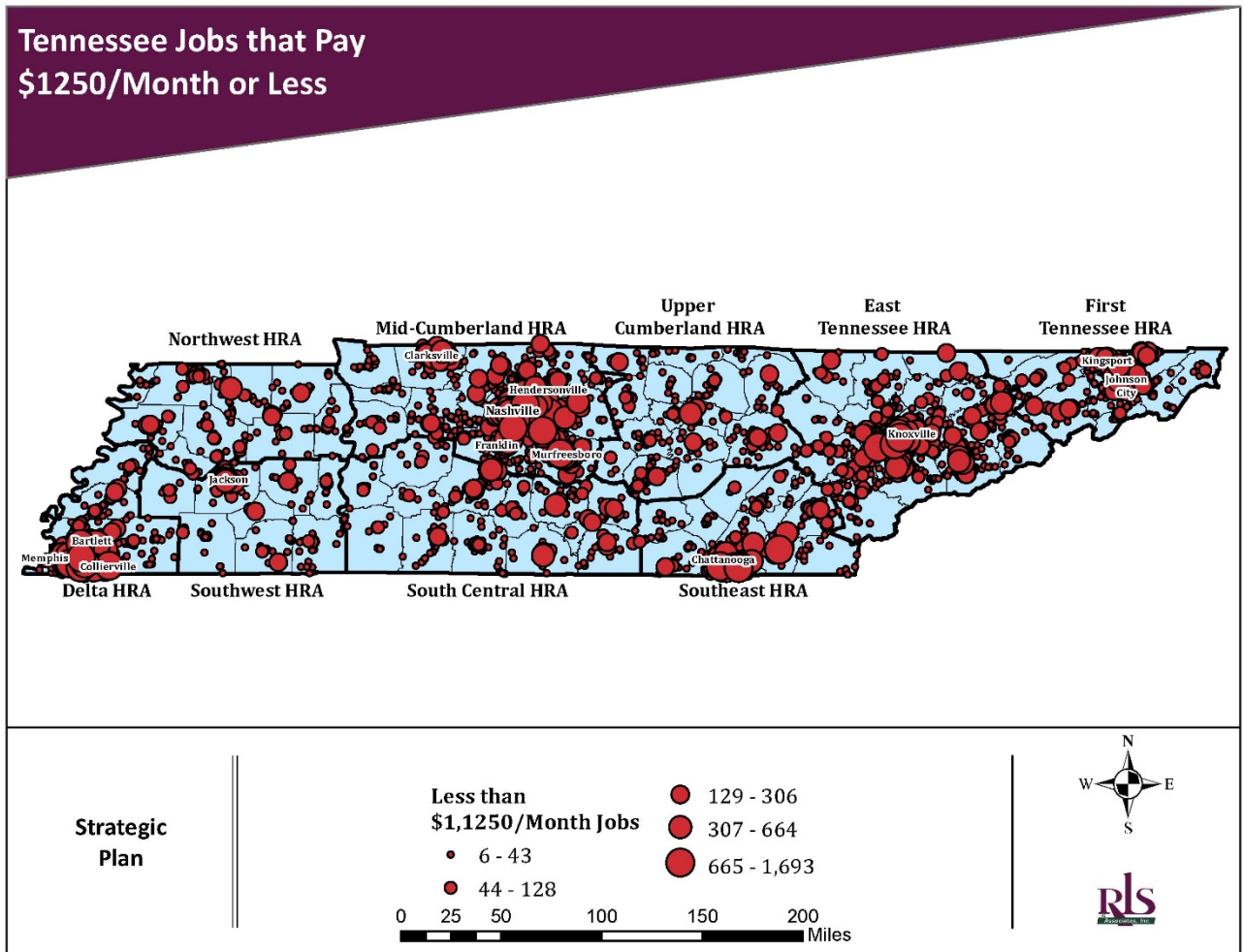


**Exhibit 14: Jobs Held by Workers Age 55 and Older**



National statistics indicate that people who are using transportation services out of need and not choice, are often (but not always) working at entry-level positions or earning lower wages. The following map illustrates the concentrations of jobs for workers making \$1,250 per month or less. In Tennessee, these jobs are commonly found throughout the state. When compared to the densities of individuals living below poverty (Exhibit 12), it would appear that the locations of jobs paying \$1,250 per month or less are distributed similarly to where people who are earning low incomes live. However, reliable and accessible access to these jobs includes the need for transportation options during early mornings and late evenings, as many entry-level job opportunities are during second and third shifts. Unfortunately, most public or low-cost transportation options are not operating during the hours necessary to support shift work. The mismatch of available transportation hours of operation and shift start/end times presents a barrier to accessing employment for those who need a ride, even if the distance to work is short.

**Exhibit 15: Jobs Paying \$1250 per Month or Less**



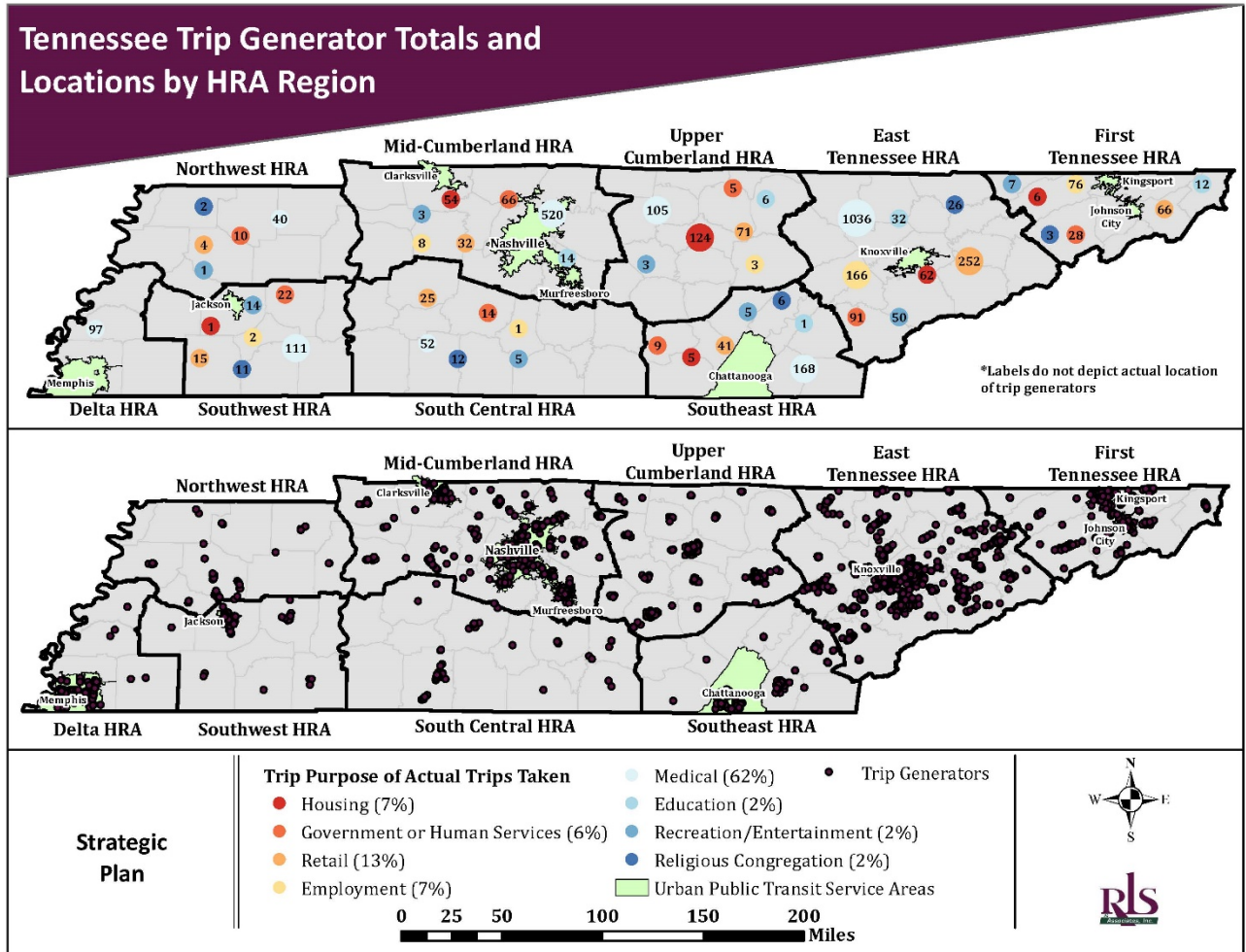
**Major Trip Generators**

In addition to employment locations, other major trip generators (or common destinations) in Tennessee for users of transportation services include medical, retail, low-income housing, human service agency appointments, education, recreation, and religious congregation. The following exhibit illustrates the trip generator totals and the frequency with which rural public transportation providers serve those locations.<sup>5</sup> Destinations included in the map are frequently served by public transit or non-emergency medical transportation providers. The exhibit on the top indicates the number of generators identified in each HRA region. The dots on the bottom map illustrate the actual location and number of trips provided by rural transit systems to the destinations. Medical facilities make up 62 percent of the trip purposes based on the sample. The number of trips provided (bottom of the exhibit) is based on data provided by rural transit providers. Naturally, most generators are in and around urban areas with fewer destinations

<sup>5</sup> Frequency is based on a sample of rural transportation provider trip logs.

in rural areas. However, it is important to note that many of the trips being provided may originate in a rural, suburban, or exurban area and end in an urban area where the regional health care provider or other agency is located. With the exception of “housing” trips, this exhibit only indicates the location of the trip’s destination. At the statewide level, this data is important to compare the potential demand for different trip purposes which may or may not require advance scheduling or recurring trips. At the regional or local level, this data will be helpful to planners as they consider the level and types of transportation that are most appropriate to fill gaps in service.

**Exhibit 16: Trip Generators by HRA Region**



## SUMMARY OF UNMET NEEDS AND GAPS IN ACCESS TO TRANSPORTATION

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TDOT, its partners and stakeholders analyzed unmet needs and gaps in transportation to make decisions about the most effective use of existing resources while providing the best possible transportation for Tennesseans. The nature and degree of unmet transportation needs varies throughout Tennessee, with no single and consistent underlying root cause but several common themes. The most significant themes identified through the strategic planning process are outlined below. These needs and gaps require implementing strategies to improve access to transportation for older adults and individuals with disabilities and will be the driving force behind the Office of Mobility and Accessible Transportation (OMAT). As performance measures improve and needs evolve, so will the efforts of the OMAT.

- ◆ **Personal Assistance** – Even in urban areas, where public fixed route transit and paratransit is available, passenger assistance is limited to specific forms of assistance mandated by the Americans with Disabilities Act (ADA). Frequently, this level of assistance is inadequate for meeting the needs of individuals who require a certain level of flexibility and customization to use the transit service. As a result, an otherwise independent person living in an area with fixed route public transit service may not be able to get to work, manage daily errands, or access medical care even when transportation services are available.
- ◆ **Misperceptions** – There is a widespread perception that transportation is not available to take people to work or other necessary errands. In some cases, this perception is reality. In many cases, however, it is a misperception. The real challenge here is making sure that information about available transportation resources is available to every person in Tennessee because not knowing how to schedule a ride is the same as having no service at all. Tennesseans need to know what transportation options are available and how to access them.
- ◆ **Forced to Accommodate the System at the Expense of Independence** - Increases and enhancements in the capacity and accessibility of existing transportation are needed. In urban and rural areas alike, passengers are scheduling trips weeks or, at minimum, days in advance so that they can accommodate the transporter’s availability to provide the trip. The options are even more limited for individuals who need a vehicle to accommodate their mobility device. Planning transportation weeks in advance limits inclusion and flexibility and is not customer -friendly.
- ◆ **Limited Weekend or Night-Time Options** - Transportation options are extremely limited on weekends and weekday evenings in most service areas. Wheelchair accessible options are especially limited.
  - Limited access to reliable and affordable transportation during weekends and nights also limits access to employment and/or education/job training options.
- ◆ **Limited Funding** - Limited funding, particularly State and local funding, and the expense of on-demand transportation restricts the amount of service that can be offered. The cost of long-distance trips (across county lines) is great and may not available in some areas even where the need and demand exist.
- ◆ **Affordable Fares** – On-demand transportation options such as a taxi, Uber and Lyft-type services are cost-prohibitive for many people and there are no affordable options for short-notice or point-to-point services.

- ◆ **Infrastructure** - Infrastructure improvements, such as sidewalk conditions or lack of sidewalks can be a barrier to accessing bus stops or walking to community resources. In rural areas there are even fewer sidewalks and often not even shoulders along the roadside. This prevents people from walking to their destination or even getting to a bus stop.
- ◆ **Options for Specialized Services** - Transportation options need to be multi-faceted and include services for individuals with a variety of needs ranging from wheelchair accessible transportation to safe transportation for individuals with cognitive or behavioral disabilities.
- ◆ **First/Last Mile Options** - First/Last mile transportation options are needed so that people can get from their origin or destination to the fixed route transportation option.
- ◆ **Volunteer Transportation** - Personal liability laws pertaining to volunteer drivers of individuals with disabilities are more restrictive than the laws that apply to volunteer drivers of older adults. Therefore, volunteer transportation services for individuals with disabilities are not as widely available. With a waiver, volunteer services could be expanded.

### Challenges to Making Transportation More Accessible

Identifying the unmet needs is only part of the solution. The next step is to honestly evaluate the challenges and identify realistic performance measures for achieving results. Primary challenges to achieving goals are listed below.

- ◆ **Overcoming territoriality** among agencies and changing the perspective of only working for clients of individual agencies to a more all-encompassing perspective.
- ◆ The local public transportation system **may not be sufficient** to get people where they need to go; particularly trips to work. Even in urban areas, public transit hours and coverage has its limits.
- ◆ Some clients are not allowed to travel independently because their loved ones do not trust the transportation system. **Trust** in the existing and new services is critical to success.
- ◆ Transportation has been **embedded** in the program operations of various agencies (i.e., day programs) and breaking away from the accepted practices of today is a structural challenge that will take time to change.
- ◆ **Funding** from multiple programs must be designed to coordinate. Policy-related changes require strong support from the State-level.
- ◆ Transportation providers must work together so that **jurisdictional boundaries** (county lines, etc.) are no longer a barrier to taking a passenger where they need to go.
- ◆ **Reporting requirements** are very strict and sometimes make it impossible for small nonprofit providers to participate in the available grant programs. However, many people, especially in rural areas, rely on the small transportation providers.
- ◆ Resistance to programs working together is more about **organizational culture** than policies. It is possible to make the policies work but the State-level and Federal-level leaders as well as the local programs must be willing to make the changes.
- ◆ **Driver and vehicle shortages** make it challenging for transportation providers to continue existing services or to consider expanding their programs.



## STRATEGIC PLAN IMPLEMENTATION

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The strategic plan implementation and performance measures were developed throughout 2021 as the State moved Tennessee closer to having a clearinghouse for Federal and State programs that fund transportation. It has been determined that opening the doors for more connectivity at a district level or in two or three county groups at a time could be effective; every solution doesn't have to have a statewide impact.

The State understands that a larger investment in transportation options that includes more drivers and operating dollars as well as more personalized and/or assisted service would enable more people to independently get in and out of their homes. The investment could come from 'braiding' existing funds from multiple Federal programs so that transportation providers can operate more efficient service, and/or identification of new funding sources.

Simply clarifying or simplifying eligibility rules tied to Federal grant programs that support transportation for older adults and individuals with disabilities may encourage agencies to change their locally developed policies and expand eligibility for rides. Some rules that limit the transportation provider's ability to coordinate at the local level, however, are not within the control of the State or local agency to change. As a result, such rules often create unnecessary duplications in service administration and operations or gaps in service coverage. Using the strategic plan activities outlined on the following pages, the State will inform the Federal-level program administrators of regulatory or rule changes that could be made to encourage and allow the local programs that have the greatest need but the lowest administrative capability to make changes that improve access for their consumers.

Finally, enabling technology that improves access to information and scheduling of transportation will improve the lives of Tennesseans who need or choose to use available resources. The Department of Intellectual and Developmental Disabilities (DIDD) is actively working on improvements in enabling technology and access to employment for individuals with disabilities. TDOT is working on enhancements to scheduling technology for public transit providers. These and other such solutions will enable communication about important transportation options for the entire state and help reduce misperceptions about availability and gaps in service.

The State, the Office of Mobility and Accessible Transportation (OMAT), transit providers, and users of the services will grow these successful strategies and cultivate new opportunities to make transportation more accessible for Tennesseans. Preliminary objectives for achieving stated goals and supporting the implementation plan are outlined in the following points. These goals and objectives were developed with input from the Transportation Workgroup.

## OMAT STRATEGIC GOALS AND OBJECTIVES

The goals and objectives for the OMAT identified in Table 12 are based on the five goals established with input from the Transportation Workgroup and data collected during this planning process.

**Table 12: OMAT Strategic Goals and Objectives**

### Goal 1: Expand Access

- Oversee updates to regional Coordinated Transportation Plans with a focus on identifying local issues and solutions.
- Develop Regional Transportation Advisory Boards (RTABs) in each region.
- Ensure passenger transit is considered in non-transit planning and development efforts.
- Establish effective methods of communication within the regions and counties.

### Goal 2: Service Solutions

- Use the Strategic Plan to conduct a regional assessment of barriers and opportunities.
- Standardize transportation safety and quality guidelines among all programs for older adults and individuals with disabilities to be consistent with other transportation funding sources.
- Explore the effectiveness of service modes like electric vehicles, vanpools and microtransit for first/last mile or multi-jurisdictional trips.
- Explore an insurance waiver protecting volunteer drivers of riders with disabilities and older adults.

### Goal 3: Collaboration

- Identify and maximize sustainable transit funding.
- Expand sources of sustainable transit funding.
- Nurture regional partnerships that fill identified gaps in transportation
- Expand trip sharing opportunities among providers.

### Goal 4: Technology Solutions

- TDOT/OMAT should serve as the liaison between the State and community to support transportation programs in their efforts to implement advanced technology.
- Support smart investment in scheduling and dispatching software.
- Encourage technology that allows customers to choose their mobility option and schedule.
- Identify technology that facilitates coordination between operators.
- Support equitable access to technology options.

### Goal 5: Communication

- Establish and oversee a clearinghouse and moderator for transportation issues and solutions.
- Develop the role for mobility management.
- Support platforms that enable single source trip planning.
- Maintain links to public and specialized transportation providers including volunteer providers.

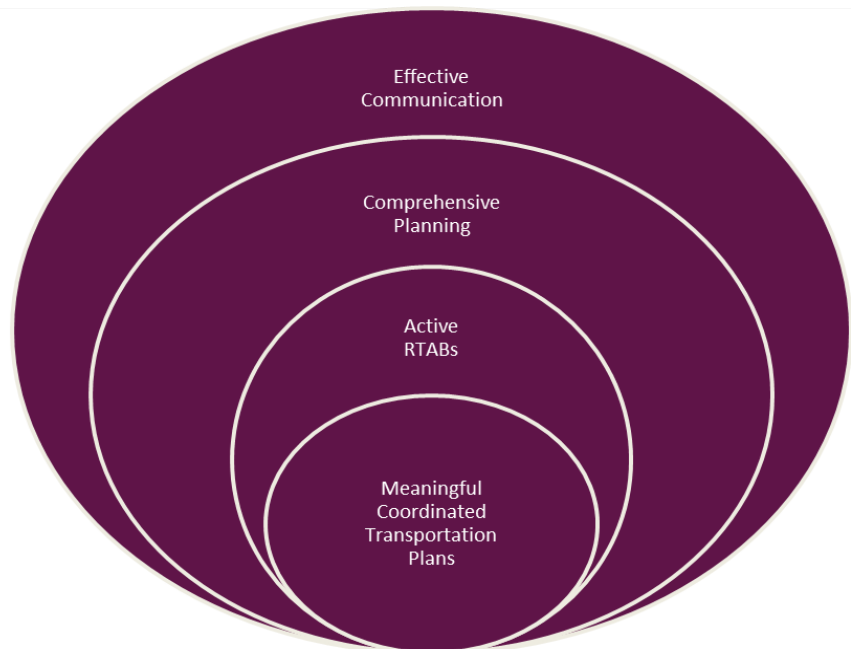
## EXPANDING ACCESS

Goal #1 presents the underlying purpose of the Office of Mobility and Accessible Transportation (OMAT): expanding access to transportation for older adults and individuals with disabilities. The focus points for expanded access are different across the state. Some regions or counties may have abundant resources but policies or jurisdictional boundaries that limit transportation program effectiveness. Other regions may have demand for transportation resources that exceeds available resources. OMAT will support local solutions for expanding access to transportation services that are appropriate at the local level.

**Goal: Oversee and support local solutions for expanding access to transportation services for older adults and individuals with disabilities.**

**Timeline: 2021 and Ongoing**

**Action Steps:** Step 1 is to develop local plans. Regional Coordinated Public Transit-Human Services Transportation Plans (CPT-HSTPs) are at the core of this goal. A requirement for the Federal Transit Administration Section 5310 Enhanced Mobility for Seniors and People with Disabilities Program, these plans provide a framework for local priorities to address gaps in transportation services for older adults, individuals with disabilities, people with low incomes, and the general public.



Step 2 is implementation. Making the CPT-HSTP and related local plans a reality is the responsibility of the local stakeholders. The RTABs will be involved in implementing the strategies identified in CPT-HSTPs. The RTABs will have regional representation from decision makers at all key stakeholder organizations that have responsibilities related to the goals of the CPT-HSTP or other related plans. OMAT will oversee establishment of the RTABs.

TDOT will establish guidelines for RTABs. TDOT, OMAT will be an At Large member on all RTABs. Regional representation must strive to cover each category listed below and must reflect the demographic make-up of the communities. Information and participation opportunities must be available for individuals with limited English proficiency. Representation should include the following organizations, at minimum:



- ◆ Human service organizations/human resource organizations
- ◆ Senior services programs
- ◆ Non-profits that serve older adults and individuals with disabilities
- ◆ Public and specialized transportation providers
- ◆ Mobility managers and travel trainers
- ◆ City/County offices responsible for ADA transition plans for pedestrian infrastructure
- ◆ Riders
- ◆ Potential riders with unmet transportation needs
- ◆ Local leaders – governmental and economic development

Step 3 is to provide a framework for comprehensive planning that facilitates long-term success. OMAT will provide a framework or toolkit for Mobility Managers and transit managers. OMAT will also encourage transit operators to participate in regional and local planning efforts to ensure transit is considered during the planning phases. Transit operators will keep the RTAB informed of planning efforts and discuss opportunities to influence those plans.

At the State level, OMAT will serve in an advisory role to TDOT multimodal planning for projects to provide expertise and information about the accessibility needs for transit riders, pedestrians, bicyclists, older adults, and individuals with disabilities. In this way, OMAT will help ensure complete integration of multimodal access into projects.

Step 4 is to establish effective methods of communication within the regions and counties. Activities include but are not limited to the following:

- ◆ Consistent marketing plans for transportation services and information
  - Regional or state transportation logo in addition to transit system logo
  - Brochure content and design
  - Website content and design
  - Rider-guide content and design
- ◆ Partnerships with local agencies that are not public transportation providers but can provide resources and customer comments
- ◆ Investigate the opportunity for a regional transportation resource center/helpline to connect riders with appropriate transportation services within the region

**Table 2: Goal 1 Performance Metrics and Implementation Timeline**

Strategic Goal	Objectives	OMAT Performance Metrics	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Expand Access: Support local solutions for expanding access to transportation services	<p><b>Objective:</b> Oversee updates of Regional Coordinated Transportation Plans with a focus on identifying local issues and solutions to those issues.</p>	<p>1. Regional CPT-HSTP plans are developed and include priorities.</p> <p>2. Local participation on the CPT-HSTP includes older adults, individuals with disabilities, and key stakeholder organizations from all counties in the region.</p>	1					1			1		
	<p><b>Objective:</b> Develop Regional Transportation Advisory Boards (RTAB) in each region with representation from each county.</p>	<p>1. A pilot RTAB is created with a defined organizational structure, roles and responsibilities, and an annual agenda.</p> <p>2. RTABs are created in each HRA region following the similar structure as the pilot.</p> <p>3. RTABs achieve annual agenda items and report quarterly progress to OMAT.</p>	1	2	3								
	<p><b>Objective:</b> Ensure passenger transit is considered in non-transit plans for development. Examples of non-transit plans include complete streets (which often include pedestrian infrastructure); economic development; ADA transition plans; and community needs assessments.</p>	<p>1. Mobility Manager toolkit/framework is developed and distributed.</p> <p>2. OMAT actively contributes to TDOT multi-modal planning efforts .</p>	1	2									
	<p><b>Objective:</b> Establish effective methods of communication within the regions and counties.</p>	<p>1. OMAT and Mobility Managers design a marketing and outreach program.</p> <p>2. OMAT and Mobility Managers deploy the approved communication program.</p> <p>3. Public survey feedback indicates awareness of transportation resources and information improves.</p>	1	2	3								

## SERVICE SOLUTIONS

The statewide strategic planning process included broad regional outreach and assessment. Results indicate that transportation providers understand the unmet transportation needs for older adults and individuals with disabilities in each of their communities. Still, each region has challenges and barriers that prevent change improvements. However, the strategic planning process did not permit the OMAT to dive deeper into the specific local transportation barriers. Therefore, as we advance, OMAT staff will identify the most significant barriers that can be addressed in the short- and long-term and then lead stakeholders through a process of developing solutions.

**Goal: Identify where barriers to transportation overlap and develop quality solutions that meet travelers' needs.**

**Timeline: 2022 and Ongoing**

**Action Steps:** OMAT will use resources developed in the Gaps/Needs Analysis and refined through Goal 1 activities to identify barriers to transportation that overlap across the regions or across multiple programs. Next, OMAT will identify potential funding and grant opportunities that would support programs that meet travelers' needs. Such grant opportunities will be communicated to potential applicants through website postings and the RTABs.

Where an actual policy or procedure prevents effective coordination between agencies that would address needs most cost-effectively, OMAT will facilitate discussions with State-level agency leaders to seek opportunities to change policy or practice. In some cases, new cost-sharing agreements or tools will need to be developed to facilitate coordination between programs. OMAT may use its own tools or apply resources available through the U.S. Department of Transportation.

In cases where it is a local misinterpretation of an agency policy or procedure, OMAT will work with State-level agency leaders to clarify, from the top down, that inter-agency coordination is permitted and supported.

Next, TDOT and OMAT will establish the OMAT Advisory Committee that will inform OMAT of statewide transportation needs and advise OMAT of solutions to address such needs. The Advisory Committee will provide vital support and influence as OMAT engages strategic opportunities and challenges and pursues the resources needed to realize quality solutions.



The role of the Advisory Committee is not to make decisions but to provide current knowledge, critical thinking, and analysis to assist OMAT with achieving the current and future goals. It will also help establish and maintain strong community partnerships and relationships for OMAT.

The committee representation must promote unbiased recommendations, informed decisions that impact funding and policies, and communication among departments. Advisory Committee representation will include, at minimum:

- ◆ State human service and transportation department representatives
- ◆ Experts in transportation
  - Transit Association-appointed representative
  - Human Resource Agency representative
- ◆ Disability program experts
  - State department appointee(s)
- ◆ Aging program experts
  - Commission on Aging and Disability
- ◆ People who use accessible transportation
  - Representation from each HRA region
    - Appointed by the RTABs

OMAT will establish clear expectations for the Advisory Committee including, but not limited to:

- ◆ Job descriptions
- ◆ Committee workplan built from strategic plan goals
- ◆ Attendance requirements

An initial objective of the Advisory Committee (or a subcommittee) is to work with OMAT to identify differences in transportation service quality standards and guidelines (i.e., differences between public and senior transportation training). The Advisory Committee will take the identified differences and propose a standardized alternative to each organization that funds transportation for older adults and individuals with disabilities. This will include public transit providers. Potential standardized training programs may include:

- ◆ Passenger Assistance Training including disability awareness and mobility device securement
- ◆ Emergency Procedures Training for incident and accident situations, including vehicle evacuation
- ◆ Defensive Driving Training specific to operators of public and specialty transportation
- ◆ Pre-Trip Vehicle Safety Inspection Training including safety inspections of accessibility equipment
- ◆ Customer Service, Diversity, and Sensitivity Training for front line transportation staff

Third, TDOT will continue to identify projects that support effective planning for electric vehicles and service modes like vanpools and microtransit for first/last mile or multi-jurisdictional trips. OMAT will support TDOT planning decisions through participation in project selection activities. And TDOT will move forward with its long-term plan of electric charging stations to facilitate possibilities for electric vehicle fleets.

Finally, OMAT will coordinate with MyRide TN leadership or other volunteer transportation programs to develop a proposal regarding an expansion of the senior transportation insurance waiver. The waiver does not currently include protections for volunteer drivers who are transporting individuals with disabilities. OMAT will work to explore the potential of a new waiver or expansion of the current senior volunteer transportation waiver.

**Table 13: Goal 2 Performance Metrics and Implementation Timeline**

Strategic Goal	Objectives	Performance Metrics	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Service Solutions:</b> Identify where barriers to transportation overlap and develop quality solutions that meet travelers' needs	<b>Objective:</b> Use the Strategic Plan to conduct a regional assessment of barriers and opportunities.	1. OMAT will compile the list of barriers that transportation providers face when working to address needs to identify strategies that could have the most impact statewide. 2. OMAT will present policy-related barriers to the Advisory Committee and suggest Federal or State-level policy amendments that would enable successful implementation of solutions.	1										
	<b>Objective:</b> Standardize transportation safety and quality guidelines among all programs for older adults and individuals with disabilities to be consistent with other transportation funding sources.	1. OMAT will establish the Advisory Committee. 2. OMAT and a subcommittee of the Advisory Committee will review and identify differences in service quality standards/guidelines among agencies that serve older adults and individuals with disabilities. 3. OMAT and the Advisory Committee will propose standardized training and service quality standards to state-level agency administrators and request that all agencies sign a Memorandum of Agreement (MOA) to implement changes that result in standardization of service quality.	1	2	3								
	<b>Objective:</b> Explore the effectiveness of structures to support electric vehicles, and service modes like vanpools and microtransit for first/last mile or multi-jurisdiction trips.	1. TDOT will identify projects that support this objective and collaborate on project selection activities. 2. OMAT will provide information and support to subrecipients and urban transit systems in development of non-traditional transportation solutions that address gaps in access to transportation.	1		2								
	<b>Objective:</b> Explore feasible opportunities to expand eligibility requirements of the volunteer driver programs (i.e., MyRide TN) or create more volunteer programs that include service for individuals with disabilities of any age.	1. OMAT will request MyRide TN or another volunteer transportation program make a presentation to the Accessible Transportation Workgroup regarding the insurance waiver. 2. OMAT will assign a subcommittee of the Advisory Committee to explore insurance waivers in other states and develop a white paper and presentation regarding the waiver. 3. The Advisory Committee will consult with insurance companies doing business in Tennessee to explore and document opportunities for the waiver. 4. The Advisory Committee will make final recommendations regarding the potential support of an expanded waiver.	1	2	3	4							

## COLLABORATION

Multi-agency collaboration and collaboration between State- and local-level program administration within a single agency is a goal for OMAT because stakeholders recognize that successful solutions are possible but require leadership. Furthermore, leadership must be present at the local (or regional) and State levels. Goal 1 addresses efforts to establish leadership at the regional level through the RTABs, Mobility Managers, or other leaders of the local Coordinated Public Transit-Human Services Transportation Plan. Now, Goal 3 – Collaboration, develops leadership responsibilities at the State level.

**Goal:** Establish a structure and collaborative culture that maximizes financial resources for transportation across multiple programs and departments.

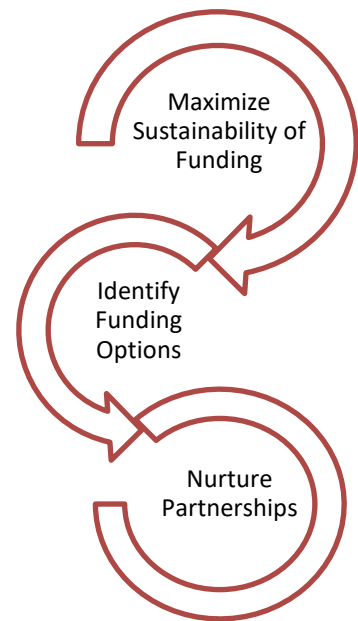
**Timeline:** 2022 and Ongoing

**Action Steps:** TDOT and OMAT will focus on identifying and maximizing transportation funding to ensure existing services, as well as potential service expansions, are sustainable. OMAT will introduce the U.S. Department of Transportation’s (DOT’s) cost-sharing and pricing tool to other State agencies. The tool is intended to encourage providers to put passengers funded by different programs on the same vehicle when feasible – and to do so with a streamlined invoicing and billing process to ensure funders are accurately billed. The pricing tool is supported by the Coordinating Council on Access and Mobility (CCAM) Cost-Sharing Policy Statement (August 2020). Under the policy statement, CCAM agencies agree that Federal grantees should “coordinate their transportation resources where possible, including sharing costs for mutually beneficial transportation services.”

(<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-programs/ccam/about/148581/ccam-cost-sharing-policy-statement.pdf>)

TDOT and OMAT will lead agencies through the application of the cost-sharing tool and provide instructions to make sure the methods systems establish for cost-sharing agreements and prices is consistent.

In addition to maximizing existing funding levels, OMAT will work toward expanding sources of sustainable funding. All State-funded programs that include transportation as part of their services will be surveyed to identify the current level of funding dedicated to consumer transportation. The survey will also clarify the level of service provided to passengers. The results will be shared with the State-level agencies so they can compare program cost-effectiveness and work toward improvements that are achievable through fund braiding. OMAT will investigate opportunities for combining funds from different Federal or State programs to support a transportation service or goal that is shared by multiple agencies or programs.



Finally, OMAT will nurture regional partnerships that fill identified gaps in transportation. This objective is accomplished through the RTAB representation. Action steps are at the regional level but will be reported to OMAT and monitored in a quarterly report. OMAT will examine where, at the State-level, is TDOT creating challenges for partnerships. After identifying challenges, OMAT will work with the Advisory Committee to create and propose a State-agency Memorandum of Understanding (MOU) that includes specific agreements to collaborate. For example, A MOU may allow Area Agencies on Aging and Disability Services to contract with Human Resource Agencies for Mobility Management. If such an agreement could be developed, TDOT will first examine where it may be creating barriers to the agreement and decide what it can do to eliminate those barriers in support of the MOU. Furthermore, OMAT will notify the Advisory Committee to request assistance with resolving any other State-level barriers that are preventing the AAAD and HRA MOU.



**Table 14: Goal 3 Performance Metrics and Implementation Timeline**

Strategic Goal	Objectives	Performance Metrics	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Collaboration:</b> Establish a structure and collaborative culture that maximizes financial resources for transportation across multiple programs and departments	<b>Objective:</b> Identify and maximize sustainable transit funding.	1. OMAT introduces cost-sharing and pricing tool to State agencies that provide funding for transportation. 2. Interested agencies develop cost-sharing agreements. 3. OMAT advises interested agencies as they develop a streamlined invoicing and billing process. 4. TDOT provides direction that ensures systems establish cost-sharing agreements and pricing that is consistent.		1									
	<b>Objective:</b> Expand sources of sustainable funding.	1. OMAT surveys all State-funded programs to identify current transportation-related funding levels, expenses, and levels of service. 2. OMAT presents survey results to State-agencies with a comparison of cost-effectiveness. 3. OMAT works with interested agencies toward more cost-effective transportation structures that could be achieved through fund braiding. 4. OMAT and participating agencies implement new agreements that result in more cost-effective use of transportation resources in Tennessee.		1									
	<b>Objective:</b> Nurture regional partnerships that fill identified gaps in transportation.	1. OMAT supports RTABs through development of regional multi-agency partnerships that offer transportation solutions to the identified gaps. 2. OMAT will identify specific policies or practices that are challenging successful regional partnerships. 3. OMAT will work with other TDOT departments to eliminate or change policies that are preventing successful collaborative transportation services from being implemented at the local level.											

## TECHNOLOGY SOLUTIONS

Transportation services being delivered today were built over decades and based on policies, products, and resources that were available at the time. In recent years, technological advancements have quickly and drastically impacted the way organizations and people function, but service changes have not kept up in the public sector. For example, in the transit industry today, there are advancements in technology that more effectively streamline recordkeeping, reporting, and billing activities, so much so that they reduce the administrative time required by staff. At the same time, riders and potential riders are increasingly expecting transportation services and information to be available at their fingertips on websites and apps.

State agencies must make intelligent technology decisions to facilitate and support advancements in technology that improve safety, accountability, customer service, and cost-efficiency. Goal 4 outlines OMAT's strategic approach to prioritizing public information systems and tools for transportation access.

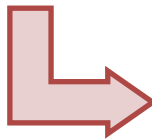
**Goal:** Prioritize user-focused public information systems and tools to diversify access to services.

**Timeline:** 2022 and Ongoing

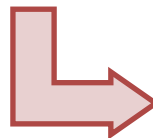
**Action Steps:** As a liaison between the State and the community to support transportation programs across the State in their efforts to implement advanced technology, TDOT will incorporate short- and long-range technology goals into State transportation plans. OMAT will inform lead agencies that are developing regional strategies about the statewide goals and initiatives.

OMAT and TDOT will support intelligent investments in scheduling and dispatching software by determining funding and eligible applicants once a program is selected.

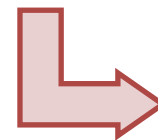
Serve as Liaison  
between State  
and community



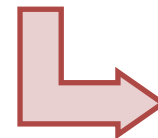
Support smart  
investments



Encourage  
technology that  
promotes user-  
choice



Identify  
technology that  
facilitates  
coordination of  
services



Ensure  
equitable  
access

To encourage technology that allows customers to choose their mobility options and schedule, OMAT will explore the potential for one-call/one-click centers that provide access to information about multiple transportation programs. In doing so, OMAT will identify a potential pilot program and assist with implementing it. Actual implementation will be performed at the local level. Following implementation,

and based upon the lessons learned, OMAT and TDOT will consider expanding the one-call/one-click program.

Next, OMAT will encourage knowledge sharing across public transit systems, human service agency transportation providers, and private transportation companies on technology advancements. OMAT will support efforts to identify technology that facilitates coordination between operators and provides options for multiple services to work together toward meeting transportation needs.

All advancements in technology must be deployed with care to ensure equitable access for all people, including individuals with disabilities. OMAT will work with providers to ensure telephone options are available in addition to app-based services for riders who do not use smartphones. Along with expansions in user-facing technology options, OMAT and the Advisory Committee will support development of effective training programs to teach users about new apps and websites.

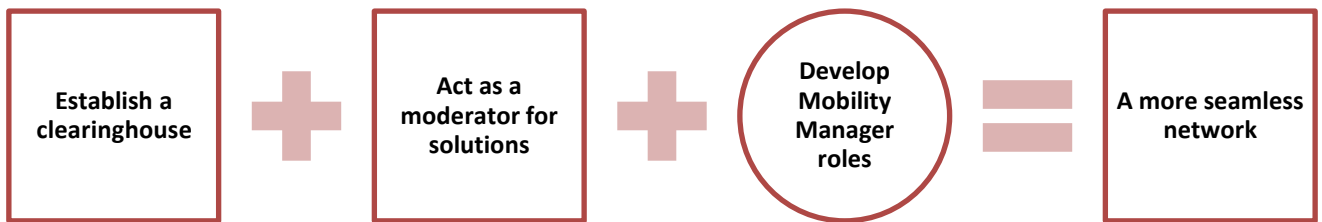
**Table 15: Goal 4 Performance Metrics and Implementation Timeline**

Strategic Goal	Objectives	Performance Metrics	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
<b>Technology Solutions:</b> Prioritize user-focused public information systems & tools to diversify access to services	<b>Objective:</b> Serve as the liaison between the State and the community to support transportation programs across the State in their efforts to implement advance technology.	1. OMAT and TDOT multimodal planning develop short- and long-range technology plans. 2. OMAT participates in development of a statewide transportation technology RFP. 3. When appropriate, OMAT informs RTAB representatives and Mobility Managers about statewide transportation technology initiatives. 4. OMAT informs TDOT multimodal planning, RTABs/ Mobility Managers of regional initiatives related to transportation technology.	1	2	3			4							
	<b>Objective:</b> Support smart investment in scheduling and dispatching software.	1. TDOT develops funding and eligibility guidelines for scheduling and dispatching software. 2. If Section 5310 programs are eligible, OMAT helps facilitate implementation and training for transportation staff.	1	2											
	<b>Objective:</b> Encourage technology that allows customers to choose their mobility option and schedule.	1. A potential pilot for a one-call/one-click center for transportation information (and potentially scheduling) is identified. 2. OMAT and TDOT develop a pilot proposal and plan. 3. One-call/one-click pilot program is implemented and performance measures are established. 4. If successful, potential additional one-call/one-click programs or expansion of the pilot are identified. 5. TDOT will maintain links to public and specialized transportation provider services and the Vanderbilt's Kennedy Center call center on its RTAP or TDOT website.	1	2	3		4						5		
	<b>Objective:</b> Identify technology that facilitates coordination between operators and provides options for multiple services to work together toward meeting transportation needs.	1. OMAT will attend multi-agency meetings and other organized events pertaining to technology that facilitates coordination between programs and centralized information for riders/potential riders. 2. OMAT identifies specific technology platforms that improve coordination and address identified needs. 3. Public transportation information available through centralized information resources is comprehensive and accurate.	1		2	3									
	<b>Objective:</b> Equitable access to technology options.	1. Public transit agencies continue to have telephone options in addition to websites and apps. 2. TDOT provides basic guidelines to transit agencies to ensure selected technology is accessible. 3. OMAT and the Advisory Committee represent the population of older adults and individuals with disabilities to ensure procurement of technology is accessible. 4. OMAT supports development of effective training programs to teach people to use new transportation apps and websites.	1			2	3	4							

## COMMUNICATION

The staff at OMAT has already begun improving communication through its efforts with the Strategic Plan Transportation Workgroup, which met quarterly from mid-2020 through fall of 2021 to discuss transportation accessibility needs for older adults and individuals with disabilities and develop these goals. The Workgroup members agree that one of the most important goals for OMAT is to continue to the successful information sharing activities and create new opportunities for communication. OMAT should make efforts to facilitate communication that leads to a more seamless mobility network for older adults and individuals with disabilities.

**Goal: Facilitate communication and coordination between transportation providers and users for a more seamless mobility network.**



**Timeline: 2022 and Ongoing**

**Action Steps:** OMAT will establish itself as a clearinghouse and moderator for transportation issues and solutions. In doing so, it will develop an online resource/clearinghouse for transportation issues related to older adults and individuals with disabilities. The resources made available through OMAT will include links to HRAs, valuable industry research, locally developed Coordinated Public Transit-Human Services Transportation Plans, mobility managers, RTBs, and more. Some of this information is already available through TDOT’s website or the Rural Transit Assistance Program website. OMAT will continue to organize and share relevant resources with the transit community and, in this way, support the network of information available to consumers and providers.

OMAT will also develop the role for mobility management in Tennessee and provide support to regional Mobility Managers. The Office has been proactive in this goal by administering the Section 5310 Program and expanding it to include Mobility Management as an eligible project. TDOT and OMAT will develop a template job description for mobility managers and a toolkit for potential roles and responsibilities. Local areas will establish actual job descriptions and duties. OMAT will review quarterly reports and facilitate quarterly meetings with regional Mobility Managers to discuss issues and plans. OMAT will encourage Mobility Managers to participate in RTABs.

**Table 16: Goal 5 Performance Metrics and Implementation Timeline**

Strategic Goal	Objectives	Performance Metrics	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
<b>Communication:</b> Facilitate communication and coordination between transportation providers and users for a more seamless mobility network	<b>Objective:</b> Establish and oversee a clearinghouse and moderator for transportation issues and solutions.	1. OMAT creates a link on the TDOT or RTAP webpage with resources for organizations serving older adults and individuals with disabilities and consumers.	1											
		2. OMAT maintains current information on the webpage.						2						
		3. OMAT notifies potentially interested parties about the information available on its webpage and encourages them to add a link to their own webpages.							3					
		4. Number of hits on the webpage resources increases over time.								4				
		5. OMAT responds to user feedback to make improvements to the webpage.									5			
	<b>Objective:</b> Develop the role for mobility management. Support local and regional mobility managers.	1. TDOT and OMAT develop Mobility Manager job description and share it with HRAs.	1											
		2. OMAT reviews quarterly reports and facilitates quarterly meetings to support Mobility Managers.								2				
		3. Mobility Managers participate in and/or lead RTAB meetings.									4			
		4. OMAT develops a Mobility Manager Toolkit and distributes it as a resource.	5											

## TAKING ACTION

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Implementing the strategic plan goals is expected to take multiple years because progressive improvement and change do not happen overnight. Many of the changes in this strategic plan require inter-agency agreements, the development of tools and resources, and technology procurement. Moreover, changing the way agencies communicate requires a paradigm shift for some and a significant adjustment to the calendars and responsibilities of all participating transportation providers and agency directors. These are the same amazing individuals who are already dedicating themselves to improving the lives of older adults and individuals with disabilities. Action steps must be gradual, respectful, and taken with an intentional focus on achieving the goals set out in this plan.

Access to transportation that meets the needs of consumers and potential consumers is at the forefront of livable, sustainable, and safe communities. Effective transportation is proven to promote health and wellbeing because it provides access to vital appointments, work, medical care, and social or recreational activities. Accessible transportation options equate to freedom for people who do not drive and provide choices for people looking for alternatives to driving. The input received throughout the strategic planning process, and the analysis of gaps and demands for services reflects the importance of improving access to transportation.

The way people travel and the choices they make have changed throughout this planning process – and they will continue to change. As the demographics and economic conditions evolve in Tennessee, different pressures and priorities will be placed on its mobility network. Transportation is no longer something that should be provided in silos based on specific funding streams. Instead, it is increasingly important to make the most efficient and effective use of all transportation resources toward meeting a common goal – improved mobility and accessible transportation. The strategic partnerships and leadership provided by OMAT will become increasingly important to coordinate the network of providers and resources. Through strategic oversight and coordination of programs serving older adults and individuals with disabilities, Tennessee will maximize the impact of its available resources.

Along with strategic planning, the service changes described in this plan will require sustainable funding because many solutions will take several years to yield measurable results. OMAT and TDOT will educate and lead participating agencies through discussions and seek agreements that maximize the impact of funding already dedicated to the existing transportation services. The growth component to service solutions will most likely require additional revenue. OMAT will have an important role in identifying areas for future investment that will have the most significant impact on Tennesseans.

## SUMMARY OF GOALS, OBJECTIVES AND ACTION ITEMS

Strategic Goal	Objectives	Action Steps	OMAT Performance Metrics	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
1 Expand Access: Support local solutions for expanding access to transportation services	<p><b>Objective:</b> Oversee updates of Regional Coordinated Transportation Plans with a focus on identifying local issues and solutions to those issues.</p>	<p>OMAT will verify that participation from advocates, providers, and end-users is documented in the plans.</p> <p>OMAT reviews draft final regional plans for rural regions.</p> <p>OMAT will use the local plans to feed statewide initiatives. OMAT will use CCAM information to identify Federal transit funding sources. OMAT will create MOUs that allow for fund braiding when appropriate.</p>	<p>1. Regional CPT-HSTP plans are developed and include priorities.</p> <p>2. Local participation on the CPT-HSTP includes older adults, individuals with disabilities, and key stakeholder organizations from all counties in the region.</p>		1					1			1	
	<p><b>Objective:</b> Develop Regional Transportation Advisory Boards (RTAB) in each region with representation from each county.</p>	<p>TDOT will establish guidelines for RTABs. TDOT, OMAT will be an At Large member on all RTABs. Regional representation must strive to include decision makers from all key stakeholder organizations with responsibilities related to the goals of the CPT-HSTP or other local transportation improvement plans.</p>	<p>1. A pilot RTAB is created with a defined organizational structure, roles and responsibilities, and an annual agenda.</p> <p>2. RTABs are created in each HRA region following the similar structure as the pilot.</p> <p>3. RTAB's achieve annual agenda items and report quarterly progress to OMAT.</p>		1	2								
	<p><b>Objective:</b> Ensure passenger transit is considered in non-transit plans for development. Examples of non-transit plans include complete streets (which often include pedestrian infrastructure); economic development; ADA transition plans; and community needs assessments.</p>	<p>OMAT will provide a framework or toolkit for local Mobility Managers and transit managers. OMAT will encourage transit operators to participate in regional and local planning efforts to ensure transit is considered during the planning phases. Transit operators will keep the RTAB informed of planning efforts and discuss opportunities to influence those plans.</p> <p>OMAT serve in an advisory role to TDOT Multimodal Planning for projects to provide expertise and information pertaining to the accessibility needs for transit riders, pedestrians, bicyclists, older adults and individuals with disabilities. In this way, OMAT will help ensure full integration of multimodal access into projects.</p>	<p>1. Mobility Manager toolkit/framework is developed and distributed.</p> <p>2. OMAT actively contributes to TDOT multimodal planning efforts .</p>		1									
	<p><b>Objective:</b> Establish effective methods of communication within the regions and counties.</p>	<ul style="list-style-type: none"> <li>Consistent marketing plan                             <ul style="list-style-type: none"> <li>Regional or state transportation logo in addition to transit system logo</li> <li>Brochure content and design</li> <li>Website content and design</li> <li>Rider-guide content and design</li> </ul> </li> <li>Partnerships with local agencies that are not public transportation providers for transportation resources and customer comments.</li> </ul>	<p>1. OMAT and Mobility Managers design a marketing and outreach program.</p> <p>2. OMAT and Mobility Managers deploy the approved communication program.</p> <p>3. Public survey feedback indicates awareness of transportation resources and information improves.</p>		1	2	3							



## SUMMARY OF GOALS, OBJECTIVES AND ACTION ITEMS

Strategic Goal	Objectives	Action Steps	Performance Metrics	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
2	Service Solutions: Identify where barriers to transportation overlap and develop quality solutions that meet travelers' needs	<p><b>Objective:</b> Use the Strategic Plan to conduct a regional assessment of barriers and opportunities.</p>	<p>Use resources developed in Goal 1 and through the Gaps/Need Analysis to inform development of quality solutions. Identify priorities and work toward aligning funding/grant opportunities with identified top priority solutions.</p>	<p>1. OMAT will compile the list of barriers that transportation providers face when working to address needs to identify strategies that could have the most impact statewide.</p> <p>2. OMAT will present policy-related barriers to the Advisory Committee and suggest Federal or State-level policy amendments that would enable successful implementation of solutions.</p>	1											
		<p><b>Objective:</b> Standardize transportation safety and quality guidelines among all programs for older adults and individuals with disabilities to be consistent with other transportation funding sources.</p>	<p>TDOT/OMAT will establish Advisory Committee and lead a subcommittee to identify differences in transportation service quality standards/guidelines (i.e., differences between public and senior transportation programs). The subcommittee will take the identified differences to state-level program representatives and propose a standardized alternative. State-level administrators will work with regional and local providers to implement changes.</p>	<p>1. OMAT will establish the Advisory Committee.</p> <p>2. OMAT and a subcommittee of the Advisory Committee will review and identify differences in service quality standards/guidelines among agencies that serve older adults and individuals with disabilities.</p> <p>3. OMAT and the Advisory Committee will propose standardized training and service quality standards to state-level agency administrators and request that all agencies sign a Memorandum of Agreement (MOA) to implement changes that result in standardization of service quality.</p>	1	2										
		<p><b>Objective:</b> Explore the effectiveness of structures to support electric vehicles, and service modes like vanpools and microtransit for first/last mile or multi-jurisdiction trips.</p>	<p>TDOT will continue identify projects that support this objective. OMAT will support TDOT planning decisions through participation in project selection activities. TDOT will move forward with its long-term plan of electric charging stations to facilitate possibilities for electric vehicles.</p>	<p>1. TDOT will identify projects that support this objective and collaborate on project selection activities.</p> <p>2. OMAT will provide information and support to subrecipients and urban transit systems in development of non-traditional transportation solutions that address gaps in access to transportation.</p>			1									
		<p><b>Objective:</b> Explore feasible opportunities to expand eligibility requirements of the volunteer driver programs (i.e., MyRide TN) or create more volunteer programs that include service for individuals with disabilities of any age.</p>	<p>OMAT will coordinate with MyRide TN leadership to develop a proposal to State legislature regarding an expansion of the senior transportation insurance waivers to include protections for volunteer drivers who are transporting individuals with disabilities. OMAT will support MyRide TN in its petition to State legislature for consideration of a new waiver or expansion of the current senior volunteer transportation waiver.</p>	<p>1. OMAT will request MyRide TN or another volunteer transportation program make a presentation to the Accessible Transportation Workgroup regarding the insurance waiver.</p> <p>2. OMAT will assign a subcommittee of the Advisory Committee to explore insurance waivers in other states and develop a white paper and presentation in support of the waiver.</p> <p>3. The Advisory Committee will consult with insurance companies doing business in Tennessee to explore and document opportunities for the waiver.</p> <p>4. The Advisory Committee will make final recommendations regarding the potential support of an expanded waiver.</p>	1	2	3									

## SUMMARY OF GOALS, OBJECTIVES AND ACTION ITEMS

	Strategic Goal	Objectives	Action Steps	Performance Metrics	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
3	Collaboration: Establish a structure and collaborative culture that maximizes financial resources for transportation across multiple programs and departments	Objective: Identify and maximize sustainable transit funding.	OMAT will introduce the cost-sharing pricing tool to other State agencies to encourage providers to put passengers funded by different programs on the same vehicle when feasible - and to do so with a streamlined invoicing and billing process to ensure funders are appropriately billed for service.	<ol style="list-style-type: none"> <li>OMAT introduces cost-sharing and pricing tool to State agencies that provide funding for transportation.</li> <li>Interested agencies develop cost-sharing agreements.</li> <li>OMAT advises interested agencies as they develop a streamlined invoicing and billing process.</li> <li>TDOT provides direction that ensures systems establish cost-sharing agreements and pricing that is consistent.</li> </ol>	1	2	3	4							
		Objective: Expand sources of sustainable funding.	OMAT will survey all State-funded programs that include transportation as part of their services to identify the current level of funding dedicated to consumer transportation. The survey will also clarify the level of service provided to passengers. The results will be shared with the State-level agencies so they can compare program cost effectiveness and work toward improvements that could be achieved through fund braiding. OMAT will investigate opportunities for using funding from different Federal or State Programs to fund a common transportation service or goal.	<ol style="list-style-type: none"> <li>OMAT surveys all State-funded programs to identify current transportation-related funding levels, expenses, and levels of service.</li> <li>OMAT presents survey results to State-agencies with a comparison of cost-effectiveness.</li> <li>OMAT works with interested agencies toward more cost-effective transportation structures that could be achieved through fund braiding.</li> <li>OMAT and participating agencies implement new agreements that result in more cost-effective use of transportation resources in Tennessee.</li> </ol>	1	2	3	4							
		Objective: Nurture regional partnerships that fill identified gaps in transportation.	This objective is accomplished through the RTAB representation. Action steps are at the regional level but will be reported to OMAT and monitored in a quarterly report. OMAT will examine where, at the State-level, is TDOT creating challenges for partnerships. After identifying challenges, OMAT will work with TDOT toward a solution.	<ol style="list-style-type: none"> <li>OMAT supports RTABs through development of regional multi-agency partnerships that offer transportation solutions to the identified gaps.</li> <li>OMAT will identify specific policies or practices within TDOT that are challenging successful regional partnerships.</li> <li>OMAT will work with other TDOT departments to eliminate or change policies that are preventing successful collaborative transportation services from being implemented at the local level.</li> </ol>	1	2	3								

## SUMMARY OF GOALS, OBJECTIVES AND ACTION ITEMS

Strategic Goal	Objectives	Performance Metrics	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032			
4	<b>Technology Solutions:</b> Prioritize user-focused public information systems & tools to diversify access to services	<b>Objective:</b> Serve as the liaison between the State and the community to support transportation programs across the State in their efforts to implement advance technology.	1. OMAT and TDOT multimodal planning develop short- and long-range technology plans. 2. OMAT participates in development of a statewide transportation technology RFP. 3. When appropriate, OMAT informs RTAB representatives and Mobility Managers about statewide transportation technology initiatives. 4. OMAT informs TDOT multimodal planning, RTABs/ Mobility Managers of regional initiatives related to transportation technology.	1	2	3		4								
		<b>Objective:</b> Support smart investment in scheduling and dispatching software.	1. TDOT develops funding and eligibility guidelines for scheduling and dispatching software. 2. If Section 5310 programs are eligible, OMAT helps facilitate implementation and training for transportation staff.	1	2											
		<b>Objective:</b> Encourage technology that allows customers to choose their mobility option and schedule.	1. A potential pilot for a one-call/one-click center for transportation information (and potentially scheduling) is identified. 2. OMAT and TDOT develop a pilot proposal and plan. 3. One-call/one-click pilot program is implemented and performance measures are established. 4. If successful, potential additional one-call/one-click programs or expansion of the pilot are identified. 5. TDOT will maintain links to public and specialized transportation provider services and the Vanderbilt's Kennedy Center call center on its RTAP or TDOT website.	1	2	3		4						5		
		<b>Objective:</b> Identify technology that facilitates coordination between operators and provides options for multiple services to work together toward meeting transportation needs.	1. OMAT will attend multi-agency meetings and other organized events pertaining to technology that facilitates coordination between programs and centralized information for riders/potential riders. 2. OMAT identifies specific technology platforms that improve coordination and address identified needs. 3. Public transportation information available through centralized information resources is comprehensive and accurate.	1		2	3									
		<b>Objective:</b> Equitable access to technology options.	1. Public transit agencies continue to have telephone options in addition to websites and apps. 2. TDOT provides basic guidelines to transit agencies to ensure selected technology is accessible. 3. OMAT and the Advisory Committee represent the population of older adults and individuals with disabilities to ensure procurement of technology is accessible. 4. OMAT supports development of effective training programs to teach people to use new transportation apps and websites.	1		2	3		4							

## SUMMARY OF GOALS, OBJECTIVES AND ACTION ITEMS

	Strategic Goal	Objectives	Action Steps	Performance Metrics	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
5	Communication: Facilitate communication and coordination between transportation providers and users for a more seamless mobility network	Objective: Establish and oversee a clearinghouse and moderator for transportation issues and solutions.	OMAT will develop an online resource/clearinghouse for transportation issues related to older adults and individuals with disabilities. The resources will include links to HRAs, valuable industry research, locally developed Coordinated Plans, mobility managers, RTABs, and more.	<ol style="list-style-type: none"> <li>1. OMAT creates a link on the TDOT or RTAP webpage with resources for organizations serving older adults and individuals with disabilities and consumers.</li> <li>2. OMAT maintains current information on the webpage.</li> <li>3. OMAT notifies potentially interested parties about the information available on its webpage and encourages them to add a link to their own webpages.</li> <li>4. Number of hits on the webpage resources increases over time.</li> <li>5. OMAT responds to user feedback to make improvements to the webpage.</li> </ol>	1										
		Objective: Develop the role for mobility management. Support local and regional mobility managers.	TDOT and OMAT will develop a template job description for mobility managers defining potential roles and responsibilities. Actual job descriptions and duties will be established by the local areas. MAT will review quarterly reports and facilitate quarterly meetings with regional Mobility Managers to discuss issues and plans. OMAT will encourage Mobility Managers to participate in the RTABs. OMAT will develop a Mobility Management Toolkit as a resource to help Managers get started and as an ongoing resource for their growth and development.	<ol style="list-style-type: none"> <li>1. TDOT and OMAT develop Mobility Manager job description and share it with HRAs.</li> <li>2. OMAT reviews quarterly reports and facilitates quarterly meetings to support Mobility Managers.</li> <li>3. Mobility Managers participate in and/or lead RTAB meetings.</li> <li>4. OMAT develops a Mobility Manager Toolkit and distributes it as a resource.</li> </ol>	1										

Mobility and Accessible Transportation  
Strategic Plan  
Appendix

**PUBLIC SURVEY FOR TDOT OFFICE OF MOBILITY AND ACCESSIBLE TRANSPORTATION**

Hello! This survey is part of an important study about transportation needs for older adults and individuals with disabilities. Specialized transportation includes services that you may be familiar with such as public transit or the ride provided by your employer, an agency, or senior services program. This survey will be used to plan for improvements over the next 5+ years to the network of transportation options available in the state. Information will be used by Tennessee Department of Transportation's Office of Mobility and Accessible Transportation. Survey results will be analyzed and presented in the aggregate. Individual respondents will not be identified. We will take less than 5 to 10 minutes of your time with these questions.

---

1. **Where do you live? Please provide your Zip Code:**  
\_\_\_\_\_
  2. **Do you have regular access to the following technologies? Please select all that apply.**
    - a. Internet service
    - b. A landline or home phone
    - c. A cell phone
    - d. A computer
  3. **Which type of transportation do you use most often? Please select all that apply.**
    - a. Public transit bus routes
    - b. Public transit paratransit or dial-a-ride
    - c. Public transit train
    - d. Volunteer driver program
    - e. Senior program transportation services (i.e., to/from the senior center, to medical appointments, shopping, etc.)
    - f. Medicaid-sponsored transportation
    - g. Transportation provided by your employer or work center
    - h. Transportation provided by an agency
    - i. Rides from someone you know (ex. friend or family member)
    - j. Taxi/Uber/Lyft
    - k. Bike or Scooter-share
    - l. Driving your personal vehicle
    - m. Other: \_\_\_\_\_
    - n. Not Applicable
  4. **How satisfied are you with the transportation services you regularly use?**
    1. Not Satisfied – I do not have access to transportation services that meet my needs. I almost never have a ride when I need it.
    2. Somewhat Satisfied – It only meets some of my transportation needs but I still need a ride and do not have one for most of my trip needs.
    3. Satisfied – I am satisfied with the available transportation services and they meet my essential transportation needs but not all of my needs.
    4. Extremely Satisfied – I am able to meet all of my transportation needs using my transportation provider.
  5. **How do you find information about available transportation services if you need them for yourself, a relative, or friend?**
    - a. Call your county/ local government or community center
    - b. Call your local public transit provider
    - c. Contact Tennessee 211
    - d. Search the internet
    - e. Ask a case manager
    - f. Ask a friend or relative
    - g. Other \_\_\_\_\_
  6. **Do you ever need a ride and not have one?**
    - a. Yes
    - b. No
- If yes, please answer the following questions:**
- c. What time do you need a ride and not have one?  
\_\_\_\_\_
  - d. What day(s) of the week do you need a ride and not have one? \_\_\_\_\_
  - e. Where do you need to go but do not have a ride? Please select all that apply.
    - i. Medical appointments (i.e., doctor, dialysis, dentist, medical clinic)
    - ii. Work
    - iii. School
    - iv. Essential errands (i.e., grocery shopping, banking, haircuts)

- v. Community programs (i.e., meals, senior programs, etc.)
- vi. Agency/Case manager appointments or counseling sessions
- vii. Addiction and recovery-related appointments
- viii. Other (please specify): \_\_\_\_\_

**7. How often do you ask a friend or family member drive you on an errand or essential trip?**

- a. 5 to 7 days a week
- b. 3 to 4 days a week
- c. 1 to 2 days a week
- d. Less than once a week but more than once a month
- e. Once a month
- f. Less than once a month

**8. How much do you spend on your personal transportation per month (or that of the individual you are representing in this survey, such as a child, parent, or grandparents)?**

- a. Less than \$20
- b. \$21 to \$50
- c. \$51 to \$100
- d. \$101 to \$150
- e. \$151 to \$200
- f. \$201 or more

**9. Do you have a mobility limitation that limits your ability to walk to a bus stop and/or board a vehicle without assistance?**

- a. Yes
- b. No

**10. What is your age?**

- a. Under age 18
- b. 19-39
- c. 40-54
- d. 55-59
- e. 60-64
- f. 65 or older

**11. How many people live in your household?**

- a. Number of Adults: \_\_\_\_
- b. Number of Children age 18 or under: \_\_\_\_

**12. What is the combined yearly income of everyone in your household?**

- a. Less than \$12,500
- b. \$12,500 to \$20,500
- c. \$20,600 to \$30,000
- d. \$30,100 to \$35,000
- e. \$35,100 to \$40,000
- f. \$41,000 to \$45,000
- g. \$45,100 to \$55,000
- h. \$55,100 to \$65,000
- i. \$65,100 to \$75,000
- j. \$75,100 or higher

**16. Please describe what transportation options work well for older adults and individuals with disabilities in your city/town, county, or region.**

**17. Please describe specific transportation needs and challenges for older adults and individuals with disabilities in your city/town, county, or region.**

**18. Please describe any potential solutions that you believe should be explored to increase mobility and accessible transportation in your region.**

**19. Please share any additional thoughts about transportation for individuals with disabilities and older adults.**

# Appendix B - Transportation Provider Survey

## TDOT Office of Mobility and Accessible Transportation Strategic Plan Provider Survey

The Office of Mobility and Accessible Transportation of the Tennessee Department of Transportation is conducting a Strategic Plan to help determine its vision and goals for improving access to transportation resources.

Transportation providers that operate public and human service agency transportation in Tennessee connect people in urban, rural, and suburban areas to the services and resources they need for daily life. Public and human service agency transportation is the only resource for many people and a choice for others. Access to safe, reliable transportation leads to opportunity and freedom. It opens up opportunities for employment, medical care, nutrition, entertainment, and connectivity to wherever we need to go.

You are invited to participate in this survey designed to identify and quantify the gaps in available transportation resources for older adults, individuals with disabilities, and people with low incomes. The following survey questions ask about the experiences of human service agencies and transportation providers in meeting transportation needs of their local communities and regions. This survey includes questions about transportation operations, unmet needs, and visions for the future. It applies to agencies that do not operate transportation as well as those who do.

Please take time to complete this important survey for the Tennessee Office of Mobility and Accessible Transportation so that they may develop the most accurate Strategic Plan goals possible. The survey will take approximately 10 to 25 minutes to complete. Thank you in advance for your time.

Please complete the survey by February 20, 2021. If you have any questions about the survey, please feel free to contact Kjirsten Frank-Hoppe at [kfrankhoppe@rlsandassoc.com](mailto:kfrankhoppe@rlsandassoc.com) or by phone at (937) 299-5007.

Thank you in advance for taking the time to participate in this important effort to improve the Department of Transportation's funding of transportation services.

### 1. Contact Information

<b>Name</b>	<input type="text"/>
<b>Title</b>	<input type="text"/>
<b>Email Address</b>	<input type="text"/>
<b>Phone Number</b>	<input type="text"/>

### 2. Agency Name and Address

<b>Agency</b>	<input type="text"/>
<b>Address</b>	<input type="text"/>
<b>Address 2</b>	<input type="text"/>
<b>City/Town</b>	<input type="text"/>
<b>State/Province</b>	<input type="text"/>
<b>ZIP/Postal Code</b>	<input type="text"/>



3. What is your organization's authority?

- Public, non-profit
- Private, non-profit
- Private, for-profit
- Other (please specify)

4. Who is eligible for your agency's services? Please select all that apply.

- There are no eligibility requirements - anyone can use our services
- Age 65 and Older
- Age 60 and Older
- Individual with disabilities
- People with low incomes/poverty
- Youth
- Only local residents (i.e., living within the local county or region)
- Other (please specify)

5. How do people travel to desired locations in your local area? Please select all that apply.

- Driving
- Taxi or other on-demand transportation service (i.e., Uber or Lyft)
- Hiring a private van
- Human service agency program
- Volunteers
- Family member/Friend drives them
- Public transit
- Not getting there
- Unknown
- Other (please specify)

6. To your knowledge, do individuals living in your service area have adequate access to transportation services that offer wheelchair accessible vehicles?

Yes

No

If no, what are the limitations of the existing wheelchair accessible services? (Examples might be that there are not enough providers, there are no services in the evenings or on weekends, the cost to the passenger is too expensive, reservations are required too far in advance, etc.)

## TDOT Office of Mobility and Accessible Transportation Strategic Plan Survey

(Questions 7-20): On a scale of 1 to 5 (with 1 meaning "not a problem" and 5 meaning "this needs to be addressed ASAP"), please rate the following challenges for older adults, individuals with disabilities, and people with low incomes with accessing transportation resources in your service area. Please consider not only the services your agency offers but also services operated by other organizations in your community.

7. Reservations require too much advance notice

1 5

8. No/Not enough wheelchair accessible vehicles are available on weekdays

1 5

9. No/Not enough wheelchair accessible vehicles are available on weekends or evenings

1 5

10. No/Not enough wheelchair accessible sidewalks and/or bus stops

1 5

11. People are not aware of their transportation options

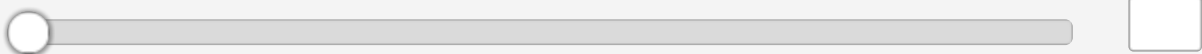
1 5

12. Employment locations are outside of the local public or agency-sponsored transportation service area

1 5

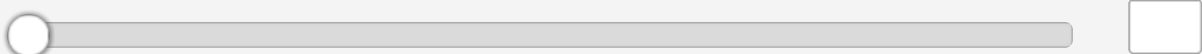
13. Medical or other services are outside of the local public or agency-sponsored transportation service area

1 5



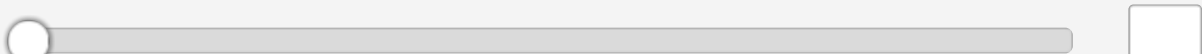
14. The cost of riding available transportation is too high for the passenger to afford on a regular basis (i.e., for employment)

1 5



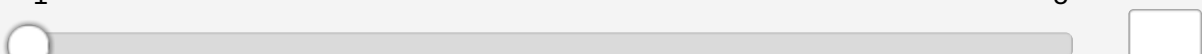
15. Transportation services are not considered to be reliable or safe

1 5



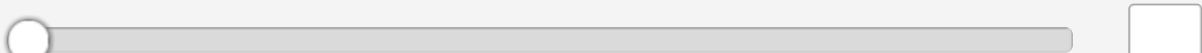
16. Transportation is not available where people who need it live

1 5



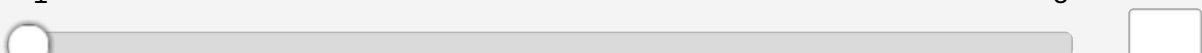
17. Transportation is not available to the places where people need to go

1 5



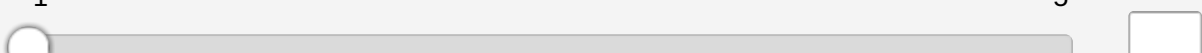
18. Transportation is not available during the days or hours when people need it

1 5



19. The level of passenger assistance that people need is not available (i.e., they need door-through-door or help with navigating at their destination)

1 5



20. Passengers have difficulty transferring between providers (i.e., at the county line)

1 5

## TDOT Office of Mobility and Accessible Transportation Strategic Plan Survey

21. Please list the name and location (address) of the top 10 most common destinations your customers visit or need to visit, including your own agency, for any reason (social, employment, medical, housing, etc.). Please be as specific as possible.

This information is key to the purpose of the Strategic Plan. It is important to identify the places where people most often need to go.

22. Based on customer and staff feedback, what are the most important unmet transportation needs in the communities you serve and the surrounding areas?

23. In your opinion, what should be the focus of mobility management programs or initiatives to improve access to transportation options in your region and the state?

24. What percentage of your agency's customers use public transportation on a regular basis?

25. If they are not using public transportation, why not? Please select one or up to the top three reasons you've heard.

- Difficult to schedule trips with the public transportation providers
- Trips are not reliable for being on-time
- Trips are not available when needed
- Trips are not available to and/or from the the locations the rider needs
- Travel time is too long on public transportation
- Riders need to make trip requests with short notice and public transportation doesn't allow or accommodate it
- Riders are more comfortable or familiar with our agency's drivers and vehicles
- Riders need specialized services not available from the public transportation providers
- Bus stops/sidewalks are not accessible
- Many of our riders cannot navigate the public transit system due to a disability
- There is no public transportation in our local area
- Other (please specify)

\* 26. Does your organization directly purchase, operate or arrange transportation for clients or the public?

- Yes
- No

## TDOT Office of Mobility and Accessible Transportation Strategic Plan Survey

27. What are the geographic service area boundaries of your transportation program (i.e., specific county or city boundaries)?

28. Which of the following criteria must a passenger meet to be eligible for your transportation services? Please select all that apply.

- Anyone is eligible for our transportation services (general public)
- Seniors age 65 and Older
- Seniors age 60 and Older
- Individuals with disabilities
- People with low incomes/poverty
- Youth
- Only people registered for our agency's programs can use our transportation services
- ECF Choices program transportation eligible individuals
- Other Medicaid transportation program eligible individuals
- Other (please specify)

29. Please list the name and location (address) of the top 10 most frequently served locations in your service area. Please be as specific as possible.

This information is key to the purpose of the Strategic Plan. It is important to identify the places where people most often need to go. Ultimately, these locations will appear as dots on a regional or statewide map. No actual addresses will be identifiable. If you have the ability to email recent sample trip log without names or identifying information for the passenger for a two-week period, please share that log with [kfrankhoppe@rlsandassoc.com](mailto:kfrankhoppe@rlsandassoc.com).



30. Similar to the previous question, please use the space below to list the top 10 locations that people in your service area want or need to access but are outside of your service area or are difficult to serve and you cannot provide the trips. Please be as specific as possible.

31. Which mode of transportation best describes your methods of service delivery? Please select all that apply.

- Fixed route (fixed path, fixed schedule, with designated stops)
- Demand response (includes casual appointments and regular clients attending daily program activities)
- On-demand/immediate response (no advance reservation required)
- Route deviation
- Inter-city routes
- Other (please specify)

32. In what manner does your organization directly purchase, contract, operate, or arrange transportation?  
Please select all that apply.

	Services for the General Public	Client Only Services
Personal vehicles of agency staff	<input type="checkbox"/>	<input type="checkbox"/>
Agency employees using agency owned fleet vehicles	<input type="checkbox"/>	<input type="checkbox"/>
Provide pre-paid tickets, tokens, passes for other transportation provider services	<input type="checkbox"/>	<input type="checkbox"/>
Reimburse mileage or auto expenses to clients, families, or friends for eligible program activities	<input type="checkbox"/>	<input type="checkbox"/>
Volunteer drivers	<input type="checkbox"/>	<input type="checkbox"/>
Provide information and referral about other community transportation resources	<input type="checkbox"/>	<input type="checkbox"/>
Contract with other transportation provider(s) to operate the service. This includes Medicaid and non-Medicaid contracts	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

33. Define the level of passenger assistance provided for users of your transportation service. Please select all that apply.

- Curb-to-Curb (i.e., drivers will assist passengers in and out of the vehicle only)
- Door-to-door (i.e., drivers will assist passengers at the destination, such as taking the passenger into the waiting room at the medical office)
- Drivers are permitted to assist passengers with a limited number of packages
- Drivers are permitted to assist passengers with an unlimited number of packages
- We provide personal care attendants or escorts to those passengers who require such services
- Passengers are permitted to travel with their own personal care attendants or escorts

\* 34. Does your organization provide transportation services 24 hours a day, 7 days a week?

- Yes
- No

## TDOT Office of Mobility and Accessible Transportation Strategic Plan Survey

35. What are the daily hours and days of operation for your transportation services? Check days and list hours of operation in the space provided.

Monday (Start time)

Time AM/PM  
hh mm -

Monday (End time)

Time AM/PM  
hh mm -

Tuesday (Start time)

Time AM/PM  
hh mm -

Tuesday (End time)

Time AM/PM  
hh mm -

Wednesday (Start time)

Time AM/PM  
hh mm -

Wednesday (End time)

Time AM/PM  
hh mm -

Thursday (Start time)

Time AM/PM  
hh mm -

Thursday (End time)

Time AM/PM  
  -

Friday (Start time)

Time AM/PM  
  -

Friday (End time)

Time AM/PM  
  -

Saturday (Start time)

Time AM/PM  
  -

Saturday (End time)

Time AM/PM  
  -

Sunday (Start time)

Time AM/PM  
  -

Sunday (End time)

Time AM/PM  
  -

## TDOT Office of Mobility and Accessible Transportation Strategic Plan Survey

36. What are your typical peak hours of operation (the hours when you have the highest demand for transportation service)?

Monday (Peak start)

Time AM/PM  
hh mm - 

Monday (Peak end)

Time AM/PM  
hh mm - 

Tuesday (Peak start)

Time AM/PM  
hh mm - 

Tuesday (Peak end)

Time AM/PM  
hh mm - 

Wednesday (Peak start)

Time AM/PM  
hh mm - 

Wednesday (Peak end)

Time AM/PM  
hh mm - 

Thursday (Peak start)

Time AM/PM  
hh mm - 

Thursday (Peak end)

Time AM/PM  
  -

Friday (Peak start)

Time AM/PM  
  -

Friday (Peak end)

Time AM/PM  
  -

Saturday (Peak start)

Time AM/PM  
  -

Saturday (Peak end)

Time AM/PM  
  -

Sunday (Peak start)

Time AM/PM  
  -

Sunday (Peak end)

Time AM/PM  
  -

## TDOT Office of Mobility and Accessible Transportation Strategic Plan Survey

37. Are your transportation services typically used to capacity during peak weekday travel times?

Yes

No

38. How many vehicles do you typically operate during peak hours of service?

Number of wheelchair  
accessible vehicles  
operating during peak  
hours

Number of non-accessible  
vehicles operating during  
peak hours

39. How many vehicles are actively operating during off peak hours of service?

40. How many back-up vehicles do you have in the fleet? (Back up vehicles are your reserve fleet to access only when you need to replace another vehicle for some reason, such as a breakdown, accident, etc.)

Accessible vehicles

Non-accessible vehicles

41. How many one-way trips did your agency provide during FY2019 and FY2020?

*A one-way trip is from the pick-up to drop-off location. The return trip is counted as a separate one-way trip. For example, if a passenger rides from home to the doctor and back home, he or she will have completed two one-way trips.*

Total (or Estimated)  
Number of one-way trips  
provided (FY2019)

Percent of total trips  
required an accessible  
vehicle (FY2019)

Total (or Estimated)  
Number of one-way trips  
provided (FY2020)

Percent of total trips  
required an accessible  
vehicle (FY2020)

42. Is there a cost to the individual rider (fare, fee or suggested donation) to use your transportation services?

Yes

No

If yes, what is the passenger fare, fee, or suggested donation amount?

43. What types of payment can passengers use to pay the fare (i.e., cash, taken, fare card, etc.)?

44. What are your transportation operating revenues (Actual or Estimated, FY2020)?

Fares Collected from  
Passengers Through  
Cash, or Tickets/Tokens  
Purchased by Passengers  
(Include Client Fees and/or  
General Public Fares  
Here)

Reimbursements for  
Services Obtained from  
Third Parties (e.g.,  
Medicaid  
Reimbursements, Title III-  
B)

Local Government

State Government

Federal Transit  
Administration

Other

**Total Transportation  
Revenues - Total**

45. What are your transportation operating and capital expenses (Actual or Estimated, FY2020)?

**Total Operating  
Expenses**

**Total Transportation  
Operating and Capital  
Expenses**

46. What courses are required and provided for your driver training program? Please list all required courses.



47. Do you require background checks for drivers and schedulers?

Yes

No

If yes, how often are the background checks updated?

48. Do you have any other feedback that you would like to provide?

## APPENDIX C – SUMMARY OF IDENTIFIED NEEDS

### Summary of Needs and Challenges Identified in by Stakeholders

Participants of the nine regional virtual focus group meetings held statewide were asked to discuss their transportation challenges and unmet needs, and then to suggest potential solutions that they believe to be most appropriate. Meeting participants included transportation providers, local government organizations, non-profit agencies, and members of the public. Common needs and challenges faced by attendees are listed below in order of most to least often mentioned.

- ◆ In every region, stakeholders expressed the need for expanded services; more and/or varied transportation options, particularly in rural areas; more frequency of fixed route service; and more vehicles (and drivers) to provide scheduled ride and on-demand service.
- ◆ Many communities are left unserved because of jurisdictional service area boundaries honored by the transit systems – particularly suburban and exurban job centers.
- ◆ Stakeholders also indicated that there are gaps in access to transportation for younger adults or individuals who are not clients of particular agencies. The gaps are created by eligibility requirements that are typically tied to local agency policies or Federal funding requirements.
- ◆ Personal assistance is needed for individuals who have difficulty navigating a trip on their own. This higher level of assistance is not needed for every passenger but it is the difference between being able to travel or staying home for some. The types of extra assistance mentioned during the meetings included:
  - escorts or travel companions;
  - assistance getting from the door of the pick-up or drop-off location to/from the vehicle;
  - assistance with through-the-door service by providing assistance from inside the pick-up and through the door of the drop-off location;
  - assistance getting on and off the vehicles;
  - assistance with packages or special shopping runs;
  - family access with multiple kids or when using a car seat; and,
  - crisis services for emergency weather (bringing supplies) or emergency health conditions (stretcher service, waiting in pain for an ‘advance schedule’ ride, and rides home after discharge).
- ◆ Regional, intercounty, and out-of-state transportation is a challenge, including getting between rural destinations which are far away and may require a higher fare that is unaffordable for the passenger; getting from rural areas into a central city for services; and finding work across a city/county/state line and not being able to get there.
- ◆ In most rural areas of Tennessee, regional transportation is available but the public misperception may be that services do not exist, are available only to those who meet certain eligibility, or are too expensive.
- ◆ In the suburban and exurban areas, service area boundaries of the fixed route system that serves the urban core present many challenges to individuals who need to travel to and from the city or within the suburban/exurban communities that are beyond the transit service area.

- ◆ Trip scheduling discussions raised the need for on-demand transportation so that passengers can make same-day trips. Most demand response transportation services require a reservation at least one day and sometimes several days in advance of the trip.
- ◆ Reliability of transportation was raised repeatedly as a concern. Passengers need on-time service, especially when traveling to and from work or for medical appointments.
- ◆ In some areas, passengers expressed concerns about the complaint/resolution process.
- ◆ Passengers need transportation that is flexible enough to allow them to run multiple errands, even when sharing rides. Chaining trips (ex. going to multiple medical providers on a trip to the city, getting prescriptions after a doctor's appointment, running several errands) would help passengers complete necessary errands in a single day. Currently, the travel time or wait time for a vehicle can make the trip so long that only one appointment can be accomplished.
- ◆ Customer service is also an issue. Concerns were expressed about schedulers/dispatchers not being helpful, and there was a frequent concern from people scheduling trips to work that they will be bumped due to prioritized medical trips.
- ◆ Accessible community infrastructure is needed such as sidewalks, crosswalks, accessible bus stops/pads/shelters, accessible traffic signals, curb ramps and other ramps for access to buildings.
- ◆ First/last mile infrastructure is needed to address bus stops that are a mile or more from the destination which may be too far to walk for some individuals or the distance from the bus stop to the destination is not pedestrian friendly. Pedestrian safety was a distinct concern, separate but hand-in-hand with the need for ADA accessibility in all development.
- ◆ Non-emergency medical Transportation needs included improvements to Medicaid transportation services provided through TennCare such as:
  - monitoring provider on-time performance;
  - reducing the long wait-time for pick-up after appointments;
  - lack of transportation for non-emergency medical and behavioral health care;
  - difficulties of recurring trips such as dialysis;
  - lack of coordination between the Veterans Affairs medical facilities and other services regarding transportation;
  - grouping or chaining trips (also mentioned in scheduling);
  - emergency health issues (mentioned in service enhancements); and,
  - the location of many medical offices in inaccessible areas.
- ◆ The lack of affordable transportation for early shift/2<sup>nd</sup> shift/weekend work is a barrier for potential employees. Also, when transportation is available, the length of trips with multiple riders to drop off makes the commute time excessive. Finally, many industrial parks are not located in areas that are easily accessible by public or shared-ride transportation services.
- ◆ Funding for service included discussion around providing a living wage to retain drivers, and the need for coordination to match funding from different programs (TANF for example, or insurance benefits), and addressing funding match dictating service boundaries.
- ◆ Service hours and days need to be expanded to cover early shift starts, 2<sup>nd</sup> and 3<sup>rd</sup> shift schedules, and weekends. In areas that have seasonal service, year-round options are needed.

Many participants described unmet needs for shopping, community, and religious trips that are outside of transit service hours, which can start as late as 9 a.m. and end as early as 4:30 p.m.

- ◆ Cost to the consumer and the need for affordable transportation options where Transportation Network Companies (TNCs like Uber and Lyft) and taxis are expensive for long trips, and where programs only support limited transportation. In reverse, some people are used to paying a transit rate for trips and will not spend more for private options, relying instead on family or friends, who may not be dependable. There is also a high cost when using multiple services for legs of a long trip.
- ◆ Availability of service information was lacking. Access to online scheduling or a one-call service is needed for people with visual impairments and others with disabilities. Discussion also highlighted the need for sharing information and accountability of service providers with elected officials at the local and state levels to demonstrate the value (and underfunding) of public transit.
- ◆ Issues around mixing passengers from different programs focused more on the delays from picking up and dropping off multiple riders, lengthening trip times dramatically, but also mentioned constraints where multiple people from the same household qualify for different services and must take separate vehicles. Shared rides also produce anxiety for the riders who feel vulnerable. One participant represented a non-profit program that was working with Department of Intellectual and Developmental Disabilities to provide on-demand/TNC-style service, but was looking for partners to pool funds and rideshare.
- ◆ Vehicle accessibility was mentioned as a need, including wheelchair equipped vehicles with ramps or lifts, particularly for use by volunteer programs and TNCs. Households are challenged if they do not have a personal vehicle available or individuals cannot drive.
- ◆ Transit vehicles are not equipped for hazardous weather, particularly now (during COVID) that they are not driving full of passengers.
- ◆ The need for electric transit vehicles was raised, as they are available to large systems, but not to small agencies.

Other important issues that were frequently mentioned include the following:

- ◆ Communication & coordination between providers would improve service.
- ◆ Volunteer programs need additional drivers and a way to accommodate wheelchair-users.
- ◆ Political climate that ignores or de-prioritizes transit and other public transportation creates underfunding. Information is needed to address lack of government/political support.
- ◆ Driver shortages are caused by a need for living wages, and the difficult conditions the drivers must deal with, including long days, difficult or unsatisfied riders, and a need for enhanced training and services.
- ◆ Medical offices are moving outside of Davidson County making it difficult to transport people from Davidson County to destinations in adjacent counties.
- ◆ Business opportunities to get additional TNCs, accessible start-ups, and sponsored employment transportation are needed and should be supported.
- ◆ Some participants indicated they do not feel safe or may be uncomfortable using their transportation service options.

- ◆ There is a lack of understanding about who can ride. Some people think public transit services are only for older adults.
- ◆ Two-way communication is needed. People need to understand what transit can and can't do within FTA regulations, and that improved services will require additional funding or reallocation of current funding from some other area of service.

## APPENDIX D - PUBLIC SURVEY COMMENTS ABOUT SPECIFIC TRANSPORTATION NEEDS

Survey respondents were invited to list specific transportation challenges or unmet needs that they experience. A complete list of responses is included in the appendix. In summary, the comments addressed user concerns about safety when walking to/from the bus stop; lack of reliability; and limited access created either by the transportation providers hours of operation or the level of personal assistance provided by drivers.

I am not able to cross county lines using my transportation option.

The cost of transportation is too high.

Public transportation, specifically for those with disabilities, is not reliable.

I am concerned for my safety.

We need bus shelters and longer timed crosswalk lights.

The wait time before and after a doctor's appointment can be over an hour each time. It is difficult for many individuals not be up and active for an hour before an appointment, an hour for the appointment, and another hour after while they wait for the vehicle.

There are not many options in the rural area.

Buses do not run where I live or where I need to go and I cannot get to a bus stop.

If shopping, I cannot haul all of my groceries on a bus.

It is hard to get on and off the vehicle sometimes.

The bus route takes too long and does not run during nights or weekends.

I need assistance getting out the door of my house, assistance getting in the car and out, and getting items off the shelf at the store.

I need affordable and reliable transportation that goes outside my county.

Lyft and Uber are not an option because these vehicles are not accessible and drivers do not provide assistance.

I don't have anyone to drive me.

There are only 2 cities in the counties that I cover in northeast TN that have a public bus system, which are Johnson City and Kingsport. The hours and days for these buses are limited to weekdays during business hours. The only form of transportation for most of my clients is NET Trans, and that is cost prohibitive for a lot of my clients, who are all disabled. While they are my client, I can pay for the tickets, for activities that are related to their program, but not for personal transportation. My clients are not often able to utilize Uber or Lyft, if that is even available in their area. They can't do cell phone apps and computers, and it is cost prohibitive. There are only 2 cab companies and they are unreliable and cost prohibitive. There are no good options for the disabled in northeast TN unless you have more money than most of my disabled clients have.

Many older adults and those with mobility disabilities need on-call transportation for needs that fall outside of the constraints of specific times with the other seniors' Transportation services currently being provided.

Transportation needs to be developed where it is available 24/7. Employment for example does not just occur Monday/Friday from 8-4. People of all abilities need to have the means to get to and from work as this will further assist their growth financially thus improving other aspects of their lives. NWTHRA and our agency assist many in the area but the way we are set up to operate and/or are funded limits the outreach we can provide. People in general who depend on public transportation face such a disadvantage to full inclusion in their communities simply because they cannot get to and from. This creates a poor quality of life and has a devastating effect on their emotional well-being.

We need transportation for errands, MD appts, church, visiting friends, supplies. We need late in the day rides because sometimes it takes a while to get going.

Just people like me without a car or can't drive needing to get groceries or heating oil and can't afford to pay much for transportation.

Current public transport is very limited and does not go door-to-door. Many clients need door-to-door, and sometimes need help getting on the bus or van.