

***HUMAN SERVICES
TRANSPORTATION
COORDINATION PLAN 2020***

Knoxville Regional Transportation Planning Organization

Human Services Transportation Coordination Plan 2020

This report was prepared in cooperation with the U.S. Department of Transportation, Federal Highway Administration, Federal Transit Administration, and the Tennessee Department of Transportation.

Approved: November 25, 2020

Prepared by:
Knoxville-Knox County Planning
Knoxville Regional Transportation Planning Organization

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**A RESOLUTION BY THE EXECUTIVE BOARD
OF THE KNOXVILLE REGIONAL
TRANSPORTATION PLANNING ORGANIZATION
ADOPTING
THE HUMAN SERVICES TRANSPORTATION COORDINATION PLAN**

WHEREAS, the Fixing America's Surface Transportation (FAST) Act requires that projects funded from the Federal Transit Administration (FTA) Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities program be derived from a locally-developed human services transportation coordination plan; and

WHEREAS, the Knoxville Regional Transportation Planning Organization (TPO) is the designated recipient of Federal Transit Administration (FTA) Section 5310 funds for the Knoxville urban area; and

WHEREAS, the FTA Section 5310 program requires that the plan be developed through a process that includes input from seniors, individuals with disabilities, persons of low-income, representatives of public, private, and nonprofit transportation, human services providers, and other members of the public; and

WHEREAS, a variety of public input opportunities were afforded to representatives of the above-mentioned parties, including surveys, meetings with various organizations and advisory committees, personal interviews, and having the draft HSTCP 2020 available in advance for public review; and

WHEREAS, the HSTCP 2020 encourages a higher level of transportation coordination recognizing that no one agency can accomplish the strategies alone, but by working together transportation can be provided more efficiently to the community and to those that need it the most; and

WHEREAS, as the TPO holds an open project selection process when allocating the FTA Section 5310 funds and it will verify the projects funded are in-keeping with the strategies of the HSTCP 2020; and

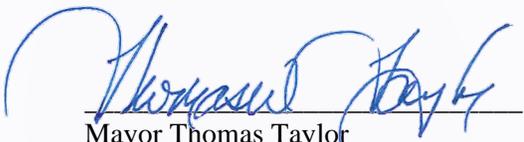
WHEREAS, the Technical Committee has recommended to the Executive Board adoption of Knoxville Regional Transportation HSTCP 2020.

NOW, THEREFORE, BE IT RESOLVED BY THE KNOXVILLE REGIONAL TRANSPORTATION PLANNING ORGANIZATION EXECUTIVE BOARD:

That the Knoxville Regional Human Service Transportation Coordination Plan 2020 be adopted.

November 25, 2020

Date



Mayor Thomas Taylor
City of Maryville
TPO Executive Board Chair



Jeffrey A. Welch, AICP
Director
Knoxville Regional TPO

Section One: Introduction

The purpose of the Human Services Transportation Coordination Plan (HSTCP) is to identify the transportation needs of seniors, people with disabilities, and people with low-incomes and provide a list of prioritized strategies to meet those needs. Federal rules and regulations are guided by the most recent transportation legislation, currently the Fixing America's Surface Transportation (FAST) Act. The FAST Act requires that projects funded from the Federal Transit Administration (FTA) Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities program be derived from a locally-developed coordinated plan. The goal of the Section 5310 program is to improve mobility for seniors, people with disabilities, and people with low-incomes by removing barriers to transportation services and expanding available options. It should be noted the FAST Act expired on September 30, 2020, and as of the writing of this plan, no new Act has been approved by Congress. Often in these situations, Congress will pass continuing resolutions extending the current Act until a new one can be approved, but such action has not yet been taken.

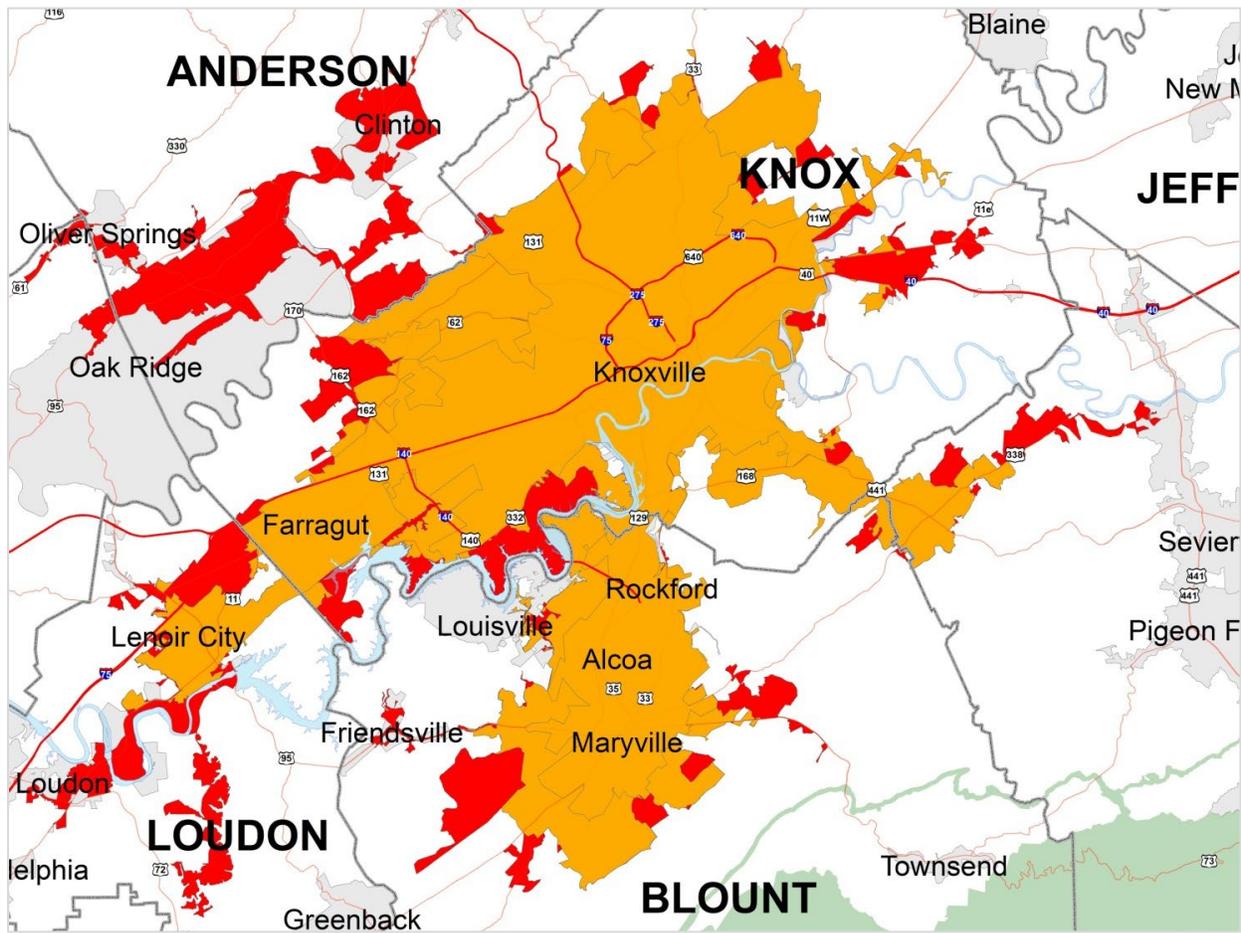
The Knoxville Regional Transportation Planning Organization (TPO) is the designated recipient of the FTA Section 5310 funds for the Knoxville urban area. As the designated recipient, TPO staff is charged with conducting a call-for-projects and must ensure projects are in-keeping with the strategies listed in the HSTCP. Staff then makes funding recommendations to the TPO Technical Committee and Executive Board. The Executive Board makes all final decisions on selected projects.

The HSTCP 2020 includes updated U.S. Census data, community goals and needs, and community and public involvement. The next update to the HSTCP will be sometime after 2022 when the results of the 2020 U.S. Census is available.

The urban area is defined by a certain level of contiguous population density as determined by the U.S. Census. The Knoxville urban area covers portions of Knox, Anderson, Blount, Loudon, Sevier and Roane Counties (Exhibit 1). Between 2000 and 2010, the Knoxville urbanized area recorded the largest increase in land area and population in the State of Tennessee. The new 2010 urbanized area added approximately 100 square miles of land area, for a total of 438.2 square miles. The total population for the Knoxville urban area is 558,696.

The 2010 urban area expanded in all of the TPO counties. Anderson County grew to include the Cities of Oak Ridge, Clinton, and Oliver Springs. Loudon County grew to encompass more of Lenoir City and parts of the City of Loudon. Blount County grew to cover more of the Cities of Alcoa and Maryville. Sevier County expanded into the Seymour area. Finally, Knox County grew to include almost all of the City of Knoxville and more of the Town of Farragut. It is expected that the urban area will grow again as result of the 2020 U.S. Census. This definition is important because the TPO's Section 5310 funding is generally restricted to projects within the Knoxville urban area boundary.

EXHIBIT 1: GROWTH OF THE KNOXVILLE URBANIZED AREA - 2000 TO 2010



It should be noted that while this update was informed by public input, engaging the public during the COVID-19 pandemic presented new challenges, especially seniors and persons with disabilities. Receiving input from these groups was more challenging than ever due to their vulnerability to the virus. TPO staff used a variety of techniques, including surveys, on-line meetings, and personal (phone and online) interviews to gather public input to avoid meeting in-person.

Section Two: Transportation Coordination & Other Community Initiatives

Several community initiatives are important to shaping transit planning in the Knoxville region. Many of these helped inform the strategies in the HSTCP.

Knoxville Regional Project Action Coalition (2013)

The Knoxville region was selected by Easterseals Project Action to participate in the Accessible Transportation Coalitions Initiative (ATCI). Funded through a cooperative agreement with the U.S. Department of Transportation and the FTA – the ATCI is a one-year process designed to support systems change at the local level. To start this process, employees of Easterseals Project Action came to Knoxville to facilitate a two-day workshop. The goal of ATCI and the workshop was to promote cooperation between the transportation industry and the disability community to increase mobility for people with disabilities. The workshop had several purposes, including to:

1. Help update the regional Human Services Transportation Coordination Plan;
2. Help establish a coalition or advocacy group for accessible transportation;
3. Facilitate group discussion around urgent issues for accessible transportation;
4. Provide technical assistance regarding best practices to reach solutions; and
5. Teach, through example, a community change process with which the coalition can continue to develop strategies to affect positive change in the future.

Approximately 25 people attended the workshop. Participants included representatives of the TPO, KAT, Knox County CAC Transit, ETHRA, Knoxville - Knox County CAC Office On Aging, Volunteer Transportation Assistance Program, City of Knoxville Disability Services Office, Tennessee Department of Transportation, East Tennessee Area Office on Aging and Disability, AAA of East Tennessee, Patricia Neal Rehabilitation Center, Tennessee AARP, Helen Ross McNabb, Barrier-Free Initiative, Knoxville disABILITY Resource Center, University of Tennessee, Tennessee Commission On Aging & Disability, and several citizen advocates.

Attendees identified several issues concerning accessible transportation facing the Knoxville region. These issues include the need to:

1. Increase both the amount of general transit services and programs for transporting people who are disabled;
2. Improve the coordination of existing transit services;
3. Establish dedicated funding for transit services;
4. Improve existing or construct new accessible pathways – including sidewalks, streets, greenways, and bus stops;
5. Educate riders regarding the availability of transportation services, including passenger rights and their responsibilities;
6. Make transportation planning, especially transit and pedestrian planning, an integral part of the various community planning and growth processes;
7. Provide assistance for people who may need someone to help them with their trip;
8. Increase the availability of accessible taxis; and
9. Provide help for families with older adults who are preparing to stop driving soon.

PlanET – Community Planning Process (2013)

The region received a sustainable community grant through the U.S. Department of Housing and Urban Development (HUD). The grant covered five counties – Anderson, Blount, Knox, Loudon, and Union and funded a three-year process called Plan East Tennessee (PlanET). PlanET sought to develop a regional “blueprint” to guide development over the next 30 years. The plan looked at ways to address challenges related to jobs, housing, transportation, a clean environment, and community health.

The need for more transit was a common theme in almost all aspects of the PlanET public outreach processes. Citizens quickly realized that transportation options are needed in order to keep the community growing and prospering. Whether providing access to jobs, encouraging greater density in housing options, promoting healthy lifestyles, improving the environment, reducing transportation congestion, or planning for the population's aging trend, transit has an important role in the region's future.

The Plan's Transportation Existing Condition's report recognized five recurring themes:

- Lack of regional transit presence (both in terms of service and governance),
- Cultural barriers to non-auto transportation,
- Lack of coordination between transportation and land use decision-making,
- Limited connectivity in rural areas, and
- Transportation needs of an aging population (choices, access, costs, etc.).

The transportation group examined issues with a focus on: (1) rising transportation costs, (2) limited transportation options and a lack of regional transit, and (3) funding uncertainty.

A key part of PlanET was outreach to the region's traditionally under-represented populations, including minorities (including Hispanics), elderly, persons of low-income, and persons with a disability. This outreach helped provide a better understanding of the needs of the under-represented, especially concerning transportation. Recommendations or solutions that emerged from PlanET focused on improved regional transit. A specific strategy provided in the PlanET Playbook was for "KAT, Knox County CAC Transit, and ETHRA to improve coordination of their services."

Inclusive Coordinated Transportation Partnership Project (2013-2014)

The Knoxville-Knox County Community Action Committee (CAC) was awarded grant funding through the U.S. Administration for Community Living in partnership with the FTA and the Community Transportation Association of America to gather information on the barriers to transportation for those who are older and/or have disabilities that inhibit their mobility. The planning process covered the counties of Anderson, Blount, Knox, Loudon, and Union.

The Plan provided opportunities for input from seniors and people with disabilities to actively involve themselves with making public transportation more accessible. Organizations providing services and support groups for seniors and people with disabilities were contacted and partnered with to host group discussions. Organizations that participated in the process included: Low Vision Support Group, Foster Grandparents, Senior Companions, Helen Ross McNabb, Goodwill-Kingston Pike, Sertoma Center, Adult Day Services-Union County, Goodwill-Pleasant Ridge, Douglas Cooperative, Campus Disability Advocates, Knoxville Deaf Senior Citizens, The Gate of Blount County, Cerebral Palsy Housing Corps, Redeeming Hope Ministries, Stepping Stones, Tennessee School for The Deaf, Union County Senior Center, Knoxville Mayor's Council on Disability Issues, Loudon County Senior Center, East Tennessee Technology Access Center, Pleasantree Women's Residential, Anderson County AARP Regional, Blount County Seniors Lunch, STAR Therapeutic Academy of Riding, Goodwill—Oak Ridge, Loudon County Nutrition, Everett Park Senior Center, Willow Ridge Assisted Living, and UT FUTURES Program.

The project team used a weighted criteria matrix in their decision-making process to help interpret ideas and concepts received from public input. This evaluation helped prioritize ideas and concepts since only a limited number of projects could be implemented due to a lack of resources (people, money, or time). This methodology also helped circumvent bias since each alternative was evaluated using the same evaluation criteria. Across counties, meetings, and online survey data, the top three barriers identified as limiting seniors and persons with disabilities access to public transportation were:

1. Time involved,
2. Limited services (hours/scheduling/options), and
3. Customer service.

Proposed solutions to these barriers included a transportation education program to help with trip planning and travel expectations, wheelchair accessible taxis, vouchers and fare assistance, expansion of a transportation counseling line, a communication board for non-verbal participants, revised complaint policies, mystery riders as auditors, and vehicle tracking applications.

Mobility Plan 2040 (2017)

Prepared by the TPO, Mobility Plan 2040 serves as the blueprint for long-term transportation investments within the metropolitan planning area. Many of the same planning assumptions are used for both the HSTCP and Mobility Plan 2040. The analysis of alternative modes, identification of transit service gaps, and list of recommendations and improvement strategies found in Mobility Plan 2040 were influenced by the results of the HSTCP. Also, Mobility Plan 2040 takes into account many of the results of the community driven PlanET process. This information helped inform the short-range and long-range strategies and actions found within the plan that were created to facilitate the safe and efficient movement of people and goods within a multimodal transportation system.

It is projected that one in four residents will be a senior by 2040, making transportation needs of the growing elderly and disabled populations a significant issue in the Knoxville region. Mobility Plan 2040 recognizes that investment in alternative transportation options such as transit and pedestrian facilities will give older adults more choice over where they live, how they travel, and how they access resources. This is also true for persons with disabilities and low-income populations. These groups are also considered vulnerable populations and are included in the equitable access component of Mobility Plan 2040.

Strategies for equitable access in Mobility Plan 2040 include:

- Promote projects that improve multi-modal connections between existing transit and surrounding communities.
- Coordinate with implementing agencies to provide connected, safe, comfortable environments for walking and bicycling.
- Enhance connections between activity centers through access to transit, pedestrian, and bicycle facilities.
- Increase mobility and access to opportunities by coordinating land use and transportation planning.
- Promote the development of bicycle and pedestrian facilities that use best practices guidance from Federal Highway Administration (FHWA) and National Association of City Transportation Officials (NACTO).
- Assist in developing and implementing municipal bicycle and pedestrian plans.
- Coordinate with partners to collect, maintain, and publicize bicycle and pedestrian facility and user data.
- Assist local jurisdictions as they develop their self-evaluation and ADA transition plans.

Mobility Plan 2040 sought to connect communities to opportunities and services throughout the region, particularly areas with high proportions of low income, senior, and minority populations. For the first time, project selection criteria included equity and access to opportunity. In conjunction with the U.S. Department of Transportation's Ladders of Opportunity initiative, the TPO sought to fund transportation projects that connect communities to centers of employment, education, and services. The TPO developed a methodology to measure the location and extent of challenges to accessible quality food, physical activity centers, and chronic disease to provide a detailed picture of need.

Priority populations are characterized by those living in areas with less opportunity, less accessibility to safe places for being active, and greater vulnerability than the region to leading a healthy and economically sustainable life. Twenty-two socioeconomic measures indicators were chosen to represent components of Priority Populations. Data for each indicator were assembled at census tract geography to represent neighborhoods and small communities throughout the region (see Exhibit 2). The 22 indicators were organized into three themes: Opportunity, Accessibility, and Vulnerability.

Strategies were developed to help provide equitable access to the Priority Populations which includes seniors, people who are disabled, and people with low-income. **The strategies include:**

- Ensure adequate funding for regional paratransit providers that serve disabled and elderly populations.
- Research and support initiatives and policies that stimulate job training and quality job creation in low-income and minority communities.
- Ensure that low-income, minority, and aging populations have equal access to the metropolitan planning and decision-making process through proactive outreach.
- Prioritize projects that include multi-modal access to community resources, especially for priority populations with high and very high vulnerability.
- Work with the disabled community and local agencies to ensure that all planning and implementation processes meet or exceed ADA requirements.
- Coordinate with local development officials and implementation partners in the private sector to ensure the adequacy of transportation access to sites where quality jobs exist or where new job growth is anticipated.
- Support transit programs that expand reverse commute possibilities and improve access to job centers.
- Coordinate with the freight sector to identify challenges and opportunities.

The TPO is currently in the process of updating the Mobility Plan. Mobility Plan 2045 will be finished in the summer of 2021. As the plan before, Mobility Plan 2045 will incorporate the HSTCP 2020 outcomes and strategies.

Tennessee State Plan on Aging (2017-2021)

The Tennessee Commission on Aging and Disability (TCAD) brings together and leverages programs, resources, and organizations to protect and ensure the quality of life and independence of older Tennesseans and adults with disabilities. As of 2017, Tennessee is home to 1.57 million adults ages 60 and older. It is projected that this will grow by 37% to 2.16 million by 2030. In fact, by 2030, 28% of the entire population of Tennessee will be 60 or older.

Tennessee will face many challenges in addressing the aging and disability populations in the coming years. The most immediate of those are financial constraints and a lack of program capacity to meet current and future demand. The long-term challenge will be the ability to keep up with the increasing demand for programs and services with stagnant or decreasing resources. This plan provides a framework for a comprehensive and coordinated system to address programs and services to allow older Tennesseans to age with dignity and the highest possible quality of life.

In order for TCAD to gain understanding of the challenges faced by older adults, a statewide comprehensive needs assessment was conducted. The assessment provides policy makers, service providers, and the general population with appropriate data about trends and implications for the current population. The Tennessee statewide comprehensive needs assessment consisted of four main components: (1) a statewide survey of older adults; (2) a statewide survey of service providers; (3) a food insecurity study; and (4) a housing study. Three of the survey results mentioned the impact of transportation and are outlined below.

Statewide Survey of Older Adults: The top four answers are listed for each.

1) What challenges keep you from being more active in your community?

- Health concerns or lack of healthcare (35.4%)
- Financial concerns (24.1%)
- Transportation (17.0%)
- Lack of accessibility (9.6%)

2) What improvements would make your day to day life better?

- Exercise, recreation, and activities (12.6%)
- Improvement in financial concerns (12.1%)
- Transportation (11.9%)
- Improvements in health or access to healthcare (11.8%)

3) What is currently working well in your community to support older adults?

- Senior centers (58.5%)
- Nutrition services (19.8%)
- Exercise, recreation, and activities (10.6%)
- Church and faith-based community (7.4%)

Service Provider Survey: The top four answers are listed for each.

1) What are the three (3) most common unmet needs you see for older adults?

- Transportation (39.7%)
- Nutritional Needs (27.9%)
- Financial (23.2%)
- Housing concerns (22.2%)

2) In Tennessee, what are the three (3) most pressing changes to be made in order to improve daily life for older adults?

- Transportation (31.0%)
- Home and Community Based Services, "HCBS" (23.2%)
- Improvements in Financial Needs (20.9%)
- Changes to meet nutritional needs (20.5%)

3) What is currently working well in your community to support older adults?

- Nutrition Programs (35.0%)
- Senior Centers (30.0%)
- Transportation providers (19.9%)
- Church and faith-based community (11.4%)

4) As a service provider, what is the greatest barrier you encounter in your efforts to improve the lives of older adults?

- Lack of Funding (33.3%)
- Not enough organizations or providers in community (18.9%)
- Waitlists for services and programs (8.1%)
- Rules and Regulations (7.1%)

Older Adult Food Insecurity Study - The following results were found:

- In the past year, they had to choose between buying food or: medicine (62.9%), utilities (58.4%), transportation (31.8%)
- Some food insecure individuals could not get food because: they did not have enough money (77.5%), they had physical limitations (47.2%), they had a lack of transportation (29.2%).

The results from the Older Adult Food Insecurity Study mirror the challenges reported in the broader statewide Older Adult Survey, where health, finances, and transportation were the most frequently mentioned challenges.

The State of Tennessee faces many challenges in addressing the aging and disability populations according to the multiple data sources used to develop the Tennessee State Plan on Aging. The major long-term challenge facing Tennessee is funding, which has been relatively stagnant over the past decade. Without increased funding, the financial capacity of services will continue to be stretched thin.

Among the service providers surveyed for the statewide need's assessment, one in three stated that lack of funding was a significant barrier faced when providing services to older Tennesseans. This widespread lack of funding for older adult support programs continues to drive up waiting lists for many programs, making it difficult to find alternative short-term programs to serve individuals.

While there is a shortage of services across the state, this is particularly true in rural and mountainous areas. These areas may have hard to reach populations, lack of funding, pockets of poverty and high unemployment. This is compounded by a lack of affordable transportation to other areas, making local resources even more critical. Services providers specifically mentioned challenges and unmet needs in the following areas:

- **Transportation (39.7%):** Transportation continues to be a challenge, especially in rural areas. While all 95 counties in Tennessee have public transportation, need often exceeds capacity. More affordable, accessible, and flexible transportation services are needed.
- **Nutritional Needs (27.9%):** Food insecurity and nutritional needs are often more prominent among older adults than for others. While some may be food insecure due to lack of money to purchase food, others may be unable to access food due to lack of transportation, mobility impairments, or health conditions.
- **Financial (23.2%):** Approximately 23% of Tennesseans ages 60 and older are below 150% of the Federal Poverty Level (FPL). Additionally, research suggests that 33% of older adults in the state have incomes falling between the FPL and the Elder Economic Security Index¹. These individuals have incomes too high to qualify for many public benefits, yet too low to achieve intermediate or long-term economic stability. Many older Tennesseans and providers declared it difficult to afford prescription medicine, utilities, and/or food.
- **Housing (22.2%):** Affordable and accessible housing becomes a problem when the house is no longer able to accommodate a person. This may happen when an individual has become disabled, has stairs they can

no longer navigate, lives in a house in an unsafe environment, and/or does not have access to services such as medical providers or grocery stores.

- Home and Community Based Services (HCBS) (20.5%): Due to the increasing number of older adults, the demand for HCBS continues to grow. Older adults prefer HCBS when compared to traditional nursing home placement. Additionally, HCBS is a cost-effective option that costs significantly less than institutionalized placement.
- Health and Healthcare Access (16.2%): Providers often mentioned poor health and lack of healthcare access. This was often related to lack of geriatricians and other specialists within local communities.
- Social Needs (13.1%): Many providers mentioned social needs among older adults. Social connections are central to physical, mental, and emotional well-being. Without it, older adults may become isolated, increasing risks for many health conditions.
- Caregiver Support (7.7%): Family (unpaid, informal) caregivers provide care for older Tennesseans every day.

As the number of adults ages 60 and older continues to grow, Tennessee must have a State Plan that utilizes all available resources in the most efficient, effective and equitable way possible. The following are the goals, objectives, strategies and performance measures for the Tennessee State Plan on Aging that deal with transportation.

1. Leverage Older Americans Act transportation funding to expand community transportation resources such as those provided by the Human Resource Agencies and senior centers.
 - Compile database of transportation programs and mobility options.
 - Collaborate with partner agencies to bolster existing transportation infrastructure using Older Americans Act funds.
 - Measures/outcomes include: updating the Statewide Transportation Map to ensure better coordination of transportation programs, mobility options, and services for the aging and disability population.
2. Develop partnerships with aging network, community-based organizations, local governments, healthcare providers and state departments in order to advocate to reduce the gaps in services as identified in the needs-assessment.
 - Increase the number and quality of senior transportation programs and numbers of seniors utilizing those programs.
 - Develop documentation on best existing senior transportation programs in Tennessee and other states.
 - Support and provide technical assistance in creating community-based, volunteer transportation models.
 - Develop an instructional guide that can be given to cities and other interested parties about the steps, financial costs, and resources needed to design and create a volunteer transportation program for seniors.
 - Measures/outcomes include: adding one (1) volunteer transportation initiative in each district and ensure the annual update of Statewide Transportation Map to ensure better coordination of transportation programs and services for the aging and disability population.

Knoxville-Knox County Needs Assessment (June 2017)

The Knoxville-Knox County CAC is a local public agency that serves the community with a comprehensive range of federal, state, local, and privately funded programs that focus on building communities, providing services to individuals and families, and advocating for opportunities for lower-income people. CAC continues to be an integral part of social services within Knoxville and Knox County. The CAC mission is to promote family self-sufficiency and independent living for low-income and other vulnerable people through caring and efficient delivery of needed services and the development of partnerships at all levels. Transportation themes discovered in the assessment are summarized below.

Based on U.S. Census data, only a small proportion of households in Knox County and Knoxville do not own a vehicle. According to the ET Index, getting around the region without a car is challenging due to long distances between trip origins and destinations and low-density development that does not support extensive transit service. Some parts of the region, however, do have sidewalks and bicycle lanes, and the number of greenways in the region is growing. Those without vehicles have public transportation options.

Knoxville Area Transit (KAT) is the most extensive transportation option offering fare-operated buses in Knoxville and some Knox County locations. KAT also has the KAT LIFT service which offers transportation options for persons with disabilities. While some can use KAT services to commute to and from work, those who do not live or work near a bus line or work evening or night shifts are not able to take advantage of the transit system. Knox County CAC Transit provides accessible, demand-response public transportation services to the residents of Knox County who live within Knox County but outside the KAT service area. These services are also available to those city residents who are not served by the KAT fixed route system, including those who live too far from a bus stop or whose destination is not within the KAT service area. Additionally, Knox County CAC Transit has a Volunteer Assisted Transportation Program that provides assisted transportation with volunteers to seniors and people with disabilities who have barriers to independent travel and must have an escort in order to travel safely. ETHRA Public is another option for travel in the 16 East Tennessee counties including Knox County.

A TPO study found that those with less income tend to own older vehicles. This is understandable, as lower income families may not be able to afford to buy a vehicle as frequently, and when they do, they tend to purchase previously owned vehicles because they are less expensive than new ones. However, this can be a problem as far as transportation reliability is concerned, as older vehicles are more likely to break down and need repairs. Without reliable transportation, these families may find it difficult to commute to and from work and to complete necessary daily activities (e.g., grocery shopping, medical appointments, transporting children to and from school).

Transportation Related Conclusions

Social indicator data show that the population in Knox County is aging, that many in the community have significant health problems, and that the number of children growing up poor is increasing. The community lacks adequate affordable housing and affordable, high-quality childcare to meet the needs of the low- and moderate-income population. The unemployment rate in Knoxville is lower than the rates for Tennessee and the US, but the percentage of families living at or below the poverty level is higher. This may indicate that the low-income population lacks the needed education to secure living-wage jobs, that the community lacks available living-wage jobs, or both.

After a review of the social indicator data and a meaningful discussion about the stakeholders' perceptions of needs in the community, the top five identified needs are:

1. Lack of affordable housing: There is a shortage of housing with rent/mortgage and utilities that do not exceed 30% of household income.
2. Lack of jobs that pay a living wage: Individuals cannot obtain jobs that provide a living wage because they lack the necessary education and skills.

3. Transportation: Individuals need increased access to reliable transportation for employment, medical appointments, and essential errands.
4. Lack of resources for seniors: The community lacks adequate resources to meet the needs of seniors to maintain safe and stable independent living.
5. Substance abuse: The agency needs to increase its knowledge about substance abuse and its impact on clients, families, and the larger community.

Analysis of Impediments to Fair Housing Choice – Knox County, Tennessee (May 2020)

Fair housing and equal opportunity are fundamental principles to creating and sustaining communities in Knox County. The county is an entitlement community under the U.S. Department of Housing and Urban Development’s (HUD) Community Development Block Grant Program (CDBG). In accordance with the Housing and Community Development Act of 1974, as amended, each entitlement community must “affirmatively further fair housing.” In order to demonstrate this, each community must conduct a Fair Housing Analysis which identifies any impediments to fair housing choice and what steps it will take to affirmatively further fair housing.

The Analysis of Impediments Study to Fair Housing Choice (AI) provides jurisdictions with information related to policies, procedures, and practices in place that impede fair housing choice for all its citizens. The study is a requirement by the U.S. Department of Housing and Urban Development (HUD) to ensure that its entitlement jurisdictions are affirmatively furthering fair housing choice through its federally funded programs and projects. The AI is a review of impediments to fair housing choice in both the public and private sectors. The study looks at many factors, but one key element is an assessment of conditions, both public and private, affecting fair housing choice for all protected classes.

One question in an extensive online survey asked, “What are some factors that prevent you from moving?” 6.82% of the respondents identified they had transportation issues. Participants were given the opportunity to provide suggestions on how to address this issue. These included:

- Developers that are required to build sidewalks and consider walkability and accessibility when building housing.
- Developers that are required to construct housing along major transit corridors.
- Sidewalks built that are safe and maintained for wheelchair users, curb cuts for wheelchair users.
- Transportation and bike lanes available further out of the city limits.
- Access to healthcare, transportation and groceries via sidewalks and bike lanes.
- Connection between affordable housing and good public transit is very important.
- For a person who relies on public transportation for work, affordable housing options are minimal.

Transportation links are an essential component to successful fair housing. Residents who do not have access to commercial areas are limited in where they can shop for goods and services, as well as seek employment. The converse is true as well. Inadequate transportation routes limit the selection of housing to neighborhoods within transportation service areas. Convenient roads in good repair are as important for those who rely on their own vehicles for transportation as they are for those who rely on public transportation.

Transportation Related Conclusions

The City of Knoxville and Knox County have seen a steady increase in population over the last decade. With the national trend of aging population and increase in minority populations, it is pertinent that the jurisdictions proactively adjust policies and procedures for its continued success. Tennessee Housing Development Agency (THDA) reported that housing affordability from 2008 to 2017 has decreased in Knox County somewhere in the neighborhood of 2.5-5.0%. The housing price appreciation has stressed the existing stock of housing. Further, regional growth is expected to create need for housing, employment, services, and transportation. The following is a list of impediments to fair housing choice in the City of Knoxville and Knox County.

1. There is limited housing stock and homogeneity in housing units.
2. Mortgage lending practices need to be addressed since there were high denial rates among certain races. Low-income families of color are at a disadvantage compared to others in terms of financial stability and employment opportunities.
3. There is lack of trust between governmental organizations and the community.
4. Transportation corridors have connectivity problems and lack integration with low-moderate income residential areas and employment centers. People needing to travel are suffering from lack of transit options and convenience in using transit. Accessibility issues within the city and county are due to lack of accessible sidewalks and lack of accessible features in the city's and county's infrastructure. Lack of accessible sidewalks and bike lane facilities in the county and problems with connectivity within the city have been the most common community survey response to the question of probable impediment to affordable housing.

Transportation Recommendation: With the changing need of the demographics, the City and County should invest in a combined transit plan and devise ways to make transit more accessible and seamless between the two. Investment needs to prioritize accessible sidewalks, bike lanes, bicycle facilities, and bus stops. Alternative transit routes that connect the city to the county, especially the employment centers during peak hours, can be planned for. Additionally, the city's new zoning code and focus on energy efficiency will yield results when complete streets and alternative means of transportation are made effective in the City and County. Green infrastructure, such as complete streets, connectivity of accessible sidewalks, and an increase in bike lane facilities, will provide alternative transportation options, encourage walking, and provide a sense of safety and freedom for people with mobility limitations.

Knoxville Knox County CAC VAT Program Users Survey (2020)

The Volunteer Assisted Transportation (VAT) program utilizes volunteer drivers who help transport seniors and people who are disabled that need an extra level of care. Volunteer drivers stay with clients and can assist them if needed. The VAT program recently celebrated its 10th anniversary of providing services. They conducted a survey of their clients and received responses from (50) riders. Of the respondents surveyed:

- 78.1% said they live alone,
- 66.7% cannot operate a vehicle,
- 64.5% do not have access to a vehicle in the home,
- 21.9% state they do not have family or friends who would be able to provide transportation,
- 46.9% own a computer or smart phone,
- 43.8% use email,
- 37.5% use the internet and social networking sites,
- More than 80% live within 5 miles of their preferred bank, grocery, post office, pharmacy and barber or hair stylist,
- 46.2% are more than 5 miles from their preferred medical provider,
- 69.4% rely on VAT for transportation to their medical appointment, and
- 23.3% rely on VAT for grocery shopping.

The following responses were received when asked what types of trips are limited by a lack of transportation.

- Grocery/Shopping – 61%
- Social Trip – 60%
- Leisure/Recreation – 54%
- Eating Out – 54%

- Place of Worship – 47%
- Volunteer – 45%
- Bank – 36%
- Medical – 34%
- Pharmacy – 31%

When examining the types of trips being taken through the Volunteer Assisted Transportation Program, the following were ranked.

- Medical – 69%
- Grocery/Shopping – 23%
- Pharmacy – 17%
- Place of Worship – 15%
- Volunteer – 12%
- Bank – 11%
- Eating Out – 6%
- Leisure/Recreation – 4%

Riders valued the program because it allows for more social interaction and reduces isolation. Furthermore, it reduces the burden on family members whose livelihoods might be impacted by their transportation needs. Finally, the riders appreciate drivers staying with them during medical procedures and offering the opportunity for multi-purpose trips. Riders were allowed to add personal anecdotes to the survey and here is a sample:

- “All of the drivers I have had the pleasure to meet are most helpful. I am legally blind and there is always a hand or arm to guide me. The service is most helpful because my family here all work.”
- “Without Volunteer Transportation I would be homebound.”
- “Without VAT, I would be totally isolated.”
- “If I didn't have this service, my daughter would have to take time off from work and then work overtime to make up her hours.”
- “I appreciate the driver being able to remain at the site of my visit until the appointment is completed. Thank you for this service in general and the driver's ability to remain during the appointment/visit.”
- “I have a friend driver for most errands, but she has a conflict on Sunday morning, which is when I use the CAC drivers for going to church.”
- “Whenever they took me to therapy after my knee surgery they asked if I needed to stop at the grocery store or bank.”

Section Three: Funding Availability and Project Selection

Projects funded through Section 5310 Enhanced Mobility of Seniors & Persons with Disabilities must be in-keeping with those programs and projects listed in the local HSTCP. Urban area funding for Section 5310 as well as Section 5307 are listed in this section. For most projects funded through Section 5307 there is no requirement that there be a relationship to the strategies of HSTCP except for Job Access & Reverse Commute (JARC) projects or activities. Due to legislative changes made in 2013, JARC projects and activities can now be funded with Section 5307 funds. Therefore, it is important that JARC projects and activities be supported by policies in the HSTCP from a coordination perspective.

FTA Section 5310 Enhanced Mobility for Seniors & Persons who are Disabled Funds

There are two different Section 5310 funding programs in the State of Tennessee. The four large urban areas (Memphis, Nashville, Knoxville, and Chattanooga) receive a direct allocation of Section 5310 funds that they themselves can distribute. The Tennessee Department of Transportation (TDOT) receives Section 5310 funding for the rest of the state, which they distribute. While confusing, certain organizations, human service agencies, and non-profits can be eligible for both large urban area and statewide Section 5310 funds. The TPO is the designated recipient of the Knoxville urban area Section 5310 funding. As such, the TPO is charged with administering and distributing those funds.

Section 5310 funding is intended to enhance mobility for seniors and people with disabilities by providing funds for programs that meet the special needs of transit-dependent populations beyond traditional public transportation services. At least 55 percent of the funds must be used on public transportation capital projects that meet the special needs of seniors and people with disabilities when public transportation is insufficient, inappropriate, or unavailable. Many non-profits have used this funding to purchase vans or mini-buses under this program. The remaining 45 percent may be used for public transportation operating projects that exceed the requirements of ADA. This can include public transportation projects that improve access to fixed-route services and/or decrease reliance on complementary paratransit. Operating projects can include alternatives to public transportation that assist seniors and individuals with disabilities with improved mobility options. Up to 10% of the funding can be used for administration of the grant. However, that 10% cannot come from the 55% that is specified for capital projects. The 55% is a floor which you cannot go below. However, you can spend above the 55% on capital if that is the desire of the local decision-making process.

For capital projects, funding is traditionally 80% federal and requires a 20% local match. For operations projects, funding is traditionally 50% federal and requires a 50% local match. In most cases, TDOT has provided half of the local match. The TDOT local match contribution is not a certainty and must be applied for with each federal grant. Federal funds are allocated on a fiscal year that runs from October 1st to September 30th. Table 1 shows how much funding the urban area received in fiscal years 2018, 2019, and 2020. It is estimated that fiscal year 2021, which started on October 1, 2020, will have similar funding to the previous year. However, it should be realized the FAST Act expired on September 30, 2020 so this assumption is not a guarantee.

TABLE 1: FTA - SECTION 5310 FEDERAL FUNDING AVAILABILITY

Federal Fiscal Year	Amount of Federal Funding	Capital 55% (55% Min)	Operating 35% (45% Max)	Administration 10% (10% Max)
2021 – Projected Availability TBD	\$587,787	\$323,283	\$205,725	\$58,779
2020 – Available	\$587,787	\$323,283	\$205,725	\$58,779
Projected Available Next Call-For-Projects	\$1,175,574	\$646,566	\$411,450	\$117,558
2019 – Awarded	\$579,378	\$318,658	\$202,782	\$57,938
2018 – Awarded	\$563,002	\$309,651	\$197,051	\$56,300

TPO - FTA Section 5310 Program Management Plan (PMP)

The PMP is a document that describes a designated recipient’s policies and procedures for administering the Section 5310 program. The PMP is intended to facilitate both the TPO’s management and FTA’s oversight by documenting policies and procedures for administering Section 5310 funds. The primary purposes are to serve as the basis for (1) the FTA to perform designated recipient-level management reviews of the programs and (2) to provide public information on the administration of the programs. While a requirement of FTA, the PMP also covers the oversight requirements of TDOT which has historically contributed funding to help offset match requirements. As the designated recipient for the Section 5310 program, the TPO is required to have a PMP on file with the FTA and to update it regularly to incorporate changes in program management or new requirements.

The FTA Circular 9070.1G allows the designated recipient to establish arrangements to administer and conduct the competitive selection process. In order to ensure unbiased project evaluation and subsequent project management, the TPO will assemble an evaluation committee to help oversee the selection of projects. Successful applicants will be subrecipients to the TPO and will be subject to meeting the FTA/TDOT contractual, program, and reporting requirements. On an annual basis, FTA Section 5310 funding is announced in a Federal Register notice. The exact date of this notice is contingent on when Congress passes a transportation budget. Once funding is announced in the Federal Register, TPO staff initiate the application process. The TPO then holds a publicly advertised call-for-projects and posts the application and supporting material on the TPO website.

Program Management Plan Goals

The TPO’s program management goals are to:

- Improve mobility for seniors and individuals with disabilities throughout the Knoxville Urbanized Area by removing barriers to transportation services and expand the transportation mobility options available.
- Meet the federal requirements associated with receiving Section 5310 FTA funding.
- Facilitate the flow and appropriate level of Section 5310 program funding to the region by ensuring that the coordinated plan fully complies with the most recent federal act’s regulations and with the spirit and intent of the Section 5310 program.
- Establish a framework by which proposed projects requesting Section 5310 program funding can be solicited and selected through a fair and equitable process.
- Ensure that all components of the plan/program have benefited from a comprehensive public involvement effort that included public, private, and nonprofit transportation providers, human service providers, and other stakeholders representing persons with disabilities, seniors, and the general public.

- Encourage coordination among services supported by the Section 5310 Program as well as the broad array of community transportation services in the Knoxville region.

The FTA Section 5310 Circular establishes two types of 5310 projects – traditional and non-traditional/other. Eligible subrecipients for each type are as follows:

- A. A. Traditional 5310 (Capital) Projects (at least 55% of total 5310 funding)
 1. Private non-profit organizations,
 2. State or local government authority that is approved by the state to coordinate services for seniors and individuals with disabilities, or
 3. Agencies in which the state or local government has certified there are no non-profit organizations in the area to provide these services.
- B. B. Non-Traditional 5310 (Operating) Projects (up to 45% of total 5310 funding)
 1. State or local government authority,
 2. Private non-profit organizations,
 3. Private for-profit organizations – must certify that all funds are used in the provision of shared-ride services

Eligible Activities

Section 5310 covers a wide range of activities, but the funding has specific requirements that determine how much of the region's funding can go towards specific activities.

Traditional Section 5310 (Capital) Projects

At least 55% of program funds must be used on capital projects that are public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable. Capital expenses that are considered traditional projects include, but are not limited to:

- Vehicle purchase and/or rehabilitation (e.g. radios, wheelchair lifts, ramps),
- Passenger facilities (benches, shelters, and amenities),
- Intelligent transportation systems (ITS), and Dispatch and fare collection systems.

Mobility Management is an eligible capital cost. Activities may include: promotion and enhancement of access to transit services; short term management activities for planning/implementation of coordination; support of local coordination bodies and councils; operation of transportation brokerages to coordinate providers; provision of coordination services such as travel training and trip planning for customers; and development and operation of one-stop travel call centers.

Non-Traditional Section 5310 (Operating) Projects

Up to 45% of program funds may be used for public transportation projects that exceed the requirements of the ADA, improve access to fixed route service and decrease reliance on paratransit service, or provide alternatives to public transportation that assist seniors and individuals with disabilities with transportation. The following activities are examples of eligible projects that go beyond the minimum requirements of ADA:

- Expansion of paratransit service beyond the ¼ mile required by ADA;

- Expansion of service hours for ADA paratransit beyond hours of fixed-route services;
- Incremental cost of providing same day service or incremental cost of making door-to-door service available to all ADA paratransit riders;
- Providing escorts or assisting riders through the door of their destination;
- Purchase of equipment designed for mobility aids that exceed the dimensions/weight ratings under the ADA and helps with over-sized wheelchairs;
- Installation of additional securement locations in public buses beyond ADA requirement feeder service to other transit services for which complementary paratransit service is not required under the ADA;
- Making accessibility improvements to transit and intermodal stations not designated as key stations or renovation to an existing station;
- Building accessible paths to bus stops that are currently inaccessible (curb cuts, sidewalks, pedestrian signals, or other accessible features);
- Improving signage or wayfinding technology;
- Other technology improvements that enhance accessibility, including ITS;
- Travel training; and
- Public transportation alternatives that assist seniors and individuals with disabilities with transportation.

FTA Section 5307 Urban Area Funding

Section 5307 funding can be used to fund capital projects and on-going maintenance needs. In some cases, Section 5307 funds can be used to fund operations. The City of Knoxville has been the Designated Recipient of Section 5307 funding since the mid-1970s and has used these funds to support Knoxville Area Transit (KAT). Starting in 2013, the City of Knoxville began sharing Section 5307 funds with Knox County CAC Transit and East Tennessee Human Resource Agency (ETHRA). The current arrangement divides the annual Section 5307 appropriation to KAT (79.8%), Knox County CAC Transit (14.9%), and ETHRA (5.3%).

Table 2 shows Section 5307 Knoxville urban area funding apportionments since FY16. Each transit agency is required to submit to the TPO a Program-of-Projects (POP), which is simply a listing of how the funds will be spent. The TPO holds a hearing to allow for public input regarding the proposed POP. The public hearing on the POP has been conducted as part of the Executive Board since 2013.

TABLE 2: HISTORIC FTA SECTION 5307 URBAN AREA ALLOCATIONS

Fiscal Year	Section 5307 Allocation	Difference FY20-FY19
FY 2020	\$6,501,910	+ 176,102
FY 2019	\$6,325,808	
FY 2018	\$6,209,859	
FY 2017	\$6,104,528	
FY 2016	\$6,204,025	

Section 5307 & Job Access & Reverse Commute Programs (JARC)

As noted, the use of Section 5307 funding for operations is very limited. One exception is that transit agencies can use Section 5307 to fund JARC programs which can include operations. This change occurred in 2012 when the FTA eliminated the Section 5316-JARC program but allowed JARC activities to remain eligible for funding under the Section 5307 program. In general, projects and expenses eligible for JARC funding must relate to the development and maintenance of transportation services designed to transport welfare recipients and eligible low-income individuals to and from jobs and activities related to their employment, including, in some cases, childcare. Examples of eligible projects include, but are not limited to: late-night and weekend service, guaranteed ride home service, shuttle service, expanded fixed-route transit routes, demand response van service, ridesharing and carpooling activities, bicycling, local car loan programs, promotion and marketing, and the purchase of vehicles or other capital equipment. Both Knox County CAC Transit and ETHRA have funded operations under JARC programs in the past.

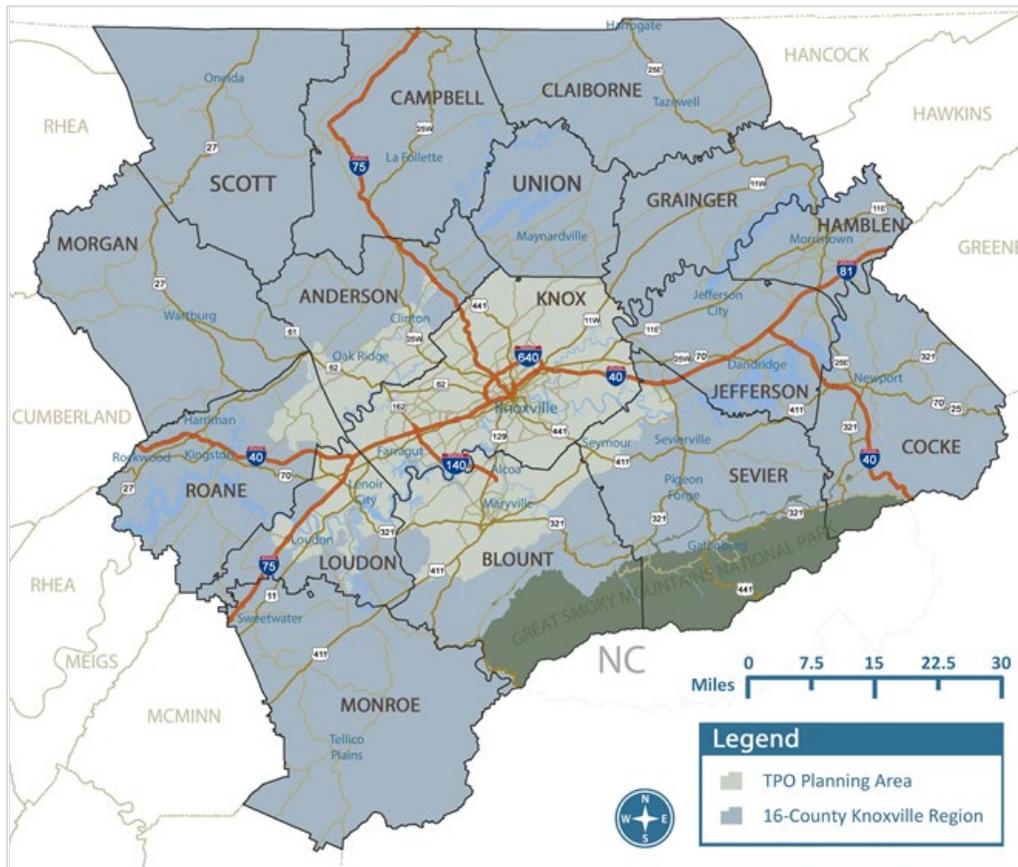
Section Four: Demographics of the Study Area

The TPO planning area includes parts of six counties – Anderson, Blount, Knox, Loudon, Sevier, and Roane. Within these six counties are the Cities of Oak Ridge, Clinton, Oliver Springs, Alcoa, Maryville, Town of Farragut, Lenoir City, and Loudon, as well as the unincorporated area of Seymour. These six counties are also part of ETHRA’s service area. While ETHRA provides services throughout 16 counties, many of their trips involve bringing passengers from rural counties into the urbanized area. The urban area represents the heart or “center” of the region where most of the medical, social, and financial services, as well as shopping and job opportunities exist.

It is important that the TPO, KAT, Knox County CAC Transit, and ETHRA coordinate efforts. As a start, this Plan’s demographic analysis chapter reflects both the TPO’s partial 6-county planning area and the larger ETHRA 16-county service area. ETHRA’s service area consists of Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Roane, Scott, Sevier, and Union counties. It is important to realize that transportation needs do not stop at city or county boundaries, and many of the needs and goals of the larger region are consistent with the TPO’s HSTCP.

Data for the Knoxville Region was gathered from the 2010 U.S. Census, the 2014-2018 American Community Survey, Tennessee Department of Labor and Workforce Development, and the University of Tennessee Center for Business and Economic Research. The TPO planning area and the 16-County Knoxville Region is shown in Exhibit 3. Most of the data in this section is at the county level so the following tables show two different geographic areas: (1) the TPO 6-counties, and (2) the remaining 10 counties. Together, the two areas comprise the entire 16-county Knoxville Region.

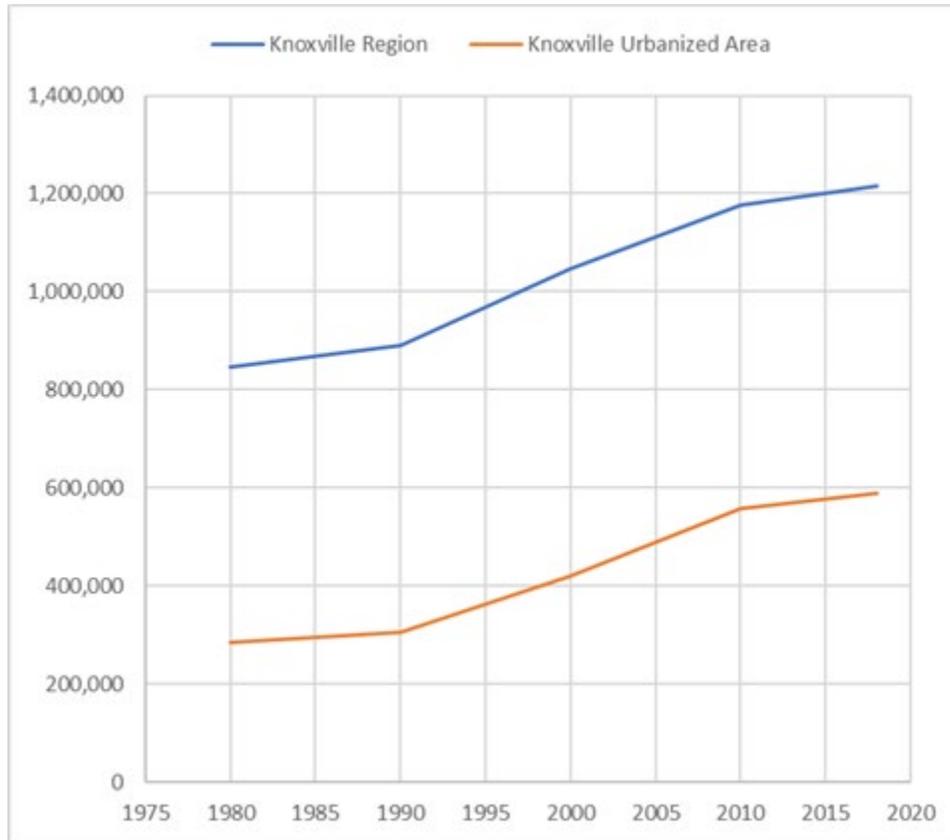
EXHIBIT 3: TPO PLANNING AREA AND THE 16-COUNTY KNOXVILLE REGION



Population

The boundaries of the Knoxville Urban Area have expanded greatly in recent decades. As a result, the urbanized population has increased dramatically, from 284,708 in 1980 to 558,696 in 2010 to 589,529 in 2018. It is anticipated that the population and the boundaries will increase again as the result of the 2020 Census. The population in the 16-county Knoxville Region has grown significantly as well, though not as dramatically as the Urbanized Area, from 845,121 in 1980 to 1,176,033 in 2010 to 1,216,552 in 2018 (see Figure 1).

Figure 1: Knoxville Urbanized Area & TPO Planning Area Population Change, 1980-2018



Source: U.S. Census Bureau Urban & Rural Classification, 1980, 1990, 2000, & 2010 and 2014-2018 American Community Survey 5 Year Estimates. U.S. Census Bureau Total Population, 1980, 1990, 2000, & 2010 and 2014-2018 American Community Survey 5 Year Estimates.

As shown in Table 3, the population of the 16-county Knoxville Region is projected to increase by 18.8% to 1,397,600 by 2040. For the counties that just make up the TPO 6-county area, the 2010 population was 822,991 and it is projected that they will see an increase of 24.2% to 1,022,522 in 2040. It is important to remember the urban area does not encompass all of these six counties. Counties projected to see the greatest individual increase in population by 2040 include Sevier (37.3%), Loudon (33.7%), Knox (27.2%) and Blount (23.2%) all counties in the TPO area.

TABLE 3: KNOXVILLE REGION HISTORICAL POPULATION TRENDS BY COUNTY

COUNTY	Total Population				Projected Population			% Change (2010-2040)
	1980	1990	2000	2010	2020	2030	2040	
Anderson	67,346	68,250	71,330	75,129	77,151	79,454	80,872	7.6%
Blount	77,770	85,969	105,823	123,010	133,808	143,918	151,526	23.2%
Knox	319,694	335,749	382,032	432,226	473,996	513,318	549,800	27.2%
Loudon	28,553	31,255	39,086	48,556	54,454	60,311	64,917	33.7%
Roane	48,425	47,227	51,910	54,181	53,285	53,111	51,956	-4.1%
Sevier	41,418	51,043	71,170	89,889	100,658	112,912	123,451	37.3%
Sub-Total	583,206	619,493	721,351	822,991	893,352	963,024	1,022,522	24.2%
Campbell	34,923	35,079	39,854	40,716	39,487	38,392	36,657	-10.0%
Claiborne	24,595	26,137	29,862	32,213	31,999	32,673	32,585	1.2%
Cocke	28,792	29,141	33,565	35,662	36,026	36,532	36,258	1.7%
Grainger	16,751	17,095	20,659	22,657	23,388	24,069	24,110	6.4%
Hamblen	49,300	50,480	58,128	62,544	65,234	68,146	70,989	13.5%
Jefferson	31,284	33,016	44,294	51,407	54,900	58,295	60,515	17.7%
Monroe	28,700	30,541	38,961	44,519	46,989	49,089	50,003	12.3%
Morgan	16,604	17,300	19,757	21,987	21,754	22,300	22,424	2.0%
Scott	19,259	18,358	21,127	22,228	22,117	22,188	21,906	-1.4%
Union	11,707	13,694	17,808	19,109	19,808	19,991	19,631	2.7%
Sub-Total	261,915	270,841	324,015	353,042	361,702	371,675	375,078	6.2%
Region	845,121	890,334	1,045,366	1,176,033	1,255,054	1,344,699	1,397,600	18.8%

Source: U.S. Census Bureau Total Population, 1980, 1990, 2000, & 2010. University of Tennessee, Center for Business and Economic Research (CBER).

Age

Like the entire nation, the Knoxville Region will face challenges as Baby Boomers continue to age. As Table 4 shows, there are 299,916 individuals age 60 or older in the Knoxville Region, representing 24.7% of the population. Table 4 also shows there are over 23,515 individuals who are 85 years of age or older.

TABLE 4: KNOXVILLE REGION ELDERLY POPULATIONS BY COUNTY

County	Age 60-64	% of Total Pop	Age 60+	% of Total Pop	Age 65+	% of Total Pop	Age 85+	% of Total Pop
Anderson	5,307	7.0	20,038	26.4	14,731	19.4	1,732	2.3
Blount	8,919	6.9	33,941	26.4	25,022	19.5	2,745	2.1
Knox	27,518	6.0	96,591	21.2	69,073	15.1	8,314	1.8
Loudon	4,125	8.0	17,260	33.4	13,135	25.5	1,171	2.3
Roane	4,497	8.5	16,115	30.5	11,618	22.0	1,188	2.2
Sevier	6,516	6.8	24,450	25.4	17,934	18.6	1,915	2.0
Sub-Total	56,882	6.6	208,395	24.2	151,513	17.6	17,065	2.0
<hr/>								
Campbell	2,462	6.2	10,492	26.4	8,030	20.2	752	1.9
Claiborne	2,296	7.3	8,347	26.4	6,051	19.1	728	2.3
Cocke	2,861	8.1	10,022	28.4	7,161	20.3	553	1.6
Grainger	1,576	6.8	6,074	26.4	4,498	19.5	332	1.4
Hamblen	3,924	6.2	15,333	24.1	11,409	17.9	1,081	1.7
Jefferson	3,792	7.1	14,104	26.5	10,312	19.4	1,057	2.0
Monroe	3,207	7.0	12,564	27.4	9,357	20.4	863	1.9
Morgan	1,565	7.2	5,138	23.8	3,573	16.5	405	1.9
Scott	1,162	5.3	4,724	21.5	3,562	16.2	398	1.8
Union	1,353	7.0	4,723	24.5	3,370	17.5	281	1.5
Sub-Total	24,198	6.8	91,521	25.7	67,323	18.9	6,450	1.8
Region	81,080	6.7	299,916	24.7	218,836	18.0	23,515	1.9

Source: U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates

Table 4 focuses on the growth of persons who are age 60 and over for the next 30 years. By 2050, people who are age 65 and above are expected to grow in numbers by 50.4% to 348,249 persons. People who are age 85 and older are expected to grow in numbers by 171.5 percent to 66,794 persons. As people live longer and the number of people at an advanced age (85 and older) grow, even regular public transit becomes more difficult to use, requiring the region to develop more specialized transportation options for the elderly.

TABLE 5: KNOXVILLE REGION PROJECTED ELDERLY POPULATION GROWTH, 2018-2050

Age	2018	2020	2025	2030	2035	2040	2045	2050	Growth
Age 60+	315,235	331,518	365,138	388,464	403,919	415,086	425,259	436,058	38.3%
Age 65+	231,592	246,374	278,763	302,943	319,398	330,536	339,320	348,249	50.4%
Age 85+	24,602	26,641	33,531	41,053	48,566	55,603	61,743	66,794	171.5%

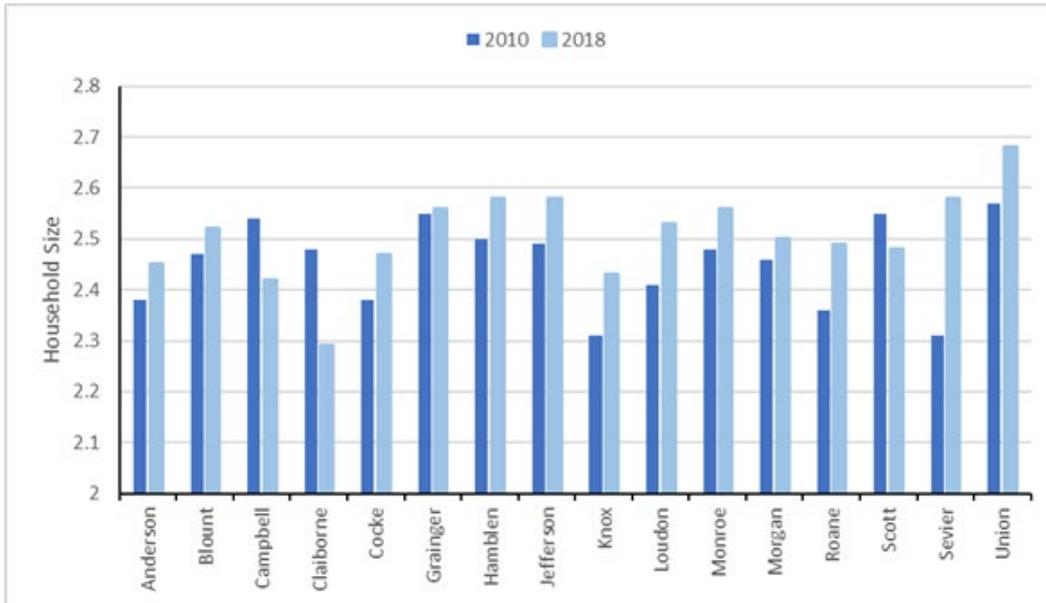
SOURCE: THE UNIVERSITY OF TENNESSEE, CENTER FOR BUSINESS AND ECONOMIC RESEARCH. POPULATION PROJECTIONS FOR TENNESSEE AND COUNTIES BY GENDER AND AGE GROUP, 2018-2050, 2019 RELEASE.

Households

In response to the increase in population, the number of housing units in the Knoxville 16-county Region has increased 19.4%, from 473,779 in 2010 to 565,556 in 2018. The change in the average household size varies by county (see Figure 2). The greatest decrease in household size was in Claiborne County, which dropped from 2.48 persons in 2010 to 2.29 persons in 2018. The greatest increase in household size was in Sevier County, which grew

from 2.31 persons in 2010 to 2.58 persons in 2018. Both the increases and decreases by percentage are statistically insignificant.

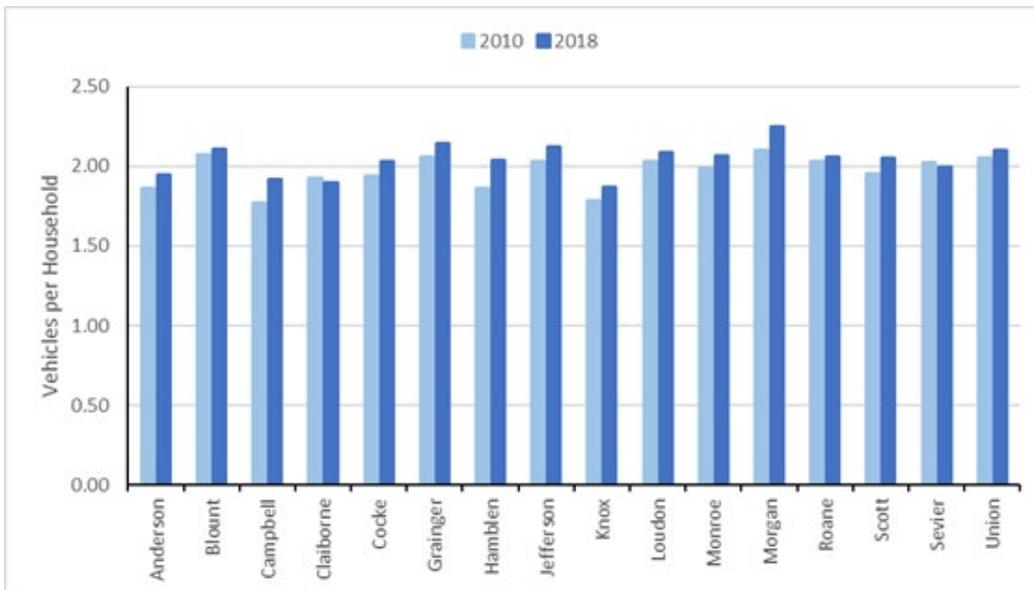
FIGURE 2: KNOXVILLE REGION AVERAGE HOUSEHOLD SIZE



Source: U.S. Census Bureau, 2006-2010 & 2014-2018 American Community Survey 5-Year Estimates

The number of vehicles per household continues to increase (see Figure 3). Knox (1.87) and Claiborne (1.90) counties have the lowest number of vehicles per household, whereas Morgan (2.25) and Grainger (2.14) have the highest number of vehicles per household.

FIGURE 3: KNOXVILLE REGION AVERAGE VEHICLES PER HOUSEHOLD



Source: U.S. Census Bureau, 2006-2010 & 2014-2018 American Community Survey 5-Year Estimates

Table 6 shows that 4.5% of the region’s households do not have access to a vehicle. Knox County has 11,283 households with no access to a vehicle, which is by far the most of any county in the region. While household size varies slightly by county, it can be estimated that close to 60,000 individuals do not have access to a vehicle. And while everyone in a household may not necessarily be of driving age, it does not decrease the significance of the need for transportation.

TABLE 6: KNOXVILLE REGION ZERO VEHICLE HOUSEHOLDS

County	Zero Vehicle Households	(%) of Total households
Anderson	1,664	4.8
Blount	1,859	3.2
Knox	11,283	5.6
Loudon	975	4.3
Roane	1,142	4.5
Sevier	1,272	2.2
Sub-Total	18,195	4.5
Campbell	1,543	7.4
Claiborne	820	5.3
Cocke	760	4.3
Grainger	409	3.7
Hamblen	1,321	4.9
Jefferson	652	2.7
Monroe	723	3.4
Morgan	380	4.2
Scott	511	5.1
Union	352	3.8
Sub-Total	7,471	4.5
Region	25,666	4.5

Source: U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates

Income

Median household income continued to increase throughout the Region as shown in Table 7. The greatest percentage increases in median income since 2010 were in Grainger (40.4%) and Union (37.2%) counties. For the TPO 6-county area, the greatest increases in median income since 2010 were in Roane (17.1%), Knox (16.4%), and Blount (14.4%) counties. The lowest percentage increases occurred in Monroe (5.8%) and Hamblen (7.0%) counties.

TABLE 7: KNOXVILLE REGION MEDIAN HOUSEHOLD INCOME & PERCENT CHANGE 2010-2018

County	2010	2018	% Change
Anderson	44,650	49,376	10.6
Blount	47,322	54,140	14.4
Knox	46,759	54,437	16.4
Loudon	49,343	56,078	13.6
Roane	42,698	50,003	17.1
Sevier	41,476	45,943	10.8
Campbell	30,686	38,170	24.4
Claiborne	31,353	36,077	15.1
Cocke	28,809	33,614	16.7
Grainger	30,623	42,997	40.4
Hamblen	39,807	42,589	7.0
Jefferson	38,239	47,264	23.6
Monroe	36,209	38,327	5.8
Morgan	36,772	40,166	9.2
Scott	28,728	35,453	23.4
Union	30,143	41,352	37.2

Source: U.S. Census Bureau, 2006-2010; 2014-2018 American Community Survey 5-Year Estimates

Table 8 shows that over 191,460 individuals live below the poverty level in the 16-county region. This equates to 16.1% of the region’s population. Claiborne, Cocke, Morgan, Scott, and Union counties all have 20% or more of their population living below poverty. For the TPO’s 6-county area, the number of individuals living below poverty is 122,786, or 14.5% of the population. As a reminder, the TPO’s planning area is a smaller geographic footprint than the 6-county area because it consists of only parts of those counties. Of the 6-county area, Anderson County has the largest percent of individuals living below the poverty level at 16.2% of the county’s population, followed by Knox (15.2%), Roane (15.0%), Sevier (15.0%), Loudon (11.9%), and Blount (11.7%) counties. While the above factor examines what percent of each county’s population is below the poverty level, Knox County has the most individuals living below poverty level at 67,732.

TABLE 8: KNOXVILLE REGION INDIVIDUALS BELOW POVERTY LEVEL

County	People Below Poverty Level	(%) of Total Population
Anderson	12,022	16.2
Blount	14,808	11.7
Knox	67,732	15.2
Loudon	6,105	11.9
Roane	7,838	15.0
Sevier	14,281	15.0
Sub-Total	122,786	14.5
Campbell	7,660	19.7
Claiborne	7,168	23.6
Cocke	8,700	24.9
Grainger	4,210	18.5
Hamblen	12,129	19.5
Jefferson	7,169	14.0
Monroe	8,650	19.3
Morgan	4,093	22.0
Scott	4,799	22.3
Union	4,096	21.6
Sub-Total	68,674	19.8
Region	191,460	16.1

Source: U.S. Census Bureau; 2014-2018 American Community Survey 5-Year Estimates

Persons with a Disability

Table 9 shows the number of persons who have a disability by county. Persons were able to select a range of disabilities, including sensory, physical, mental, self-care, go-outside-home, and employment disability, in the Census. For the 16-county region, there are 199,345 individuals who have a disability, or 16.6% of the population. When examining those 65 and over for the 16-county region, 80,882 individuals have a disability. For the TPO 6-county area, 124,318 individuals have a disability, representing about 14.6% of the population. In both the 16-county and the TPO 6-county areas, Knox County has the most individuals who are disabled at 56,682, followed by Blount (18,304), Sevier (16,810), and Anderson (14,157) counties. Knox county also has the most people over age 65 who have a disability (23,460).

TABLE 9: KNOXVILLE REGION PERSONS WITH DISABILITY & AGE

COUNTY	Disability Population		Disability Population: Age 64 & Under		Disability Population: Age 65 & Over	
	Total	(%) of Total Population	Total	(%) of Total Disability Pop	Total	(%) of Total Disability Pop
Anderson	14,157	18.9	8,706	61.5	5,451	38.5
Blount	18,304	14.4	9,795	53.5	8,509	46.5
Knox	56,682	12.5	33,222	58.6	23,460	41.4
Loudon	7,779	15.2	3,935	50.6	3,844	49.4
Roane	10,586	20.3	6,438	60.8	4,148	39.2
Sevier	16,810	17.6	10,398	61.9	6,412	38.1
Sub-Total	124,318	14.6	72,494	58.3	51,824	41.7
 						
Campbell	9,813	25.1	5,997	61.1	3,816	38.9
Claiborne	6,645	21.4	4,039	60.8	2,606	39.2
Cocke	8,226	23.5	5,042	61.3	3,184	38.7
Grainger	5,446	23.8	3,541	65.0	1,905	35.0
Hamblen	11,769	18.7	6,821	58.0	4,948	42.0
Jefferson	10,524	20.1	6,581	62.5	3,943	37.5
Monroe	9,209	20.3	5,457	59.3	3,752	40.7
Morgan	4,177	22.2	2,363	56.6	1,814	43.4
Scott	5,608	25.9	3,782	67.4	1,826	32.6
Union	3,610	18.9	2,346	65.0	1,264	35.0
Sub-Total	75,027	21.5	45,969	61.3	29,058	38.7
Region	199,345	16.6	118,463	59.4	80,882	40.6

Source: U.S. Census Bureau, 2014-2018; American Community Survey 5-Year Estimates

Employment

In 2018, there were 512,843 people age 16 and over who were employed within the Knoxville 16-county region, and Table 10 shows that 34,757 individuals age 16 and over were unemployed. For that same time period, the TPO 6-county area had 22,487 persons 16 and over who were unemployed. Knox County had the largest population that was unemployed at 11,489, followed by Blount (3,238) and Sevier (2,777) counties.

The data in Table 10 was collected before the Covid-19 pandemic, at which point a large number of workers in East Tennessee lost their jobs and/or were furloughed. While many are returning back to work and the unemployment rate is shrinking, the lasting impact of the pandemic is not yet known.

TABLE 10: KNOXVILLE REGION TOTAL INDIVIDUALS UNEMPLOYED AGE 16 & OVER

COUNTY	Individuals Unemployed	
	Age 16 & Over	(%)
Anderson	2,114	3.4
Blount	3,238	3.1
Knox	11,489	3.1
Loudon	1,180	2.8
Roane	1,689	3.8
Sevier	2,777	3.5
Sub-Total	22,487	3.2
Campbell	1,443	4.5
Claiborne	1,107	4.2
Cocke	1,557	5.4
Grainger	667	3.5
Hamblen	2,252	4.4
Jefferson	1,429	3.3
Monroe	1,722	4.6
Morgan	602	3.3
Scott	815	4.7
Union	676	4.3
Sub-Total	12,270	4.2
Region	34,757	3.5

Source: U.S. Census Bureau; 2014-2018 American Community Survey 5-Year Estimates

Section Five: Public Involvement

Public involvement for the HSTCP occurred in several ways. The HSTCP was on the agenda at multiple TPO Technical Committee and Executive Board meetings. These meetings are publicly advertised in regional newspapers and on the TPO website and broadcast on local public access television and YouTube. The HSTCP draft plan was placed on the TPO website in prior to its adoption and public comments were allowed.

The plan was discussed at a variety of public meetings, including: the Knox County CAC Transit Citizen Advisory Committee, Knox County CAC Volunteer Assisted Transportation Program Advisory Committee, Knoxville Transportation Authority, Knoxville-Knox County Community Action Committee (CAC) Board, East Tennessee Area Agency on Aging and Disability Board, and the Knox County disability committee called DAGWould?. Many of these groups are social service agencies and non-profit organizations that have concerns about public transportation, as well as groups representing citizens and transit passengers.

Other public outreach activities included an online survey and 23 personal interviews of persons who work at agencies whose mission is to assist seniors, people who are disabled, or people of low-income, or are actual users of the transportation system who are seniors, people who are disabled, or people of low-income.

HSTCP Survey

One part of the public input for the HSTCP was to conduct an online survey during the months of June through August of 2020. Efforts were made to promote the survey, including posts on the website and social media. The TPO also contacted local human service agencies and non-profits and encouraged them to forward the survey opportunity out to their staff, boards, contacts, and clients. At the close of the survey, 102 responses were collected. The results of the survey can be found in Appendix A. This section summarizes the responses.

Almost 59% of the survey respondents were providers of services, representing dozens, and in some cases hundreds, of clients. Twenty-two (22%) percent identified themselves as a senior, a person who is disabled, or a person who is of low-income. Fifteen (15%) of the respondents were representatives of boards or committees, and four (4%) were caregivers taking the survey on behalf of another. All three groups that the HSTCP focuses on were well represented in the survey, with seniors being the most indicated, followed by people with disabilities and people of low-incomes.

The survey asked for disabled participants to identify their type of disability, and respondents could select more than one. Visual disabilities were the most prevalent, followed by hearing, ambulatory, cognitive, independent living, and self-care.

The survey showed people are currently using a cross-section of transportation choices. The most common transportation method used was riding with family or friends. Less than half of the respondents indicated they have the ability to drive themselves. Other options used by the respondents included accessing transportation through volunteer driver programs, non-profits, or churches. Of the respondents who utilize transit, most said they used ETHRA, followed by KAT and then CAC. However, in the survey, respondents could individually select KAT's regular fixed-route bus service or their Lift service. If the responses to both of those are combined, KAT is the most used public transit provider. Of note is almost 10% said they currently have no method of transportation.

The most frequent use of public transportation was for medical services, followed by shopping, personal errands, and work. When asked if a lack of transportation prevents them from taking a trip, the trip types most often impacted were personal errands, followed by medical services, social trips, and shopping trips. When asked if a lack of pedestrian facilities prevented them from accessing public transportation, the results were split with half saying yes and half saying no.

The survey allowed the respondents to rank twenty-two potential strategies for improving transit in the region. The ten most prevalent of the selected strategies were:

- Make sure all public transit services have affordable fares,
- Help provide funding assistance to human service agencies and non-profits so they can purchase vans to transport their own clients,
- Provide shorter wait times for return trips on public demand response services,
- Create a website about transportation services in the region that highlights options,
- Promote programs that recruit volunteer drivers to help provide more individualized transportation services,
- Create a centralized source of information that can be accessed by one phone number,
- Establish a general program to help educate new riders about the regional transit options and how to ride them,
- Provide more frequent service on the public transit system,
- Provide better coordination between different transportation providers for a more efficient system, and
- Provide regular sensitivity training to transit drivers.

Respondents could provide open comments at the end of the survey. Some of the most common themes were:

- Reduce wait times for return trips on demand response transit services,
- Expand the volunteer assisted driver programs,
- Increase training for seniors and people with disabilities on how to take the bus,
- Add more benches and bus shelters for our aging population to wait for the bus,
- Expand KAT to cover areas further out in west Knoxville past Cedar Bluff Road and further out in north Knoxville including the Halls and Powell areas,
- Using technology, increase options for making reservations for demand response transit services,
- Add the ability to call for on-demand transit service the day service is needed,
- Add more transit services so riders can work all hours of the day and night,
- Add more demand response transit services so other trips can be taken besides just for medical appointments, and
- Add more sidewalks throughout the region.

HSTCP Personal Interviews

The TPO also conducted a series of short interviews as part of the public involvement effort for the HSTCP. Phone interviews were conducted with transit providers, human service agencies, non-profits, transit riders, seniors, people who are disabled, and people of low-income. The interviews focused on each person's perceived needs for how transit could be improved in the region. Twenty-three individuals were interviewed and their comments are in Appendix B. The following are common themes discussed:

- Expand the fixed route transit system further into Knox County and possibly to some of the cities throughout the region,
- Maintain funding for assisted volunteer driver programs,
- Expanded transit so employees can work a variety of shifts,
- Expand assisted volunteer driver programs into other cities and counties,
- Improve coordination between the various transit providers,
- Add more transportation services geared towards seniors and senior centers,

- Provide quicker returns on demand response transit systems to pick up clients,
- Provide direct transit services to high density job centers or where pockets of large employers are located,
- Expand the sidewalk network to provide more opportunities to use public transit,
- Create education programs and promote the transit options that are available,
- Expand wheelchair accessible transportation options,
- Increase transit in the surrounding counties for the unemployed who have little to no access to reliable transportation,
- Improve sensitivity training concerning seniors and people with disabilities for public transit drivers and front-office staff,
- Add accessible public transit services to the airport,
- Establish wheelchair accessible taxis.
- Explore newer services like Uber and Lyft for first mile-last mile connections to help people who live just outside the service area to transit,
- Continue to help non-profits buy vans to transport their clientele,
- Have each city and county have their own ADA coordinator,
- Expand the volunteer driver program to include younger disabled people since most current services are for people age 60 and older,
- Increase training focused on helping people to learn how to ride transit,
- Improve communication between riders and drivers and vice versa, and
- Add capacity so same day service is available on demand response transit systems.

Section Six: Assessment of Available Services

This section provides a brief description of available services in the Knoxville Region.

Knoxville Area Transit (KAT)

Knoxville Area Transit (KAT) is the City of Knoxville's transit system and the largest provider of public transit in the TPO planning area. KAT operates primarily within the City of Knoxville limits, providing bus service on 23 fixed-routes, three downtown trolley routes, and door-to-door complementary paratransit service called The Lift. KAT's fixed route and Lift hours of service are Weekdays from 6:00 a.m. to midnight, Saturdays from 7:00 a.m. to midnight, and Sundays from 8:00 a.m. to 9:00 p.m. The Trolleys service hours are Monday through Thursday from 7:00 a.m. to 8:00 p.m., Fridays from 7:00 a.m. to 10:00 p.m., and Saturdays from 9:00 a.m. to 10:00 p.m. In 2019, KAT's regular bus service provided over 2.1 million trips. The downtown trolleys provided approximately 600,000 trips. KAT's 2019 operating budget was approximately \$22.3 million.

KAT offers paratransit service for those who are unable to use regular fixed-route buses. The Lift is provided by reservation only and passengers must be certified by KAT to use the service, which requires filling out an application. All Lift passengers must re-apply every two years in order to keep their certification current. Passengers must schedule their trip a day in advance. In 2019, the Lift provided 67,507 trips.

Over the last five years, KAT has made significant upgrades to its fixed-route system, increasing frequencies on core routes to 15-minutes during peak service (from 30-minutes), while other secondary routes moved to 30-minute frequencies (from 1-hour). KAT continues to improve service frequencies and to provide later service on some routes as funding allows.

For the most up-to-date map and schedules, visit www.katbus.com.

Knox County CAC Transit

Knox County CAC Transit provides public demand-response transportation for Knox County. The agency's mission is to provide access to community resources and services for Knoxville-Knox County residents who have no other means of transportation by providing safe, reasonable, and comfortable transportation. CAC Transit provides accessible door-to-door transportation services to residents who live outside the KAT service area. Hours of operation are Monday through Saturday from 5:00 a.m. until 9:00 p.m. Employment transportation is provided Sunday through Saturday – 24 hours per day. Rides must be scheduled no later than 11:00 a.m. the day before the appointment. Fares are \$2.00 per person each way.

In addition to general trips, other types of transportation provided include dialysis and cancer therapy; Health Department Clinic and other medical treatments; therapy for severe arthritis, post-stroke or other trauma; trips to grocery stores, general shopping and other essential errands; trips related to employment and training; and sponsored transportation that increases access to community resources and promotes coordinated use of vehicles. Some funding sources allow Knox County CAC Transit to provide service to the general public, while other services are limited based on income or other eligibility requirements.

In calendar year 2019, Knox County CAC Transit provided over 148,000 trips, which equates to 6,645 individuals receiving accessible transportation services. Approximately 67% of the program's riders are over seventy-five years of age and 38% are over eighty-five years of age. CAC has a fleet of 51 vehicles and traveled over 1.4 million miles in 2019. Knox County CAC Transit's 2019 operating budget was approximately \$3 million.

For more information see www.knoxcac.org.

Volunteer Assisted Transportation Program

Knoxville Knox County CAC Volunteer Assisted Transportation Program (VAT) is a volunteer driven program dedicated to providing accessible and affordable transportation services to Knox County seniors and people with disabilities who require aid and assistance to travel safely. These trips are “door-through-door” service, meaning the volunteer driver stays with the passenger and can provide extra help rather than just dropping a passenger off at the curb. The majority of trips are for essential errands such as medical appointments or to pick up groceries. The VAT program is unique in that it provides agency vehicles for all volunteer drivers. Currently, the program has a fleet of 20 vehicles, including seven wheelchair-accessible mini-vans.

For FY 2018-2019, 58 volunteer drivers provided 7,078 trips and traveled 90,424 miles. The program also sponsored 2,822 rides for groups of seniors and people with disabilities to various social, recreational, and entertainment venues using Knox County CAC Transit. The VAT program also provides transportation counseling service by working one-on-one with clients to find them the best transportation options. This provided 500 individuals with transportation counseling, information, and referrals in FY 2018-2019.

For more information see www.knoxseniors.org/vat.

Tennessee Vans Program

Tennessee Vans is operated by the University of Tennessee Center for Transportation Research and provides vehicles to the community through its Agency Purchase Program. The Agency Purchase Program allows qualified community agencies to purchase vehicles through an affordable financing plan. Currently, over 70 program participants use their vehicles to provide a range of trips for those they serve.

Tennessee Vans is a social enterprise that works in partnership with community agencies that provide services to persons with disabilities, workforce participants, youth, seniors, recovery program participants, and community outreach programs. Through these partnerships, Tennessee Vans maintains program sustainability and produces positive financial, social, and environmental outcomes and benefits to its program participants and communities in Tennessee.

The Goals of Tennessee Vans

1. Provide mobility and access to work, community activities, and services to help people fully participate in society.
2. Reduce traffic congestion and improve environmental quality by encouraging group transportation and use of alternative fuels.
3. Promote financial self-sufficiency to ensure that resources are available to meet current and future mobility needs.

For more information see <https://tnvans.utk.edu/>.

East Tennessee Human Resource Agency (ETHRA)

ETHRA provides demand-response transportation to residents of 16 counties in East Tennessee. The ETHRA service area represents 6,563 square miles and a service area population of 1,176,033. There are no eligibility guidelines to use ETHRA. Transportation is available to all members of the general public. However, some programs or funding sources have eligibility requirements that must be met prior to program participation, such as Job Access, Elderly and Disabled, Families First, and TennCare.

Within the Knoxville urbanized area, ETHRA serves the communities of Clinton, Oak Ridge, and Oliver Springs in Anderson County; the Cities of Alcoa and Maryville in Blount County; the Cities of Loudon and Lenoir City in Loudon County, and Seymour in Sevier County. ETHRA provides a specialized service for the City of Oak Ridge. ETHRA also serves portions of Knox County that are considered rural.

ETHRA's services are provided Monday through Saturday from 6:00 a.m. to 6:00 p.m. ETHRA public transit is a door-to-door, curb-to-curb, and hand-in-hand service to ensure any resident of the service area that they will have access to public transportation services regardless of age and/or disability. Consumers may request a reservation two days in advance and all trips are scheduled on a first-come, first-served basis. However, emergency trips can be scheduled the day of need if service is available.

For calendar year 2019, ETHRA provided 280,830 trips, traveled 4,637,572 revenue miles, and operated 81 vehicles in maximum service for the 16-county area. For the Knoxville urbanized area, ETHRA provided 68,945 trips, traveled 807,268 revenue miles, and operated 25 vehicles in maximum service.

ETHRA's fares are \$3.00 one way with an additional \$3.00 for every county line crossed and/or \$1.00 extra for each extra stop. ETHRA's annual operating budget is approximately \$10.2 million, with the urban services portion costing approximately \$2.5 million.

For more information see www.ethra.org/programs/16/public-transit/.

Oak Ridge Transit System (ORTS)

The ORTS provides public demand response transit service that covers the City of Oak Ridge and is operated under contract by ETHRA. Transit services are provided Monday through Saturday from 8:00 a.m. to 4:30 p.m. Reservations for trips must be made 24-hours in advance. The cost to ride is \$2.00 one way. The service is available for anyone.

For more information see <https://www.ethrapublictransit.org/oakridgetransit>.

Blount County SMiles

The Blount County Office on Aging houses SMiles, a senior friendly, door-through-door transportation program for Blount County residents who are over age 60 and in need of rides for essential trips like medical visits or to pick up groceries. SMiles drivers are volunteers who use their personal automobiles to give rides and are screened, trained, and supervised. SMiles is a membership program that costs \$25 per year and requires the advance purchase of four \$6 round trip rides.

SMiles is designed for seniors age 60 and over who live independently, can walk with assistance of a walker or cane, and can communicate with the volunteer driver. No one in a wheelchair can be accommodated through SMiles; however, ETHRA provides transportation for persons who must remain in a wheelchair. SMiles operates Monday through Friday from 8:00 a.m. until 4:00 p.m. with trips only taken within Blount County. Once membership information is processed, a welcome packet is mailed to the rider with instructions on how to schedule a ride. Trips must be arranged three business days in advance.

For more information see <https://www.blountcaa.org/programs/>.

MyRide Sevier County (LIVE-IT)

LIVE-IT's new program, MyRide Sevier County, provide Sevier County seniors age 60 and older with much needed transportation. Rides to doctor appointments, pharmacies or grocery stores can help them maintain their independence, enabling them to lead a healthier, more productive, happier life. It is a volunteer-based service that utilizes advanced internet software to schedule, track, maintain, and manage common destinations and repeat

riders. Volunteer drivers are provided access to an online scheduling website so they can schedule their own trips at their convenience from at home and they can choose time(s) that fit their schedule. Volunteer drivers can even schedule to have a senior's ride coincide with one they were already planning for themselves. The ease and flexibility of the program make it a great fit for both senior citizens and volunteers. MyRide Sevier County requires a \$25 annual membership fee and charges \$6 per round trip ride. Typically, a 24- hour advance reservation is required.

For more information see <https://liveit.care/my-ride-sevier-county/>.

Round About Roane

Round About Roane is a senior-friendly, door through door transportation program for Roane County residents age 60 and older who need rides for essential trips including medical, grocery shopping, and social service appointments. A transportation manager coordinates the rides and schedules. Most trips are only available within Roane County, though some medical trips are allowed to cross county lines. Hours of operation are Monday through Friday, 9:00 A.M. – 3:00 P.M., and based on volunteer driver availability. Round About Roane participants must be 60+ years old, unable drive, live independently in their own homes or apartments, be mobile, able to communicate and understand, walk unassisted or with the use of a cane/walker, and afford a minimal cost for transportation. Annual rider membership is \$25.00 and a roundtrip ride costs \$6.00. All rides must be paid in advance to Round About Roane. Volunteer drivers undergo a background check and attend training prior to being assigned rides.

For more information see <https://www.mecaa.net/senior-citizen-services>.

Smart Trips Program

The Knoxville Smart Trips Program is housed within the TPO. Current goals of the Smart Trips Program are to reduce peak-hour traffic congestion on major roadways in the Knoxville Region and reduce long-term parking needs in Downtown Knoxville. The program aims to improve mobility while reducing the number of commute trips made in single occupant vehicles, thus improving air quality. Getting businesses involved in promoting transportation choices and implementing Smart Trips strategies is another important goal of the program.

A major component of the Smart Trips Program is implementation of Commute Trip Reduction (CTR) programs at individual worksites. Smart Trips staff helps develop and initiate these programs, but they are sustained in the long-term by the employer. Another component of the Smart Trips Program is a public information campaign via television, radio, online, and other advertising.

An online ride-matching service is provided by Smart Trips free of charge to the public. The Smart Trips website also allows people to log their alternative transportation trips program to be eligible for monthly prizes. This database allows Smart Trips to quantify results, although not everyone who participates in alternative transportation registers for Smart Trips, and not every participant logs all of their commutes.

Section 5310 Providers

Other agencies receiving Section 5310 funding in past years have been:

- AGAPE Outreach Homes – Knoxville
- Sertoma Center, Inc – Knoxville
- Cerebral Palsy Center of Knoxville – Knoxville
- Emory Valley Center – Oak Ridge
- Mid-East Community Action Agency – Kingston

- Evergreen Presbyterian Ministries, Inc. – Knoxville
- Adult Community Training, Inc. – Lenoir City
- Ridgeview Psychiatric Hospital and Center, Inc. – Oak Ridge
- Sunshine Industries (The ARC Knox County) – Knoxville

Other Providers

There are many other transportation providers in the area including taxis, limousine services, and ambulances. In the East Tennessee area, Uber and Lyft are slowly becoming options for seniors and persons with disabilities. In addition, many churches, child and adult day care centers, or nursing homes also have their own vans. Below is a list of other providers or agencies that fund transportation for seniors, persons who are disabled, or persons who are of low-income. This includes those agencies that provide funding for transportation. While this list includes entities that provide service as well as those that only fund service, they are all stakeholders.

- Covenant Health
- Senior Companions Program
- Loudon County Senior Center
- Foster Grandparents Program
- Senior Nutrition Program
- Retired Senior Volunteer Program
- Workforce Connections
- John T. O'Connor Senior Center
- Tennessee Department of Transportation
- Knoxville-Knox County Community Action Committee
- Sunrise Community of Tennessee

Section Seven: Assessment of Transportation Needs

Projects that are funded with Section 5310 grants must be derived from a locally developed Human Services Transportation Coordination Plan (HSTCP). A HSTCP is defined as a strategy for public transportation service delivery that: (1) identifies the transportation needs of seniors, people with disabilities, and people of low-incomes; (2) assesses the current transit providers; (3) identifies gaps in services; (4) and outlines strategies for meeting the identified gaps or needs. The HSTCP should seek to maximize local programs' collective coverage by minimizing duplication of services. FTA recommends, to the extent feasible, that area transportation planning agencies, public transit agencies, non-profit transportation providers, other human services governmental agencies, transit riders, and the general public be among those included in the plan's development.

The TPO serves a planning area (Exhibit 4) that consist of the Knoxville urbanized area, as defined by the U.S. Census, plus an area that is expected to be urbanized over the next twenty years. For the TPO this includes all of Knox County and portions of Anderson, Blount, Loudon, Sevier, and Roane counties. When examining socio-economic data concerning seniors, people with disabilities, and people of low-incomes, most of it is reported at the county level. Therefore, for the HSTCP, data is most often presented for all of Anderson, Blount, Knox, Loudon, Sevier, and Roane counties (called TPO-6 county area hereafter).

EXHIBIT 4: TPO PLANNING



The TPO's Mobility Plan 2040 states, "the region consistently ranks high when compared to peer regions in quality of life, including natural beauty, greenways, and lack of traffic congestion. But there is always room for improvement, especially when it comes to transportation access for historically underrepresented communities, economic vitality, and addressing effects of transportation on communities and the natural environment." For the TPO-6 county area, the current population is estimated at 822,991. Of this population 151,513 (18.4%) persons are

age 65 and older and 17,065 (2.1%) persons are age 85 and older. If the range is broadened to consider those persons age 60 and above, there are 208,395 people, representing 25.3% of the population. In this same area, 124,318 people have a disability (14.6%), and of those, 51,824 are age 65 and older. Also, 122,786 persons live below the poverty level.

In identifying the transportation needs of the community, especially for those persons who are seniors, disabled, or of low-incomes, several methods of assessment were used. Methods included a combination of online meetings, an online survey, personal phone interviews, and the use of prior planning/transportation studies that had been publicly vetted. Because this HSTCP was developed during the Covid-19 pandemic and many seniors and people with disabilities are extremely vulnerable to the virus, more reliance was put on past studies and use of public outreach tools that relied on telephone and online platforms instead of in-person meetings. The Knoxville community has a rich history of undertaking communitywide planning efforts, often involving thousands of citizens. In compiling relevant information, the following reports or studies were used: Regional Project Action Coalition Report (2013), Knoxville Regional Transit Corridor Study (2013), Plan East Tennessee (2013), Inclusive Coordinated Transportation Partnership Project (2014), Mobility Plan 2040 (2017), Knoxville-Knox County Needs Assessment (2017), Tennessee State Plan on Aging (2017-2021), and an Analysis of Impediments to Fair Housing Choice – Knox County, Tennessee (2020). Along with these local documents, several national resources were also used.

A 2020 Area Agency on Aging (AAA) National Survey reports that by 2030 there will be more than 73 million seniors in the United States. In the TPO-6 county area, the amount of persons age 60 and older is expected to grow by 14.7% by 2030, and persons age 65 and older will grow by almost 20%. The rapid increase in senior population has communities scrambling to prepare for their social and health care needs. Eighty-six percent (86%) of older adults wish to age in their homes and communities, yet more than half will need home and community-based services in order to do so. Beyond the growth of the aging population, 61 million people in the United States have a disability that impacts their daily activities. Also, while the number of older adults continues to grow, changes in family structure, relatives being spread across the country, and declining birthrates are reducing the pool of available family caregivers, who currently provide the majority of all long-term care for seniors or people who are severely disabled.

The availability of accessible transportation is central to the ability of all individuals to live independently. Many regions of the country provide limited transportation alternatives, leaving older and disabled adults stranded without a way to access services. A survey by the National Aging and Disability Transportation Center reported nearly half of older adults stated that giving up driving would lead to social isolation and loss of enjoyment, and 28% said it would mean a loss of independence. Social isolation and loneliness have increasingly been recognized as important issues among older adults. In addition to reduced quality of life, loneliness increases the risk of health problems, loss of function in terms of self-care, and shorter life expectancy. Having fewer social connections has also been linked to an increase in dementia. In the United States, 5.8 million people live with Alzheimer's disease, the most common form of dementia. Eighty (80%) percent of people with dementia live in their home or with family, and 24% live alone.

The Tennessee State Plan on Aging (2017-2021) conducted extensive surveying of older adults in Tennessee and found 17% said transportation issues keep them from being more active. When Senior service providers were asked what the most common unmet needs in the State are, transportation (39.7%) was the top issue. When older adults were asked what competing expenses kept them from buying food, transportation was listed third behind medicine and utilities. When asked what limited them from accessing food, transportation was once again listed third behind money and physical limitations. It is clear that access to transportation is critically important.

The Knoxville region will not be immune to the looming "aging of the Baby Boomer" phenomenon. Regional projections show that by 2040, one in five, and maybe even one in four, persons will be a senior. Researchers tell us our population is "aging in place." We are getting older, living longer, and not moving around much. There will always be retirees who travel, but most people are staying in communities where they have roots. According to research almost 25% of Americans age 65 and older do not drive. In fact, it is estimated that on average, older

adults will outlive their driving ability by 11 years for women and six years for men. Additional hurdles to aging in place include insufficient transit options and safe pedestrian walkways, and some communities lack these resources altogether. A 2014 Study shows the majority of older adults live in low-density suburban and rural areas where it is difficult to shop, access services, or visit families and friends without using a car. The Study reported that only 16% of respondents aged 65 and older lived within walking distance of a grocery store.

Of seniors who do not drive, more than half of this group stays home on any given day. Seniors who do not drive make 15% fewer trips to the doctor and 59% fewer trips to shop or go out to eat than those who use a car. Drivers go out for social trips about eight times per week, while non-drivers go out about three times per week. Even if a senior cannot drive but has family support for transportation, that dependence can lead to depression. Persons who cannot drive are often more self-conscious about asking for rides, citing feelings about dependency and concerns about imposing on others. And, while family members gladly help, they suffer costs in terms of time, transportation, and loss wages in caring for a senior or a person who is disabled who cannot drive. Often seniors will continue driving despite safety risks to themselves and the public because they are faced with no alternative. Public transit services are needed to help maintain independence for many in our community.

People who are disabled face many of the same transportation issues as seniors. In a 2018 US. Department of Transportation (USDOT) Issue Brief concerning the Travel Patterns of American Adults with Disabilities, it reported 25.5 million Americans have self-reported travel-limiting disabilities accounting for 10.2% of the population. Only one-fifth of people age 18-64 who have a travel-limiting disability work full-or-part time. Regardless of age, people with disabilities make fewer trips per day on average than people without disabilities. A 2017 National Household Travel Survey showed that over one-third of people age 18 to 64 with a disability made no trips on the appointed survey days versus 13.4% of people without disabilities.

The same USDOT Issue Brief reported the percentage of people with a travel-limiting disability increases with age. Before age 50 less than 10% of Americans have a travel-limiting disability. By age 70 that number increases to 18.4% and then increases again to 31.9% for those over the age 80. People age 18 to 64 with a disability are less likely to own or have access to vehicles versus people without a disability. Of workers with a disability, 12.2% live in zero-vehicle households versus 3.9% of workers without a disability. People age 18 to 64 with a disability reported using a range of strategies to compensate for transportation limitations. These strategies include: asking others for rides (44.3%), limiting travel to daytime (22.6%), and using special services such as dial-a-ride or reduced-fare taxis (14.4%). In many cases, people with a disability simply traveled less often by: (1) reducing day-to-day travel (70.6%), (2) giving up driving (21.6%), or using transit less (14.4%).

The use of private transportation, such as taxis, can be an option for those who can afford it. However, in the Knoxville region, wheelchair accessible taxis are extremely limited. In 2013, the Knoxville Regional Project Action Coalition called for increased availability of accessible taxis. Since 2013, new private transportation options like Uber and Lyft have been introduced, but again few, if any, are wheelchair accessible. Taxis, Ubers, and Lyfts bring their own challenges for seniors, people with disabilities, and people of low-incomes. A 2019 article in the New York Times explored the issues that older people have with Uber and Lyft. The Pew Research Center reported that in 2019 more than half of adults over age 65 own smartphones, but among adults age 50 and older, only about a quarter have used ride-hailing services. By comparison, over half of those age 18 to 29 had used an online private transportation service.

In a 2018 AARP survey only 29% of those over age 50 had used a ride-hailing app. Two-thirds said they weren't likely to do so in the coming year, citing in part concerns about safety and privacy. A recent University of Southern California study offered unlimited free Lyft rides to seniors who had chronic diseases that had reported transportation problems. The Study included travel training and lessons on how to use the transportation app. Nearly all the participants took trips and almost all riders reported improved quality of life. However, the USC study estimated the typical trip taken would have cost \$22 with the average cost per month estimated at \$500. After the study, not quite half said they wouldn't continue using the service, mostly because of cost. The article also noted the availability of Uber and Lyft is still inconsistent across the country and especially in more rural communities. A 2020 TPO survey of seniors, people who are disabled, and people of low-incomes reported 34%

have used Uber or Lyft, but 22% of those who said they had tried Uber or Lyft noted they had a negative experience. Of the 66% who had not tried Uber or Lyft, the following reasons were given: cost, safety concerns, not accommodating to persons with disabilities, felt vulnerable, not always available, and do not have a smartphone.

The TPO 6-county area is a growing job market with business expanding, starting up, or relocating to the region. Often when these businesses and employment centers come to the region, they choose locations without an abundant amount of available transit services. Several local studies call for greater connections between transit and employment centers. Both Plan East Tennessee (PlanET) and Mobility Plan 2040 call for stronger connections between land use, development, and transportation. Mobility Plan 2040 specifically calls for enhancing connections between employment centers through transit and pedestrian and bicycle facilities. The Analysis of Impediments to Fair Housing Choice – Knox County, Tennessee (2020) states transportation accessibility is an essential component of successful fair housing. Residents who do not have access to commercial areas are limited in their shopping and employment options. The study recommends extending transit routes into the region, especially near employment centers.

There are people in the community whose mobility is limited because they are physically unable to drive or unable to afford the rising cost of maintaining and fueling a car. Many people need rides to work and not just during the normal 9-to-5 work hours. The Knoxville region needs workers around the clock for both industrial and service industry jobs. Suburban or regional employment centers or industrial parks need workers and offer good paying jobs. A 2017 Report by the Tennessee Higher Education Commission reported that as the manufacturing industry continues to grow throughout the state, thousands of job opportunities are expected over the next decade. Despite this, it is projected that Tennessee will face an annual shortage of over 5,000 qualified workers for jobs in the manufacturing industry over the next ten years.

Matching good paying suburban and regional job openings with inter-city unemployed or low-income individuals seems like an easy task. It is often assumed this can be solved by providing reverse type express bus service from the central part of the urban area out to the suburban or regional employers. However, pre-Covid-19 unemployment rates for the Knoxville region were very low, and data showing where low-income individuals live does not guarantee enough individuals in one area to justify large buses. While pockets of low-income communities exist in the City of Knoxville, they also can be found throughout the other TPO-6 counties. Over the last decade, trends have shown that more affordable housing is being located in the suburbs where very little transit exists. Even within certain areas of a city or county, low-income families are often spread out enough that service by traditional transit can be inefficient. Also, depending on the job requirements there are often issues of having a population that can qualify or is trained sufficiently to be eligible. While this is not to discourage a regional fixed route or reverse-express bus services, it often takes a more strategic approach, using a range of transportation options, to connect low-income individuals to suburban and regional jobs.

Almost all past reports and studies reviewed and recently documented public outreach support some form of increased transit services. Those persons who are transit dependent are especially interested in seeing extensive increases in services. Even where current services exist, additional capacity is needed to be able to respond more quickly to passenger needs. Most demand response services are geared towards medical trips. Additional capacity needs to exist so people can make other trips, such as for employment, shopping, and social visits, and so that same day service can occur. Many riders find it inconvenient to schedule trips more than 24-48 hours in advance. Additional services are needed, both in terms of overall frequency (shorter wait times for buses or vans) and quicker return pick-up times for demand response services.

The urban area is diverse in term of population, employment, commercial centers, and medical office locations. The quality of roads also varies greatly, and most roads do not have sidewalks. Because of this, a mix of services and vehicle sizes need to be offered. While large buses on fixed-routes may be more efficient, it is impossible to offer that type of service across the urban area. There are areas where fixed route or express services should be expanded, but much of the suburban and rural area will need to be served by smaller vehicles. However, there could be situations in which the demand response services could tie into the fixed-route service (or express

services), especially at KAT's super stops or park-and-ride lots (currently no park-and-ride lots exist). While this seems like a simple solution that could open up a larger area to many of the region's transit dependent, in reality it requires a great deal of coordination, especially for timed-transfers.

Another issue frequently mentioned in the online survey and interviews was that many people already have access to transit services but are not aware of it or do not know how to use it. Therefore, a variety of activities needs to occur to promote transit services. Promotional material needs to be varied. Transit agencies need to continue to expand the use of technology and to promote services digitally, online, or through smartphone apps. Recognizing that many seniors, people with disabilities, and people of low-incomes do not have regular access to the internet or to smartphones, there also continues to be a need to design appropriate print material for various consumer groups. Respondents also agreed that there is a need for a centralized source of information that can be accessed by one phone number, website, or app to share information about regional travel.

Many people learn about transit services as they enter employment counseling, job training, educational programs, or medical treatment. An instructive program for counselors, teachers, medical personnel, and facility staff should be created to help them share information about the availability of transit services. Another useful program would be one that educates new riders about transit options, policies, and the intricacies of riding different services. Additionally, transit agencies could create "case managers" who would work one-on-one with passengers to help arrange or understand how to use transit services. Transit services could also use travel escorts or trainers. These individuals could, on a limited basis, personally accompany a passenger to help them better understand how to use transit services. Providers could recruit travel trainers who already use transit from senior or disability housing facilities to encourage other residents to try transit, assist in trip planning, or even accompany them on an initial trip. Several of the transit agencies already have some of these programs, but they do not exist at the region level.

One such concept has already proved successful. In 2018, KAT received a grant to establish a Ride-to-Wellness pilot program that sought to improve public health by providing transportation access and education to the general public and healthcare employees. The program helped demonstrate to healthcare patients that they can use the fixed-route transit system to make their healthcare trips rather than depend on a neighbor or family member who may have to miss work in order to provide the trip. Furthermore, use of KAT transit promotes independence for the user and may allow households to greatly reduce transportation costs and avoid the health impacts of missing medical appointments. Key to the program's success was for transit to build a partnership with the healthcare community. KAT, East Tennessee 2-1-1, and Cherokee Health Systems created a program that: (1) through a single point of contact taught individuals how to use KAT services or how to get to a doctor or healthcare facility by transit, (2) educated the 2-1-1 phone personnel on how to assist callers with medical trip planning, (3) provided travel trainers to assist someone making their first transit trip, and (4) trained healthcare personnel to identify patients experiencing difficulty with transportation and suggest they use the pilot program for help. Programs like these can be supported, modified, and expanded to serve the region.

It is very important to educate not only the public but local, state, and federal representatives to understand the need to provide additional funding for transit services. Providing public transportation is very expensive. The cost of providing demand response transit services can range from \$30-\$40 a trip and providing fixed-route service can cost \$70-\$100 an hour per bus. Combining KAT, Knox County CAC Transit, and ETHRA's 2019 annual budgets for the urban area, the transit providers spent approximately \$29.2 million to provide these services. Of that, KAT's budget represented 78.2%, followed by Knox County CAC Transit (13.1%) and ETHRA (8.7%). Many assume that public transportation is paid for by federal funds. While federal grants do help pay for some operations, it only represents approximately 19% of the funding spent in the urban area. Other sources of revenues include local funds (47%), fares (7.2%), TDOT grants (16.4%), and TennCare and other contract revenues (10.2%).

KAT has the most extensive transit services, offering both regular fixed-route bus service and ADA paratransit services. The KAT system serves a large portion of the City of Knoxville. The City of Knoxville itself contributes approximately 50-55% of KAT's budget, ranging from \$11-13 million a year. For Knox County CAC Transit, local government contributes approximately 10%, or \$300,000-\$400,000, of their annual budget. For ETHRA, no local

governments contribute direct funding at this time. To dramatically expand transit services in the TPO region, funding will have to come from local governments, and helping local leaders understand the importance of transit is paramount to bringing about this change.

Two TPO programs that have had a positive impact are assisting non-profits and human service providers in purchasing mini-buses and vans and financially supporting volunteer assisted driver programs. Both of these were made possible from Section 5310 Program funding. Supporting non-profits and human service agencies to purchase mini-buses or vans helps the public transit providers in several ways. Non-profits are typically better trained to work with their clients' special needs. Many of the non-profits the TPO funds service individuals with serious cognitive or physical disabilities and are in wheelchairs. The TPO provides 90% of the funding for a \$36,000-\$50,000 wheelchair accessible vehicle that typically lasts at least five years. If the non-profit provides a minimum of 2,000 trips each year for five years, that van has potentially saved the public transit providers \$300,000. And, because the non-profit provides transportation for their own clients, it frees up additional capacity on the public transit providers for other passengers. Providing funding to non-profits and human service agencies to help them purchase mini-buses and vans was identified as a top strategy in the TPO online survey.

The TPO has also funded volunteer driver transportation programs like the Knoxville-Knox County CAC Volunteer Assisted Transportation (VAT) Program and Blount County SMiles (senior miles). Both programs use volunteer drivers to help transport seniors and/or people with disabilities. The driver typically picks the client up at home and transports them to their destination. The volunteer driver stays with the client during the entire trip and can assist with certain tasks. These programs are often for the frailest in the community who can no longer use regular public transit or people who live where public transit is not an option. A 2020 survey of the CAC VAT program riders found: 78.1% live alone, 67.7% cannot operate a vehicle, 69.4% relied on the VAT service for medical appointments, and 23.3% relied on VAT for grocery shopping. For the CAC VAT program, a great majority of the riders are age 80 and above and without the program would need to move into assisted living. Providing funding to volunteer assisted driver programs was another highly ranked strategy in the TPO online survey.

Though not transit specific, it is equally important that our local officials understand the need for other infrastructure such as sidewalks, bike lanes, shelters, and signs to allow greater access to transit. Mobility Plan 2040 calls for both increased funding for transit and enhancing connections through access to transit and pedestrian and bicycle facilities. A study by 1,000 Friends of Oregon found that "households in pedestrian-friendly neighborhoods make over three times as many transit trips and nearly four times as many walk and bicycle trips as households located in neighborhoods with poor pedestrian environments." Moreover, allowing better access to transit routes by bicycling can increase the transit-shed substantially, meaning more people would have transportation options. A reasonable bike commute to a transit stop would be about 2 to 3 miles, versus the traditional walking distance is of $\frac{1}{4}$ to $\frac{3}{4}$ of a mile.

To facilitate this, there is a need for stronger development requirements that include sidewalks along all new roads and developments in order to promote mobility options, especially for low-income, elderly, or disabled persons. A majority of respondents to the TPO online survey want to be sure roadways are designed to account for all potential users, including pedestrians, persons in wheelchairs, bike riders, and transit riders. However, that same survey found that 35.6% of respondents said the lack of pedestrian facilities prevented them from using public transportation. Cities also need to rethink the way they are growing to encourage modern mixed-use town centers where people can shop, work, and recreate in a neighborhood environment. In addition to mixed-use developments, studies show seniors and persons with disabilities want quality single-family homes on small lots, but often, any housing styles other than detached single-family homes on large lots face local opposition or are incompatible with zoning or land use plans.

Section Eight: Strategies to Address Identified Needs & Gaps in Service

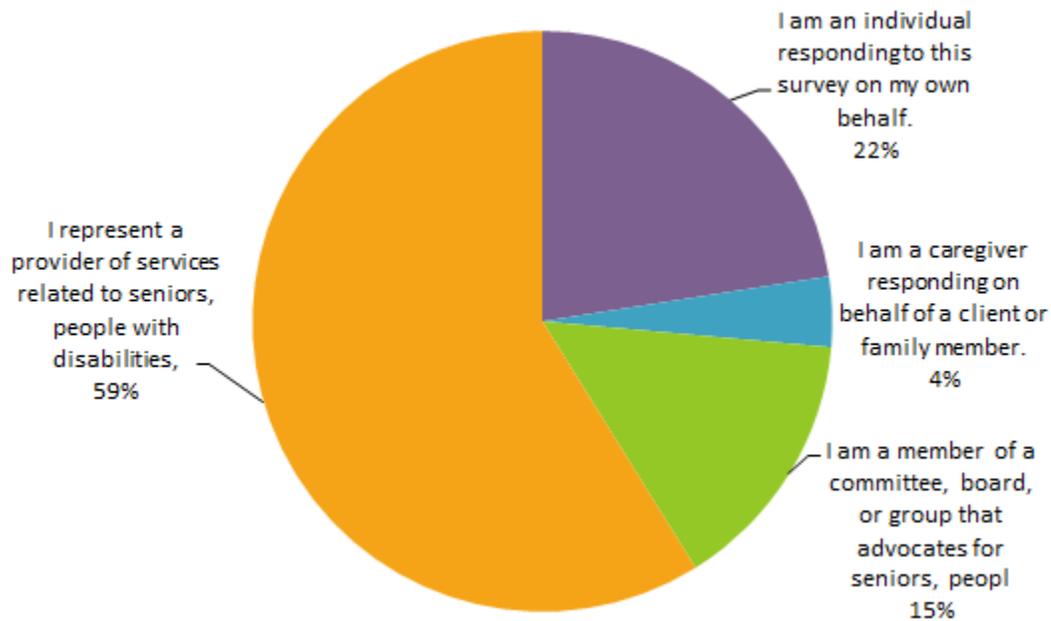
Below is a list of strategies that help address the identified needs and/or gaps in services. However, these strategies are not supposed to represent a final collection and it is hoped that additional ideas surface as the coordination and collaboration processes continue. As an adopted study, this list does not represent an agreed upon list of projects or service to be funded by local government. Collectively, this list exceeds available financial resources.

1. Provide additional, affordable, and accessible service.
 - Expand CAC, KAT, and ETHRA services.
 - Provide a mix of transit services and vehicle types that can provide a more efficient transportation service.
 - Provide enough demand response transit service so it can be used for more than just medical trips.
 - Make sure services are affordable to the passenger.
 - Provide shorter wait times for return trips on demand response transportation.
 - Provide same day service reservations for demand response trips.
 - Examine ways to coordinate transfers between the demand response services and the KAT fixed route system.
 - Provide transportation to many of the industrial parks where more skilled and higher paying jobs are located.
 - Provide later service and very early morning service so workers can take a variety of shifts.
 - Provide additional transportation services targeting employment opportunities to areas where higher concentrations of low-income or subsidized housing is located.
 - Provide a twenty-four-hour emergency transportation service to accommodate persons who have an unexpected disruption in their usual mode of travel.
 - Provide capital funding to human services transportation providers and non-profits to help purchase vehicles (mini-buses and vans) to support transporting their clients.
 - Provide operating funding to human service transportation agencies or non-profits to create and support volunteer assisted driver programs.
 - Provide operating funding to human service transportation agencies or non-profits that develop specialized services targeting the needs of seniors, people who are disabled, and people of low-incomes.
 - Explore ways to develop public/private sector partnerships that could fill the gaps in accessible transportation services, complement existing services, and assist in the development of new forms/designs of mobility options.
 - Explore ways to expand the use of private transportation options to provide additional capacity. This could include, but is not limited to, subsidy vouchers or contracts to help provide first mile-last miles transportation to connect with public transit.
 - Explore ways to introduce wheelchair accessible taxis, Ubers, Lyfts, or other private transportation options.
2. Educate citizens about the availability of transit services.

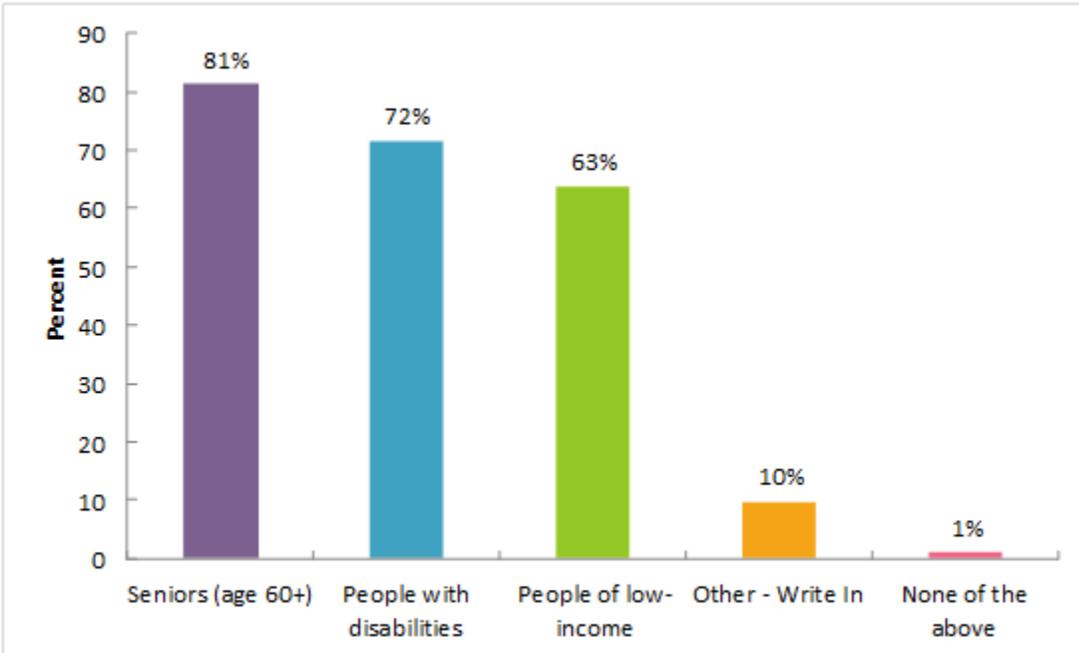
- Create a centralized source of information that can be accessed by one phone number.
 - Create Transportation Services in Knoxville Urban Area website.
 - Help transit agencies implement new technology including smartphone apps to help make accessing information or rides easier.
 - Help prepare more standard information, including a variety of print information, in accessible formats since not all seniors, people with disabilities, and people of low-income have access to smartphones or the internet.
 - Expand on KAT's Ride to Wellness program or use it as a model to create additional educational programs for potential riders, medical staff, and counselors about the availability of transit services.
 - Establish a regional program that would help educate new riders about area transit options, policies, and the intricacies of riding them.
 - Have case managers who would work one-on-one with passengers to help them arrange or understand how to use transit services.
 - Have escorts or travel trainers who, for a limited time, will personally accompany a passenger to help them better understand how to use transit services.
3. Create greater access to transit by providing infrastructure and amenities such as sidewalks, shelters, signs, and bike facilities.
- Inform local, state, and federal representatives about the need to provide additional infrastructure such as, sidewalks, bike lanes, shelters, and signs to allow more access to transit.
 - Advocate stronger development requirements to include sidewalks and, if appropriate, transit amenities and bike lanes along new roads and developments to promote pedestrian and bike travel and easier connections to transit.
4. Coordinate and increase efficiency.
- Add or share technology to help create a more conducive coordination environment.
 - Increase efficiency of transportation agencies staff through training and technology to better handle passenger needs.
 - Prepare a study that examines ways to improve coordination among the region's transit services.
 - Encourage additional training to transit providers to assist with better understanding and to be more sensitive of passengers – especially seniors and people with disabilities. Create a regional training program.

Appendix A: Results of Online Survey

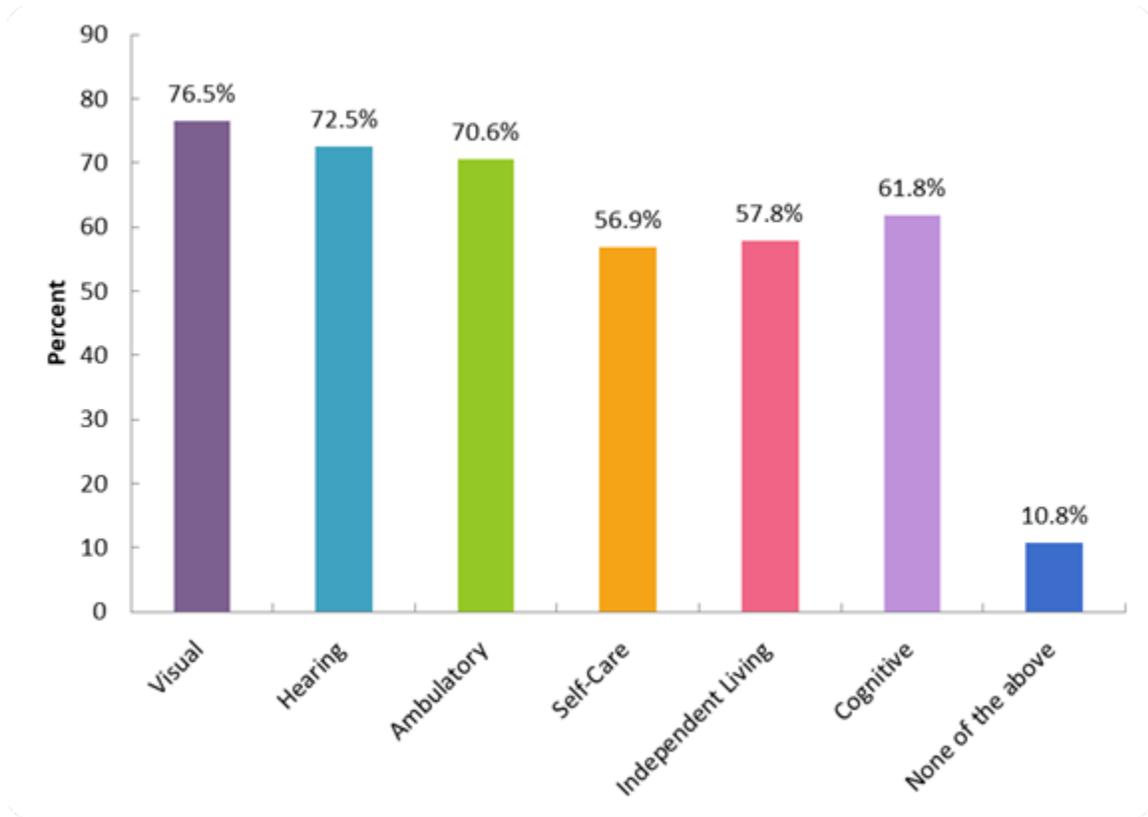
1. Which of the following best describes you? Almost 60% of the survey responders are providers of services related to seniors, people with disabilities, or people of low incomes. The benefit of these responders is they represent dozens if not hundreds of clients. Twenty-two percent identified themselves as a senior, a person who is disabled, or a person who is of low-income who were taking the survey on their own behalf.



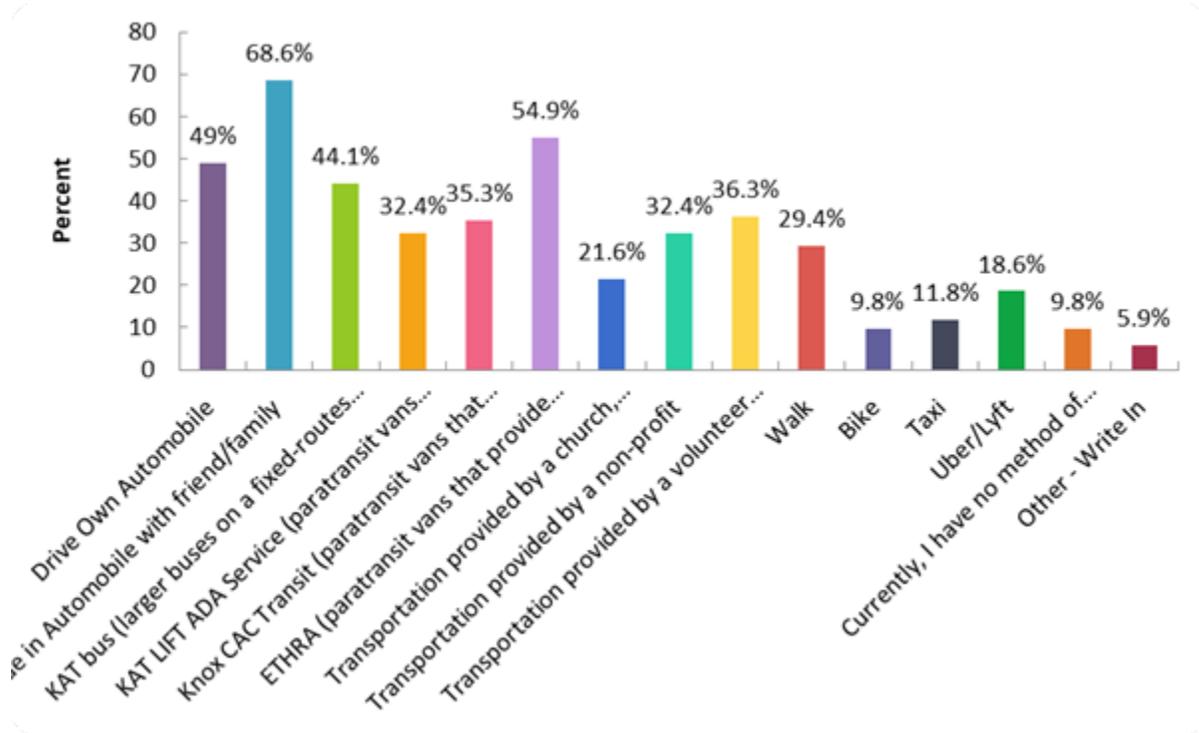
2. Which best describes who you are representing? If you are a provider of service or a member of a committee, board, or group - the person(s) you serve or advocate for are who you should represent for this survey. Check all that apply. All three groups that pertain to the HSTCP were very well represented in the survey with seniors (81%) being the most indicated, followed by people with disabilities (72.6%) and people of low-incomes (63%). In this question responders could select more than one category.



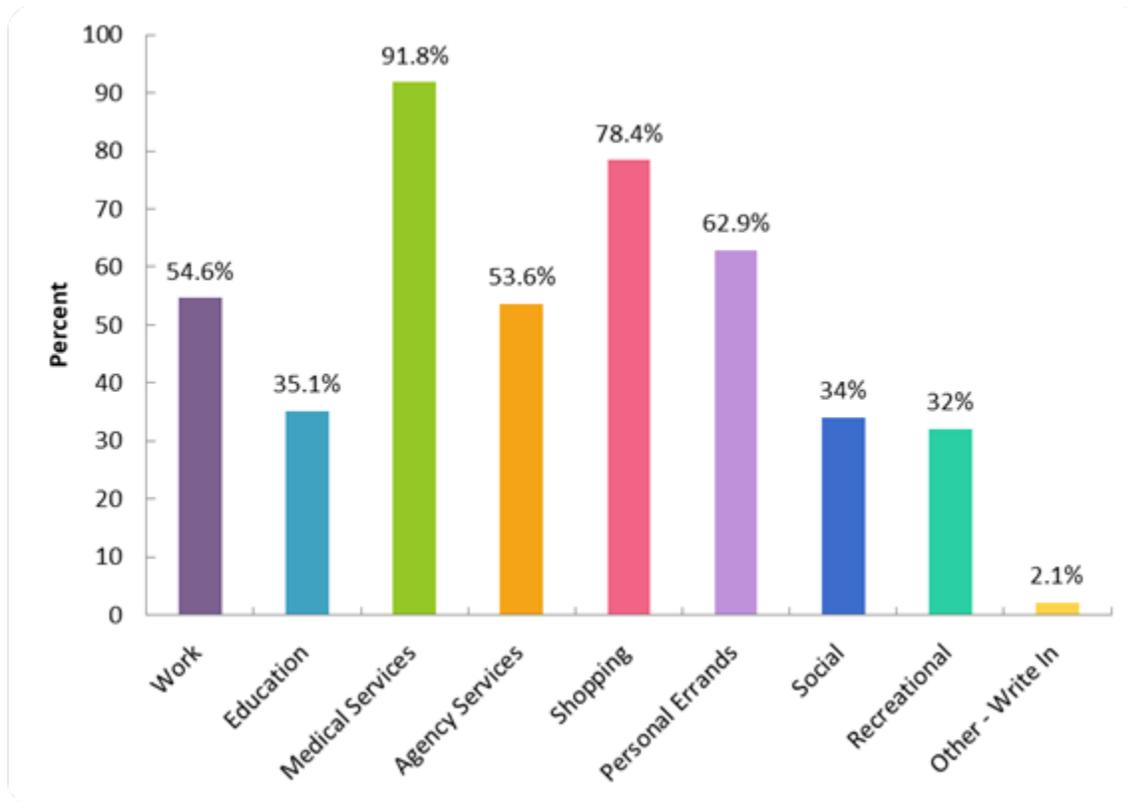
3. Do you or your clients have any of the following types of disabilities? Check all that apply. The most prevalent disability selected was visual (76.5%), followed by: hearing (72.5%), ambulatory (70.6%), cognitive (61.8%), independent living (57.8%), and self-care (56.9%). Respondents could select more than one type of disability.



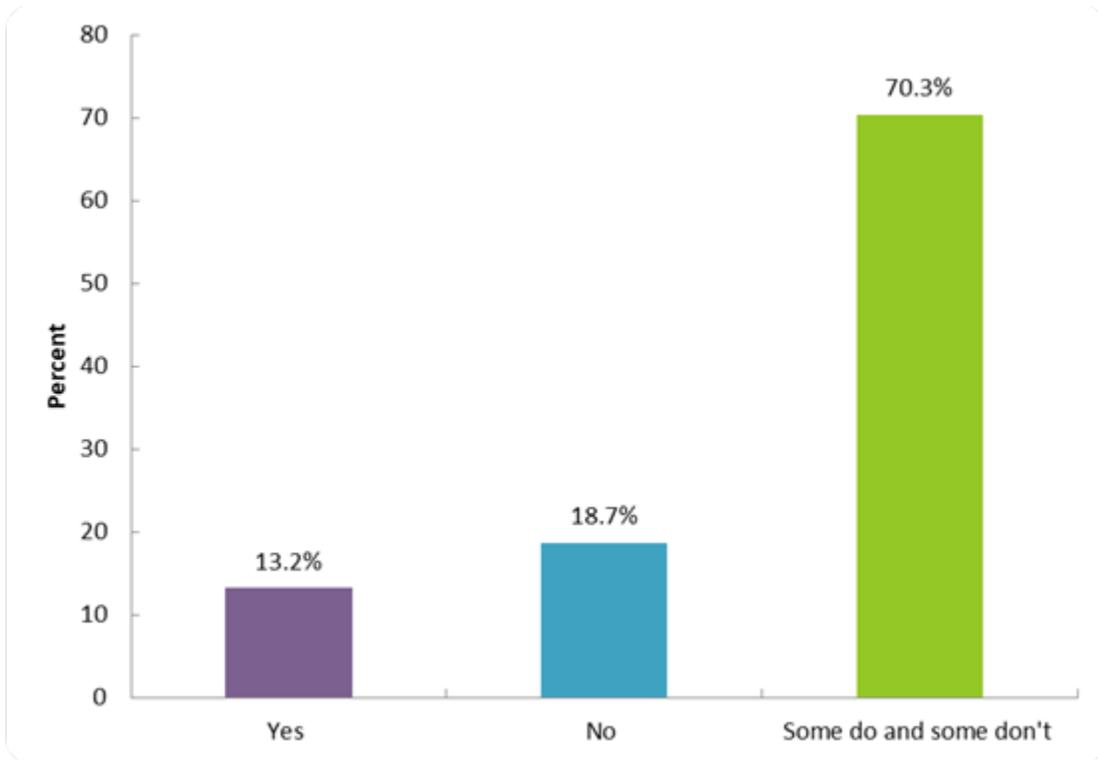
4. Which of the following do you or your clients currently use for transportation? Check all that apply. The survey showed people are using a cross-section of transportation choices ranging from riding with family or friends (68.6%), still having the ability to drive themselves (49.0%), getting transportation through a volunteer driver program (36.3%), a non-profit (32.4%), or a church (21.6%). For people who utilize transit, 54.9% said they used ETHRA, 35.3% said they used Knox County CAC Transit, and 44.1% said they used the KAT regular fixed-route bus service and 32.4% said they used the KAT Lift service. Of note is almost 10% said the currently have no method of transportation.



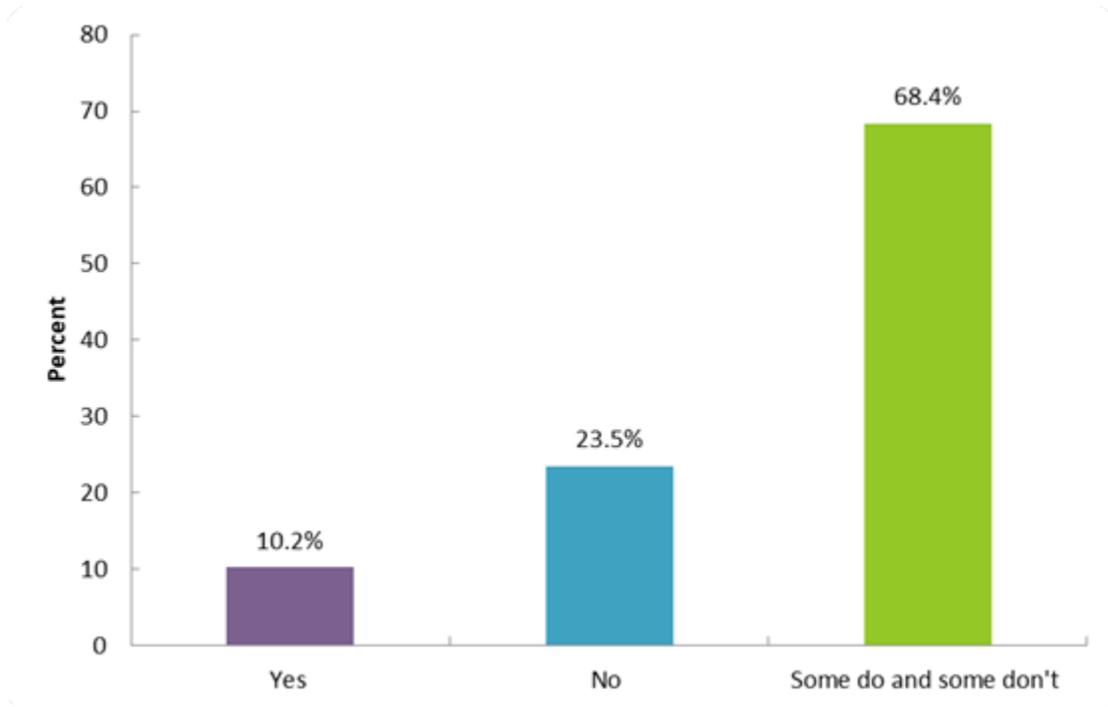
5. If you or your clients use public transportation what are the purpose of the trips? Check all that apply. The most frequent use of public transportation was for medical services (91.8%) followed by: shopping (78.4%), personal errands (62.9%), work (54.6%) and (53.6%).



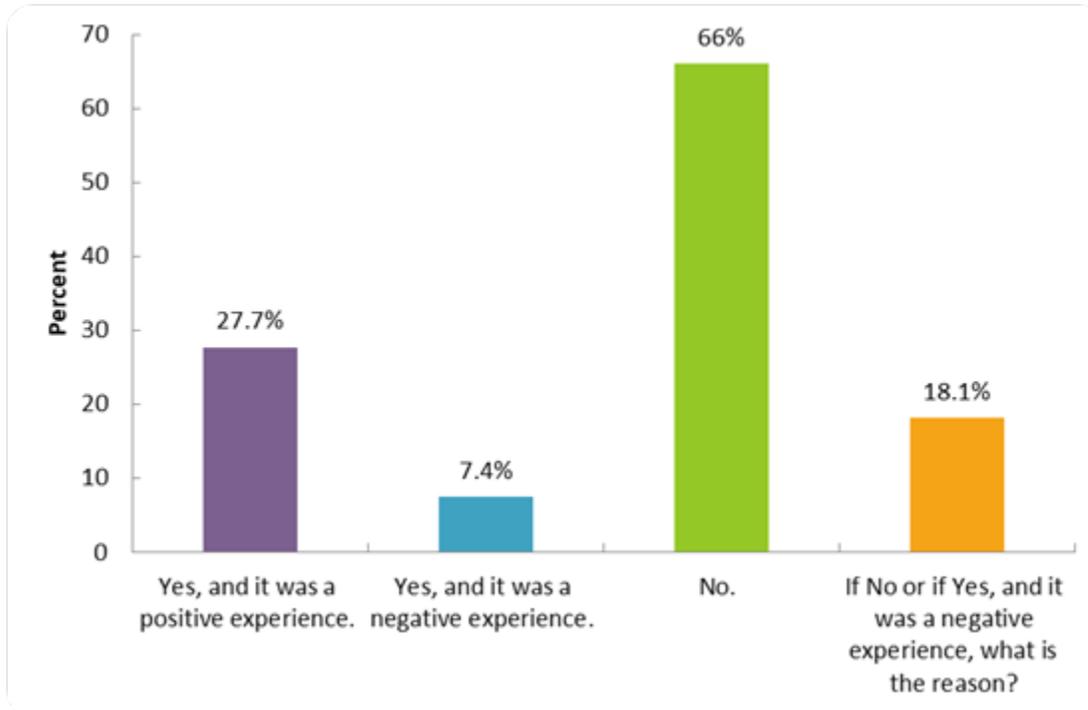
6. If you or your clients use a wheelchair, must you/they remain in it while riding in a vehicle? Of the people that affirmatively responded (31.9%) to this question more are able to ride in a vehicle without having to remain in a wheelchair as opposed to those that must remain in a wheelchair.



7. Do you or your clients need an assistant or caregiver to stay with you/them during the entire trip? Of the people that affirmatively responded (33.7%) to this question more are able to ride without an assistant or caregiver as opposed to those that must have an assistant or caregiver.



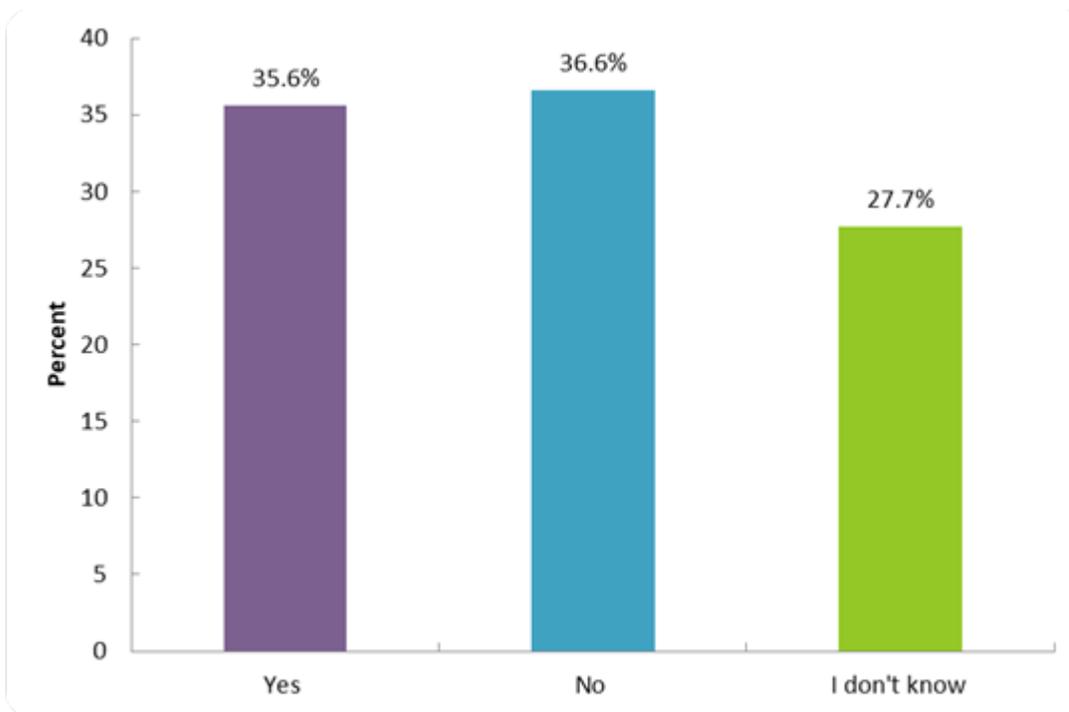
8. Have you or your clients used private transportation providers such as Uber or Lyft? Most people have not tried a private transportation provider (66.0%). Of those that have tried a private transportation provider most said it was a positive experience. But, for those that had a negative experience some of the reasons given are: cost, safety concerns, not accommodating to persons with disabilities, felt vulnerable, not always available in some counties, don't have a smartphone so can't access App.



9. How frequently does the lack of transportation options prevent you or your clients from accessing the following? For this question, persons taking the survey could check Always, Often, Sometimes, Rarely, or Never. A point system was assigned to each response and a composite score was calculated. The data shown in the table is the number of responses to each category with a calculated “composite” score shown. Then, the categories are ranked in order of highest score. With this question a higher score means a lack of transportation prevented persons from accessing that type of trip. By example, persons indicated a lack of transportation most often prevented them from taking a trip for personal errands, followed by: medical services, social trips, shopping trips, and agency trips, etc.

Category	Always 3 points	Often 2 points	Sometimes 1 point	Rarely -1 points	Never -2 points	Composite Score
Personal Errands	10	28	28	10	10	84
Medical Services	7	26	39	14	8	82
Social	11	27	27	14	9	82
Shopping	6	30	32	13	8	81
Agency Services	4	29	32	13	8	81
Recreational Trips	11	25	22	15	11	68
Work	3	18	31	9	18	31
Education	2	12	22	14	22	-6

10. Does the lack of pedestrian facilities (sidewalks, curb cuts, crosswalk signals) prevent you or your clients from accessing public transportation? For this question, of those that affirmatively answered, the results were almost split in half from those that said lack of pedestrian facilities prevented them from accessing public transportation versus those that responded that a lack of pedestrian facilities did not prevent them from accessing public transportation.



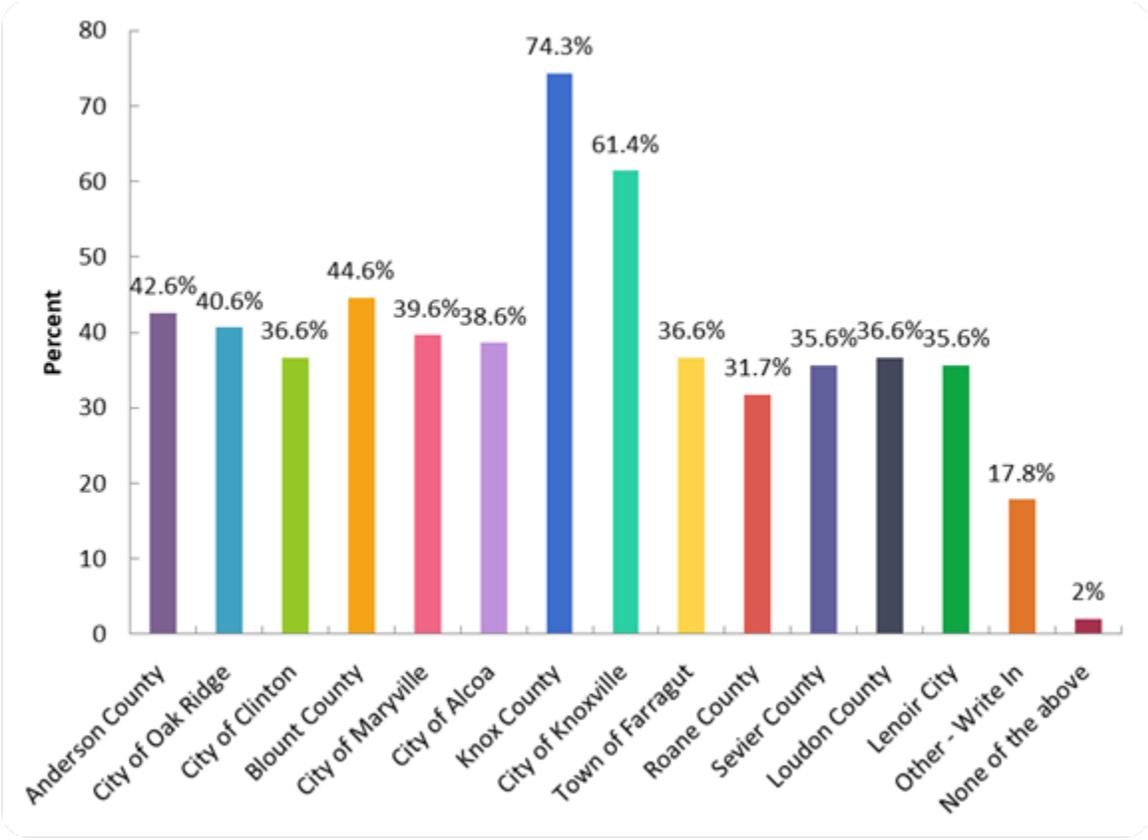
11. If you or your clients have the occasion to walk and/or ride a bike, please rate how important the following improvements are for you. For this question, persons responding could check Very Important, Important, and Not Important. A point system was assigned to each response and a composite score was calculated. The improvements are ranked in order of highest score. With this question a higher score means the improvement selected is the most or more important than the next improvement listed. The top improvement selected was designing roadways that take into account all potential users, including pedestrians, persons in wheelchairs, bike riders, and transit riders. Other top improvements listed, in descending order, are: increase the number of curb ramps to better access sidewalks, provide more transit amenities, increase the number of sidewalks, and increase the number of crosswalks to make it easier to change sides of the road.

Improvements	Very Important 2 Points	Important 1 Point	Not Important -1 Point	Composite Score
Design roadways that take into account all potential users, including pedestrians, persons in wheelchairs, bike riders, and transit riders.	52	26	5	125
Increase the number of curb ramps to better access sidewalks	47	27	5	116
Provide more transit amenities, such as benches and shelters, along the bus routes.	38	37	5	108
Increase the number of sidewalks	44	26	11	103
Increase the number of crosswalks to make it easier to change sides of the road	41	28	12	98
Provide a longer walk cycle time for crosswalks	32	28	14	78
Increase the number of automated push button signals at crosswalks	25	32	12	71
Provide a median as a safe refuge on roads with 3 or more lanes	32	20	18	66
Increase facilities to safely park and secure a bike	15	24	24	30
Increase the number of bike lanes	14	19	26	21

12. The following were identified in the 2013 Coordinated Plan as potential strategies to help seniors, people with disabilities, and/or people of low-income with greater transportation options. An important role of the Plan is to be sure strategies are identified. These strategies help determine what type of programs or projects get funded in the future. Please rate each one based on whether you think the strategy is still important or not. Persons taking the survey could check Very Important, Important, and Not Important. A point system was assigned to each response and a composite score was calculated. The strategies are ranked in order of highest score., in descending order. With this question a higher score means the strategy selected is the most or more important than the next one listed. Also shown is the percent of how many respondents selected Very Important for that individual strategy.

Human Services Transportation Coordination Plan Strategies by Ranking	Ranking	% Very Important
Make sure all public transit services have affordable fares.	150	67.7%
Help provide funding assistance to human service agencies and non-profits so they can purchase vans to transport their own clients. This strategy can help take demand off of the public transit providers and opens up capacity.	150	63.0%
Provide shorter wait times for return trips on public demand response services.	146	57.6%
Create a website about transportation services in the Knoxville region that highlights options.	135	53.1%
Promote programs that recruit volunteer drivers to help provide more individualized transportation services.	134	48.9%
Create a centralized source of information that can be accessed by one phone number.	133	48.0%
Establish a general program to help educate new riders about the regional transit options and how to ride them.	132	46.5%
Provide more frequent service on the public transit system.	130	50.5%
Provide better coordination between the different transportation providers for a more efficient system.	129	54.0%
Provide regular sensitivity training to transit drivers.	123	52.0%
Provide same day service reservations for public transit demand response trips.	122	45.0%
Expand the fixed-route KAT bus system farther out into Knox County.	114	44.8%
Provide a 24-hour emergency ride program to help persons who use transit and have an unexpected problem and can't access the bus/van for a return trip.	114	44.0%
Provide regular bus service that travels to different cities or counties.	109	40.4%
Increase public transit services on the weekend.	108	42.3%
Allow free and timely transfers between the different transit services.	103	40.2%
Have "transit" case managers who would work one-on-one with individuals to help them arrange service.	101	37.8%
Promote travel training programs that teaches people how to ride transit.	101	35.7%
Provide public transportation services to regional industrial parks for increased employment opportunities.	94	39.2%
Provide later service at night on the public transit system.	89	38.1%
Provide earlier starting times on the public transit system.	84	34.0%
Explore ways to encourage wheelchair accessible taxis, Ubers, or Lyfts.	81	36.5%

13. Where do you or your clients live? Check as many as apply. The survey had a strong response in terms of geography or location. Every TPO jurisdiction (county or major city) had people responding either their clients lived there or they themselves lived there. There were a few respondents who lived outside the TPO 6-county area with the most prevalent being Campbell, Claiborne, Jefferson, Morgan, and Union Counties.



14. Do you have any other general transportation needs that have not been addressed in this survey or any other comments you would like to share? The following are comments made by responders in their own words.

- Serve all counties in East Tennessee.
- More vehicles and more drivers (for ETHRA transportation specifically).
- Van services for senior used to be senior friendly ... Lifts, wider steps with hand rails.
- More drivers/vans to reduce wait times for return trips and "too early" pick up times for those sharing rides for long trips.
- Wait times for demand response transit services are too long.
- Expansion of assisted transit services that allow for door through door options and support the more frail and vulnerable populations - it has to be more than a ride for our older and more disabled citizens.
- The drivers of demand response transit services need to give the client MORE than 5 minutes to get to the door, instead of driver pulling out and calling it a no show.
- As a driver of a non-emergency medical service, I am very aware of the need for increased carry-on and storage capacity on bus services for persons needing to shop for groceries and other items. It is very expensive and time consuming for someone to make several trips to get basic necessities.
- Better communication for scheduling services. Better scheduling for better servicing.
- Unmet needs include those who live in rural areas (outside of the areas that the TPO serves) and those who live within the area that TPO serves but cannot use traditional public transit. Volunteer programs that provide assistance are working to address this need, but funding to support these programs is extremely limited. TPO/RPO funding needs to be available for both equipment purchases and administrative costs to encourage non-profits and providers to explore the possibility of developing and maintaining these services.
- The largest issue most of my clients have is with the wait times for public transit demand response trips. Being picked up hours early and staying hours after an errand/appointment is done is very taxing for my clients.
- Hands on training in taking a bus along a route, using the transit map, and general use of public transit system would greatly reduce anxiety and promote independence in my senior clients and volunteers. Additionally, bus shelters are essential for my aging population.
- It is extremely important to help the most vulnerable, aged/disabled rider with door-to-door assistance to access the vehicle, to get off the vehicle for needed visits, and to see that the person is safely at/in their door on return home!
- Continue to serves more counties.
- On the bike, sidewalk, ramps the design of these can also impact those with power motor chairs. None of my clients use bikes, most are too old or disabled plus I don't know they have the balance to bring home groceries. Maybe look at low income/subsidized housing with certain days being grocery store day and say "the van will be leaving for Food City at 9:00 and 10:00, with last trip out at 11:00" that way they can plan to go and it is a better use of resources.
- Trips to Veterans Administration offices in Tri-Cities area.
- There is no bus service past Merchants Road to cover Halls and/or Powell which are still Knox County. And bus service to Halts at beyond Cedar Bluff Road is needed. Seniors, especially victims

of abuse or trauma are extremely transportation sensitive, and need high levels of service for shorter periods of time.

- Ultimately Uber and Lyft will provide these services far more efficiently and cost effective than Regional government. Regional government should focus on coordination and education.
- ETHRA is a good thought but it's terrible for our clients. Some sit for hours waiting.
- I am increasingly becoming unable to walk unassisted and occasionally ride the bus. I would appreciate more seats (covered would be nice) at bus stops because it's hard for me to stand for long. More bus stops and/or more routes would be helpful so I wouldn't have to walk so far to get to and from the bus. Also, a few days ago I had to retrieve my car at a repair place on Chapman Highway, but the Route #41 doesn't make any stops between Kroger and Walmart, so I had to ride an Uber at a greater expense. I used to ride the bus often to and from work and always enjoyed it. I would still be doing it if I were able to walk. The drivers have almost always been pleasant and helpful.
- Many of our riders do not have access to computers and need printed info by mail with large print.
- I think there is technology out there right now from that could make our regional on-demand services so much simpler and easier. We all need one scheduling platform and one mobile pay platform that can be used across multiple agencies and they do exist now. What is East Tennessee waiting for?
- I cannot stress enough that the current bus system needs to be accessible further into the county. We live just past Cedar Bluff Road and to access a bus, we have to drive to get it.
- So far, I have been impressed with the services available in Knoxville. Knox County is a bit more challenging due to the larger geographic size. I am very pleased that the agency continues to work on this area. Keep up the good work.
- Being able to call for transit service day of need would be great. Having a person to help at destination. i.e. walk around the grocery store or stay in dr. office waiting room would also be great.
- We no longer have a system.
- Having the bus system cross into other counties would be helpful.
- Many of our clients who use ETHRA or CAC services for transportation complain that they have to wait hours to be picked up to return home. We do have several clients who would like to walk to the nearby store but there are no sidewalks for them to safely trespass.
- We live on a large hill. I would like to see service on weekends so we don't have to walk down the hill to get groceries. Broadway Towers closes gates at certain times but perhaps buses could come outside gates so we don't have to walk up and down the hill to either Broadway or Nadine Street to get a bus.
- Some of the drivers don't lower the large buses to make it easy for people with strollers to get on and off the bus.
- It would be so helpful to have bus service to Pellissippi State Community College at the Hardin Valley campus!
- Larger coverage of the fixed-route bus service area, more services so I have the ability to get transportation to work at all hours, we need more transportation so we have other options than just going to medical appointments.

- Living by the mall to go to Cedar Bluff Road and home is a 3 hour round trip that can be driven in 15 minutes. I would love to see the Route 11 expand down to Peters Road or Ebenezer Road. After leaving West Town go down Ray Mears Boulevard like normal, take a left at the light going down Downtown West Boulevard, Gleason Road to Ebenezer Road, Ebenezer Road right turn to Peters Road, Peters Road back to Kingston Pike. Only one left turn and it is a light that is NEVER busy. This would increase property values along Gleason Road, in Wedgewood Hills, offsetting the cost. Seriously, try and buy property in West Knoxville connected to the Route 11. It is impossible. This also opens up the Cedar Bluff to be retooled. This removes congestion at Walmart having 3 buses at Walbrook and Walmart. There is an abandoned Food City next to the 8901 Kingston Pike (Krystal) that could be used as a "hub." The Route 11 could come off North Peters Road, cross Kingston Pike, take a right into the parking lot then leave the parking lot at Ebenezer Road and Kingston Pike the Route 16 then is freed up a bunch. Start from that abandoned Food City, head down Kingston Pike, hit Turkey Creek, Lovell Road, Murdock Drive, Sherril Road, Walker Springs Boulevard, Fox Lonas Road, Walker Springs Road, Kingston Pike, back to the abandoned Food City. The only left turn in that whole map is at Sherril Road. Through all of this you have increased property values in multiple subdivisions, added basically all of Cedar Bluff and Kingston Pike... you can go ask the Town of Farragut for money for bus service like you had a decade ago. One left turn total on the Route 16 and this would cost two total buses extra? One more on the Route 11 and you might up the Route 16 to 2 buses.
- You combined pedestrian and bike options in several of questions. Wheelchair and Uber were also combined in some questions. Knoxville needs wider sidewalks and reliable bus service. We have plenty of bike routes and few bike riders.
- My main concern is that the closest transit stop to my house, in the Kingston Woods subdivision is more than one mile away. There are no sidewalks or reasonable pedestrian ways to walk. As a resident of the City of Knoxville, I should have easier access to transit.

Appendix B: Personal Interviews

As additional public involvement, interviews were conducted with representatives of transit providers, human service agencies, non-profits, transit riders, and seniors, people who are disabled, and people of low-income. The interviews focused on their perceived transit issues and needs of the region. This is a summary of those interviews.

Anna Bass – Program and Quality Director for Disability Rights Tennessee, Director of Advocacy for East Tennessee and a member of Knox County DAGWould? – I would like to see more transit in the rural areas. I would also like to see an expansion of the fixed route system further into Knox County and possibly to some of the cities throughout the region. I would like to see the volunteer driver programs expanded. Perhaps Uber and Lyft are viable for some, but I would like to see them be accessible for wheelchair users. I also would like to see expanded transit so employees can work a variety of shifts. I know of workers who had to quit jobs because transit was not available for late night (after mid-night) or early (before 6:00 a.m.) shifts. Often employers want people to start on late shifts and work their way up to day shifts.

Karen Estes, Knox County CAC Transit, Director – I would like to see maintained funding for the volunteer assisted driver programs. I would like to see improved coordination between the various transit providers.

April Tomlin, a member of Knox County DAGWould? – I would like to see more transportation services geared towards seniors and senior centers. There does need to be a quicker return on the demand response transit systems to pick up clients as I have seen many having to wait a long time. I have a mixed opinion on the use of technology with seniors. Before the pandemic, I thought seniors were weary and not interested in using technology like websites or apps. Now that the pandemic has forced people to stay at home, I have noticed more seniors are embracing technology.

Belinda Woodiel-Brill, Knoxville Area Transit, Chief Planning & Public Information Officer – I would like to see transit services expanded to serve high density job centers or where pockets of large employers are located. I see a continued need to expand the sidewalk network which is important for riders to stand and wait for the bus in a safe environment. Long term, I would like to see continued development of more density along main arteries or corridors of the City of Knoxville.

Nancy Welch, Knoxville Knox County CAC Volunteer Assisted Transportation Program, Program Manager – I would like to see more education on transit options available in the region. I feel many in the region don't know what services exist or even how to use them. I would like to see more education of health care workers on transportation options. One issue CAC deals with is the discharge of seniors or disabled patients from hospitals. They are often sent home with no family support and no way to get prescriptions, groceries or supplies, and no way to follow-up with medical appointments. The health care provider, as part of the discharge plan, needs to consider what transportation the patient has available to them. Also, I would like to see expansion of wheelchair accessible transportation options. The Knox County CAC VAT program has wheelchair accessible vehicles available to them, but many of the other regional volunteer driver programs do not.

Joani Shaver, Blount County Office on Aging and the Smiles Volunteer Driver Program, Director – Many times people are being discharged from the hospital and do not have a ride home. SMiles can't help in that situation, since we only transport "members." People regularly get sent home in taxis. ETHRA doesn't work in this scenario either. That is a definite gap that exist. Once seniors are too feeble or disoriented to use SMiles, no options remain for their transportation unless family or friends are available. It would be interesting to know how many ambulance trips are made for this population. That's another potential gap. Unemployed or underemployed people in Blount County who have no access to reliable transportation and must rely on family and friends to obtain or retain employment.

Sandy Booher – Senior and Disabled Citizen of the City of Knoxville and also on the Knoxville Transportation Authority and on Knox County DAGWould? – I want to see more sidewalks. I have very low vision but I can get around the City on KAT. However, my biggest challenge is walking to the transit stop or to my destination because often no sidewalks exist. For demand response transit, I do think a quicker response for return trips is needed so you don't have to wait as long.

Katherine Moore, disAbility Resource Center, Executive Director – I think there is still a need for sensitivity training concerning seniors and people with disabilities for public transit providers both in terms of drivers and front-office staff. From time-to-time, I still hear of issues surrounding the denial of transportation due to service animals. In buses, the location for people who are disabled to sit is located up front. Often when someone has a service animal they are asked to sit in the back. I would like to see accessible transit services to the airport. I feel this is important for our disabled citizens, but also visitors who are disabled who want to visit our region. I still think there is a great need for sidewalk improvements, crosswalk improvements, and accessible bus stops. These deficiencies still prevent many disabled citizens from access transit or getting around town. And, not all parts of the region's public transit providers' websites are totally accessible (videos, etc).

Warren Secrest, a Senior and Disabled Citizen of the City of Knoxville – I would like to see continued support for volunteer assisted driver programs and see new ones established across the region. I still think there is an opportunity of establishing accessible taxis. Newer services like Uber and Lyft should be explored as options, but the City can legislate changes and legally monitor the taxi cab industry.

Nancy Brown, a Senior with a Disability who lives in Knox County and is a member of DAGWould? – I would like to see transit expand to the airport and to Oak Ridge. I think our region is losing lots of convention business by not having accessible transit service to the airport. I think there is a possibility of services like Uber and Lyft to help, but I worry about their overall standards. I have seen some cities use Uber and Lyft for the first mile-last mile concept. This helps connect people who live just outside the service area to transit and that sounds like a good idea.

Stephanie Cook-Brewer, City of Knoxville, ADA Coordinator – Connectivity of transit system to sidewalks is a big issue. With a fully connected, accessible sidewalk system, there would be more opportunities to use public transit and that would provide more opportunities for people to seek and find employment. Systematic, coordinated training for transit operators on providing service to seniors and people with disabilities would be great! KAT does regular training, but I am not sure of ETHRA or CAC. It would be awesome if there was a training module available and maybe that should be a goal? It would be great if business owners and managers understood the value that having public transit adds to their bottom line and to the satisfaction of their customers. Too many times, a manager wants the bus as far away from the door as possible and that is not good for riders' safety. Perhaps a public awareness campaign about the value that transit adds to private business would help? Accessibility of information is a biggie! If a person is blind and goes to a website to determine which route to use, they should find the site easy to navigate and interact with, but often it isn't. Accessible taxis are still not a reality in East Tennessee, but would be so helpful! Accessible taxis would help folks who cannot schedule transit in advance, such as when something urgent pops up. Education about the prevalence of seniors and people with disabilities and some of their unique needs, how meeting their needs makes transit easier and more enjoyable for all riders would be fantastic, too. If society realized this type of thing, we would see deliberate access and universal design be a priority across our communities.

Lee Freeman, Sertoma Center, Chief Executive Officer – I think additional resources are needed to help replace non-profits' aging fleet. I believe one way to help grow our Employment and Community First (ECF) program would be to have wheelchair accessible vehicles allotted to that program. I do know the director of ECF has had inquiries for services that we have not been able to accept due to the fact there are no additional vehicles available to provide transportation in the ECF program. As our population ages we are finding that more of our existing people supported are needing the wheelchair vans in residential as well. So, it is not just simply a matter of replacing some of the aging vehicles but also being able to add needed vehicles when necessary. In saying that, with the

continued consolidation of homes we will be in a position of having more individuals in the homes and in some cases a single vehicle will not be acceptable for transporting all persons in the home at one time.

Mark Brogan, a Disabled Veteran who is a Citizen of Knox County and is a member of Knox County DAG Would?

– I would like to see services focus on people who are temporarily disabled. By example, people who have an epileptic seizure must not drive for six months. The current transit systems for disabled persons seems more geared towards those with permanent or long-term disabilities. Accessing information about the services is difficult and complex and hard to understand for someone who is only going to use them for a short time. I am not sure if people even understand these services are available for short term disabilities.

Kevin Hicks, Emory Valley Center, Facilities Director – Funding is always a barrier but one of the biggest issues we run into is the availability of public transportation. A lot of the people we serve are in rural areas, Campbell, Morgan and Roane counties (to name a few) which have no public transportation. The only thing I know of that is available in these areas other than private services is ETHRA which is limited in the services they are able to provide.

Aaron Bradley, East Tennessee Area Agency on Aging & Disability, Director – As people are living longer and therefore are older many cannot use the current transit system. Older citizens can't ride on vans for hours or walk to bus stops and stand and wait. I would like to see a systemic change in how public transit is designed. Seniors and people who are disabled deal with isolation. Isolation leads to increased dementia and increased medical problems. I feel the newer volunteer driver models are a good response for the aging population. This service is more hands on or what they call door-through-door service, instead of simply dropping someone at the curb. Having the person stay with the client helps them with certain errands and allows an extra set of eyes on them and if needed the volunteer can help connect them to other services. I want to see continued funding of the volunteer driver programs and see expansion regionwide. I would like to see public transit allocate funding dedicated to serving the more niche markets. The so called, on- size-fits-all model of transit service leaves many unable to use it. I also would like to see TDOT provide funding for regional volunteer driver programs.

Louise McKown – a Senior who is Disabled who is a Citizen of the City of Oak Ridge – I want to see more cities and counties have their own ADA coordinator. The grant for the MY Ride volunteer driver program for Oak Ridge was only written for Oak Ridge citizens over the age of 60, and according to my sister, if a person wants to go grocery shopping and uses a wheelchair, the volunteers will not help them load the wheelchair into the volunteer's car. But there apparently seems to be problems with that program now (note: unfortunately, the Oak Ridge program no longer exist).

Donna Saunders, ARC Knox County/Sunshine Industries, Vocational Case Manager – I think that one of the improvements that could be made is expanding the KAT Lift service area. The Lift service is only $\frac{3}{4}$ of a mile from a fixed route and then it goes to Knox County CAC Transit to take over. The KAT Lift is so much more consistent than CAC and ETHRA. If the Lift had a larger catchment area it would help. And, maybe a system such as Uber could be contracted by the government to help. Uber, for this population might be more affordable versus the cost of public transit. Uber might be more easily understood by individuals with decreased intellectual function. We have a lot of work to do when training someone to ride a bus, the paratransit is much more user friendly.

Dennis West, East Tennessee Area Agency on Aging & Disability, SNAP and SVTN Coordinator – I would like to see the continued support and expansion of the volunteer assisted driver programs. A lot focus is on medical trips and I would like to see that expanded to other types of trips. Social isolation is a big challenge for seniors and people who are disabled. Many people need some level of companionship. Volunteer drivers can help provide some of the needed companionship, even if it is only for a few hours a week. Though not in the TPO purview the Rural Planning Organizations (RPOs) need to have operating funding so they can also establish volunteer driver programs in the rural counties. For VAT programs it would be good if grant funds could help with mileage reimbursement or the ability to hire a limited number of paid drivers as volunteers are becoming harder to recruit (especially during a pandemic).

Michael Estes – a Disabled Citizen living in Knox County – I am frustrated that the KAT Lift service area changes on the weekend versus what is available Monday through Friday. This has limited me on types of jobs or shifts I can take because I can't work weekends due to no transit service. I would like to see better communication between the rider and the drivers. Also, it is very difficult to change reservations. There is no flexibility in the system for short-notice changes. Sometimes the wait to be picked up is long and I have been left behind due to a misunderstanding of where I was to be waiting. The drivers don't wait long or will not take time to look for passengers.

Emily Duchac – Tennessee Department of Transportation – Mobility and Accessible Transportation Supervisor - Transportation is the number one barrier for people with disabilities in the State of Tennessee, including in East Tennessee. Accessible transportation is needed for independent living – and – this is for both physical and intellectual disabilities. Traditional fixed route transit and paratransit or demand response transit is vitally important, but it can be challenging to ride and not for everyone so we need other alternatives. Lack of infrastructure such as sidewalks, curb cuts, and no shelters/benches still prevent many from using regular fixed-route transit even though they may live fairly close to a bus stop. I would like to see more emphasis on travel training. Transit travel training should be included in many of the life skills programs being taught by non-profits to the disabled community. Travel training to the elderly is important also. Many who have never ridden a bus before are afraid or too unsure and need some level of education to help them.

Hubert Smith – a Senior with a Disability and a Citizen of the City of Knoxville – I have used almost all of the different transit providers one time or another. I was using the fixed-route bus until I had a stroke a few years ago. Now I ride the KAT Lift service and occasionally Knox CAC Transit. The KAT Lift is an outstanding service. The Lift is my lifeline, without it I am not sure what I would do. Sometimes both KAT Lift and Knox County CAC Vans are late for pickup, but as a veteran rider, I am aware of the complexities for the transit system to schedule returns and plan for it accordingly. I think some of the frustration of other riders is because they don't know what to expect. The transit agencies need to do a better job helping first time riders to understand how the system functions which could temper expectations.

Darlene Thurman – a Senior who is Disabled and a Citizen of the City of Oak Ridge – It is very frustrating not to have service when you need it. I would like to see more same day service. Occasionally, transit can accommodate same day service, but most likely you need to make a reservations 24-48 hours in advance. I have used taxis before but they are expensive and often not clean. Even taxis in Oak Ridge can take 2-3 hours to arrive. I would like to see a fixed route system in Oak Ridge even if a minimum one because at least you know when it will arrive. I am also frustrated that it takes a long time for return trips on demand response system. I once waited over an hour in the heat outside and eventually had to retreat inside to cool down and the van came by and did not see me and left. The transit system did not try to call me to see where I was at. Some seniors or people with disabilities get so frustrated with the current transit services they just don't go out. It is also frustrating that if I need groceries, I have to wait 2-3 days to get a reservation for a trip.

Terri Danis, Sevier County LIVE-IT, Executive Director – I see a need to provide volunteer assisted driver programs and expand those already in operation. In Sevier County we carry a lot of older (age 80+) clients who can no longer use regular public transit. These individuals need an extra level of care and our volunteer drivers will stay with them during the entire trip. Traditional transit services drop passengers off and pick them back up at the curb. Our clients have memory issues, are unstable, or do not have the stamina to walk long distances. The volunteer driver can help steady them and make sure they can get back home. The volunteer driver can also help them with physical needs like carrying groceries. Many of our clients cannot wait for the time it takes for demand response transit to return and pick them up. Though not a lot, we are starting to see generational families that now live together and need transportation. We service a few families in which the parent is in their late 90s and the son or daughter are in their 70s and both live together and need transportation help.

Mike Patterson, East Tennessee Human Resource Agency Transit Service, Director – I would like to see increases in operating funds to expand service days and service hours especially in Anderson, Blount, Loudon, Sevier, and Roane counties. Continued support for purchasing vehicles for these expanded services would be helpful. I would like to see increase in coordination efforts between all organizations providing public transportation services especially for seniors and those with disabilities. Many individuals that are transportation disadvantaged are not able to get a ride from household members or others for life-sustaining trips such as critical medical care, grocery shopping and other vital services. I would like to see programs for urgent day trips and transportation on demand for day of services without a 24-hour notice.