Center for Accessibility and Safety for an Aging Population

Florida State University

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RESEARCH FINAL REPORT

Older Adult Public Transportation Services in Rural and Small Communities in the United States: An Examination of Service Types, Provision, and Use

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Older Adult Public Transportation Services in Rural and Small Communities in the United States: An Examination of Service Types, Provision, and Use

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List of Abbreviations

Alleghany in Motion (AIM)

Atomic City Transit (ACT)

Elderly and Disabled (E&D)

Federal Transit Administration (FTA)

Hill Country Transit District (HCTD)

River Cities Public Transit (RCPT)

Rural Community Transit (RCT)

Sunset Empire Transportation District (SETD)

Tillamook County Transportation District (TCTD)

Transportation Reimbursement and Information Program (TRIP)

United States Department of Housing and Urban Development (HUD)

United States Department of Transportation (USDOT)

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Disclaimer

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Abstract

This study uses a national web-based survey and case study investigation to better understand the types of public transportation services that exist in rural and small communities, how these services are organized, financed, and delivered, and how they are used by older adults (typically age 65 and over). The results indicate that providers offer a diverse array of transportation options for older adults, and frequently partner with social services, government, and other entities to finance, operate, and/or market their services.

Providers frequently use partnerships to assist with marketing and outreach, as well as to leverage fiscal resources and professional expertise. These partnerships are frequently the source of ideas to improve service provision. Providers face significant financial challenges that frequently obstruct their ability to provide the types and amounts of services they would prefer to offer. They are required to be adaptive, leverage unique funding sources, and to reduce costs as much as possible, including occasionally through the use of volunteers to provide some services. Providers regard direct outreach, word-of-mouth marketing, and personal contact as critical to gaining trust with older adults and encouraging greater use of their services.

The results also highlight a lack of knowledge as to the extent of older adult use of most transportation services in rural and small communities, as few service providers devote resources to tracking older adult use of their service. This limits our ability to determine whether older adult transportation needs in these communities are being effectively and adequately met.

Chapter 1 Introduction

1.1 Background

America is aging. Individuals aged 65 and older comprise 14.1 percent of the total population and they are projected to account for 21 percent of the total population by 2040 (Administration on Aging, 2013; U.S. Census Bureau, 2014). The members of this growing population will likely encounter one or more of the following issues related to aging during their lives: frailty, limited mobility, social isolation, and/or some form of cognitive impairment. These common issues associated with aging affect individuals' ability to engage in the instrumental activities of daily living and are further complicated by limited transportation accessibility for many older adults.

In order to permit these individuals to age in place, to the extent that they desire, and maintain their independence in the homes and communities they have known for decades, they require safe, convenient and reliable transportation to provide them with accessibility to medical appointments, retailers, volunteer opportunities, church activities, the always-vital visits with friends and relatives, and other everyday activities (AARP, 2012). Transportation needs become particularly significant once older adults stop driving and rely on public transportation or family and social networks to get them to their desired destinations (Safe Mobility for Life Coalition, 2011; AARP Public Policy Institute & NCSL, 2011). Older adults who do not drive still need to make regular medical, business, and shopping trips in addition to visits with friends and/or family in order to maintain social networks, which may contribute to the long-term physical and mental well-being of the older individual.

While older Americans living in metropolitan areas that provide fixed-route transit have access to public transportation to help them meet their mobility needs, approximately 19 percent

of older adults live outside metropolitan areas and lack easy access to such transportation services (Administration on Aging, 2013). In rural and small communities, basic transportation options usually include rides in private vehicles owned by family or friends, taxis, or paratransit services. As a result of the limited transportation options available to older adults in these communities, older adults must carefully plan their outings so that they may efficiently accomplish all necessary tasks on the days when they are able to make trips. Additionally, the transportation options available are often limited with regard to scheduling and availability of the service and can be quite costly to the individual.

In recent years, providers in several states have begun to implement different public transportation service models that seek to overcome the mobility barriers that older adults face in rural or small communities. These may be truly innovative services that have rarely been used before, or they may be modifications or adaptations of existing service models in or to these communities. However, most of these services are understudied, and there is a need for more information about the types of services that are provided, their cost and funding mechanisms, how they are organized, managed, and delivered, and most importantly how they are used by older adults to help meet their mobility needs.

1.2 Study

This study provides information about the types of public transportation services available for older adults (individuals aged 65 and over) living in rural and small communities and addresses critical questions related to the organization, management, delivery, and use of these services. The study is guided by three primary research questions. First, what types of modified/innovative public transportation services exist for older adults living in rural and small

communities? Second, how are these services financed, organized, and delivered by the entities that provide the service? Third, how are these services utilized by older adults?

In the context of this study, a modified/innovative rural or small community public transportation service is one that adapts traditional service models to address the unique mobility needs that exist in rural and small communities. These modified/innovative services have emerged largely in response to two conditions that severely limit rural and small communities' abilities to provide traditional transit services. First, a scarcity of fiscal resources at the local government level has forced many communities to look to other entities to provide transportation services, including community-based organizations, public-private partnerships, and higher levels of government. Second, the low population levels, low employment densities, and scattered development patterns that characterize rural and small communities have prompted service providers to move away from the traditional fixed route model of service delivery to alternative forms such as feeder services, flexible services, and multipurpose services. The authors discuss each of these subjects in the literature review section of the report.

1.3 Organization of the Study

This report consists of five chapters. The first chapter is the introduction, which defines the problem and introduces the research questions that guide the study. The second chapter is a literature review that surveys the state of knowledge on public transportation services for older adults living in rural and small communities. These two chapters help to frame the study.

The heart of the study consists of chapters three and four. Chapter three presents the results of a national web-based survey of transportation service providers that operate in rural and small communities and serve older adult populations. This chapter provides background information on the types of services being provided, how they are being provided, and challenges

and opportunities related to either the provision or growth of such services. Chapter four discusses a set of more detailed case studies of selected service providers from around the country. This chapter relies on a combination of documentary review and key respondent interviews with both agency-side and user-side contacts to explore the services being offered, as well as issues related to their provision and use by older adults, in some detail.

The report concludes with chapter five, which distills lessons from the investigation and outlines directions for future research. An accompanying appendix provides supporting materials for both the web-based survey and key respondent interviews discussed in preceding chapters.

Chapter 2 Literature Review

2.1 Transportation Needs of Older Adults in Rural and Small Communities

The unique transportation needs of older adults (individuals aged 65 and over) have been explored at length in recent years, often through the lens of "aging in place" initiatives. The focus is often on the promotion of transportation as a means of maintaining independence for older adults who wish to maintain community ties while remaining in their own homes (American Association of Retired Persons, 2012). Destinations popular among the older adult population include shopping centers, medical offices, places of worship, and community centers, but in rural and small community settings such destinations are often inaccessible by transit. This compels older adults living in such areas to rely on the personal automobile to a greater degree than their urban counterparts (Giuliano, 2004; Rosenbloom, 2004). In recent years, the gerontological literature has focused on the physiological and cognitive impairments that often accompany aging, and how these can have a deliterious effect on driving (Alnish & Hensher, 2003; McKnight, 2003). As such, the need for reliable alternative transportation options becomes particularly pronounced once older adults voluntarily or involuntarily cease driving (Safe Mobility for Life Coalition, 2011; American Association of Retired Persons & National Conference of State Legislatures, 2011). This need is particularly acute in rural and small communities due to the smaller array of alternative transportation services that tend to be available.

In rural and small communities, older adults face an additional set of challenges. Many communities have experienced farm consolidation and the outmigration of young and educated residents, which reduces the local tax base and thus the community's fiscal ability to provide many essential human services. Additionally, the outmigration of educated professionals,

particularly in the medical professions, compels older adults in many communities to seek medical care in larger communities elsewhere (Carr & Kefalas, 2010). Thus, the ability to age successfully while living in a rural or small community setting often depends to a great degree on being able to travel long distances to obtain medical services, to shop for daily essentials, and to maintain social connections (National Rural Health Association, 2013).

The authors structured the review of public transportation services available in rural and small communities along three dimensions: service provision, service types, and service funding. The baseline knowledge presented in this literature review then helped to shape the research questions that guide this study, specifically the investigation of older adult use of these services. Interspersed within the literature review are case study vignettes that discuss representative cases for the service concepts discussed.

2.2 Service Provision Models for Rural and Small Communities

Rural and small communities tend to have smaller tax bases as a consequence of the decreased economic opportunities and lower living standards of their communities as compared to their urban counterparts. These smaller tax bases typically produce insufficient local government fiscal resources to support a permanent public transportation program (The White House, 2010). Because of these resource challenges, service providers have often been said to exist in a "culture of innovation" (KFH Group, 2001). Their circumstances require them to be creative and adopt unique funding streams, institutional partnerships, or other strategies related to service delivery, management, and administration (Hosen and Powell, 2011; Koffman, 2004).

Three service provision strategies are generally available to resource-strapped local governments that still seek to meet the public transportation needs of their residents: 1) allow a community-based organization to provide public transportation services, either formally or

informally (community-based model); 2) request that a higher level of government, either regional or state government, provide transportation services (regional/state model); or 3) partner with a community organization or private transportation provider to jointly provide the service (partnership model).

Figure 2.1 illustrates the three general models and their typical variants. The following paragraphs then define each of the three models and provide an example to illustrate their use in practice. Note that these are general models of service provision within these types of communities; the providers employing these models may or may not target older adults as a specific rider group.



Figure 2.1 Transportation Service Provision Models for Rural and Small Communities

2.2.1 Community-Based Model of Service Provision

In many resource-strapped rural and small communities, local governments have turned to a community-based, or non-governmental, model of public transportation service provision. Indeed, community-based approaches are the most common of the three types of service provision strategies employed in these communities. Under this model, the local government uses other community organizations to meet local transportation needs and relieves itself of the burden of directly providing transportation services. Community-based transportation services are typically operated by professionally-staffed transportation-focused service providers, nonprofit organizations, or volunteer organizations. Community-based service models are different from a model where local government partners with another entity to cooperatively provide services; this partnership model is discussed later.

Community-based services can be further divided into two sub-categories: formal services and informal services. Formal services are typically operated through a single-entity or a partnership of private or non-profit organizations, whereas informal services are typically provided through volunteers who donate their time – and sometimes their personal vehicles as well – to providing transportation services. This variability in service provision strategies provides rural and small communities the flexibility to design a transportation system that will work best to address that community's transportation needs according to community size, demand, and customer base, and whether riders include able-bodied older individuals and/or older individuals with disabilities.

Formal Services: Single Entity

In some communities, a single non-governmental entity provides transportation service under a formal agreement or contract with the government. The entity typically receives funding from federal, state, or local governments, but is otherwise unaffiliated with a government body. These entities are often non-profit organizations or private, independently operated transportation providers. Community-based organizations, generally focused on a single town or

region, are often able to provide a unique flexibility with respect to both the types of funding sources used to support their services and the types of transportation services they provide riders.

For example, a community-based organization that provides transportation services for older adults, individuals with disabilities who reside in rural areas, and residents receiving housing assistance from the U.S. Department of Housing and Urban Development (HUD), can receive federal grant funding for providing mobility services for the first two groups from the Federal Transit Administration (FTA), as well as additional federal funding from HUD for the third group. The strategy of adapting services in order to both meet client needs and to obtain funding from a variety of sources is important to maintaining an effective transportation service at the community level, because both the array of funding sources and the needs of riders are ever changing. As a secondary community benefit, the expanded services made possible with these funds just described might also result in higher overall ridership for the service.

Community-Based Formal Model Case:

Zuni Entrepreneurial Enterprises, Inc., Zuni, New Mexico

Zuni Entrepreneurial Enterprises, Inc. is a non-profit community-based transportation agency that is based on the Zuni Pueblo Nation Reservation in New Mexico. It initially operated to serve individuals with developmental disabilities, but has evolved over time into a transit service that also fills unmet transportation needs within the broader Zuni Pueblo tribal community. Statistics from the early 1990s indicated that nearly 30 percent of tribal households had no personal automobile and the median household income was \$16,500 (Transportation Research Board, National Research Council, 2001). As a result, it became clear that providing transportation services to the general population of the reservation could help improve quality of life for many residents by providing them new mobility options (Transportation Research Board, National Research Council, 2001). Recently, the agency has grown to provide transportation services off-reservation as well. Medical, work, and education related trips are among the primary trip types for which customers utilize the service. Fares range from \$.50 to \$2.50 for travel locally and to the nearby Gallup community. Special trip fares are a minimum of \$10.00 plus mileage charge (Zuni Entrepreneurial Enterprises, Inc., 2015).

Obtaining funding can prove challenging for tribal governments because they are considered sovereign nations, but the agency navigates the funding system by operating as a non-profit organization on behalf of tribal residents and not the tribal government. By applying for funding as a non-profit organization, the agency can obtain funding to assist the tribal population without the significant hassle of working through bureaucratic processes as might be experienced if the tribal government applied for funds directly (Transportation Research Board, National Research Council, 2001). The benefit of obtaining funding using this non-governmental, community-based channel results in a single entity that can provide transportation for members living on the tribal reservation, but also for those tribal members living outside the reservation in neighboring communities.

Formal Services: Multiple-Entity Partnership

Multiple entity partnerships are models where transportation services are provided by two or more community-based, non-governmental entities that work in a formalized multiple entity partnership to deliver a tailored transportation service to a community. Typically, these formal partnerships enhance the community-based model by allowing for the pooling of financial resources, as well as technical or managerial expertise, in order to optimize the management and delivery of the transportation service. This model can operate at a variety of different levels, from local to regional and even statewide partnerships.

Community-Based Formal Model Case:

Malheur Council on Aging, Ontario, Oregon

The Malheur Council on Aging is the designated Area Agency on Aging responsible for coordination of many older adult services for Ontario, Oregon. The brokerage service provided by the Malheur Council on Aging is an example of a multiple entity partnership that arose out of a need for transportation services for older adults, but within a community that has limited funding to meet such a need. To meet this need, several community-based agencies came together to form a brokerage service that would serve as a centralized scheduling and dispatch service for the community. The brokerage service was designed to coordinate transportation services for multiple organizations such as the council on aging, local senior centers, local dial-aride services, school districts, Welfare to Work programs, and nursing homes (Transportation Research Board, National Research Council, 2001).

The tailored transportation service in this case is the brokerage service that provides a central mechanism for coordinating transportation services in the area. By pooling limited resources (financial, logistical, and capital) from many smaller agencies, the Malheur Council on Aging is meeting not only the transportation needs of the older adult population in the community, but also the needs of the community at large as the popularity of the service continues to grow.

Volunteer Services

Volunteer services, while often managed through community-based services, are unique in that volunteers who drive customers to and from their desired destinations typically operate the service. Drivers can be either paid or unpaid. Volunteer service programs can be formal or informal, but a majority of volunteer programs are informal, meaning an established agency, government, or firm does not operate them. Volunteer drivers for formal programs are welltrained and often wear a uniform while operating the service (Transportation Research Board, National Research Council, 2001). Volunteer drivers for informal program are also trained, but typically have no specific uniform or vehicle requirements. These services are very convenient for older adults not only because they provide transportation services, but also because they afford less mobile older adults opportunities to socialize with others. Additionally, volunteer driver services using personal automobiles may provide an added level of comfort and familiarity for the older adult rider, which can ease anxiety that is sometimes attributed to riding public transportation. From an administrative perspective, volunteer-focused programs almost always offer substantial cost savings over the more formal alternatives (Ellis and McCollom, 2009). They are generally less expensive than either a taxi or paratransit trip, and often require less administrative oversight than formal programs.

Community-Based Informal/Volunteer Model Case:

Transportation Reimbursement and Information Program, Riverside, California

The Transportation Reimbursement and Information Program (TRIP) is an example of a volunteer-oriented transportation program for older adults. TRIP was initially designed to serve the needs of isolated seniors in California's large but transit-poor San Bernardino County, many of whom required transportation to specialized medical services in Los Angeles or Las Vegas (Independent Living Partnership, 2015). TRIP does not operate using paid drivers or dedicated vehicles, but instead issues modest mileage reimbursements to volunteer drivers who provide transportation to enrolled riders. It is designed as a complement to existing transit and paratransit systems, and has been adapted by transit agencies and human-service organizations nationwide.

The TRIP model is able to obtain substantial cost savings through its unique structure that places the rider at the center of decision-making. Once a rider is enrolled in the program, he or she contacts the driver of their choice – TRIP does not enroll or pre-select drivers – and the two schedule trips as they see fit. Both rider and driver then report the mileage and fuel used to the TRIP-affiliated agency, and a reimbursement check is given to the rider to give to the driver. The mileage-reimbursement rate varies by agency, but TRIP's designers argue in promotional materials that the program offers a substantial discount over traditional paratransit service (Independent Living Partnership, 2015). They also point out that placing scheduling and driver selection in the hands of the client not only reduces administrative costs, but also promotes independence and empowerment among older adults. By relying on volunteer drivers and small-scale mileage payments, the TRIP model represents a flexible and cost-effective means of providing a semi-formal transportation option for older adults in need.

2.2.2 Regional/State Government Model of Service Provision

When local governments are not able or choose not to provide transportation services due to resource deficiencies within a community, regional or state governments may provide the service. There are several advantages that arise from this approach to service provision. First, because regional or state governments often have access to more fiscal resources than their local counterparts, it allows a better resourced government to provide transportation service that might not have been funded, and thus never provided, or might have been poorly funded, and thus be of poor quality or reliability. Second, a higher level of government might choose to provide transportation service across multiple jurisdictions scattered over a larger geographic area than that which might have been served by a single local government. In both cases, potential travelers enjoy better quality transportation services that provide more mobility and better accessibility.

Regional Government Model Case:

Hill Country Transit District, Central Texas

Hill Country Transit District (HCTD) is a regional body that operates a transit system for a nine county service area in central Texas. Known as "The HOP", the system is designed around a model that allows customers to make convenient trips around the local region within which the service operates (Hill Country Transit District, 2015). The HCTD's mission statement reflects a commitment to improving transportation to a region, not just a single community. Its services include regular fixed route service, specialized transit services for those unable to use the fixed route system, and rural feeder services.

As a regional body that operates a regional transit service, HCTD brands itself as a fullservice system capable of meeting the diverse transportation needs of the general public as well as social service agencies and their clients within a nine-county region (Hill Country Transit District, 2015). HCTD tailors its service to meet the specific transportation needs of each community within which it operates. For example, HCTD operates standard buses on a fixed route in a small community, but also operates smaller specialized transit vehicles that serve the very rural communities in the region. This variety in vehicle types and services improves overall connectivity within the nine-county service area. By serving multiple counties, the residents of the rural areas are better able to connect to the larger communities with relative ease, thereby increasing their overall accessibility.

2.2.3 Government Partnership Model of Service Provision

Government partnership models feature a partnership between a local government and a community-based agency or private service provider. This model is particularly important for rural and small communities because the local government cannot always afford to provide service on its own, or may lack the staff expertise needed to provide transportation or offer older-

adult care. The rationale for a partnership model is that it allows for a pooling of resources in order to increase capabilities, provide the best possible community transportation solutions within the limits of the available resources, or to simply make management of the system easier for the governing body. Most partnerships are actually managed by the non-profit organization partner, with funding provided by the government partner(s) (Ellis and McCollom, 2009).

Creative partnerships result in mutually beneficial arrangements for the service provider, customer, and partner whereby the transportation service provider receives reasonable compensation for providing services, the customer receives some type of transportation benefit or discount for using the service, and the partner receives a benefit relative to the type of service arrangement to which it has agreed.

Government Partnership Model Case:

Citibus, Lubbock, Texas

Citibus in Lubbock, Texas is an example of a government partnership model of transportation because it is managed by the City of Lubbock, but is operated by a private transportation provider that is under contract for the service. This contractual arrangement may contribute to perceived efficiency on the part of the local government by transferring some of the operational burden onto a private provider, but the partnership extends also to partnerships with local businesses in an effort to capture ridership. Citibus, while an established transportation system, is a model case in that it has provided a unique solution to an important accessibility problem: the need for people to be able to access healthy and affordable food.

In response to a problem where clients were not able to easily reach a local grocery store in the area, Citibus implemented the United Shopper shuttle. As part of an agreement with a local grocery store chain United Supermarkets, grocery store customers receive transit at a free or discounted rate and the grocery store maintains a unique customer base by providing 100% reimbursement to Citibus for providing transit services to grocery customers (Transportation Research Board, National Research Council, 2001; Transportation Research Board, National Research Council, 2011; Transportation Research Board, National Research Council, 2004). This service is provided four times a week to low income residents, older adults, and riders with disabilities and requires a pre-application process be completed in order to qualify (Citibus, 2015). The benefit to this type of partnership is that a critical transportation need is met for populations often at a distinct disadvantage when it comes to accessing healthy food options. Additionally, mobility and a sense of independence are increased to these populations when a grocery shuttle service is offered.

While Citibus' shuttle operates in a larger community, adaptive services such as regular shopper shuttles that provide transit services to grocery stores (or pharmacies, medical facilities, etc.) on a regular basis are also beneficial for rural and small community residents, particularly older adults. Filling unmet transportation needs for these communities must be a focus for transportation agencies as accessibility to food, medical care, and other social services is an issue that is acutely severe in such communities and can be easily mitigated by providing transportation to the services residents need the most.

2.3 Transportation Service Types in Rural and Small Communities

Rural and small communities have unique issues related to low-density development

where a spatial mismatch occurs between where rural and small community residents live and

where a majority of the services these residents need to access on a regular basis are located.

Providers have developed an array of modified/innovative service strategies in an effort to more

effectively serve this challenging environment. The authors identified four primary service types

- feeder, flexible, multi-purpose, and system modification - as a result of reviewing relevant

literature (Table 2.1). Each service type can be associated with any one of the service provision models previously mentioned in Figure 2.1. In this section, each service type will be defined and an example case provided for each.

Service Type	Definition
Feeder Service	Provides transportation from rural areas to feed into the urban area fixed-route network. Operate to extend the reach of the formal transit network.
Flexible Service	Provides some type of hybrid service between different transportation service types such as fixed route, feeder systems, or demand response. Can be flexible with regard to routes or service delivery type.
Multi-purpose Service	Provides multiple types of service using the same vehicles. Some examples are vehicles delivering bulk mail between communities and providing transit service on return trips (the "postal bus") and school buses serving as transit vehicles when not in school use.
System Modification	Modifies an existing transportation service to increase customer/client access and attract ridership. Examples are extended service hours and employee-to-work services.

Table 2.1 Transportation Service Typologies in Rural and Small Communities

2.3.1 Feeder Services

Feeder services provide transportation from rural and small communities to locations that allow clients to utilize the services of an urban area fixed-route transit network. In most cases, the feeder service is operated through a rural park-and-ride pickup location. Feeder services are important for rural and small communities located near an urban area that has a functional fixedroute transit service as they provide a critical linkage that extends the reach of the urban transit network. Further, residents of rural and small communities often need to access common services that are provided in the nearby larger metropolitan area. The need for these residents to access common destinations in the metropolitan area creates a market for ridership that can benefit from having access to the fixed route transit system; they merely need a link in order to access that system. Feeder services provide the missing link to bridge the gap between the rural and small communities and the nearby metropolitan area.

Feeder Service Model Case:

TriCounty Link, Monck's Corner, South Carolina

TriCounty Link is an example of a feeder service operated out of Monck's Corner, South Carolina under the regional government service provision model. The feeder service operated by TriCounty Link includes a fleet of forty-nine vehicles that serve six commuter routes, a commuter shuttle to an outlying area, and a lunchtime service in town (TriCounty Link, 2015). The commuter routes provide transportation service from three rural South Carolina counties (Berkeley, Charleston, and Dorchester) to connection locations for the fixed-route transit system in Charleston, South Carolina (TriCounty Link, 2015). Each route includes an option for route deviation on request.

The key feature of the TriCounty Link feeder service is that it picks up customers at Park and Ride locations along the six commuter routes it serves (Transportation Research Board, National Research Council, 2011). This strategy provides transit services to rural areas and allows individuals to connect to a fixed-route system in a nearby urban area so that they may access goods and services in the urban area without the need to own a personal automobile or find a private ride to travel there.

2.3.2 Flexible Services

Flexible service is a hybrid of different transportation service types such as fixed-route,

feeder systems, and demand response, etc.; such services have been around since approximately

the 1960s (Transportation Research Board, National Research Council, 2004). A flexible service

has traits unique to flexibility with regard to routes, such as route deviation, or service delivery

type, such as a combination of demand response and fixed route service (Transportation

Research Board, National Research Council, 2011; Transportation Research Board, National

Research Council, 2004; Transportation Research Board, National Research Council, 2010). In short, flexible service combines attributes of demand response and fixed-route transportation, but at a lower cost than might be found in a traditional fixed route transit service. However, the greatest benefit of a flexible service lies in its ability to fill the vehicles to a higher passenger load than typically found on paratransit vehicles, and thus permit the agency to provide service at a lower cost per ride.

Flexible transportation programs' operation and performance is influenced by the local context within which they operate. For example, the challenge of distance in trip-planning is a central obstacle for rural and small-community transportation operations, so many providers adapt services to pool trips that transport several individuals between the same general origin and destination points (Ellis and McCollom, 2009). Also, services in these areas can be significantly impacted by administrative decisions made at the local or dispatch level; day-to-day management decisions often have a stronger influence on operations than uncontrollable factors such as weather events or external funding levels (KFH Group, 2001; KFH Group, 2008).

According to the Transit Cooperative Research Program, flexible transit services may be a less expensive option than demand-response transportation, particularly for older adults and individuals with disabilities living in rural and small communities (Transportation Research Board, National Research Council, 2010). Table 2.2 contains flexible service types, definitions, and common forms. According to Table 2.2, route deviation is the type most often used by agencies surveyed in 2010. This service type provides benefits of both fixed-route and demand response services, which allows for greater utility in the service provided to customers.

Flexible Service Model Case:

South Central Transit Network, South Central North Dakota

The South Central Transit Network is an example of a single-entity community-based transit service that is owned and operated by South Central Adult Services, Inc. and serves a seven-county area in south central North Dakota. The South Central Transit Network operates a flexible transportation service that includes route deviation, zone routes, and demand response connectors (South Central Transit Network, 2015; South Central Adult Services, Inc., 2015). Rides must be scheduled in advance by the user. The variety of service types offered is an attempt by the system to address the unique transportation needs associated with the rural communities served. Rural communities possess a unique spatial problem where resources and land uses are spread apart, thus creating accessibility challenges for community residents. Flexible services can be adapted to fit unique community needs in this context.

The flexible service model is successful in south central North Dakota because it provides transportation service to a large, low-density rural area in response to specific user needs (Transportation Research Board, National Research Council, 2010). While the South Central Transit Network service is primarily oriented toward older adults as part of a broader adult services organization, anyone in the general public may ride. This service thus addresses critical transportation needs of all individuals residing in the communities in which it operates.

Flexible Service Types	Definition	Common Forms of Service (by percentage of agencies using that service)
Route Deviation	Vehicle deviation from a scheduled, fixed- route in order to service a demand-response request within a pre-specified zone (can be a bounded zone or flexible).	63.9%
Point Deviation	Vehicle service for demand-response requests and limited stops within a pre- specified zone.	30.9%
Demand-Responsive Connector	Vehicle service for demand-response requests that also serves transfer points which allows for connections to a fixed-route network.	24.2%
Request Stops	Fixed-route vehicle service that allows for undefined stops along the route according to passenger requests.	16.0%
Flexible-Route Segments	Fixed-route, fixed-schedule service that also services demand-response requests along the route as needed.	14.4%
Zone Route	Demand-response vehicles that serve a corridor, but are scheduled with fixed departure and arrival times at different destinations.	11.9%

Table 2.2 Flexible Service Types, Definitions, and Common Forms of Service, 2010

Source: Adapted from TCRP Report 140, 2010

2.3.3 Multi-Purpose Services

Multi-purpose service, as identified by the literature, is perhaps the most innovative service type that exists in very small communities and rural areas as it utilizes existing capacity in a way to increase transportation options available to residents in communities that would otherwise be underserved or not served at all by public transportation. In most cases, a variety of transportation services are provided using the same vehicles at different times of day. An example such as the "school bus transit" model, which uses school buses as transit vehicles when

not in school use, is a unique representation of this typology.

Multi-Purpose Service Model Case:

After School Activity Service, Mason County, Washington

The After School Activity Service is an example of a multi-purpose service operated by the Mason County Transit Authority in Mason County, Washington. The After School Activity service operates in cooperation between the Mason County Transit Authority and the Shelton School District; county school buses are used for transporting students during school hours, but are then used to provide public transit service after hours. The buses run four deviated routes after 5pm Mondays through Fridays when school is in session (Mason County Transit Authority, 2015). Rides must be requested one hour in advance of a trip. The service is operated free of charge within Mason County and, having been operational since the 1999-2000 school year, can be considered a success. This model could easily be implemented in similar small communities provided the relevant agency partnerships are strong and the resources are adequate to ensure successful operation.

2.3.4 System Modification

System modification relates to modifying an existing transportation service to provide better service to clients when their needs are not being met by that service. Thus, system modifications are made to respond to specific community transportation demands. Examples include extended service hours to accommodate schedules for those who work outside of conventional work hours and employee-to-work services which provide transportation near workplaces for low income individuals or those in workforce development programs. Benefits of the system modification model include small, yet instrumental changes to improve service delivery by capturing a portion of the market that rely on critical transportation services where they previously had limited to no access outside of specified service hours. One noteworthy limitation to this model in some places is that higher fares are often associated with extended service hours (Transportation Research Board, National Research Council, 2001; Transportation Research Board, National Research Council, 2011; Transportation Research Board, National Research Council, 2004).

System Modification Model Case:

9 Town Transit, Connecticut

9 Town Transit is an example of a system modification model that included a change of the service schedule to better accommodate customer work hours. As a regional government model of transit service that operates under the Estuary Transit District in Connecticut, 9 Town Transit operates thirteen buses on four flexible routes to provide service within the Valley Shore region of Connecticut, which includes twelve small towns in addition to providing feeder connections to the larger towns of New Haven, New London, and Middletown (9 Town Transit, 2015; 9 Town Transit, 2015). Additional services offered are demand response transit and connections to rail and ferry services in the region.

As a result of a system modification, 9 Town Transit offers extended service hours for fixed-route and demand response vehicles to accommodate customer work schedules, resulting in improved ridership at peak hours, specifically morning and evening work commute times. The expanded hours were geared toward older adults who work which allowed them to utilize either type of service to travel to and from work and home. Ultimately, the system modification increased ridership not only for the older adult demographic, but for all transit riders in general (Transportation Research Board, National Research Council, 2011).

2.4 Funding for Transportation Services in Rural and Small Communities

Funding is the foundation of many transportation service innovations or adaptations

explored in this study. Several funding sources, particularly at the federal level, were identified

as common sources for rural and small communities, and the nature of those federal programs

sometimes influences service adaptation at the agency level. States are also a significant source

of funding, as they supplement federal monies and in some cases match local funds. It is,

however, funding sources at the local level where the most innovative funding arrangements

were observed. Table 2.3 identifies common funding sources at federal, state, and local levels.

Federal	State	Local/Other
Older Americans ActMedicaid	Vocational Rehabilitation	 Local government funding Private Foundations
 USDA low-interest loans FTA § 5311 - Formula Grants for Rural Areas Tribal FTA § 5310 - Enhanced Mobility of Seniors and Individuals with Disabilities 	• General State Transportation Funding -Funding from multiple states if service operates across state lines	 Service agreements/sponsorships -public-private partnerships -medical centers -colleges -businesses/employers
 FTA § 5316 - Job Access and Reverse Commute Program Congestion Mitigation and Air Quality Improvement Act HUD Funding - Transportation as a supported service for housing facility FTA § 5317 - New Freedom Program (for those with Disabilities) 		

 Table 2.3 Transportation Service Funding Sources by Type and Government Level

Sources: TCRP Report 99 (2004), TCRP Report 70b&c (2001), TCRP Synthesis 94 (2011)

Most transportation services in rural and small communities receive the same types of basic funding, primarily with regard to federal formula grants for capital and operations expenditures. State funding is provided in some cases as well. Local funding sources are where much innovation and creativity is found, particularly with regard to service agreements and sponsorships with other entities. In these arrangements, the partner provides funding to the transit agency in exchange for specific transportation services (Transportation Research Board, National Research Council, 2001) While local governments and private grants are helpful to community transportation providers, it is often the more formalized agreements and sponsorships that permit smaller agencies to provide service, attract riders, and gain organizational maturity and capacity. Such agency growth helps community residents to better access critical resources, such as healthcare and social services, as the transportation provider becomes a more stable and reliable community resource.

2.5 Lessons from Literature Review

The literature review highlighted the diversity of strategies used to provide transportation services in rural and small communities. The review highlighted different organizational and partnership strategies used to provide service, the diversity of service types, and the funding issues that often impel communities to be creative in developing and delivering transportation services. These findings provide useful background to the issues explored in this study, which focus on how these communities are trying to meet the needs of older adults. The next chapter explores these issues in more detail through the use of a web-based survey of 40 rural and small community transportation service providers, while the subsequent chapter delves more deeply into a set of seven illustrative cases. Chapter 3 National Survey of Rural and Small Community Transportation Providers 3.1 Rural and Small Community Providers who Serve Older Adults

The types of public transportation services available in rural and small communities vary widely from place to place, but may consist of fleets of ordinary automobiles rather than large buses, operations that make individualized trips via appointment rather than on scheduled fixed routes, and/or shuttle-like services between very specific destinations, such as housing developments and major medical complexes (KFH Group, 2004). Service providers that operate rural- and small community-focused transportation programs in the U.S. receive funding from federal authorities to provide their service. For example, in FY2014, the FTA devoted over \$600 million to rural-area programs under the §5311 Formula Grants for Other than Urbanized Areas Program (FTA, 2015). Some transportation service providers also receive FTA funding through the §5310 Transportation for Elderly Persons and Persons with Disabilities Grant Program that funds services for senior citizens and individuals with disabilities. Unlike with §5311 grants, however, funds for §5310 are disbursed across urban, suburban, and rural areas. In fact, the FTA stipulates that 60% of funding must be directed to larger urbanized areas (metropolitan statistical areas with more than 200,000 residents), with the remaining 40% directed to smaller cities and rural areas (FTA, 2015).

While there is no funding program specifically geared toward serving older adults (individuals age 65 and older) who reside in rural and small communities, the agencies that receive funding under both FTA programs most likely provide such services. In fact, the set of funding recipients for the two programs overlaps considerably, which suggests that policymakers might have designed these grant programs to serve similar basic transportation needs. What is less clear is the kinds of transportation services that are being provided, how they are being
provided, or how effective they are at meeting the transportation needs of older adults. This chapter seeks to address the first two of these unexplored issues using a national, web-based survey of rural and small community transportation providers.

3.2 Web-Based Survey Design and Methodology

The authors designed a survey distributed to administrators of 108 agencies that serve older adults living in rural and small communities. These survey respondents were drawn from the National Transit Database of local/regional transit agencies that received some combination of funding designed to serve both elderly/disabled individuals (§5310 Funds) and individuals living in non-urbanized areas (§5311 Funds) (FTA, 2015), which allowed the authors to communicate specifically with rural and small community-serving organizations who devoted at least a portion of their resources to serving the transportation needs of older adults. Survey materials were addressed to administrators or those individuals within the organization who could best discuss the issues identified immediately below. The research participant consent form may be found in **Appendix A**.

The authors asked respondents a set of 13 questions that ranged from general topics such as organization, location, and communities served, to more administrative-focused topics such as agency mission, results of ridership surveys, and noteworthy opportunities or challenges to future growth of the older adult rider market. The general-topic questions helped to establish the context in which these programs operate. The administrative questions shed light on issues more directly related to service provision, by allowing respondents to explain how their organization works with older clients, as well as how their stated mission connects with their current and long-range activities.

The survey was administered using a web-based program called survey monkey, with the web link sent to all potential participants via email. The survey utilized an open-response format, which allowed respondents to list more detailed and subjective information in their answers. Individual responses were coded and compared to other responses to form the basis of this project's qualitative analysis. Responses were coded in part by merging synonyms for noteworthy terms. For example, some respondents referred to their on-call service as "door-to-door," "paratransit," or "on-demand," but the coding process classified all such terms under the technical term "demand-response." The process of organizing and reclassifying terms in this fashion is often necessary when analyzing responses from an open-ended survey, for purposes of both clarity and efficiency in documentation.

3.3 Geographic Distribution of Web-Based Survey Responses

A total of forty responses were received from agencies located throughout the United States, with a large number of respondents from the Pacific Northwest (**Figure 3.1**). Of the forty individuals who completed the survey, thirty-eight occupied a position of senior management, such as executive director, mobility manager, transportation director, or a similar title. One respondent self-identified as a dispatcher, and one identified as a service specialist. Most responding agencies were formed or administered by a local government body, as opposed to being non-profit organizations or private companies. The authors focus the discussion that follows on eight key survey questions about service provision (**Table 3.1**).



Figure 3.1 Geographic Distribution of Survey Respondents

Table 3.1 Survey of Rural and Small Community Transportation Providers

Does your organization/agency have a specific mission
with respect to the provision of transportation services? If
so, what is it?
What kinds of transportation services do you provide?
Do you partner with any other organizations/agencies
when providing services? If so, who are they? For what
purpose(s) do you partner?
Are older adults a targeted user market for your programs
or services? Why or why not?
If they are, how do you market your programs or services
to older adults?
Have you conducted any assessments of the effectiveness
of the services you provide in meeting the transportation
needs of older adults? If so, what were the results?
What do you see as the greatest challenge(s) to
encouraging greater usage of your services by older
adults?
What do you see as the greatest opportunities for
encouraging greater usage of your services by older
adults?

3.4 Survey Results for 40 Rural and Small Community Agencies

The survey responses fit into a few broad categories, from which some general points of consensus emerged regarding the operation and growth potential for transportation service providers in rural areas and small communities. For example, nearly all respondents identified either inadequate funding or the difficulties in communicating effectively with independent older adults as their organization's single greatest challenge. Nearly all respondents identified either financial or collaboration/partnership ties with government agencies and/or local nonprofit organizations, usually those organizations related to healthcare or education services. The survey also revealed that even though a large percentage of respondents stated that their organization explicitly targets older adults and/or receives funding to serve their needs, the language of their published mission statements was far less likely to contain references to older adults or their specific needs.

3.4.1 Mission Statements

The authors asked respondents whether their organization has a specific mission related to transportation service provision. Respondents were also asked to provide the text of their mission statement, if available, and to state whether their organization explicitly targets older adults as potential clients. The purpose here was to discern whether an organization's daily operations fit with the terminology and general spirit of its stated mission.

Thirty-three respondents supplied the authors with their agency's mission statement. An exploration of the terminology used in those statements, along with a broader comparison of responses, yielded some informative results. The authors found that general terms such as "transportation," "provide," and "service" appeared much more frequently in the statements (30, 28, and 17 appearances respectively) than aging-oriented terms such as "independence,"

"seniors," and "safe," (7, 5, and 4 appearances respectively). This was observed despite the fact that every agency surveyed received some funding from the FTA to provide services specifically for older adults and the disabled. While the terminology used in mission statements is not generally required to match an organization's daily operations, the fact that many of these agencies received federal dollars to serve older adults and the disabled, yet maintained mission statements that tended not to contain explicit references to those populations, shows a functional disconnect between formal policy and daily operations.

3.4.2 Services Provided

The authors next asked respondents to list the specific transportation services they provide to their various client populations. The purpose of this question was merely to identify which transportation services are being provided. Given the wide range of terms the respondents used to describe their services, the authors reviewed and classified the responses into a number of basic service categories, as is shown in **Table 3.2**. Despite the considerable knowledge gaps in the transportation literature regarding rural and small-community transportation, the authors felt comfortable with the assumption that transportation in these areas is less likely to utilize fixed routes, and more likely to involve specialized longer-distance travel to and from larger cities. Also, given the ubiquity of §5310 funding among these agencies, the authors expected most, if not all, respondents to indicate the array of services they offer to older adult or disabled clients.

Service or Related Program	Frequency
Demand-Response	39
Fixed-Route Public Transportation	14
Medical/Medicaid Transportation	14
Paratransit/ADA-compliant Service	12
Route Deviation Service	8
Commuter/Workforce Transportation	5
Subscription/Membership Route	3
System Connection/Intercity Route	3
Elderly Nutrition/Socialization	2
Bus Rental/For-Hire Program	2
Rideshare Service	1
Child Services	1

 Table 3.2 General Categories of Transportation Service Provided

Nearly every respondent listed multiple service types, but the most common by far was demand-response or "door-to-door" service. A majority of respondents stated that they offer an on-call or demand-responsive service, while a smaller number reported providing traditional fixed-route services, such as those that accept or discharge passengers at predetermined stops or operate on a set schedule. This finding mirrors what one might expect to find in a rural area with a dispersed population; many rural transit riders use these services primarily for medical or infrequent trips (Kerschner, 2006; National Rural Health Association, 2013). Interestingly enough, though these organizations all accept §5310 monies to service clients considered disabled under the terms of the Americans with Disabilities Act (ADA), only twelve respondents explicitly mentioned providing paratransit or ADA-specialized service. One dimension to this finding is the fact that numerous terms are used within the industry to describe the services listed in Table 3.2, and some of those terms' definitions overlap. For example, while some respondents

explicitly distinguished between "Paratransit service" and "Demand-Response service," it is not clear from the data that all respondents made the distinction between the two services when they answered the survey question. Given this issue, it was not easily discerned from this survey the degree to which individual agencies focus on disabled passengers versus older-adult passengers. This overlap in service-provision is made more difficult by the fact that \$5310 monies are disbursed to serve both older adults and disabled individuals of all ages. A deeper examination of the issue may bear more solid findings on the specific makeup of \$5310 funds allotted to each agency's various services, but for this analysis, it was clear from respondents' statements that demand-response services dominate the programming of rural and small community transportation providers.

3.4.3 Service Provider Partners

The authors also asked whether respondents partnered with other organizations when providing services. If respondents did so, they were then asked to list those partners and to explain the purpose(s) for such partnerships. The authors assumed that many of these rural and small-community agencies were likely to lack the fiscal and/or technical resources necessary to provide services without some degree of cooperation with other entities. Based on prior research, the authors also expected that many agencies would act as "entrepreneurs" who proactively sought out partners (KFH Group, 2004). The responses, once categorized into the simple tally of partner types shown in **Table 3.3**, produced two central findings.

Partner Agency Type	Frequency
Local Government	20
State Government	16
Senior Service Facilities	16
Health Facilities	12
Education and Workforce	11
Human Service Nonprofit	8
Private Transportation Companies	3
Veterans' Care Organizations	2
Tribal Transportation	1

 Table 3.3 Partners for Rural and Small Community Transportation Service Providers

First, eighty-five percent of respondents reported that they partner with at least one local, regional, or statewide entity to provide their services. Since the majority of the surveyed organizations are public transportation agencies, it was not unexpected to find that the most common partners were state and local government agencies such as a county office of senior affairs or state department of transportation. Local-government ties were more frequently reported than statewide ties. Most of these intergovernmental partnerships were of the sort defined by formal and/or financial arrangements such as contracted service, government grants, and pass-through monies.

Second, locally-oriented human service nonprofit organizations, particularly those related to senior services and health, tend to dominate these working relationships. Assisted-living facilities, adult day-care facilities, and medical facilities were listed as the most frequent nongovernmental partners. Many respondents also reported collaborating with school districts, local colleges, job-training nonprofits, and a few private companies to provide transportation service to students and workers. Overall, the survey results suggest that transportation service providers are well-connected and in a unique position to provide clients with access to a vast array of services.

However, the third segment of the question, which asked respondents to explain the purpose(s) for such partnerships, was not elaborated upon by the full set respondents. In fact, only fourteen out of forty explicitly stated the purpose for their inter-agency partnerships. Still, many partnerships can be considered intuitive in nature. For example, the agencies that mentioned partnering with school districts most likely partner in order to transport children to school, while veterans' care partnerships likely exist for the transportation of qualifying veterans, and so forth. The fourteen respondents that did explain the purpose(s) behind their partnerships described rationales such as fee-for-service contracts, state-required inter-agency coordination, or simply a coordinated effort to share costs among various local human-service agencies.

One unanticipated factor regarding this question is the possibility that different respondents might have had their own varying definitions of what was meant by "partnership." For example, they might consider their vertical relationship with the government agency that funds their operations to be the same sort of partnership as a lateral and non-financial relationship they might have with, for instance, a local senior center. Further investigation would be needed to better understand the exact nature of the partnerships identified by the respondents. *3.4.4 Marketing*

The authors also asked respondents to assess the degree to which they marketed their services to older adults, as well as the specific ways in which they did so. Given their acceptance of federal funds intended to serve older adults, the authors expected most respondents to indicate that they market services to that population. The authors also expected to find that many agencies

would operate with a community-focused orientation that relied on interpersonal relationships rather than the provider-client ties present in urban transit systems.

Thirty-one out of the forty respondents reported that they target older adults as a client population, and devote resources to marketing their services to that population. Twenty-one of those thirty-one work directly with senior centers and medical professionals to market their programs at those locations, as well as to educate potential riders of the benefits of their transportation services.

Twenty-four out of forty respondents stated that their outreach efforts depend to a large degree on informal recommendations and/or word-of-mouth communication among clients, due to a commonly-held belief among these providers that personal recommendations are the most effective marketing tools when working with older adults in smaller communities. While traditional marketing and education tools such as media advertisements and informational pamphlets were utilized by twenty-five respondents out of forty, the notion that informal marketing is seen as vital – and the fact that so many respondents made that direct assertion in their survey responses – indicates that a communicative and socially-oriented marketing approach is likely to be equally, if not more, successful at growing and retaining older adult ridership than traditional marketing formats such as printed or multimedia advertising.

3.4.5 Customer Surveys

The authors also asked respondents whether they conducted surveys or other assessments to measure the effectiveness of their services in meeting older adult transportation needs, and if so what were the results of these assessments. The authors hoped to use this question as a means of starting to identify the kinds of services which tended to be more effective or less effective, and then to explore possible explanations for these different performance outcomes. However,

the respondents' answers differed greatly from these expectations, and indicated that those agencies that do conduct surveys tended to do so for purposes of gauging general customer satisfaction rather than as a means of service evaluation.

Twenty-two out of thirty-nine respondents stated that they conducted formal surveys, with most being for general customer-service or customer needs-assessment purposes. Three of those twenty-two claimed to have done so as part of a comprehensive-plan update or as a legal/contract stipulation. Four respondents survey clients informally – for example, through inperson conversations with a client during or after a trip – while the remaining thirteen respondents do not survey their clients at all. Of the twenty-two conducting formal surveys, one stated that they do so solely as a requirement for receiving federal funding.

As a whole, the survey responses indicate a client-oriented culture in many of these organizations, given their focus on gauging customer satisfaction and customer needs. The fact that only one respondent claimed to conduct surveys as part of a legal obligation brought an interesting question worthy of future investigation: if all of these agencies receive large sums of funding from federal, state, and local government, why did only one report being legally obligated by their funding agency to survey their clients while the others did not?

3.4.6 Service Challenges and Opportunities

Near the end of the survey, the authors asked respondents what they perceived to be the greatest challenge(s) to encouraging greater older adult usage of their services. The authors hoped to thereby explore the respondent's informed perspective as to their organization's weaknesses and/or barriers to more effectively serving this rider population. The authors expected finance and funding to dominate the responses, given the severely constrained

resources in rural and small communities. Responses were organized into a handful of broad but logically-grouped categories, as shown in the upper panel of **Table 3.4**.

Challenges to Encouraging Older Adult Use	Frequency
Inadequate Funding/Staff/Vehicles	12
Maintaining Seniors' Independence as they	
Transition from Driving to Transit	11
Overcoming Seniors' Fears and Building	
Trust	8
Limited Schedules and Dispersed Clientele	4
Inadequate Marketing of Services	2

Table 3.4 Greatest "Challenges and Opportunities" to Future Success

Opportunities for More Older Adult Use	
Expansion of Existing Service	8
Marketing/Education for Older Riders	7
Strong Ties to Senior Services	7
Word of mouth among existing users	5
Popularity of Service Among Older Riders	2
Miscellaneous or Unrelated Response	7

The most common challenge identified by respondents was the set of issues related to funding for operations, equipment, and staffing. As mentioned above, the authors expected this result, given the environments within which these agencies operate. The second and third most frequent responses were actually more noteworthy for this project, as they related to respondents' views about more effectively engaging older adult riders. Nearly a third of respondents stated that their greatest challenge was helping auto-dependent older adults transition from driving to transit. One fifth of respondents reported that building trust and helping older adults overcome their fear of transit represented their greatest obstacle to success. Taken together, these responses show that nearly half of the respondents consider their interactions with older adults to be their single greatest challenge. The remaining respondents felt their organization's greatest challenge was either program-related (limited schedules and dispersed clientele), or a generally inadequate marketing of services. Thus from the respondents' perspective, issues of limited fiscal resources and the need for more effective senior outreach and engagement are the biggest obstacles to their future success.

To supplement the question regarding challenges, the authors also asked respondents to identify their organization's best opportunity(ies) for encouraging greater older adult use of their services. This question was intended both as a complement to the previous question, and as a means for the authors to learn the respondents' sense of how well positioned their agency was to meet existing and future older adult transportation needs. The authors anticipated that respondents would view the pending increase in the number of older adults as an opportunity for growth. The authors grouped responses to this question into a small number of broad categories, mainly as a means of simplifying the analysis.

First, as the lower panel of **Table 3.4** indicates, respondents identified the expansion of existing services as representing the biggest opportunity for growth. This response was consistent with the authors' assumption that providers would be quite mindful that demand for their services is likely to increase given the growth in numbers of older adults in the coming decades. Second, consistent with the responses related to challenges, many responses related to agency relationships with the older adult community. A number of respondents perceived opportunities for more marketing and outreach directly to seniors and for more partnerships with senior-serving entities. Many respondents also thought that their services' generally positive

reputations among senior riders and senior-serving organizations provided an excellent opportunity for more informal, word-of-mouth marketing opportunities that might promote older adult use of the services. Indeed, some respondents perceived word-of-mouth as the most effective marketing strategy for this population in the rural and small community setting. The fact that nearly all relevant responses were in some way related to either funding/expansion of services or relations with senior riders indicates that rural and small-town transportation providers understand the tremendous value that their services have in meeting the various practical as well as social and emotional needs of older adults in their communities.

3.5 Key Lessons from Web-Based Survey

The authors intended the survey to be exploratory in nature, and designed it to both explain the environment in which these providers operate and to identify for practitioners some of the common elements and viewpoints that drive day-to-day operations for these and similar providers. The previous sections discussed the survey findings in detail, but here we focus on the most important findings and those issues that require more careful additional inquiry.

One important finding from the survey is that nearly all survey respondents work closely with a wide range of government and/or community partners to organize, finance, market, and/or deliver their services. While the exact nature of these partnerships and their effectiveness in permitting or encouraging older adult use of transportation services is still to be determined, the importance of these partnerships is unquestioned by respondents and reflects the value of partnerships in overcoming many of the financial, technical, and/or organizational challenges that are especially challenging for service providers working in rural and small communities. This finding also indicates a potentially unexplored dimension of transportation serviceprovision. If robust partnerships are so ubiquitous and productive in rural areas and small towns,

a future study might examine the potential utility and frequency of such ties for more urbanized transit agencies.

A second important finding is the significance that survey respondents assign to word-ofmouth marketing and direct personal outreach to the older adult population. The managers of these programs seem particularly attuned to the social and/or psychological challenges inherent in building trust with older adults and helping them transition from driving to transit. Their experiences should be valuable for others who work with older adult populations in both rural and urban settings.

During the survey research, four issues emerged as potential topics for future investigation:

- There is a need to determine the proportion of §5310 funds that are devoted to transporting older adults versus transporting disabled individuals. This proportion may vary widely based on local factors, or there may be a nationwide pattern of one group receiving the majority of allotted funds. But in general there is a need to better understand how many resources are available and how they are being used to provide services for older adults.
- 2. There is a need to more carefully investigate the nature of the partnerships referenced by the survey respondents. This survey treated all working relationships as equal, but if pressed to elaborate, respondents may view their lateral relationships quite differently than their grantor-grantee relationships.
- 3. There is need for more careful investigation of the motivations behind transit surveys that may shed some light into why so few agencies conduct assessments of their services beyond customer satisfaction surveys. Whether such surveys are required as a condition

of funding, or not, there is a need for better guidance as to the kinds of services, or service-related strategies, that tend to be more effective or less effective in different operational contexts.

4. Perhaps most importantly, there is a need to better understand whether, why, and how older adults are actually using these services in order to determine whether and how these services are effectively meeting their transportation needs.

In the chapter that follows, the authors explore a set of selected rural and small community transportation service providers in more detail, in order to provide a deeper understanding of how they serve the older adult populations in their communities. Chapter 4 Case Studies of Rural and Small Community Transportation Providers <u>4.1 A More Detailed Examination of Seven Cases</u>

The administrators' survey discussed in Chapter 3 provided a basic-level understanding of transportation services provided by 40 agencies located in a wide array of rural and small community locations and identified key issues associated with the provision of these services. The authors used the results of this survey to identify a smaller number of cases for a more detailed investigation, which is presented in this chapter. The authors selected cases for inclusion is this set based on: 1) the array of services provided (agencies providing a more diverse array of services were rated more highly than those that perform one type of service); 2) the level of detail provided about marketing and outreach strategies (agencies that outlined their marketing policies in greater detail were ranked more highly than those that gave a vague or blank response); 3) geographic location of the respondents and their service areas (to provide a wide geographic distribution if possible); and 4) the survey respondent's expressed willingness to participate in the follow-up study. An initial set of 10 candidates were then narrowed to the seven ultimately selected for the case study investigation that follows.

4.2 Basic Agency Information

This section provides background information about the service areas and missions, services provided, service levels and ridership statistics, and basic financial information for the seven cases. The discussion highlights similarities and differences across the cases, including with respect to the types of transportation services offered, the levels of service provided and numbers of riders attracted, and the amounts and sources of operating expenses and capital expenses. Each of these subjects is discussed in turn.

4.2.1 Agency Service Areas and Missions

This section discusses the service areas and missions of each agency. As the discussion indicates there are significant differences in the sizes of the populations served (10,879 persons to 178,264 persons) and the spatial extent of the service areas (single county to eleven counties). Most agencies have either a mission statement or set of goals related to providing mobility in their community. However, only a few statements single out older adult users as a particular focus of agency interest.

Alleghany in Motion (North Carolina)

Alleghany in Motion (AIM) is the public transportation system for Alleghany County, North Carolina. Alleghany County has a total population of 10,879, of which 2,666 (24% of the population) is 65 years of age or older (United States Census Bureau, 2014); nearly 50% of the population in Alleghany County is 50 years of age or older. Even though AIM's transportation services reach beyond the county boundaries, the service area is officially defined as only encompassing Alleghany County (**Figure 4.1**).



Figure 4.1 Alleghany in Motion Service Area

AIM does not provide a clear, easily-accessible mission statement, as their website is part of the larger county website. However, their website states "It is the goal of AIM to provide quality community transportation services that are efficient and responsive to the current needs of Alleghany County" (Alleghany County North Carolina, 2012). Given the large older adult share of the county population, effectively serving this group would clearly qualify as an important county transportation need.

Atomic City Transit (New Mexico)

Los Alamos County, New Mexico operates its transit service under the name "Atomic City Transit," due to that region's scientific facilities and its historic ties to the development of nuclear weapons during and after World War II. Los Alamos County has a total population of 17,682, of which 2,940 (17% of the population) is aged 65 years or older (United States Census Bureau, 2014). The ACT service area only includes Los Alamos County (**Figure 4.2**).



Figure 4.2 Atomic City Transit Service Area

As stated on the ACT website, the agency's mission is "to improve and strengthen mobility in Los Alamos County through an effective, efficient, and dependable transit system" (Los Alamos County, 2015). A more formal mission statement can also be found in the Los Alamos Comprehensive Transit Study/ Updated Service Plan completed on March 3rd, 2015, which reads "the mission of Atomic City Transit is to meet the needs of the residents of Los Alamos County by operating a safe, reliable, and efficient transit service that will be flexible and adaptable to meet the changing needs of the community" (LSC Transportation Consultants, Inc., 2015, pp. II-1). These statements emphasize providing reliable and efficient service; however neither statement specifies catering to older adults or any other target population.

COAST (Idaho and Washington)

COAST is the transportation branch of The Council on Aging & Human Services, a private non-profit agency located in Colfax, Washington. COAST currently serves Whitman,

Garfield, and Asotin counties in Washington State and Lewis, Nez Perce, Clearwater, Latah, and Idaho counties in Idaho (**Figure 4.3**). This service area has a total population of 178,264, of which 28,978 (16% of the population) is 65 years of age or older (United States Census Bureau, 2014).



Figure 4.3 COAST Service Area

The Council on Aging & Human Services does not have a formal mission statement; however there are several goals that are mentioned on the agency's website. The agency is "committed to enhancing lives and supporting communities with transportation and nutrition services" (The Council on Aging & Human Services, 2015). Their transportation goal is to provide safe, affordable, and reliable transportation services to all citizens who need access to basic necessities and activities. The agency places an emphasis on serving older adults, low income residents, the disabled, and children as part of their target audience, although service is also open to the general public (The Council on Aging & Human Services, 2015). The agency's emphasis on serving the older adult population is perhaps expected since the transportation services are being provided by The Council on Aging & Human Services.

River Cities Public Transit (South Dakota)

River Cities Public Transit (RCPT) is a private non-profit agency located in Pierre, South Dakota. The agency was created as a result of the recommendations of a Transportation Planning and Coordinating task force created in 1996 by South Dakota's Governor Janklow. The task force was composed of the "state departments of Transportation, Social Services, Health and Human Services, and the Coalition of Citizens with Disabilities" (Lynott, Fox-Grage, & Guzman, 2013). RCPT started its operations in 1998 by coordinating the joint transportation services for St. Mary's Hospital, Capital Area Counseling and other agencies, as rural area funds were made available from the Federal Transit Administration. Since then with funding support from the city of Pierre and the South Dakota Department of Transportation, the agency's service area has grown to incorporate 11 counties and two tribal reservations. The counties served are: Hughes, Stanley, Hand, Hyde, Dewey, Ziebach, Haakon, East Pennington, Jackson (northern portion only), Jones, and Lyman; the reservations served are the Lower Brule Reservation and the Ford Thompson Indian Reservation (River Cities Public Transit, 2015) (Figure 4.4). Within the service area there are approximately 152,069 people, of whom 23,426 (15%) are older adults (aged 65 and over) (United States Census Bureau, 2014).



Figure 4.4 River Cities Public Transit Service Area

The RCPT mission statement reads "River Cities Public Transit is committed to providing safe, reliable and courteous public transportation to the members of the communities we serve by promoting quality of life, livability, self-sufficiency and freedom through mobility" (River Cities Public Transit, 2015). Like many agency mission statements, there is not an explicit mention of older adults. RCPT also has a vision statement that reads that the agency seeks "to demonstrate a Standard of Excellence unparalleled in the small urban and rural transit industry by richly enhancing mobility options for residents in the communities that River Cities Public Transit serves" (River Cities Public Transit, 2015). The vision statement thus does not explicitly reference older adults either. However, the agency does state elsewhere that their goal is to provide "transportation services to individuals with disabilities, the elderly" and other targeted groups (River Cities Public Transit, 2015).

Rural Community Transportation (Vermont)

Rural Community Transit (RCT) is a private non-profit organization located in Lyndonville, Vermont. The agency was created in 1991. The current RCT service area includes Caledonia, Essex, Lamoille, and Orleans counties (**Figure 4.5**). There are approximately 89,270 people in the service area, of whom 16,272 (16%) are older adults (age 65 and over); this is about 1% higher than Vermont's statewide share of older adults (United States Census Bureau, 2014). In 2012 RCT also started serving as the Medicaid transportation broker for Orange County (Rural Community Transportation Inc., 2015).



Figure 4.5 Rural Community Transportation Service Area

RCT has a vision which is "to establish a solid foundation for regional development of a safe efficient public transportation system" (Rural Community Transportation Inc., 2015). Their mission statement contains three objectives, "1) encourage the use, development and support of safe public transportation, 2) provide coordinated, consolidated, non-duplicative transportation

services, (and) 3) promote the planning and development of public transportation" (Rural Community Transportation Inc., 2015). These objectives do not specifically single out older adults, but it is clear from the agency's partnerships with older adult-serving organizations that RCT places a strong emphasis on serving the older adult population.

Sunset Empire Transportation District (Oregon)

Sunset Empire Transportation District (SETD) is a government agency located in Astoria, Oregon. The agency was "formed by the Clatsop County, Oregon Board of Commissioners on March 24, 1993" (Sunset Empire Transportation District, 2015). SETD serves Clatsop County in its entirety, and also provides connecting service south to Tillamook County, north to Pacific County in Washington State, and east to Columbia County (Sunset Empire Transportation District, 2015) (**Figure 4.6**). Within the service area there are approximately 37,474 people, of whom 7,243 (19%) are older adults (aged 65 and over) (United States Census Bureau, 2014). The population share of older adults in Clatsop County is slightly higher than for Oregon as a whole (16% older adult population) (United States Census Bureau, 2014).



Figure 4.6 Sunset Empire Transportation District Service Area

SETD does not have an easily accessible mission statement on its webpage, but according to their *Transportation Service Provision Survey*, their mission is to "provide safe, reliable, relevant and sustainable transportation services to Clatsop County with professionalism, integrity, and courtesy." (Hazen, 2015). The agency's mission does not address older adults specifically, as they provide service to a broader range of the population and do not have a specific service oriented to older adults.

Tillamook County Transportation District (Oregon)

Tillamook County Transportation District (TCTD) is a non-profit agency located in Tillamook, Oregon. The agency was established on July 16th, 1997 (Tillamook County Transportation District, 2015). The agency serves Tillamook County (Figure 4.7). Within the service area there are approximately 25,342 people, of whom 5,929 (23%) are older adults (aged 65 and over); this share is 7% higher than the percentage for Oregon as a whole (United States Census Bureau, 2014).



Figure 4.7 Tillamook County Transportation District Service Area

While the TCTD mission is not clearly stated on their webpage, their main goal is "to serve the transportation needs of the residents and visitors to Tillamook County" (Tillamook County Transportation District, 2015). Thus, older adults are not specifically identified as a targeted population for the agency's service efforts.

4.2.1 Types of Transportation Services Provided

The seven agencies offer an array of transportation services (**Table 4.1**). All seven agencies offer some form of demand-responsive service. Four agencies offer some form of fixedroute service, although some routes may deviate or otherwise operate differently from the fixedroute service found elsewhere. The paragraphs that follow briefly describe the transportation services provided by each agency.

Agency Name	Fixed Route	Demand-Response
Alleghany in Motion (AIM)	No	Yes
Atomic City Transit (ACT)	Yes (11 routes)	Yes
COAST	No	Yes
River Cities Public Transit (RCPT)	No	Yes
Rural Community Transportation (RCT)	Yes (3 shuttles, 5 shopping)	Yes
Sunset Empire Transportation District (SETD)	Yes (5 routes weekdays, 3 routes weekends)	Yes
Tillamook County Transportation District (TCTD)	Yes (6 routes)	Yes

 Table 4.1 Transportation Services Offered by Each Agency

AIM provides demand-responsive transit services only; the service is available for both medical and non-medical trips (Alleghany County North Carolina, 2012). Medical trips must be scheduled at least three days in advance, while non-medical trips must be scheduled at least one day in advance. Furthermore, if the medical trip is to a destination outside Alleghany County, the trip must be scheduled at least five days in advance. These services are provided for destinations beyond Alleghany County for the disabled, older adults, and the general public.

Atomic City Transit operates 11 fixed bus routes and demand-responsive service throughout Los Alamos County (Los Alamos County, 2015). The demand-responsive service is available primarily to those with disability or who are aged 60 and over, and is operated from 6:00 am to 7:00 pm. Riders may schedule a trip up to seven days in advance. The general public can also use the service; however their trips may be scheduled only on the same day of the trip. There is also a seasonal fixed-route called the *Bandelier Seasonal Fixed Route*, which operates every day of the week from the end of May to the end of October. This routes runs from White Rock Visitor Center to the Bandelier National Monument (LSC Transportation Consultants, Inc., 2015). COAST provides demand-responsive transit service through coordinated transportation and brokerage services (The Council on Aging & Human Services, 2015). COAST seeks to provide demand-responsive service by the least expensive means possible. There are no required fares; however donations are encouraged.

RCPT provides medical and non-medical demand-responsive transit service to individuals with disabilities, the elderly, low income individuals, and the general public (River Cities Public Transit, 2015). Medical transportation services do not include emergency trips but are instead planned trips to medical or health provider locations that a rider must schedule ahead of time. RCPT also partners with the following agencies for non-emergency medical rides: Golden Living Center, St Mary's Hospital, Maryhouse Nursing Home, Kelly Assisted Living Apartments, and Parkwood Assisted Living Center (River Cities Public Transit, 2015). Personal care attendants are allowed on the vehicle for no additional charge. RCPT drivers are trained to assist passengers but not to provide medical assistance (River Cities Public Transit, 2015).

RCPT also provides non-medical transportation services, whether for school, work, shopping, or any other trip one might need to take. The request for a ride can be made between 9:00 a.m. and 9:00 p.m. on any day of the week. The request must be made at least 48 hours in advance of the trip; trips may be cancelled at least 1 hour prior the scheduled pick up time. Key partnerships for non-medical transportation services include: Career One Stop, Right Turn, Growing Up Together, Even Start, Missouri Shores Domestic Violence Center, Senior Meals Program and South Dakota's Women Prison. In addition, the agency provides service to the Lower Brule Sioux Tribes through contract (River Cities Public Transit, 2015).

RCT provides both demand-responsive and fixed-route transit services. Fixed-route services include three shuttles between different communities and five routes dedicated to

serving shopping-related destinations; shuttle routes operate Monday through Friday while the shopping routes operate either on once per week or twice per month schedules (Rural Community Transportation Inc., 2015). RCT also offers demand-responsive services, which include Medicaid transportation services and coordinated services with local human service agencies. RCT partners with a number of older adult serving organizations including the Area Agency on Aging, Adult Day Services, Northeast Kingdom Human Services, Central VT Council on Aging, Out and About, Reach Up and the Northeast Kingdom Community Action (Rural Community Transportation Inc., 2015).

SETD offers fixed route services, on-demand or scheduled ride services, and medical rides (Sunset Empire Transportation District, 2015). The fixed route service is called "Ride the Bus." During weekdays, there are five routes available. On the weekends, there are three routes in service. There are also three seasonal routes that operate in May, August, September, and October.

SETD's demand-responsive paratransit or scheduled ride service is called "RideAssist" and is designed for those who have a disability or who cannot otherwise access fixed route service (Sunset Empire Transportation District, 2015). This service functions during the same days and times as the fixed route services and the origin and destination of the trip must be three quarters of a mile from the fixed route. All trips must be scheduled at least one day in advance and a subscription service is available if the rider travels to the same destination on a regular basis (Sunset Empire Transportation District, 2015). SETD also provides non-emergency medical rides through its "Ridecare" service. This service is for riders who are "eligible under the Oregon Health Plan Plus for travel to covered medical services." Trips must be scheduled at least two days in advance (Sunset Empire Transportation District, 2015).

TCTD offers three types of services including deviated fixed route, intercity bus service, and demand-responsive service (Tillamook County Transportation District, 2015). The deviated fixed route service covers "Tillamook County, (as well as) Inter-City and connecting service to Lincoln and Clatsop counties and into Portland." These buses operate on a fixed route and follow a fixed schedule; however they can deviate up to three-quarters of a mile from the set route if requested to do so by a passenger. However, requests for deviated route services are "limited when Dial-A-Ride is available Monday through Friday from 8:00 am to 5:00 pm." The deviated route service reservations must be made in advance. TCTD also operates intercity bus service daily between Tillamook and Portland to connect riders to AMTRAK, Greyhound, and Tri-Met services (Tillamook County Transportation District, 2015).

TCTD's demand responsive service is provided with the aid of volunteer drivers (Tillamook County Transportation District, 2015). The service is a door-to-door, shared ride service for the Tillamook area for any type of trip; however, service only operates weekdays between 8am and 5pm. Each trip can be scheduled at least two hours in advance and a maximum of two weeks in advance. Riders can bring a personal care attendant along at no extra cost.

4.2.2 Service Provided and Ridership Served

There are significant differences in the total amount of service operated by each agency, with the number of vehicle hours of service operated in 2013 ranging from a low of 13,786 hours to a high of 109,600 hours (Federal Transit Administration, 2012-2014) (**Table 4.2**). Agencies operating in the least populous service areas tend to provide fewer hours of service than those operating in more populous areas. For three of the four agencies that offer both demand-responsive and fixed-route service, the proportion of their service dedicated to fixed routes significantly exceeded that dedicated to demand-responsive service in 2013. RCT was the

exception. However, the agency that provided the most service that year (RCPT) only operated demand-responsive service.

Table 4.2 also shows that between 2011 and 2013 three agencies increased the amount of service they provided (ACT, RCT, TCTD), three agencies decreased their service (AIM, COAST, SETD), and one agency provided a similar amount of service (RCPT) (Federal Transit Administration, 2012-2014). COAST experienced the largest decline in service during this period (55% decline), while RCT experienced the largest increase (843% increase); this latter increase was entirely due to the more than 30-fold increase in the amount of demand-responsive service that RCT provided.

Agency Name	2011	2012	2013
Alleghany in Motion (AIM)	20,990	16,545	13,786
Atomic City Transit (ACT) (Total)	28,224	33,887	35,381
Demand Response	2,138	4,917	2,830
Fixed-Route	26,086	28,970	32,551
COAST	16,476	7,577	7,458
River Cities Public Transit (RCPT)	109,771	109,646	109,600
Rural Community Transportation (RCT) (Total)	11,238	25,833	106,004
Demand Response	3,121	16,982	97,782
Fixed-Route	8,117	8,851	8,222
Sunset Empire Transportation District (SETD) (Total)	35,232	15,903	19,622
Demand Response	5,473	3,689	3,691
Fixed-Route	29,759	12,214	15,931
Tillamook County Transportation District (TCTD) (Total)	19,819	25,207	25,137
Demand Response	3,782	4,671	6,363
Fixed-Route	16,037	20,536	18,774

 Table 4.2 Total Service Operated by Agency (Vehicle Revenue Hours) (2011-2013)

Source: Federal Transit Administration 2012-2014. National Transit Database. www.ftis.org. Accessed October 2, 2015

Given the differing amounts of service provided by these agencies, it is not surprising that there are also significant differences in the numbers of riders this service carries. **Table 4.3** reports ridership by agency. In 2014, ridership ranged from a low of 17,254 (AIM) to a high of 550,804 (ACT). Generally speaking, agencies that operated more service also attracted more riders. For three of the four agencies that operated both demand-responsive and fixed-route service, fixed-route ridership far exceeded that carried on demand-responsive service; the only exception to this pattern was RCT.

Table 4.3 also shows that between 2011 and 2013 three agencies saw ridership fall (AIM, COAST, SETD) while four others attracted more riders (ACT, RCT, RCPT, TCTD). Where ridership fell, the decrease affected each type of service operated. Where the ridership increased, the increase affected each type of service operated. The change in ridership strongly tracked the change in the amount of service being provided.

2011	2012	2013
19,168	17,487	17,254
449,729	562,226	550,804
5,701	5,989	5,972
444,028	556,237	544,832
47,033	9,698	9,752
303,120	338,625	368,623
51,849	76,568	207,315
3,409	21,512	149,707
48,440	55,056	57,608
348,243	148,065	177,829
8,623	6,151	6,152
339,620	141,914	171,677
95,258	105,243	123,287
6,953	7,164	9,111
88,305	98,079	114,176
	19,168 449,729 5,701 444,028 47,033 303,120 51,849 3,409 48,440 348,243 8,623 339,620 95,258 6,953	19,168 17,487 449,729 562,226 5,701 5,989 444,028 556,237 47,033 9,698 303,120 338,625 51,849 76,568 3,409 21,512 48,440 55,056 348,243 148,065 8,623 6,151 339,620 141,914 95,258 105,243 6,953 7,164

 Table 4.3 Total Ridership by Agency (Unlinked Passenger Trips) (2011-2013)

Source: Federal Transit Administration 2012-2014. National Transit Database. www.ftis.org. Accessed October 2, 2015

Only two agencies track the older adult share of their ridership. In 2014, ACT reported that 12 percent of its riders were aged 60 or older (LSC Transportation Consultants, Inc., 2015: V-3). RCPT reported that 9 percent of its riders were aged 65 and older. This percentage is relatively unchanged over recent years (State of South Dakota Department of Transportation, 2011-2014). The other agencies do not specifically track older adult ridership, which limits the ability to assess whether older adults are being adequately and effectively served.

4.2.3 Expenditures and Funding Sources

The seven agencies required a significant amount of operating funds to provide their transportation services. Table 4.4 reports total operating expenses by agency. The table indicates that five of the seven agencies spent more than \$1 million on operations in 2013, with RCT spending more than \$4 million that year. Between 2011 and 2013, four agencies increased their operating expenditures while three agencies reduced their operating expenditures. Among the agencies, COAST experienced the largest decline (68%), while TCTD experienced the largest increase (20%). The change in operating expenses was generally consistent with the change in the amount of service operated.

 Table 4.4 Total Operating Expenses by Agency (2011-2013)

Agency Name	2011	2012	2013
Alleghany in Motion (AIM)	\$455,876	\$497,951	\$436,271
Atomic City Transit (ACT)	\$2,123,765	\$2,220,045	\$2,402,884
COAST	\$647,778	\$273,697	\$205,070
River Cities Public Transit (RCPT)	\$3,507,110	\$3,550,588	\$3,558,810
Rural Community Transportation (RCT)	\$3,515,728	\$3,861,979	\$4,039,348
Sunset Empire Transportation District (SETD)	\$2,506,191	\$1,906,233	\$1,585,992
Tillamook County Transportation District (TCTD)	\$1,459,176	\$1,794,483	\$1,752,068
Source: Federal Transit Administration 2012-2014. National Transit D	atabase, www.ftis.org. Access	sed October 2, 2015	

sit Administration 2012-2014. National Transit Database. www.ftis.org. Accessed October 2, 2015

The agencies also made capital investments to support their operations, as shown in Table 4.5. Given the types of things that fall under this category of expenditure, it is not surprising that the amount expended fluctuated widely from one year to the next, with no readily apparent trends to report.

Agency Name	2011	2012	2013	
Alleghany in Motion	\$29,388	\$171,581	\$90,723	
Atomic City Transit	\$666,570	\$239,668	\$2,358,185	
COAST	\$249,846	\$0	\$0	
River Cities Public Transit	\$3,270,727	\$1,263,882	\$77,027	
Rural Community Transportation	\$0	\$12,755	\$221,696	
Sunset Empire Transportation District	\$375,125	\$0	\$153,461	
Tillamook County Transportation District	\$862,359	\$0	\$347,403	

Table 4.5 Total Capital Expenses by Agency (2011-2013)

Source: Federal Transit Administration 2012-2014. National Transit Database. www.ftis.org. Accessed October 2, 2015

These rural and small community agencies depend on an array of funding sources to finance their operations and capital expenditures. **Table 4.6** examines the changing proportion of operating expenses funded by fares, contracts, and the three levels of government. There are significant differences in the various agencies' dependence on each of these sources. As of 2013, only four agencies rely on fare revenues. Six of the agencies relied to varying degrees on contract revenues to support operations. Five agencies received some state support for operations, while every agency received both local and federal funds. Federal funds came through the 5310 and 5311 programs.

Table 4.7 considers the proportion of capital expenses supported by federal, state, or local funds. Here, not surprisingly, the federal government emerges as the most important source of capital funds for these agencies, with local funding sources being the second most important funding source. State government, by contrast, is a relatively minor financer of capital expenditures for these agencies.

Table 4.6 Source of Funds Used for Operating Expenses by Agency (2011-2013)

2011				2012						2013					
Agency Name	Fares	Contracts	Federal	State	Local	Fares	Contracts	Federal	State	Local	Fares	Contracts	Federal	State	Local
Alleghany in Motion (AIM)	10%	26%	30%	29%	5%	10%	27%	30%	21%	12%	11%	28%	31%	24%	6%
Atomic City Transit (ACT)	0%	0%	52%	0%	48%	0%	0%	52%	0%	48%	0%	0%	52%	0%	48%
COAST	2%	26%	35%	25%	12%	0%	11%	52%	0%	37%	0%	3%	40%	0%	57%
River Cities Public Transit (RCPT)	12%	3%	49%	4%	32%	12%	29%	44%	4%	11%	6%	42%	29%	3%	20%
Rural Community Transportation (RCT)	0%	13%	60%	26%	1%	0%	10%	64%	25%	1%	0%	9%	61%	28%	2%
Sunset Empire Transportation District (SETD)	13%	2%	31%	20%	34%	5%	7%	32%	7%	49%	14%	4%	61%	5%	16%
Tillamook County Transportation District (TCTD)	12%	0%	29%	26%	33%	13%	1%	26%	15%	45%	15%	2%	41%	38%	4%
Source: Federal Transit Administration 2012-2014. http://www.ntdpi	ogram.gov/ntdp	rogram/rural/arc	hives.htm												

Table 4.7 Source of Funds Used for Capital Expenses by Agency (2011-2013)

Agangy Nomo		2011		2012		2013			
Agency Name	Federal	State	Local	Federal	State	Local	Federal	State	Local
Alleghany in Motion (AIM)	84%	8%	8%	79%	10%	11%	80%	10%	10%
Atomic City Transit (ACT)	80%		20%	83%		17%	74%		26%
COAST	98%		2%						
River Cities Public Transit (RCPT)	89%		11%	89%		11%	80%		20%
Rural Community Transportation (RCT)				75%	10%	15%	80%	10%	10%
Sunset Empire Transportation District (SETD)	71%		29%				77%	16%	7%
Tillamook County Transportation District (TCTD)	62%		38%				53%		47%
Source: Federal Transit Administration 2012-2014. http://www.ntdprogu	ram.gov/ntdp	rogram/rural/arc	hives.htm						
4.2.4 Summary of Basic Agency Information

The preceding sections provide a baseline of information about agency missions and goals, service areas, services offered, budgets and finance, and ridership. This information provides a basic picture of the agencies and the context within which they operate. The discussion also highlights two important issues that are pursued further in the interview-based discussions that follow. First, only two of the agencies collect information about older adult use of their services. This means there is a lack of good baseline data for most of the agencies about how many older adults use the services, let alone the purposes for which they use the services. Second, there is variation among the cases, as well as fluctuation in many cases from year to year, with respect to budgets, service levels, and ridership. The notable variability in funding levels and their sources is undoubtedly the root cause of all of this, and funding-related questions are an important topic of the discussion that follows.

4.3 Lessons from Agency Interviews

The authors interviewed representatives from transit and user-side agencies in order to understand the ways in which transit agencies in rural and small communities operate their services, and partner with others, and shed light on issues related to service provision in these areas, including older adult use of these services. This section will present the findings from a content analysis of interviews with respondent agencies regarding the types of transportation services offered, organizational origins and structures, funding for transportation services, marketing and outreach strategies, opportunities and constraints for service delivery. The following section then highlights key findings.

4.3.1 Methodology for Interviews

The authors conducted 14 semi-structured interviews across the seven rural and small community cases. For each case, we conducted an interview with a transit agency leader (agency-side, with respondent denoted "A") and another interview with someone who represented an older adult-serving organization (user-side, with respondent denoted "U"). Participants for the agency-side interviews were selected based upon their role as executives who could speak about agency goals, objectives, services, and outreach to older adult riders. Agencyside participants were asked to identify older adult-serving agency partner organizations. The research team then identified persons in leadership positions in these social service or community organizations, either through agency-side referrals (snowball technique) or a search of agency websites or directories, to serve as user-side interview participants.

The authors asked each interview participant a set of approximately 20 base questions, with additional questions inserted to query case-specific issues. For agency-side participants, these questions covered: (1) organization history, structure, and service area; (2) the funding sources used to support the agency's services; and (3) the types of services provided, their means of delivery, and their use by older adult riders. For the user-side participants, these questions focused primarily on (1) how their older adult clients use transit and (2) whether/how the transit agency is meeting the unique mobility needs of its older adult clients(s). The participant consent form and example question sets are included in **Appendices A, B,** and **C**. Interviews were conducted via telephone and took approximately one hour each. The open-ended nature of many questions encouraged free-response answers.

The research team subsequently coded the participants' answers for the individual cases, and used a grounded theory methodology to identify important cross-cutting themes regarding

how transit in these rural and small communities is organized, financed, delivered, and used by older adult populations. Within each theme are critical subthemes that emerged as part of our study regarding partnerships, opportunities, constraints, and strategies agencies use in order to provide the best possible service within their means. The results of the interviews are presented thematically in the following sections. Respondent (A for agency-side and U for user-side) and case study (1-7) identifiers have been used in lieu of names where necessary to maintain the anonymity of the interview participants.

4.3.2 Types of Transportation Services Offered

The transit agencies included in this study operate services over a variety of geographic areas, including services limited to residents within a single county (ACT and TCTD), services that connect county residents to locations within their home and adjacent counties (AIM and SETD), services that cover multiple counties in a single state (RCPT and RCT), and services that cover multiple states (COAST).

The transit agencies in these communities offer a variety of transportation services, including vans/paratransit services (4 cases), deviated route programs (2 cases), and special program services, such as subscription services, employment transportation programs, and nutrition programs, etc. (all cases). These services are provided to meet a variety of transportation needs, including medical trips, shopping trips, trips to meal sites, and occasional recreational trips. A number of agencies rely on volunteer drivers to provide these services (4 cases), as we discuss in the next section.

Volunteer Driver Programs

Volunteer drivers are sometimes used to help agencies serve clients in an environment of limited fiscal resources. Many agencies characterize their use as integral to service provision

(Agencies A3, A4, A5, & A6). These agencies consider their use an effective strategy to keep costs low. The costs are lower than for traditional transit service because drivers are not typically paid for their labor; instead, drivers are paid only for expenses through mileage reimbursement, gas reimbursement, or reimbursement paid for Medicaid trips (Agencies A3, A5, & A6). One interview participant stated that volunteer driver programs are highly preferred by their agency's riders over other transit services, because riders get to know the drivers on a very personal basis. Riders tend to have the same driver for repeated trips (Agency A5).

Perhaps the most striking example of a successful volunteer driver program comes from Rural Community Transport, Inc. (RCT) located in Vermont. This agency maintains a dedicated volunteer base of approximately 85 drivers that operate transit service on behalf of the agency nearly seven days per week. These volunteers provide transportation to the general population and those with special medical needs. Volunteer drivers are only reimbursed for mileage driven, which helps to keep costs low.

The program's success derives from the dedicated volunteer base that provides service on behalf of the agency nearly seven days per week. RCT tries to schedule the same drivers for their clients, particularly for cancer and dialysis patients, because their specialized needs are so high. Having the same driver also tends to create a relationship between driver and user that reduces user anxiety. High quality, personal service and low to no cost fares are viewed as key contributors to a successful program that keep riders coming back to use the service.

Shared-Ride and Paratransit Services

"There is an overreliance on paratransit systems. Their use, despite [their high] expense, is grandfathered in and older adults are

relegated to using them. Fixed route isn't promoted in these areas,

but should be given more attention."

- Executive Director, Agency U6

Shared-ride vans and paratransit services are deemed to be amongst the most feasible service delivery strategies in many rural and small communities due to their use for more flexible and individually tailored service, and their smaller vehicle sizes and resulting easier navigability as compared to the standard large transit bus. Interview participants pointed to the flexibility that smaller vehicles provide with respect to routing to serve the areas where demand for service arises at the time it appears (Agency A5). In many rural areas, there simply is not the critical mass of population to make the use of large vehicles operating over dedicated, frequent-service routes cost-effective.

In some communities, paratransit is seen as a successful and thriving operation that has been an integral part of the overall service strategy for many years (5 cases), while in other communities, other service types are seen as more successful and better suited to meeting community needs because of paratransit's relatively high cost per rider served (2 cases). Conflicting opinions regarding paratransit tend to result from the different geographic contexts, population levels, and delivery strategies being employed by the agencies. Agency-side opinions regarding paratransit typically focused on (1) its high cost per rider to operate and (2) its relatively small proportion of total ridership (Agencies A1 & U1). User-side opinions about paratransit somewhat differed. While user-side respondents recognized paratransit's high cost per rider, they tended to focus more on how paratransit operates as a service (see below).

For example, Agency U6 which is located in the northwest, regards other service options as much more cost-effective and efficient than paratransit, while Agency U7, which is located in

the southwest, believes that paratransit in its community can be more effective and should simply be marketed better. These two user-side agencies are located in areas that are very different in terms of geography and population served. Agency U6 is a user-side agency located in an area where transit service operates over a multiple county area to serve a dispersed population. Alternatively, Agency U7 is a user-side agency located in an area where transit service is localized to a single county where the population is comparatively more concentrated. As such, paratransit operates differently in the two communities. These examples highlight that local context is important to understanding the best possible way to provide transit service to effectively meet local needs.

Deviated-Route Services

Deviated-route service affords some riders convenience because of its ability to merge the positive attributes of both traditional fixed-route and more specialized services. Deviated route services are intended to benefit from higher passenger loads which, in theory, increase the productivity and cost effectiveness of the service compared to paratransit. Because deviated route services increase the geographic coverage of an otherwise fixed-route service, it is thought to increase its potential ridership pool in these lower population density settings.

However, most respondents characterized deviated route services in rural and small communities as imposing a significant burden to passengers. The services frequently employ long headways, often up to two hours, which were reported to make older adult and disabled riders uncomfortable (Agencies A4 & A5). In addition to the inconvenience of long headways, Agency A4 noted that local topography might pose challenges for the successful operation of larger vehicles on deviated routes, which could prevent some parts of a county from being served by transit except through smaller vehicles.

Special Transportation Programs

All agencies in the rural and small communities we studied offer special programs tailored to meet specific mobility needs in their communities. Some of these programs emerged from partnerships between the transit agency and a social or human services provider located within the same community. Examples of special programs include subscription services, employment transportation programs, nutrition programs, an Elderly and Disabled Program, a Connector service between counties, peak-hour service during non-peak times, and travel training programs.

Subscription services are offered by Alleghany in Motion (AIM) to help local senior service agencies (the Council on Aging and a local adult daycare program) with transportation provision to clients. This type of service is cost-effective to the senior service agencies, because it is less expensive than operating vehicles directly, and allows them to offer transportation to their clients as an amenity in addition to the other services they offer. The subscription service also benefits the transit agency because it provides a steady stream of revenues and riders, and thereby allows them to provide continued transportation service in the community.

Employment transportation programs are offered by the transit agency to connect clients to current or potential employers or to aid in their pursuit of employment. AIM operates a low-fare employment transportation program that serves work trips, trips for interviews, and trips for continuing education within its county. The program also serves trips to drop children off at daycare for an additional low-fare charge; the daycare drop-off service tends to be utilized more by younger women than men. Agency officials view this specialized service as highly beneficial to clients in the local community and work hard to keep the program affordable for users.

Some specialized programs are geared toward individuals with unique needs. In Colfax, WA, *nutrition programs* are offered through a partnership between the Council on Aging &

Human Services and its transportation branch, COAST. Through this program, COAST provides transportation service to meal sites and pantries in addition to running traditional Meals on Wheels services.

Rural Community Transit, Inc., (RCT) which serves riders in Vermont, offers an *Elderly and Disabled (E&D) Program* that may be regarded as exemplary in terms of the broad reach that community and transit agency partnerships can have. The E&D Program includes a partnership with the local transit agency as well as the Council on Aging and local Area Agency on Aging to serve individual clients. Partner agencies send authorization for the transit agency to provide transportation service to a client. Included in this authorization are details regarding needs and date ranges (i.e. clients can go shopping once or twice a week). Importantly, the close relationship between the partners allows for personalized assistance for older adults with any emerging issues. For example, if a rider participating in the E&D Program declines a scheduled ride, the transit agency will notify the client's caseworker that he/she didn't utilize the service that day. This notification allows the caseworker to follow up with the client in case there is a potential issue that needs remedy.

The *Northwest Connector* connects transportation services between several agencies located in multiple counties in northwestern Oregon, including Sunset Empire Transportation District (SETD) and Tillamook County Transportation District (TCTD). The Connector services bridge the various local services and operates through a multi-county alliance of transportation service providers called Northwest Oregon Transit Alliance (NWOTA). The Northwest Connector allows patrons to travel between coastal communities on the western edge of the state and the towns and cities of the Willamette Valley, including Portland, on the other side of the Coast Range.

Peak-hour service was instituted all-day by Atomic City Transit (ACT) in an effort to maintain strong ridership. As a result transit service in Los Alamos County, NM operates with consistent thirty minute headways all day. An agency contact reports that this program has helped to maintain stable and strong ridership throughout the system and thus they view it as a highly successful program.

Travel training programs were reported by six of the seven transit agencies interviewed. Training types consist of young rider training, general training, and on-demand training. The formality of the travel training programs differs between agencies. In all cases, the training is geared around helping people to navigate the transit system with confidence. Young rider training is conducted by RCT and RCPT and is focused on training young riders with the intention that they will use the service into adulthood.

General training for older adults and other riders varies by format. A mobility coordinator at SETD in Clatsop County, OR conducts small group travel training at the local transit center. The training consists of a basic course on how to navigate the system and concludes with a ride on an actual bus. Travel training at TCTD in Tillamook County, OR is conducted at the visitor's center by volunteer staff. The volunteers provide assistance with downtown navigation in addition to ride-along service and travel training specifically for older adults.

On-demand travel training specifically for older adults is provided by ACT, AIM, RCPT, and RCT. Within these transit organizations, there is no official travel training program. Rather, training is provided on an as-needed basis and is typically requested by the older adult or his/her family. In the case of RCPT, if confusion is detected, one-on-one training may be offered to assist a rider. Once a request for training has been made, an informal course introducing the rider to the vehicles and how to use the system is conducted. This type of training is beneficial

particularly to older adults because it provides one-on-one attention and helps to boost rider confidence.

4.3.3 Organizational Origins and Structures

The organizations participating in this study primarily grew out of a need for public transportation services in their local communities. These organizations emerged through both grass-roots initiatives (9 cases) and formal local government actions (4 cases). One user-side agency representative reported its origins as unknown.

For example, one of the oldest user-side agencies that participated in the study is the Astoria Senior Center, which is a key user side partner for Sunset Empire Transportation District. The Center was founded in the early seventies by local citizens and led by a nun named Sister Patricia who secured a grant in 1974 to create a senior drop-in center in 1976. This drop-in center evolved into what is now the Astoria Senior Center. More recently, Alleghany in Motion (AIM) was created in 2001 as the result of the shared vision of two local officials to integrate countywide transportation services that were previously operated by each social service agency operating its own passenger vehicle to provide its own transportation services.

The transit agencies are structured in a variety of ways, including non-profit with a board (3 cases), a unit of county government (2 cases), or a special district with a board (2 cases). Transit agency roles in day-to-day operations mainly involve the provision of transportation service itself, coordinating with local government and various social service agencies as well as connecting with other transportation services, and providing dispatch services. In all cases there exists some type of partnership with an outside organization to help market and/or deliver transportation services in the community.

Of the user-side agencies, they are primarily structured as a non-profit with a board (4 cases), are volunteer-run (1 case), or have a full-time staff (1 case). Of these, four cases rely heavily or in part on partnerships with the local government or local transit agencies. One user-side agency representative reported its structure as unknown. There does not appear to be any connection between agency structure and service provision or use. Rather, partnerships appear to be more influential to service provision in that user-side and transit agencies maintain professional working relationships in order to share resources and knowledge in order to provide services to older adults.

The Importance of Partnerships

Strategic partnerships between transit agencies and social/human service agencies as well as partnerships with some Native American nations emerged as an important theme throughout the study. Partnerships are viewed as integral to service provision according to all study participants. Partnerships allow for:

- provision of service to multiple destinations as well as intercity service to extend the reach of transit which leads to increased ridership;
- assistance with announcements and outreach to targeted populations;
- promotion of resource and knowledge sharing; and
- service coordination.

The Northwest Oregon Transit Alliance (NWOTA) is an example of a successful partnership between Tillamook County, Sunset Empire Transportation District, Lincoln County, Benton Rural Services, and Columbia County Rider to coordinate regional transportation services. The general managers of the member agencies serve as the coordinating committee.

They jointly market services as the Northwest Connector program. The mission is to provide seamless travel throughout the five county region.

Rural Community Transportation, Inc. (RCT) also serves as an example of what a successful partnership can look like. They partner with six local agencies or organizations (Northeast Kingdom Council on Aging, Central Vermont Council on Aging, adult day health services, and community action organizations) to deliver needed services. RCT has a partnership with another transportation broker in Vermont that allows for buses from both agencies to operate in each other's service areas. This overlap of service provision in different areas affords riders the ability to travel seamlessly between the east and west across Vermont.

Two agencies partner with Native American nations in order to develop service plans and provide alternative services. Acknowledged as revenue-neutral in most cases, the Native American partnerships rely heavily on intergovernmental agreements due to different governmental and financial structures. For some agencies, tribes match FTA §5311 money, yet shrinking funds from this program do not help these agencies manage service growth. As a result, the transit service is adjusted to match the funding available through the partnership. Different politics and operating procedures between transit agencies and tribes can present logistical challenges at times, but respondents generally view managing contracted service for the Native American nations as a means to increase service use by a wider array of riders.

Many agencies cited close working relationships with partner agencies that resulted in responsive, reciprocal, and productive work environments in order to deliver outstanding service to clients (6 cases). In all cases, user-side agencies viewed transit agencies as very responsive to their needs, especially given occasional problems, issues, or programmatic changes that might occur due to funding or policy changes at higher levels of government.

4.3.4 Funding for Transportation Services

Transit agencies operate services in a climate of ever-increasing demand and fluctuating funding, often resulting in these agencies having to do more with less. To adapt to changing environments, creative funding and operational strategies are born. Funding is regarded as the most critical aspect of agency operations for both the transit and user-side respondents. They all report receiving some federal, state, and/or local financial assistance to support their programs and services. In addition to these primary sources of funding, some agencies also use contract agreements with other parties, such as Native American tribes or social service organizations, to secure additional funding and expand services. Some user-side agencies secure additional funding by charging fees for service use (Agencies U1, U2, U3, U4 & U6).

Despite relying on multiple funding sources, all agencies report that funding is not enough to provide the high levels of service they would like to offer. Agencies tended to prioritize the use of funds to service provision, which resulted in often minimal funding for travel training, marketing, or outreach to attract new riders. Many agencies reported that constrained funding results in a need to meet growing demand for transit operations while operating off of stagnant or shrinking funds (5 cases). Given this fiscal climate, making capital investments and increasing service delivery were cited as especially challenging (Agencies A5 & A7).

On the other hand, all agency respondents reported that having additional funds would allow their agency to offer tailored services to a wider variety of people or to promote specialized programs that are needed in the community. Respondents noted that increased funding could be used to provide more amenities such as convenient scheduling (Agency A4), offer routes to new destinations (Agency A2), and provide travel training for riders to promote growth of older adult ridership (6 transit agencies). Agencies could improve infrastructure, such

as benches at transit stops for mobility challenged people (Agency U7). Many agencies would also like to increase their outreach efforts, but they simply are not able to do so because of limited funds. Three agencies indicated if more funding were available, the agencies could improve the quality of materials and mechanisms for outreach (Agencies U4, A2, & A4).

Given their fiscal situation, respondents report that their agencies seek to reduce costs wherever possible while still trying to maintain good service levels for clients. For example, RCT uses trip coordination to provide a "least cost mode" by combining passenger trips to ensure that more people are riding on one vehicle; the increased passenger loads serve to reduce the cost of serving each passenger trip. This strategy lowers costs and enables them to keep fares free to the riding public. While not all transit systems operate fare-free services, they employ a variety of service delivery strategies that help to best serve community needs.

4.3.5 Older Adult Use of Transportation Services

"[Older adults in rural areas] have always driven. For them to give up their independence & accept public transit to get around, is a barrier." –Representative, Agency U2

In general, interview participants reported an increase in transit use by older adults (4 user-side cases and all transit agencies). This information is self-reported. Few agencies have specific numbers to report about older adult transit use (only 2 cases, as reported earlier in the report). In many communities, transit services are offered to all county residents and older adults are not treated as a special population or sub-group for tracking purposes (4 cases). Rather, older adults are simply seen as part of the rider market as a whole. Two cases mentioned rider growth in the medical transportation market and assumed a linkage to older adult ridership, but could not

prove a direct link. One agency referenced growth in the older adult population as reported by the U.S. Census Bureau, and assumed a correlation with a recent increase in their ridership.

Agency respondents would like to attract older adult riders to their services. However, they report facing many barriers to doing so, including those related to the kind and level of services provided (which are influenced by available funds), service operation (of route deviations, long routes, and irregular or infrequent schedules) and ridership unpredictability (widely fluctuating ridership demand due to seasonal and tourism ridership and gasoline price changes) (Agencies A4 & A5).

Particularly important, however, several user side agencies reported that many older adults simply don't want to give up driving (4 cases). Older adults who have been drivers are accustomed to the independent mobility provided by the automobile and are loath to give it up. To overcome this barrier, transit agencies are helping older adults make the transition to using transit, when necessary. For example, Sunset Empire Transportation District (SETD) engages with the local DMV to provide alternative transportation options to some older adults when they give up their driver's licenses.

4.3.6 Marketing and Outreach Strategies

Respondents identified marketing and outreach as important ways to increase ridership, including among older adults, by enhancing potential riders' knowledge about transit services (Agencies A1, U1, and U4). Agency marketing efforts consist of advertising via traditional media outlets such as radio broadcasts, community events, and a newsletter/print media (Agencies A4, A7, and U3), use of the internet and social media (Agency A7), telephone hotlines (Agency A5), word of mouth marketing through social services programs/referrals or friends (Agency A1, A2, and A6), and even free ride promotions (Agencies A1 and A5). Some agency

respondents stated the importance of making people aware of the service before they truly needed it, so that they would be better prepared to use it (Agencies A1, U1, and U4).

Respondents report that their outreach strategies consist of conventional advertising, outreach to large groups (particularly through senior centers), adding a personal touch to services, and travel training and education. Some agencies conduct travel training programs for groups, usually at senior centers or public fairs/festivals (SETD and TCTD) while others conduct training on an as-needed basis (ACT, AIM, RCPT, and RCT). Respondents deem face-to-face communication as being most effective for reaching older adults who seem to be more responsive to in-person interactions. They use this very personal outreach to older adults to improve effective general communication about their services, to better educate potential riders, and to identify and potentially mitigate barriers or constraints to transit use.

Respondents reported that the most successful outreach strategies emerged organically. They pointed to examples like altering service to respond to emerging community needs (i.e. providing out of town trips: AIM and RCT), treating everyone equally with dignity and respect (RCPT), changing fare or service policies to encourage more riders (examples include senior discounts offered by RCPT or restructuring dial-a-ride as in the case of TCTD), and conducting individual travel training to improve system knowledge (SETD and RCT).

4.4 Discussion of Results and their Implications

The interviews raised three important findings related to providing transportation services for older adults in rural and small communities which should inform future investigations of older adult transportation services in such communities.

First, older adult ridership is not typically tracked by agencies and therefore we do not know, in a systematic way, whether, how often, or for what purposes older adults use these

transportation services. Some respondents had a general sense of older adult use or a notion of the kinds of services they were likely to use, but only two agencies even collect basic data about older adult ridership. The lack of good, consistent data limits our ability to understand whether the transportation needs of older adults living in these communities are actually being met.

Second, funding is a major challenge for agencies in rural and small communities, and they have to be adaptive, and often entrepreneurial, in responding to their frequently challenging fiscal situation, as for example through the use of partnerships noted below. The relative scarcity of funding has precluded many agencies from providing the service and engaging in the outreach they would like to do, although it has also prompted some agencies to work especially hard to stretch their resources by reducing costs (through pooling of rides and/or extensive use of volunteers) and leveraging other funding sources (social service grants and Medicaid reimbursements). They are simply adapting to make do with less.

And, third, the agencies are relying heavily on partnerships. Partnerships allow for service coordination to multiple destinations both locally and to other communities, thus extending the reach of transit to increase ridership. Partnerships can assist with marketing and outreach to a variety of potential transit users, which fosters strong networking and interagency relationships as well as forms community bonds. Partnerships can maximize the use of available fiscal resources and professional expertise. And partnerships are frequently the source for ideas about new and frequently innovative services. All the respondents used partnerships of one form or another.

Chapter 5 Conclusion

The survey and case study results presented in the preceding two chapters provide important insights about public transportation services for older adults in rural and small communities and also highlight a number of questions that should be explored in future research. The authors undertook this study to address three specific research questions, and learned the following as a result.

Question 1: what types of modified/innovative transportation services exist for older adults living in rural and small communities?

Agencies in rural and small communities provide a wide array of transportation services, many of which are adapted or modified from conventional transit services to better fit the specific needs of these communities. These agencies offer fixed-route services, van and paratransit services, deviated route services, feeder services to nearby larger communities, regular services to specific destinations, subscription services, employment transportation services, and/or medical transportation services. Some agencies rely on volunteer drivers to provide services. Services that meet medical transportation needs, provide connections to nearby cities and their regional transit networks, and connect riders to specific destinations (such as shopping or senior centers) are examples of frequently used specialized services. *Question 2: how are these services financed, organized, and delivered by the entities that provide the service*?

Agencies in rural and small communities rely on a combination of funding sources to support their services. They rely extensively on federal funding (5310 and 5311 funds) and on local funding. States also provide funding in many cases. Some agencies also use contract agreements with other parties, such as Native American tribes or social service organizations, to

secure additional funding. By and large, rural and small community agencies tend to be much less reliant on fare revenues than their more urban counterparts.

The agencies are structured in a variety of ways, including as non-profit organizations, units of county or local government, or as special districts. Their services are often organized and delivered through partnerships between transportation providers and other units of government, social service organizations, and/or other community partners. These partnerships often exist to leverage fiscal resources or professional expertise. In many smaller agencies, the transportation or ganization is not run by an individual with an educational background in transportation or transit, but instead by someone with a social services background or orientation. This often results in a more client-focused approach to the delivery and management of their services. They rely heavily on personal communication, through partners and directly with potential users, to conduct outreach, market their service, and provide rider training on how to use the service. *Question 3: how are these services utilized by older adults?*

Agencies in rural and small communities tend to have very limited data on who is using their service or for what purpose; few collect any data whatsoever on older adult use of their service. This suggests the need for policymakers, particularly at the federal level, to develop some mechanism for allowing easy collection of such data to determine whether older adults are using these services and whether the services are adequately and effectively meeting their mobility needs.

Given the scarcity of numeric data, agency comments on older adult service use tended to rely on observation and anecdote. The agency respondents believe older adults are using the services in greater numbers than in the past, and they believe they are using it for medical trips, shopping trips, and trips to engage in other social activities (such as at senior centers). They also

report that they frequently confront difficulties encouraging older adults in their communities to use their transportation services, because of their long personal history as drivers, their reluctance to surrender their independent mobility, and the generally lower visibility of public transportation services in these communities.

Transit and social service agencies report that they most effectively promote greater older adult use through direct personal outreach and word-of-mouth marketing. They regard such faceto-face communication as being most effective for reaching older adults who seem to be more responsive to in-person interactions. They use this very personal outreach to older adults to improve effective general communication about their services, to better educate potential riders, and to identify and potentially mitigate barriers to their transit use. This is an important finding for practitioners and policymakers seeking to effectively reach older adults in other communities.

The study findings also suggest the need for additional research in a few targeted areas. First, there is clearly a need for more research on older adult use of public transportation services in rural and small communities so we can begin to get a clearer picture of how and in what numbers they are using the services, and thus identify where the existing services are deficient and what might be done to improve them. This could be accomplished nationally through the use of Federal Transit Administration funds to support collection of such data as a condition of receiving federal aid or through scholarly research, such as through a detailed case study investigation in partnership with a transportation service provider. In any case, the need for such basic data is absolutely critical to ensuring that the transportation that is provided is doing what is required to effectively meet older adult mobility needs.

Second, there needs to be more research on how older adults can be encouraged to use these transportation services when they need to do so, or should be doing so. The study

highlighted the importance of a personalized marketing and outreach strategy for the older adult population in rural and small communities. The interviews also elicited comments about the sense of safety that many older adults feel when using the service with friends or acquaintances, as opposed to confronting the unfamiliar world of public transportation on their own, and the desire of older adults to not be labeled or treated differently from other groups. Yet older adults may have desires, fears, and behaviors, when it comes to their mobility needs and their feelings toward public transportation, that differ in either important or subtle ways from the typical transit user, and more knowledge about these issues is needed to develop effective policies to support their safe and comfortable use of such services.

Third, there needs to be more investigation of the inner workings of the partnerships between transportation providers and user-serving organizations that were so in evident in this case investigation. Particularly important is an understanding of how successful partnerships are established and their resulting relationships managed to effectively deliver transportation services to the client population. The different roles of public, private, and non-profit actors, of various types, in such partnerships is also worthy of some detailed investigation.

And finally, there needs to be more research about the funding mechanisms used to support transportation services in rural and small communities and the potential impacts of reliance on these different funding sources for the organization, delivery, use, and performance of these transportation services. Particularly helpful would be more knowledge about the details of innovative strategies that might permit resource-strapped agencies to more effectively leverage their own resources to improve the quality of their services and the outreach needed to attract riders to use it.

This study provided important information about public transportation services for older adults residing in rural and small communities, but clearly there is still a great deal left to learn.

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Appendix A: Participant Consent Form



THE FLORIDA STATE UNIVERSITY COLLEGE OF SOCIAL SCIENCES & PUBLIC POLICY Department of Urban and Regional Planning

Agreement to Participate in Research

Responsible Investigator(s): Jeffrey Brown (PI), Megan Bond, Vitor Suguri, and James Wood **Title:** An Investigation of Innovative Approaches to Transportation Service Provision for Aging Populations Residing in Areas Lacking Fixed-Route Public Transportation Service

1. You have been asked to participate in a research project examining the operation and effectiveness of innovative approaches to providing transportation services to older adults residing in areas lacking traditional fixed-route transit. The research will begin and conclude during the 2015 calendar year.

2. You will be asked a series of questions about your organization's role in providing on-demand, informal, or other innovative transportation services for older adults, your understanding of the purposes of these services, and your observations of their effectiveness as a means of transporting this subset of the population. We will ask the questions during a one-hour, one-time interview. With your permission, we will record the interview for note-taking purposes.

3. No foreseeable risks are expected to arise from your participation in the study.

4. We will provide you with a copy of the final research report. The research will provide insights for transit agencies, city authorities, state/federal transportation departments, and other entities with an interest in issues related to transportation and the older adult population. The information may also be presented in scholarly publications.

5. Although the results of this study may be published, no direct quotations will be included without your express, written permission. Your name will not appear in any published material without your express, written permission. You will instead be identified in terms of your general role in the transportation service you provide within the organization you represent.

6. There is no compensation for participation in the study.

7. Questions about this research may be addressed to the investigators listed above. Complaints about the research may be presented to *David W. Rasmussen, Dean, College of Social Sciences and Public Policy, (850) 644-5488.* If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the FSU IRB at 2010 Levy Street, Research Building B, Suite 276, Tallahassee, FL 32306-2742, or 850-644-7900, or by email at humansubjects@fsu.edu.

8. No service of any kind, to which you are otherwise entitled, will be lost or jeopardized if you choose to "not participate" in the study.

9. Your consent is being given voluntarily. You may refuse to participate in the entire study or in any part of the study. During the interviews, you have the right to not answer questions you do not wish to answer. If you decide to participate in the study, you are free to withdraw at any time without any negative effect on your relations with the Florida State University or with any other participating institutions or agencies.

10. At the time that you sign this consent form, you will receive a copy of it for your records, signed and dated by the investigator. The signature of a subject on this document indicates agreement to participate in the study. The signature of a researcher on this document indicates agreement to include the above named subject in the research and attestation that the subject has been fully informed of his or her rights.

11. Your responses will remain confidential. This confidentiality is protected to the extent allowed by law.

Signature

Date

Investigator's Signature

Date

FSU Human Subjects Committee approved on 3/19/2015. Void after 3/17/2016. HSC # 2014.14515 Appendix B: Agency-side Interview Questionnaire

Biographical Info/ Basic Organizational Issues

- 1. Tell us a little about your professional background and how you came to join your organization. What is/are your current role/duties?
- 2. How did your organization or agency start? (Tell us a little about its history)
- 3. What is the mission of your organization with respect to the operation or coordination of transportation services?
- 4. How long has your organization been involved in either the operation or coordination of transportation services? In what ways?
- 5. What is the current administrative and operational structure of your organization?
- 6. Does your organization partner with any other organizations or agencies in the operation or coordination of transportation services? If so, which ones? For what purpose(s)? Who are your points of contact?
- 7. Does you agency interact with any social service or advocacy organization that serves older adults? Which one(s)? Who is your point of contact with this organization?

Delivery and Finance

- 8. What is your current service area?
 - How was it identified?
 - Is it growing, shrinking, or changing in any way? How/why?
- 9. To what extent do you rely on volunteers in the provision of your services, and in what capacities? How do you manage them?
- 10. How are your transportation programs or services financed?
- 11. Is your funding growing, shrinking or changing in any way? How/why? In what ways?

General Use

- 12. Have you conducted any surveys or evaluations of your services? Would it be possible to obtain copies?
- 13. Could you provide a general rider profile?
- 14. Do you have information/a breakdown of trip types?
- 15. Is your rider market growing, shrinking or changing in any way? How/why? In what ways?
- 16. What do you regard as the most successful aspects of your program or service?
- 17. What do you regard as the least successful aspects of your program or service?

Older Adults

- 18. What strategies have you implemented to improve the ability of your program or service to more effectively meet the transportation needs of older adults? What have been the results of these efforts?
- 19. You mentioned in the initial survey that you do a lot of in-person marketing through area senior centers and service clubs. Do you feel that face-to-face communication is more effective for older adults in your service area?
- 20. Do you engage in any travel training for your older clients? If so, how does it work and how has it been received by clients?

Other

- 21. If you were advising another organization or agency that was considering offering services specifically tailored to older adults, what advice would you give to them?
- 22. Are there any other issues or questions that we should be examining as part of our study?

Appendix C: User-side Interview Questionnaire

Individual and Organizational Background

- 1. Tell us about your background and how you came to be in your current position. What is your current position? What is the nature of the position (volunteer, appointed, etc.)?
- 2. When/how did you become involved with issues affecting older adults?
- 3. What is your organization or affiliation? When did this entity start?
- 4. How is the organization structured? Does it have a formal board?
- 5. How is the organization financed? Does it charge fees to older adults to use its services?
- 6. What is its mission with respect to serving older adults? Does it have a mission specifically related to the transportation needs of older adults?
- 7. How would you characterize the relationship between your organization and (TRANSIT PROVIDER)? With whom do you work closest in that organization?
- 8. How responsive is (TRANSIT PROVIDER) in acknowledging/meeting/responding to the concerns of your organization? In what ways?

Older Adults and Transportation

- 9. How large an older adult population does your organization serve?
- 10. Can you talk about your organization's outreach strategies? How do you reach out to get new older adults to use your services?
- 11. What do you wish you could do to more effectively reach underserved populations?
- 12. How would you characterize the quality and reliability of public transportation services available to meet the needs of older adults in your community?
- 13. How significant is older adult use of public transportation services? What kinds of services tend to be most popular and least popular? Why do you think this is the case?
- 14. For what kinds of trips do older adults tend to most often use public transportation services in your community?
- 15. Have you noticed any change in older adult use of public transportation services? Is it increasing/decreasing? Are they using these services more for new kinds of trips?
- 16. What do you regard as the greatest barriers to greater older adult use of public transportation services in your community?
- 17. Has your organization discussed any of these barriers with (TRANSIT PROVIDER)? If so, how have they responded? And what have been the results for older adult residents?
- 18. Does (TRANSIT PROVIDER) provide travel training to older adults seeking to use public transportation services? What is the nature of this training? Where does it take place? How would you assess its effectiveness? What is the older adult use of these services?
- 19. Does (TRANSIT PROVIDER) offer other mobility-related services or resources (either formally or using volunteers) to older adults through/at your organization? What is the nature of these services or resources? How would you characterize their effectiveness?

- 20. Have you done any surveys of your older adult clients/customers relating to their transportation needs or concerns? What were the results? Would it be possible for us to obtain copies of these surveys for our research?
- 21. Have you done any surveys relating to older adult use or satisfaction with the public transportation services in your community? What were the results? Would it be possible for us to obtain copies for our research?
- 22. What do you see as the greatest opportunities for greater older adult use of public transportation services in your community? What do you think needs to occur to take advantage of these opportunities? How likely do you think this is?
- 23. Are there any other issues affecting older adults and transportation in your community of which you think we should be aware?