

INCREASING THE USAGE OF DEMAND-RESPONSE TRANSIT IN RURAL KANSAS

by

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Abstract

Public transportation in rural America has existed for decades. Its providers are challenged with low populations and long distances in rural areas. Many of these rural transit providers have been in existence for many years, but ridership still remains low. These providers usually operate in a demand-response format, as opposed to large cities, where busses run on fixed routes. This research was conducted to see if any type of service improvements or enhancements could be found in order to increase ridership of demand-response transit service in rural Kansas.

In order to determine if ridership of public transportation in rural Kansas can be increased, customer satisfaction surveys were conducted. One survey was distributed to current riders of demand-response systems, one survey distributed to non-riders of public transportation, and the last survey given to providers to obtain basic system information throughout Kansas.

Ridership is significantly skewed toward the elderly, disabled, and those who either choose not to drive or are unable to drive. Those who do not fall into one of these three categories often do not use public transportation in rural areas. For most of the riders, public transportation is their only reliable method of mobility as they are transit dependent. Only 35% of the riders had a personal vehicle they could use to make the trip had public transportation not been available. Riders of demand-response transit systems in rural Kansas are pleased with the service provided as a whole.

Non-riders are ambivalent toward demand-response transit service. They appreciate the fact that in many cases general public transportation service exist, but they are also generally unwilling to use it themselves. These are typically choice riders, and are unlikely to switch to demand-response transit due to their other mobility options. It was found that the more vehicles a person has access to in their household, the less knowledge they have about public transportation in their area. These people are content to use the vehicles they have, because it is more convenient than using public transportation in rural Kansas.

Improvements to the provider's system, like extending operating hours and days, along with implementing GIS-assisted scheduling may bring higher ridership. However, this may only

increase the number of rides by the same current riders with few new riders gained. Increasing the usage of demand response ridership will continue to be a challenge in the future with the increasing number of elderly in the years to come.

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CHAPTER 1 - Introduction

The ability to be mobile in rural areas is typically more difficult than in more urban areas. Mobility in rural Kansas is often linked to a personal vehicle. One of the alternative options, if a personal vehicle is not available, is to use a general public transportation agency in the area. A disproportionately high number of the people that do use public transportation in rural areas are the elderly, handicapped, or low-income.

1.1 Demand-Response Transportation

Public transit is generally perceived as urban fixed-route bus lines or subways. These public transportation facilities are typically centered in large population, high-density cities. However, bus lines and subways are not the only public transportation available. In less-populated and less-dense areas, public transportation providers exist that adapt to the rural nature of providing public transportation. These systems, often called demand-response systems, function differently than fixed routes.

Demand-response transportation (also called paratransit or dial-a-ride) is transportation consisting of passenger cars, vans, or small busses that will show up at a location after a person has called in a request to the dispatcher. The buses are often wheelchair-lift equipped in order to be more accessible for those who cannot use the stairs. These vehicles do not run on a fixed route or time table, but rather will pick up and drop off people at requested origins and destinations as quickly and efficiently as they can. This often means that unlike taxis, they will pick up or drop off other passengers before continuing on to a rider's intended destination (1). These shared rides operate typically either door-to-door or curb-to-curb and from many origins to many destinations (2). Door-to-door means that drivers may assist passengers all the way up to, and sometimes inside of, the building the passenger is destined for. Curb-to-curb is where the drivers pull up to the curb of the building to pick up and drop off passengers, similar to a conventional taxi service.

Fixed routes in large cities typically also have a version of demand-response transportation due to Americans with Disabilities Act (ADA) requirements. Fixed-route providers must provide demand-response transportation for those who are unable to access the

fixed route using normal means. Often discounts are given to them to use fixed routes in order to encourage the disabled to attempt to do so wherever possible. Depending on the provider and the city, demand-response service can be as short as 30 minutes, all the way up to 24-hour notice like most rural demand-response transit providers are, to obtain a ride.

There are 5,960 demand-response transit providers with 41,958 vehicles in America as of 2005. By comparison, there are only 1,500 motor bus providers with 82,027 vehicles. This means there are many small providers without much staff or resources available to improve usage of demand-response systems. Demand-response transit trips are typically nine miles in length, with motor bus trips being only four miles long (3). These demand-response trips are much more personalized than fixed-route buses, and are much more difficult to run cost-effectively.

1.2 Rural Kansas Transportation

Service areas for each transportation provider in Kansas differ. Some providers will work only in their county; others will work in a multi-county area providing rides. Others are based in the county's largest city and provide rides to areas outside the city only on certain days of the week or month. This variable geographic coverage for each provider makes it difficult to determine if everybody in Kansas is being served by public transportation.

During the summer and fall of 2007 the price of gas in rural America was affecting whether or not it was cost-effective for people to even travel to work. At the time, the price of gas was hovering around \$4 per gallon. Economists think that "over the next few years, the country could see a migration that would greatly reduce the population of Small Town America" (4). "Half of American households don't have access to adequate transportation options other than cars," according to Sandy Markwood, chief executive of the National Association of Area Agencies on Aging (4). She also stated, "Rural America and suburbs don't have public transportation available" (4). While that may not be entirely true, it often seems that way. Twenty-one percent of Americans older than 65 do not drive and more than 600,000 people age 70 and over stop driving each year nationwide (5). This will only become more pronounced in the near future with the increasing age of the large baby boomer section of the U.S. population. The large upcoming elderly segment of society will want to stay mobile as long as they can, and

a high percentage of the U.S. voting population they will be able to vote in favor of public transportation funding if they so desire.

The U.S. Census Bureau estimates that in 2007 Kansas' population was 2.76 million, with 0.36 million 65 years or older (6). Population alone may not be the best indicator for demand-response public transportation in rural areas though. A better comparison would be density, where Kansas has 32.9 people per square mile, with the U.S. average being 79.6. Ranking states by density would place Kansas as the 10th least-dense state. A large number of citizens are clustered in the most urban counties in Kansas. Eighty-two of Kansas' 105 counties have population densities lower than 32.8 people per square mile. To make matters worse, 55 counties have a density of 10 people per square mile or less (7). This low density in Kansas as a whole, and rural areas especially, makes providing public transportation difficult due to the distances traveled for few riders.

The density of Kansas compared to the rest of the U.S. can be seen in Figure 1.1. Figure 1.2 shows the percentage change from 2000 to 2007 in county density. Rural Kansas is already sparsely populated, and it is rapidly decreasing in population. It becomes obvious that because rural is defined by population and not density, specific states' "rural areas" are very different for transit providers in actuality (8, 9). Rural in Kansas is not even close to as dense as rural New York, for example.

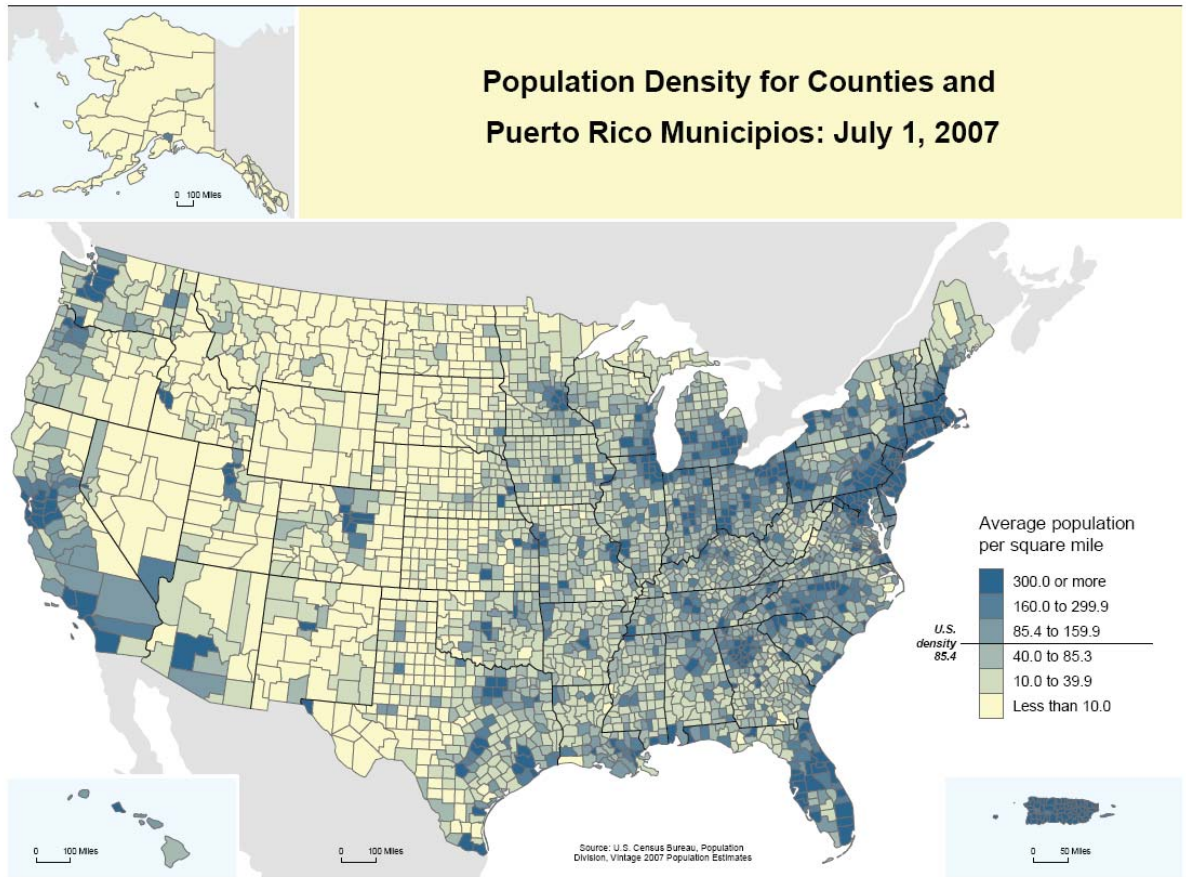


Figure 1.1. Population Densities by County for the United States

Source: U.S. Census Bureau, Population Division, Vintage 2007 Population Estimates

Since in rural Kansas the elderly make up a significant portion of the riders, forecasting this population is important to demand-response transit providers. The U.S. will be experiencing a significant increase in population of the elderly in the coming years. The elderly population age 65 and over was 34.5 million in 1999, and by 2030 there will be about 70 million over the age of 65 (10). This significant shift in demographics will increase the number of potential drivers with reduced driving abilities. Abilities related to driving are a decrease in vision, an increase in response time, and other functions necessary for driving. Demand-response transportation should be available and widely publicized in order to be an encouraged alternative option to driving.

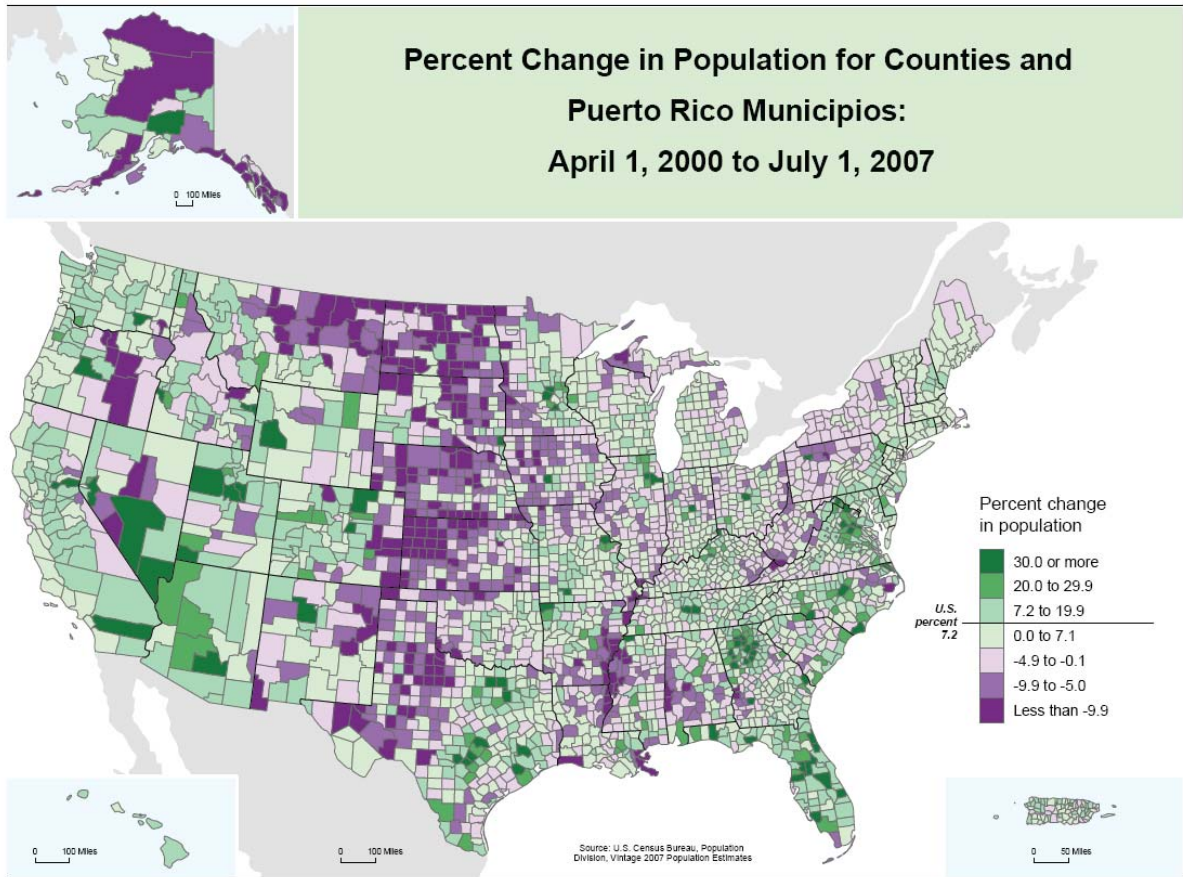


Figure 1.2. Percent Change in Population by County for the United States

Source: U.S. Census Bureau, Population Division, Vintage 2007 Population Estimates

1.3 Rural Transit Funding

The federal government provides financial assistance to rural transportation agencies through 49 U.S.C. Section 5311, often called Section 5311. Rural areas are defined as having a population smaller than 50,000. Federal funds are provided to the individual states who then distribute the funds to transportation agencies in rural areas. These funds cover up to 80% of the capital costs and up to 50% of operating expenses of the agency (11). A provider is not required to operate a demand-response service if it receives Section 5311 funds, but often that is the method used to operate cost-effectively and serve the riders as efficiently as possible in rural areas. Section 5311 funds are for general public transportation providers as opposed to similarly distributed Section 5310 funds, as provided through 49 U.S.C. Section 5310, which focus on

elderly and disabled riders. This report will primarily focus on Section 5311 providers who serve the general public through a demand-responsive operation system. Although these Section 5311 providers are for the general public, often their ridership consists mainly of the elderly and disabled and therefore will be discussed in more detail further in the report.

1.4 Public Transit Ridership

With gasoline prices rising rapidly throughout the summer and early fall of 2008, the United State's public transportation systems experienced the greatest quarterly ridership increase in 25 years (12). Gas prices during this time topped out at more than \$4 per gallon in July but then fell from that high to around \$2 per gallon in early 2009. This is in contrast to the decline in ridership over the past few years. Ridership for Section 5311 rides in Kansas from the years 2001 to 2005 fell from 594,073 to 286,383(13). Early numbers for the Riley County, Kansas, Area Transportation Agency (ATA bus) showed a 40% increase in ridership from September 2008 to September 2009 (14). The Riley County ATA bus is a Section 5311 recipient from the Kansas Department of Transportation (KDOT). Anne Smith, director of ATA bus, suggested that the increase in gas prices was causing the increase in ridership. In later sections, gasoline prices will be charted along with ridership data from the ATA bus over the previous five years. The suggestion of a gas prices-to-ridership correlation is supported by hard data from New York, N.Y. The Metropolitan Transportation Authority's bridges and tunnel traffic dropped 4.7% from the month of May 2007 when gas ended the month at \$3.15 a gallon, to the month of May data in 2008 when gas ended the month at more than \$4 per gallon (15, 16). Meanwhile, various New York bus and rail lines saw increases of 6.5%, 4.3%, and 9% from the month of April 2007 compared to April the following year (17).

Transit agencies in rural areas are often focused on the elderly and disabled riders. This is due to the fact that most people in rural Kansas prefer to drive if possible and given the choice. It has been shown, however, that the elderly prefer modes other than public transit (15). An AARP (formerly known as the American Association of Retired Persons) study found that "seniors aged 75 or older widely preferred driving. Elderly who are no longer drivers almost universally considered riding with friends or family the next best alternative" to driving themselves (15). This preference for travel modes other than public transportation is something providers must overcome to increase their ridership.

1.5 Research Objective

The objective of the research is to provide recommendations to improve usage of demand-response transit services in rural Kansas. An emphasis is placed on transportation-disadvantaged groups like the elderly and handicapped. In order to provide recommendations, a literature review was conducted of similar studies and suggested improvements. Once completed, customer satisfaction surveys were created to measure the effectiveness and application of demand-response transit for current riders and non-riders. These can then be analyzed to see why riders are currently using demand-response transit and why non-riders are not.

Providers of demand-response transit in rural Kansas were also surveyed about their operations to determine the extent of their service as compared to what riders and non-riders would like. Based on the analysis of all three surveys, recommendations were provided for increasing utilization of demand-response transit in rural Kansas.

1.6 Outline of Thesis

Chapter One provides a brief background on the topic of the thesis.

Chapter Two reviews existing literature related to demand-response transportation, the elderly, rural populations, and existing level of service methodologies.

Chapter Three discusses the methodology of this research including the creation and distribution of the rider and non-rider surveys. Also included in this chapter is an explanation of the statistical method used.

Chapter Four discusses the results of the rider and non-rider surveys. Comparisons are drawn between different types of riders, age groups, and physical abilities.

Chapter Five discusses the transit provider survey. Operating hours, days, and methods are shown and new methods to communicate with the public are addressed.

Chapter Six gives overall conclusions and recommendations from the project.

CHAPTER 2 - Literature Review

This chapter contains a review of published papers related to rural transit. The topics include transit operations, marketing, technology, demographics, and ridership.

2.1 Level of Service

The Highway Capacity Manual (HCS) is a transportation industry standard for measuring capacity (18). As part of this measurement, HCS provides a Level of Service (LOS) rating to different aspects of a transportation network. Highways, streets, and interrupted intersections all receive an LOS grade from A through F. The LOS represents a traveler's point of view, which is not always the most efficient method nor provides the greatest capacity from an operations viewpoint. An LOS of F would represent an undesirable condition from a traveler's viewpoint (2). Much work has gone into some aspects of the HCS; however other aspects do not receive much attention. The paratransit section of the HCS seems to be one of these neglected sections. Table 2.1 shows the HCS's Exhibit 27-2, "Service Frequency LOS for Paratransit Service." In particular, a note concerning this table states that "the threshold between LOS E and F is one day's advance notice for obtaining a ride" (19). While this table may be reasonable for urban Americans with Disabilities Act (ADA) paratransit operations, it seems to lump all rural paratransit providers into the LOS F category without differentiating between them. Due to the distances involved, paratransit in rural Kansas typically requires passengers to call the day before to schedule a ride.

Table 2.1. Highway Capacity Manual Level of Service for Paratransit

	Access Time (hours)	Comments
LOS A	0.0 – 0.5	Fairly prompt response
LOS B	> 0.5 – 1.0	Acceptable response
LOS C	> 1.0 – 2.0	Tolerable response
LOS D	> 2.0 – 4.0	Poor response, may require advance planning
LOS E	> 4.0 – 24.0	Requires advance planning
LOS F	> 24.0	Service not offered every weekday or at all

The Transit Capacity and Quality of Service Manual (TCQSM) measures demand-response travel LOS differently and more thoroughly (20). The TCQSM measures five aspects of demand-response transit (DRT) including response time, span of service, on-time performance, trips not served, and DRT-auto travel time. Rather than rating an A through F scale, the TCQSM rates from 1 to 8 in order to divide the thresholds further (2).

The following tables show the charts associated with each aspect of the Transit Capacity and Quality of Service Manual's measures of LOS.

Table 2.2. Transit Capacity and Quality of Service Manual DRT Response Time LOS

	Response Time	Comments
LOS 1	Up to ½ hour	Very prompt response; similar to exclusive-ride taxi service
LOS 2	More than ½ hour, and up to 2 hours	Prompt response; considered immediate response for DRT service
LOS 3	More than 2 hours, but still same-day service	Requires planning, but one can still travel the day the trip is requested
LOS 4	24 hours in advance; next-day service	Requires some advance planning
LOS 5	48 hours in advance	Requires more advance planning than next-day service
LOS 6	More than 48 hours in advance, and up to 1 week	Requires advance planning
LOS 7	More than 1 week in advance, and up to 2 weeks	Requires considerable advance planning, but may still work for important trips needed soon
LOS 8	More than 2 weeks, or not able to accommodate trip	Requires significant advance planning, or service is not available at all

Table 2.3. Transit Capacity and Quality of Service Manual DRT Service Span LOS

Hours per Day	Days Per Week						
	6-7	5	3-4	2	1	.5*	< .5
16.0	LOS 1	LOS 2	LOS 4	LOS 5	LOS 6	LOS 7	LOS 8
12.0 – 15.9	LOS 2	LOS 3	LOS 4	LOS 5	LOS 6	LOS 7	LOS 8
9.0 – 11.9	LOS 3	LOS 4	LOS 4	LOS 6	LOS 6	LOS 7	LOS 8
4.0 – 8.9	LOS 5	LOS 5	LOS 5	LOS 6	LOS 7	LOS 7	LOS 8
< 4.0	LOS 6	LOS 6	LOS 6	LOS 7	LOS 8	LOS 8	LOS 8
*service at least twice a month							

Table 2.4. Transit Capacity and Quality of Service Manual DRT On-Time Performance LOS

	On-Time Percentage	Comments*
LOS 1	97.5-100%	1 late trip/month
LOS 2	95.0-97.4%	2 late trips/month
LOS 3	90.0-94.9%	3-4 late trips/month
LOS 4	85.0-89.9%	5-6 late trips/month
LOS 5	80.0-84.9%	7-8 late trips/month
LOS 6	75.0-79.9%	9-10 late trips/month
LOS 7	70.0-74.9%	11-12 late trips/month
LOS 8	<70.0%	More than 12 late trips/month

Note: Based on 30-minute on-time window.
 *Assumes user travels by DRT round trip each weekday for one month, with 20 weekdays/month.

Table 2.5. Transit Capacity and Quality of Service Manual DRT Trips Not Served LOS

	Percent Trips Not Served	Comments*
LOS 1	0-1%	No trip denials or missed trips within month
LOS 2	>1%-2%	1 denial or missed trip within month
LOS 3	>2%-4%	1-2 denials or missed trips within month
LOS 4	>4%-6%	2 denials or missed trips within month
LOS 5	>6%-8%	3 denials or missed trips within month
LOS 6	>8%-10%	4 denials or missed trips within month
LOS 7	>10%-12%	5 denials or missed trips within month
LOS 8	>12%	More than 5 denials or missed trips within month

Table 2.6. Transit Capacity and Quality of Service Manual DRT-Auto Travel Time LOS

	Travel Time Difference (min)	Comments
LOS 1	“0	The same or slightly faster by DRT as by automobile
LOS 2	1-10	Just about the same or slightly longer by DRT
LOS 3	11-20	Somewhat longer by DRT
LOS 4	21-30	Satisfactory service
LOS 5	31-40	Up to 40 minutes longer by DRT than by automobile
LOS 6	41-50	May be tolerable for users who are transit-dependent
LOS 7	51-60	May indicate a lot of shared riding or long dwell times
LOS 8	>60	From most users’ perspectives, this is “too lengthy”

As can be seen from the Transit Capacity and Quality of Service Manual LOS charts, the description given in the HCM is oversimplified. For frequent riders, the five criteria in the TCQSM are much more applicable and provide more insight into quality of service being provided.

The TCQSM provides insight as to what is important to riders, and therefore how to increase the ridership of demand-response systems. Decreasing the DRT-auto travel time to close to an average automobile time may not be possible for rural providers. To accomplish this would turn the service into close to a taxi service. On-time performance and trips not served deal with scheduling, which may be able to be improved relatively cheaply. Response time and service span are often the first two LOS equivalents that people bring up when discussing demand-response transit in rural Kansas.

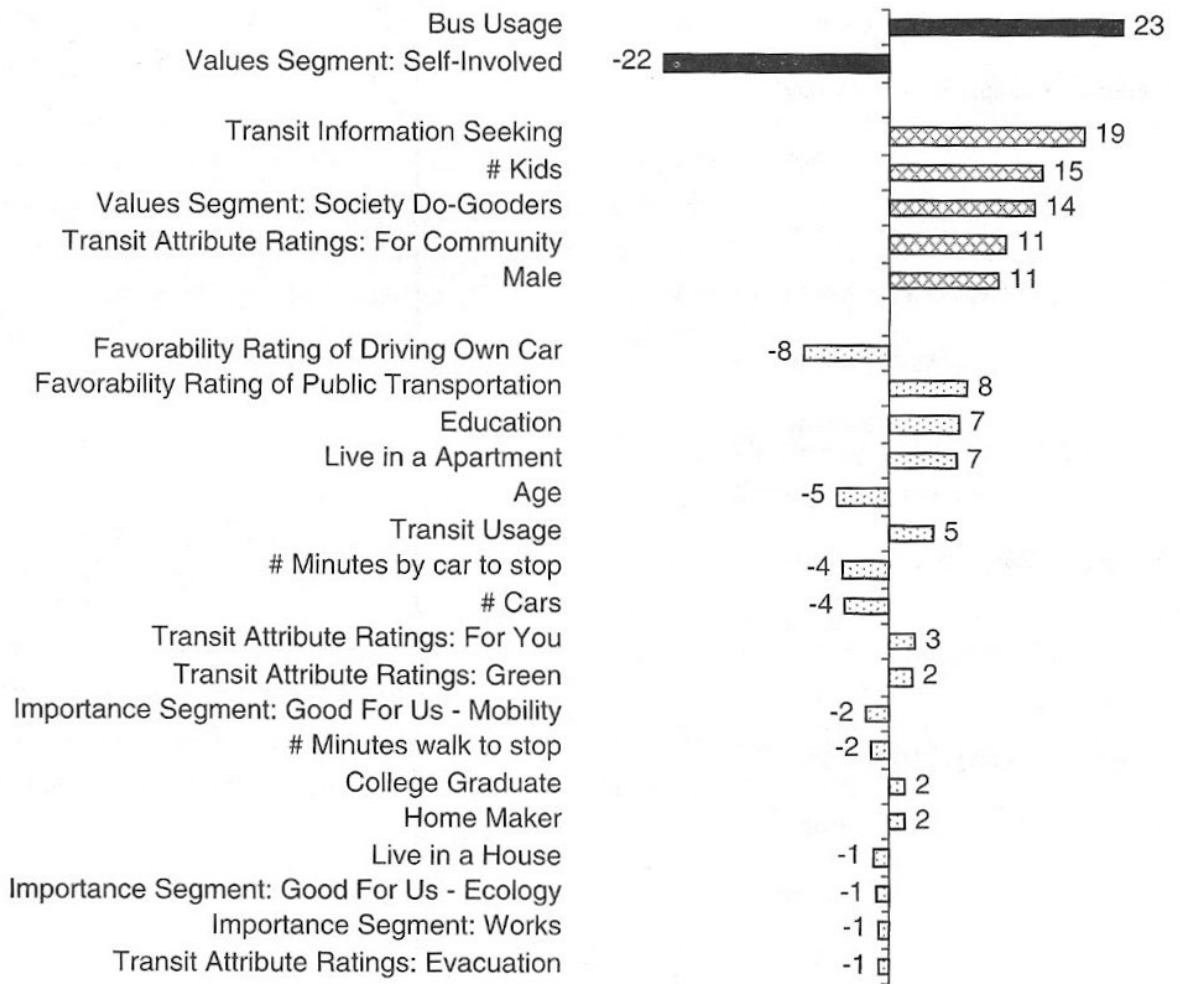
There was one attempt to create a single LOS for rural demand-response transit providers; however, the data requirements and acquisition were unrealistic for efficient calculation with large numbers of transit providers (21). It also focused on the LOS from the viewpoint of the providers, not the users of demand-response systems. It was found in Kansas that many of the transit providers could not even provide the data required to calculate the LOS for their area of operations using this new method.

2.2 Marketing and Advertising in Public Transportation

Marketing and advertising are standard ways of encouraging people to buy a product or use a service in the US. These can become expensive quickly for a rural transportation provider that is already trying to make ends meet and provide mobility for those who request it. While funds may be difficult to come by for marketing the following section should provide insight or ideas as to how to best use these. Some suggestions may not even require funding to accomplish.

Many factors affect whether or not a person will chose to ride transit in rural areas. Transit Cooperative Research Program (TCRP) Report 122: Understanding How to Motivate Communities to Support and Ride Public Transportation, created a chart for low-density areas showing the relative power in driving support for transit from different attributes. This is shown in Figure 2.1. Solid dark bars represent having more effect than those with cross hatching, which in turn have more effect than those with dotted bars. The most obvious finding is that those who

use transit support it (15). It also shows that if one rates driving his or her own car favorably or owns more cars, the less he or she supports transit. Age is also on the list, showing that the older you are the less you support transit. This may be due to transit being perceived as more difficult to use than other modes of transportation.



Relative power in driving support, positively or negatively.

Source: Rhindress, M. Understanding how to Motivate Communities to Support and Ride Public Transportation. Transit Cooperative Research Program, Report 122, 2008, pp. 15

Figure 2.1. Net Impact on Transit Support in Low-Density Markets

Further analysis shows that “most respondents rate transit high” on “helping those who can’t afford a car to get around” and “promoting mobility to those who can’t drive, such as seniors, teens and people with disabilities,” which leads to the assumption that transit is for other people, just not oneself (15). The report suggests emphasizing benefits to the individual and for

society as a whole in order to increase support of transit and thereby potentially increasing ridership (15).

Individualized marketing is one step that can be taken to correct the incomplete and often negative view of public transportation by the general public. Correcting this negative view has shown in previous studies to mobilize potential ridership (22). A study in Germany contacted potential users of public transportation to inform them about public transit. Following the informational contact, potential riders were given a one-month free pass to use the system. The idea behind this was that by actually using the system at no cost, riders would be able to evaluate the possibility of using the system for other trips in the future and to increase their positive perception of public transportation. This individualized marketing resulted in “a measurable and rapid image improvement” for public transportation (22). Individualized marketing with potential riders also avoids the “cannibalism effect” by which current riders obtain free passes in mass mailings or other media and then ride for free rather than attracting new prospective riders, which is what the transit agency is encouraging (22).

A long-term method to increase transit ridership is to expose teenagers to public transportation. Teenage values and habits are often found in areas of future adult lives. If their parents or grandparents use or experience transit and the younger generation is aware of their pleasant experience using it, they in turn are more likely to use it when they are older. These teenagers are also future voters and if they realize the transit systems are used and have personal experience with them, they are more likely to approve funding public transportation (23).

General marketing tactics will also work, and some of them are not that expensive to implement. Tactics include painting the busses in a distinct and unique pattern so the general public is aware of the activity of the service, or attending back-to-school expos to inform parents about the service and letting the students get on and tour the bus. Students typically enjoy new experiences and things they can touch and wander through, and this is a great opportunity to let them do so while informing the parents of the service provided. It may even be that while neither the parents nor children plan to use the bus, relatives or neighbors might be interested in the information that the provider passed on. This information can then make it to the potential rider. Creating a newsletter to inform riders of upcoming events or changes in the schedule or hours of the service is another idea. These could be distributed by hand and not mailed if the current system has low ridership numbers (24).

Selling or giving away identifying items is another way to increase awareness for the service. Hats, shirts, cups, sweaters, and other objects that can be worn or used around the community will increase awareness of service. These can be worn by employees, customers, or even non-riders if given away for free to them. Sponsoring community sports teams is also a good way to increase visibility of a public transportation agency. While the youngsters may not be riders of public transportation, adults or grandparents may be riders or potential riders. While chatting about the sports activity, the adults may end up discussing the local public transportation agency (24).

Attending other local or community groups is an excellent way to network the transit agency's ridership to higher levels. While these groups may not have direct ties or desires to ride public transportation, they may have neighbors or relatives in the area that might find the information useful. Attending or presenting to any gathering that has seniors or persons with disabilities would likely generate interaction and questions about the service provided. When talking to these groups, ample time to listen to their comments will be key. These comments can provide ideas or insights as to why or why not someone is riding, or who else might be interested in more information about public transportation. If the public asks for changes to be made and the provider does not change or does not get back to the person who made the suggestion, the transit provider will lose credibility in the community. Asking administrative staff or governing board members to ride along periodically to ask questions about the service to riders sometimes will bring items to the provider's attention that may not otherwise have come about through more formal communication channels (25).

While working with outside groups will increase a transit agency's visibility, some internal analysis before the agency turns to external groups is useful. This internal analysis can include checking to see if the drivers are helpful or friendly by asking riders at their destination, or making sure the buses are clean and neat by joining a passenger to just peak around inside the bus for a few seconds. Looking at customer complaints is also a serious issue that can have far-reaching impacts. A response to the customer with a complaint within 24 hours is optimal. Quick, accurate, and helpful responses are best but sometimes the complaint cannot be resolved. Even if the complaint cannot be resolved, replying to the customer quickly with as much information as the agency can give is appropriate. The rider will at least know his complaint was received and the honesty of the response may build credibility with the transit agency (25).

It is recommended to start with reasonable and measurable objectives for networking and marketing, such as attending the local parade and letting people tour the vehicle at the end of the route. As the community becomes more aware of the provider's offerings, further contacts and help will come from the initial contacts. If local media can assist with publicity, providing them as much information as possible in a way they can use it, be it short video clips, graphics, or radio spots will be helpful (25).

The following is a list of ideas from the Community Transportation Association of America that can be implemented immediately to advocate and improve a provider's transit system (25).

- 1) *At every opportunity invite elected and appointed officials to visit your system. You can create these opportunities - host an "open house" for these officials, and send your vehicles to transport them to the event. New-route ribbon cuttings and vehicle-acceptance situations are other good opportunities.*
- 2) *If your agency publishes a newsletter, be sure to send copies to local city or county councils, mayors, and other elected officials. Send copies to major businesses (human resources managers), Chambers of Commerce, and to the secretaries of local service clubs.*
- 3) *Post your service days/hours/schedules/fares in churches, libraries, and on public bulletin boards. If your agency has a Web page, use it to inform the community of all aspects of your service and operation.*
- 4) *Ask directors of other human services organizations to write letters in support of your services. Be sure to ask them to state how valuable your service is to their clients and how not having your service would negatively impact their clients.*
- 5) *Never miss or turn down an opportunity to speak on behalf of your service. Remember to thank your supporters and funders publicly - it helps them look good in the community. If you, your board members, or customers want basic public speaking training, contact local vocational schools, community colleges, or Toast Masters Clubs. Call the local Chamber of Commerce for a resource referral in your area.*
- 6) *Create a recognizable presence by developing and using a logo that is consistent and visible on each vehicle. You want everyone in your service area to see your vehicle and know exactly who you are and what the van or bus is for.*
- 7) *Keep your vehicles clean!*
- 8) *Form coalitions with entities that may also have transportation vehicles (the local hospital, long term-care facility, Head Start, private or preschool programs, etc.) to create cost or operational efficiencies. You may not be able to consolidate services, but if, for instance, all agencies are able to purchase less expensive gas by buying it in bulk, then operating costs are lowered.*
- 9) *Basic office and maintenance supplies are less costly when purchased in volume. Check with other paratransit providers or transportation agencies about the possibility of discount buying by purchasing as a group. Procurement of vehicles and equipment is also less costly when purchased in volume.*

- 10) *Share information with other agencies that provide services to your customers. You may be able to consolidate trips to therapy, the senior center, or the grocery store by creating circulator routes for various user groups.*
- 11) *If you have an in-house maintenance facility, consider selling maintenance services to other entities with vehicles.*
- 12) *Understand that paratransit service in minibuses is the most expensive option. Help isolated communities establish volunteer driver programs to provide non-technical, ambulatory trips when your system is at capacity or a trip request is out of your service area. Your agency can help with driver training and record keeping.*
- 13) *Combine your driver training with one or more agencies to take advantage of sharing the cost of a professional trainer.*
- 14) *Explore the possibility of using the city or county motor pool for your agency's maintenance at less than the cost of a local provider.*
- 15) *Decorate your bus for a local parade, filling it with your customers who might otherwise never participate in a parade.*
- 16) *Use a vehicle for transporting children or your own customers to a community-sponsored event on a holiday or weekend.*
- 17) *Offer your vehicles to aid volunteers or the Red Cross during a crisis or community emergency.*
- 18) *Offer to transport homeless individuals to the local shelter during cold weather on your last trip before returning to base.*

While most people in rural Kansas use English as their native language, not all do. Many immigrants are choosing to live outside cities. Rural areas have seen noticeable increases in foreign-born people since 1990. Southwest Kansas in particular has seen populations of foreign-born, typically Hispanic, increase to more than 5% of the total population from 1990 to 2000 (26). For transit providers, this means making sure all languages are accommodated for in their area. Spanish would be the typical choice for another language in Kansas, but providers should make sure there are no other large groups that would benefit from the transportation provider's flyers in a language other than English. The public transportation provider in Manhattan, Kansas, recently started printing brochures in Chinese to pass out to the significant number of Chinese international students attending Kansas State University (27).

2.3 Cooperative Agreements for Public Transportation Agencies

Sometimes it is possible for the transit agency to partner with a local grocery store to provide service to the store. Citibus in Lubbock, Texas, partnered with a local grocery store to cover the costs of transporting seniors during Citibus's mid-day lull. The grocery store would cover the full operating costs, of the service to pick up seniors on a route that went by high

concentrations of senior citizens and the only stop on the trip would be the sponsoring grocery store (28). While this was a more urban solution, a similar cooperative agreement could possibly be worked out with stores in cities in rural Kansas.

2.4 Elderly Riders of Public Transit

A significant number of riders of demand-response transit in rural areas are above the age of 65. The U.S. Census Bureau estimates that the population of adults age 65 and over will more than double from 2000 to 2030. While this increase alone is staggering, the real concern may be the increased percentage of those age 65 and over as can be seen in Table 2.7 (29). In Kansas, the percentage of the population age 65 and over will increase from 13.25% to 20.17%. This means there will be more elderly to take care of with fewer younger adults than there are now. Finding a younger person, whether younger friend or younger relative, to obtain a ride from, as many elderly do now to be mobile, will become more difficult in the coming years. Public transportation should be ready to step in and fill these roles with greater ridership than it currently experiences.

Table 2.7. Population Statistics for Age 65 and Older in the U.S. and Kansas

	2000 Census	2030 Projection	2000 Percentage	2030 Percentage
United States	34,991,753	71,453,471	12.43	19.65
Kansas	356,229	593,091	13.25	20.17

As current personal vehicle drivers age, they limit their driving in multiple ways and often the trips come at higher monetary and psychological costs. The number, length, and destinations of their trips change. If they are not comfortable or cannot drive at night, they often miss out on all social and recreational trips occurring during that time. Elderly men above the age of 85 that have current driver's licenses make three times as many trips as elderly men without licenses due to their ability to still drive (30). The elderly still want to get around like they once did but are sometimes unable to without help.

Other travel modes may be available to assist them, but the car is still the top travel mode choice for the elderly. Often these elderly have relied on their vehicles for their entire lifetime and are unfamiliar with public transportation. This unfamiliarity may cause them to be reluctant or unable to learn new transportation modes at their age (30, 31). This reluctance or inability drives the elderly to try and find relatives, neighbors, friends, or other drivers to get them around,

thereby continuing to use personal autos for their transportation without learning new modes of travel. A study in Connecticut found that former drivers want to travel primarily by private car, then walking, paratransit, and (fixed-route) public transit in that order (30). Connecticut is a more densely populated area with public transportation generally more prevalent than rural Kansas, yet the two types of public transportation methods were still the least preferred. Many participants of a focus group for related research stated that they would use public transit if it was in their area, but that upon further research few actually did use it or had ever used it when it was available to them (30). This may be the case for rural Kansas as well. Kansas has 105 counties with a little fewer than 200 transportation providers not counting taxis. Some of these providers are not supportive of general public transportation and may be focused on one particular organization, but that still leaves a large number of providers.

Reasons for not using public transportation in old age abound, but one that may be under reported is the “quality” or “class” of the other individuals riding the bus. There is a perception that public transportation is for lower-class individuals. While this seems to be rarely self reported, it can be found anecdotally in research. One study that was conducting focus groups by bringing in the elderly using taxis and senior-service vans discovered this when they encountered the following issue. “One man who was scheduled to participate declined at the last moment, stating that he and his wife did not want their neighbors to see them getting on the senior-services van. ‘The bus we’re talking about is for people with a very low income. We don’t take that bus and leave it at that’” (30).

There is almost 98% agreement among older Americans that “maintaining a sense of independence and mobility is extremely important” as they grow older (31, 32). The desire to maintain independence for as long as possible aligns with their worry that not being able to drive will leave them feeling “stranded and unable to get around” (31). Older drivers’ ability declines with age as “visual acuity decreases, glare sensitivity increases and recovery takes longer, night vision is reduced, and eye movements slow” among other issues (31).

Potential public transportation clients’ lack of information about public transportation is a common issue for transportation providers. A study in Washington, D.C., found that even when transit service is available for seniors, 47% stated they did not have enough information to use the services (30). Even those who are part of city commissions and approve the budgets for public transportation do not always realize that public transportation is for everybody, not just

the elderly or disabled (27). Rural and small town residents though, tended to be more aware of alternative transportation modes than urban and suburban residents (33).

Although one would like to think the elderly will stop when they no longer feel safe to drive, this isn't true in all cases. During a focus group with the elderly and their adult children, some of the elderly stated that "even if they knew they should stop, they would not, and would keep driving 'until the end'" (33). Another stated, "I don't want to give up my license. Someone will have to take it before I give it up." While this lack of concern for others' safety is serious, perhaps it could be avoided with prior planning and encouragement to try public transportation modes. Discussions with adult children found that 75% of them feel that their relatives, typically their parents, either "do not know or will not admit when it is time to stop driving" (33). Another study looked into older drivers age 65 and above that thought they would be stopping soon and could only find a single driving senior who thought they would stop driving within the next two years (32). They therefore had to re-write their criteria to include those who thought they might not be driving five years from then, as the elderly were highly unlikely to think about stopping driving on their own in the near future.

Thinking about ceasing or curtailing driving for the elderly is not something they enjoy. The following quotes are from seniors or their adult children from a focus group study about older driver cessation conducted in five locations across the continental U.S. (32).

- "I'll cross that bridge when I come to it." (Senior – referring to plans to stop driving)
- "No. I haven't thought about it. For now, I'm alright." (Senior – referring to plans to stop driving)
- "It's humiliating to ask for help." (Senior woman)
- "I don't know of any place [to get information]." (Adult Child)
- "A Website!" (Adult child – looking for information)
- "Get a second opinion, but not family." (Senior – referring to who they would listen to if instructed to stop driving)
- "If my kids told me I shouldn't drive, I probably wouldn't speak to them again." (Senior)
- "Give them other options, instead of forcing them. It makes it less negative." (Adult child)
- "If you're a responsible person, you know." (Senior - referring to knowing when to stop driving)
- "Responsibility means you won't do any damage." (Senior)

- “It’s hard to rely on bus service; you have to go by their rules.” (Senior)
- “People would get out more if they didn’t have to wait so long.” (Senior)
- “I’ve heard bad things about Call-a-Ride.” (Senior)
- “It’s irritating to wait for a metrovan.” (Senior)
- “I’ll drive till I drop.” (Senior – previously “seriously injured in a crash in which he was at fault”)

These focus group comments show how hard it is to get even those, who by most accounts should be using public transportation, to ride public transportation. Increasing ridership for public transportation is not just the responsibility of the transportation provider; it is a social and safety issue for all. However, focus group comments also show some possibilities to encourage ridership within the comments. The seniors wanted wait times to be shorter, if possible, and they needed to be comfortable with the service provided. The things they hear may not always be positive about the service, and they may have never even ridden the service themselves because of what they hear. Word of mouth is a strong indicator of how a system is working from a rider’s perspective. The adult children were usually upset with their parents’ continued driving, but often didn’t have answers. One of them suggested a website, demonstrating the technology divide between those who ride, providers, and those looking for help for others. Each year there are more and more elderly that are familiar with computers and the Internet and who look to those sources for information about mobility. Transportation providers need to have information available to the greatest number of possible sources of information in order to increase their ridership.

2.5 Technology in Public Transportation

Distributing information through technology is another way to encourage or increase ridership. Transit operators in rural areas can use similar technology as some of their urban counterparts. A way to meet rural mobility requests is to become “early adopters of technology and innovation and [provide] state-of-the art service” (34).

A possibility exists, although perhaps not yet cost-effective, to install automatic vehicle locators (AVL) on rural buses so that wait times for users are cut down. Often users are given a pickup window of up to 20 minutes although 15 minutes is typical, for larger cities when riders have to be ready, waiting, and watching for the bus to come get them. The bus could use the

AVL to tie in with a geographic information system (GIS) back at the dispatcher's office. This would let the dispatcher know where the vehicle was at all times, which would improve coordination of buses. It would also make it possible to warn the customer busses are approaching for pickup, thereby decreasing the time spent watching for the vehicle. The GIS could tie into the schedule to know that a specific customer is the next location the bus will be going and could send a pre-recorded phone call or other notification to the customer saying that the bus will be there in a set number of minutes. A short time frame of around five minutes might be reasonable to make sure the customer can have all of his or her belongings in order to board the bus as soon as it shows up. All of this could be automated so the dispatcher does not have to call, and the customer does not have to spend time just waiting and watching for the bus. It is unknown if this is too much information and technology for older users of demand-response transportation. The next wave of the elderly will have a higher understanding and acceptance of technology, and this may encourage them to ride.

Further use of this in sparsely populated areas would be to phone or notify previous and repeat riders along the bus's upcoming path when the bus is headed towards a common destination or larger town. The rider receiving the phone call may not have previously wanted a ride to town, but when the phone rings, it would be an opportunity to enjoy a slightly more spontaneous trip than the usual 24-hour notice that riders must give transit providers. This would work along the same system as the short-notification time, thereby providing riders with more mobility options by notifying them of the upcoming bus along with its destination. This system would also benefit the transit provider who could more efficiently use its vehicles by picking up chance riders along the route and potentially reduce the number of trips taken in a week to the same area.

An interesting technique used to inform potential travelers of public transportation was to create a video demonstrating how to use public transportation. This video was then shown to the elderly in group settings, although it could be used for any age group if the demonstration were more generalized. The video takes potential riders on three common trips for those who live in the Rossmoor senior community in California. Each of the destinations is different and uses a different method of public transportation. To guide the elderly viewer through the trips, prominent and well-liked elderly individuals in the community were used as guides in the video and took the trips themselves. In rural areas, there would often be only one available method,

demand-response. Participants who watched the videos were asked prior to viewing if they had ever used any of these services, and then after viewing if they would be more likely to use these services. Respondents indicated steps demonstrated in the video like obtaining schedules, costs, and payment methods generated positive change, but that the difficulties of reading schedules and climbing stairs was little changed (35). In rural demand-response systems, some of the challenges associated with transit in urban areas such as at Rossmoor would be eliminated. There are typically no complicated transit schedules, no connections between transit options, and no stations to get to for fixed-route transit. This type of video could be an excellent method of encouraging elderly users to ride public transportation, as they will see people they know demonstrating the system and simulating rides they themselves could also make.

2.6 Coordinated Transit Districts in Kansas

Coordinated Transit Districts (CTDs) are groups of local human service transportation agencies that are required by KDOT to participate in coordination efforts in order to receive funding (36). This coordination is required by federal law through SAFETEA-LU, which was passed in 2005 and runs through 2009 (37). This means that in order for any city, county, or human transportation service provider to receive funds from KDOT they must take part in coordinating with other regional agencies that have similar interests. The objective of this is to create a “comprehensive strategy for public transportation service delivery,” while emphasizing the needs of those individuals with disabilities, the elderly, and those with low incomes. The CTDs attempt to lay out a broad strategy for accomplishing these goals with each of the participating agencies. There are 15 CTDs in Kansas of varying geographic size (36).

CTD 8 covers 18 counties in Northwest Kansas. This area of Kansas is the epitome of rural Kansas. The entire population of these 18 counties was 96,395 as of 2005, with a typical density outside the local cities of one to 10 people per square mile (Figure 2.2). Further analysis conducted by CTD 8 can be seen in the following figures that show population densities over the age of 65 (Figure 2.3), individuals with disabilities (Figure 2.4), and those with low incomes (Figure 2.5) (36).

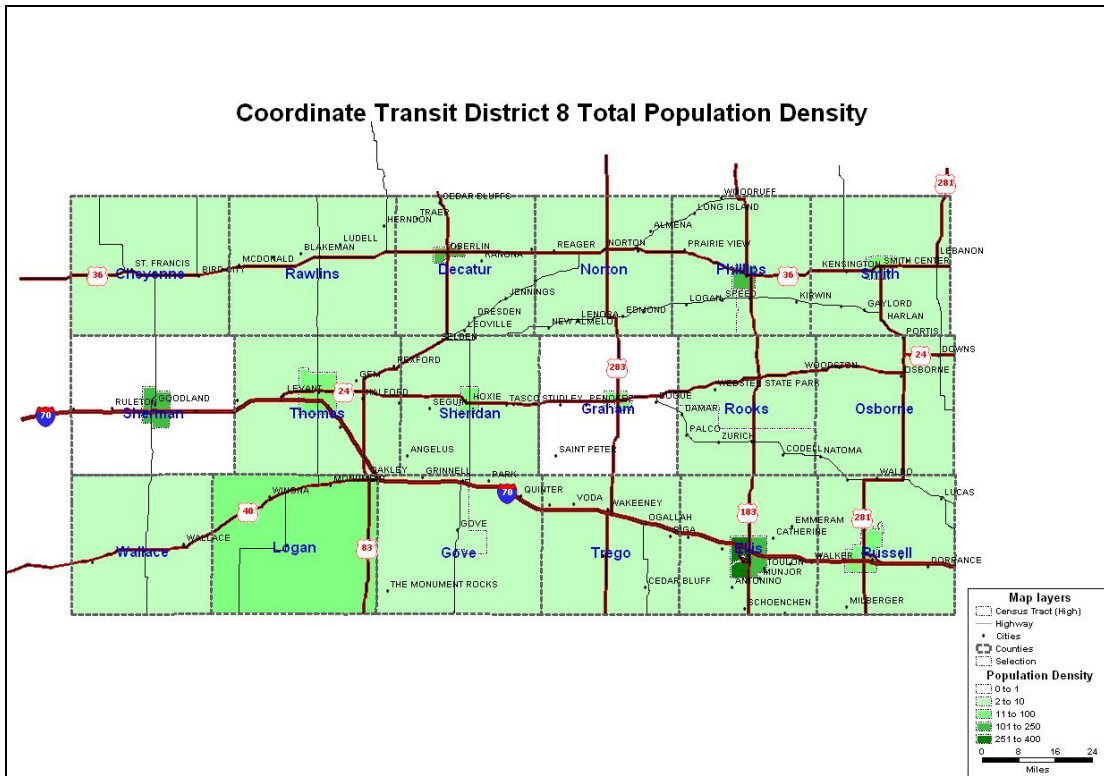


Figure 2.2. Kansas' Coordinated Transit District 8 Total Population Density

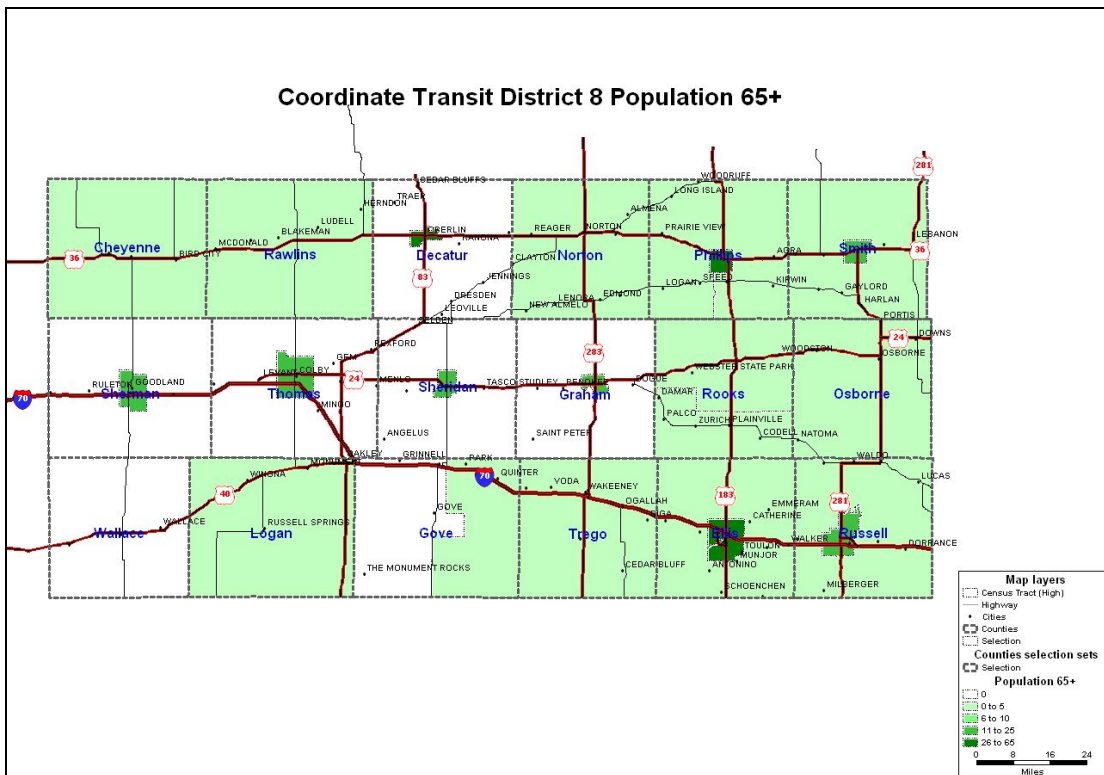


Figure 2.3. Kansas' Coordinated Transit District 8 65+ Population Densities

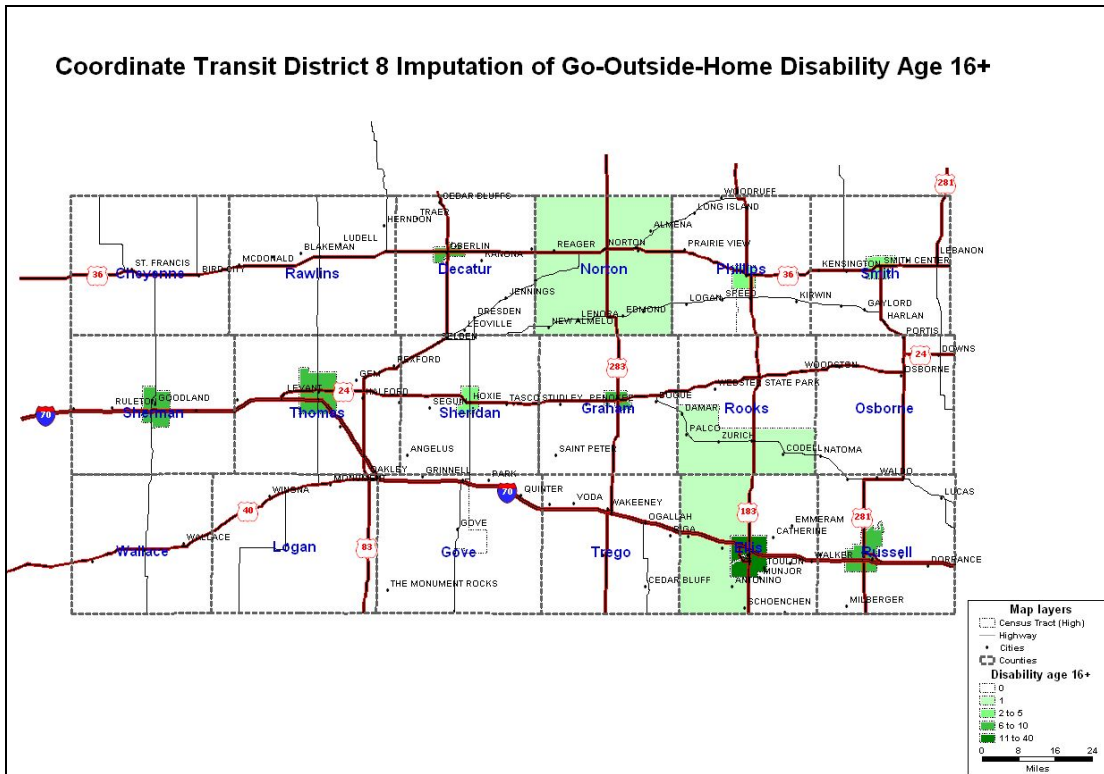


Figure 2.4. Kansas' Coordinated Transit District 8 Disabled Population Density

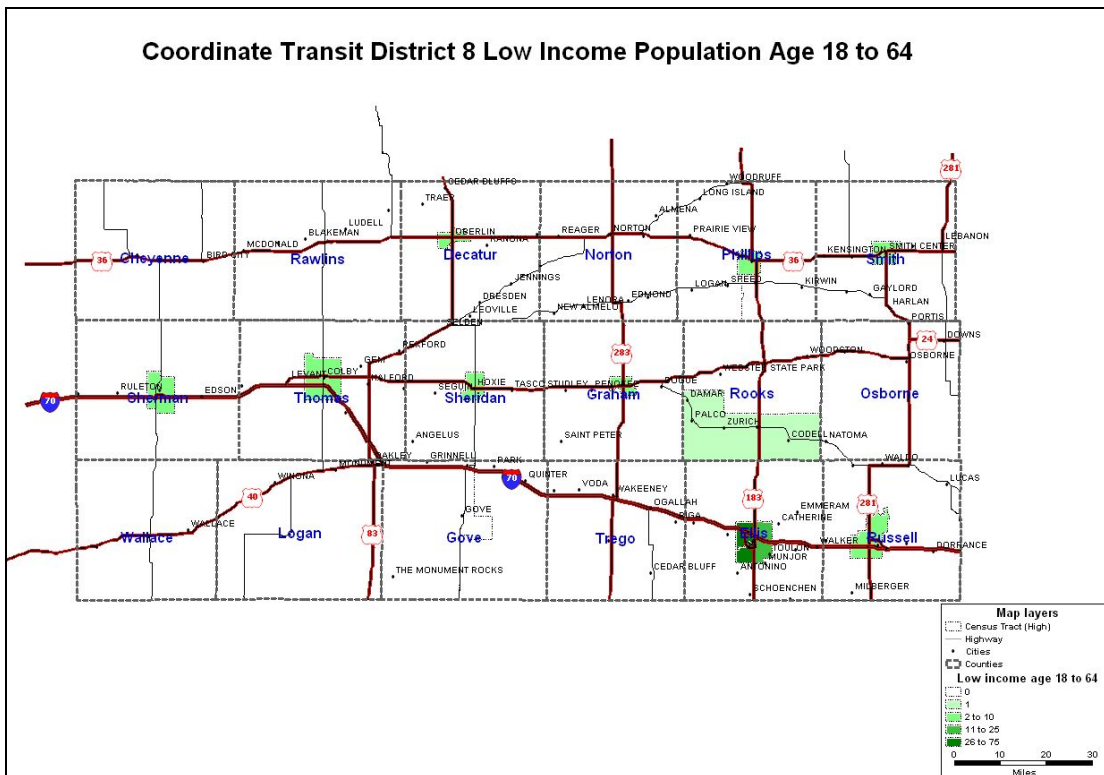


Figure 2.5. Kansas' Coordinated Transit District 8 Low Income Population Density

Low population densities makes operating transit agencies difficult, even for demand-response systems. Increasing ridership in areas like CTD 8 may not even be possible due to the distances required and the locations of those who wish to use it. Of particular note is the low density of the elderly, age 65 and over. Many counties outside the city have a density of zero to five people per square mile over the age of 65. Compounding this issue of elderly transportation is the fact that while the U.S. average population percentage for those over the age of 65 is 12.9%, the average for CTD 8 is 19.7% (6, 36). From a mobility standpoint, this leaves fewer able drivers that can help take the elderly around if public transportation is unavailable. Making sure the elderly are aware of available public transportation is necessary.

Providers in CTD 8 recognized this in a survey conducted by CTD 8. The CTD 8 Self-Assessment Results Summary report took questions from a survey that providers answered and provided the results, along with any comments to each question asked and general comments at the end of the survey (36). Some notable comments follow:

- Rural Northwest Kansas is dependent upon special transportation needs and residents of Decatur County are aware of this. They verbally help newcomers to know we have public transportation available.
- This area of questions is somewhat frustrating to answer, as most of the questions asked do not pertain to small communities such as ours. Therefore, being small, we do know our assets and limitations, and we do go above and beyond what even a community just a little larger would not consider doing. We do put a lot of ourselves into serving this public transportation program. As far as technology, I feel there is way too much emphasis on this. In my opinion, it is a total waste of resources that could be much better utilized in other areas. So, in answer to the tech question, NO. 2) ... My feeling is here is that too much emphasis is being put on whatever these silly questions are being directed to us are about, (which I am not quite sure), but something needs to be stressed here, that most of us are volunteering to administer this public transportation program, and, speaking for myself have a very demanding job that takes a great deal of our time. I personally feel that we are doing a great job w/ our program, and as I say time and time again...if it isn't broke, don't fix it!
- I'm not sure how committed other entities are to a coordination plan. When I called various agencies, the senior centers were concerned with providing meals and not with the transportation they provided for people to get to the meal site; nursing homes were concerned

only with their patients and getting them to medical appointments and social outings but did not look at themselves as a transportation agency; the county health department just said they referred anyone with transportation needs to the county Section 5311 program; school systems were only interested in their own student activities, etc. It will be difficult to initiate interest in coordination among these groups.

- Although my particular program has recently improved marketing somewhat, we do not currently collect any customer satisfaction data.
- Each agency has its own needs, so suppose it will be difficult to coordinate access - but it's a good idea.

In the CTD 8 Final Report dated Nov. 30, 2007, the providers of public transportation created a list of things they need to improve on to have a better service. Among others the comments included staff quality, service hours, cost-effectiveness, local support, and funding. They came up with three general service needs to prioritize: “improve awareness of services among providers and with the public, expand service for long-distance travel and additional hours of service, and coordination between providers with human service agencies and transportation providers” (36). The first and third priorities should increase ridership of demand-response transportation if it is possible to increase it in CTD 8.

A CTD 10 Final Report also dated Nov. 30, 2007, covered similar topics as CTD 8. CTD 10 consists of 10 counties in Southeast Kansas. The providers identified a list of service gaps and then created a list of four priorities to work on. The four priorities are: “improve coordination between providers, improve education and awareness of transportation needs, expand services; and develop financial resources” (36). Coordination will make it easier and less frustrating for potential customers to find the correct agency to take the trip they desire. Education and marketing will increase awareness of public transportation services in the area. Expanding the service, either by geography or time in cooperation with the above changes, should increase demand for demand-response public transportation in CTD 10. CTD 10 states that all marketing material should be bi-lingual, presumably Spanish and English for patrons in their area.

Coordinated Transit Districts in Kansas are an important way to attempt to serve as many citizens that wish to use public transportation as possible. If providers can keep from overlapping services and communicate with other agencies about the services they offer, the

opportunity to use public transportation for those in rural Kansas will be increased. Once the opportunity exists, providers can attempt to increase usage of the services provided as well.

CHAPTER 3 - Methodology

To achieve the objective of this study, two surveys were created for the public. One was for riders of public transportation and the other for non-riders. Survey responses were then tabulated and conclusions were drawn from the data and opinions of the public.

3.1 Survey Creation

Questions for both rider and non-rider surveys were developed based on knowledge gathered through the literature review. The starting point of the questions for both surveys was the U.S. Census Bureau's proposed 2010 questionnaire and its American Community Survey questionnaire (38, 39). In addition, questions from the Transit Performance Monitoring System (TPMS) results reports were used (40, 41). By using similar-worded questions to previous large studies, it was assumed that it would decrease problems with the survey questions. Other questions were then added related specifically to transit and rural areas from perceived issues from the literature review (10, 42-44).

While the elderly are not the only age group that uses public transportation in rural areas, they are a significant percentage of the total. A report titled "Increasing Elderly Mobility by 2025" quotes other reports' trip generation for elderly variables (45). Variables for the state of Virginia in rural areas include age, sex, education level, marriage status, and walking difficulties. For urban London the variables include disabilities, walking difficulties, household structure, ethnic background, difficulty of understanding directions, age, car availability, geography, possession of driving license, and household income (45). Another factor the author mentioned concerning public transit use for elderly was if the subject had relatives in town (45). Some of these factors were included in the survey and are examined further in this report.

The rider survey was completed first and reviewed by the director of the Riley County Area Transportation Agency (ATA bus). Changes to existing questions and given answers were then made from the suggestions, and some questions were added. One important change was the removal of a question regarding income of the rider. Due to funding rules for rural transit providers, they cannot ask about income, and Riley County Area Transportation Agency would not assist in passing out the surveys if that question remained. The author could have ridden the

bus and handed them out in person, but this method would be infeasible on a large scale to distribute the surveys around the entire state. Realizing this, the question regarding a rider's income was reluctantly removed.

Following the preliminary review, the survey was distributed with mail-back envelopes by the drivers of the Riley County ATA buses to riders. The author also rode on the bus for a few hours, verbally conducting the survey with those who rode the ATA bus but otherwise might not have filled it out themselves. This proved to be insightful as some of the questions, even after the initial questionnaire review with ATA bus, did not always fit the answers riders wanted to give. Results from the initial rider test and on-board interaction with passengers resulted in the final rider survey that was distributed to transit providers throughout the state in order to be distributed among riders.

Once the rider survey was finalized, creating the non-rider survey was primarily a matter of formatting as many of the rider questions as possible into a format suitable for non-riders. In this way, as many questions as possible would be directly comparable from the rider and non-rider surveys. Some questions could not always be exact duplicates but often addressed a similar issue in each of the surveys. The non-rider survey also lacked an income question due to the fact that the rider survey could not be compared to it and the space could be put to better use with other questions that might prove more enlightening. The non-rider survey was informally tested with a very limited number of the author's acquaintances, including those of international origin and rural backgrounds, to determine the suitability of the survey for all who may respond to it.

3.2 Survey Distribution

Distribution of the two general public surveys was conducted in two different manners. The rider survey distribution relied on public transit providers in Kansas, and the non-rider survey was distributed through the author's friends and public agencies, and at the Kansas State Fair.

3.2.1 Rider Survey Distribution

Distributing the rider survey was fairly straight forward. The Kansas University Transportation Center (KUTC) contains a list of all transit providers in Kansas by county. The pertinent information from each listing was then recorded into spreadsheet format to be filtered.

Criteria for transit providers to be contacted consisted that they must serve towns with a population less than 50,000 and have the “General Public” clientele box checked on the KUTC site. From this shortened list, providers were contacted by phone and asked to distribute the surveys through their drivers to users of their system. The surveys were inside pre-paid, self-addressed envelopes to make it as easy as possible for riders to return them and to enable the highest possible response rate. Each provider was asked to estimate the number of individual riders he or she served in a given month so an appropriate number of surveys could be sent. This is different than the often-recorded ridership numbers they use, which counts how many times they provide a ride, even if it is the same person. It is possible that some surveys were not distributed at all because the number estimated was more than the actual number of riders. It is also possible that the same rider was given the survey twice by different drivers of the same system. Because the survey contained no personally identifying information, it was impossible to determine if there were duplicates among the completed responses.

The providers that were contacted to distribute the final survey, their locations, and quantity of surveys sent can be seen in Table 3.1. It should be noted that the Decatur County Transportation Bus management decided to just copy the survey themselves, collect the responses, and then copy the responses so they could keep the data as well. It is unknown how many they sent out. There were 3260 surveys distributed to transit providers in rural Kansas. There were 445 valid rider responses and 24 invalid rider responses received, generating a response rate of 14.4% for the rider survey. Invalid responses are blank responses, cities or zip codes outside of Kansas, or similar obvious errors that would skew the survey.

Table 3.1. Rural Transit Providers Utilized in the Distribution of Rider Surveys

Provider	City	Zip	County	Surveys
City of Great Bend / Commission on Aging	Great Bend	67530	Barton	200
City of Stafford	Stafford	67578	Barton	30
Hoisington Commission on Aging	Hoisington	67544	Brown	40
City of Goodland	Goodland	67735	Sherman	40
Thomas County	Colby	67701	Thomas	100
Saline County Commission on Aging	Salina	67401	Saline	300
Nemaha County Transit	Seneca	66538	Nemaha	60
Marion County Commission	Marion	66861	Marion	25
McPherson County Council on Aging, Inc.	McPherson	67460	McPherson	40
City of Wilson	Wilson	67490	Ellisworth	15
Ellsworth County Council on Aging	Ellsworth	67439	Ellisworth	85
Finney County Committee on Aging, Inc.	Garden City	67846	Finney	360
City of Dodge City	Dodge City	67801	Ford	100
Twin Valley Developmental Services, Inc.	Greenleaf	66943	Morris	300
Pottawatomie County Transportation	Onaga	66521	Pottawatomie	40
Senior Services of Southeast Kansas, Inc.	Coffeyville	67337	Allen	40
Project Concern, Inc.	Atchison	66002	Atchison	50
Chase County	Cottonwood Falls	66845	Chase	25
Chautauqua County Council on Aging	Sedan	67361	Chautauqua	15
CLASS LTD	Columbus	66725	Cherokee	100
Clay County Task Force, Inc.	Clay Center	67432	Clay	100
Decatur County Transportation Bus	Oberlin	67749	Decatur	Copied
Abilene Housing, Inc. / Frontier Estates	Abilene	67410	Dickinson	100
City of Herington / Hilltop Community Center	Herington	67449	Dickinson	100
Doniphan County Public Transportation	Troy	66087	Doniphan	100
Elk County Council on Aging, Inc.	Howard	67349	Elk	100
Lyon County Area Transit	Emporia	66801	Lyon	150
Wabaunsee County Adult Transportation Service	Paxico	66526	Lyon	70
Mitchell County Transportation	Simpson	67478	Mitchell	40
Morris County Senior Citizens, Inc.	Council Grove	66846	Morris	250
Norton County Senior Citizens, Inc.	Norton	67654	Norton	40
Pawnee County Council on Aging	Larned	67550	Pawnee	75
City of Phillipsburg	Phillipsburg	67661	Phillips	20
Pratt County Council on Aging / RSVP	Pratt	67124	Pratt	100
Stevens County Health Department	Hugoton	67951	Stevens	50
		Total Number of Rider Surveys Sent		3260

While a listing of cities and zip codes is informative, it does not convey how widely distributed the survey was throughout the state of Kansas. As can be seen in Figure 3.1, responses from the rider survey were received from all over the state. The origin zip code of the

rides was arbitrarily chosen as the feature to map, as opposed to the destination zip code of the riders from the survey questions.

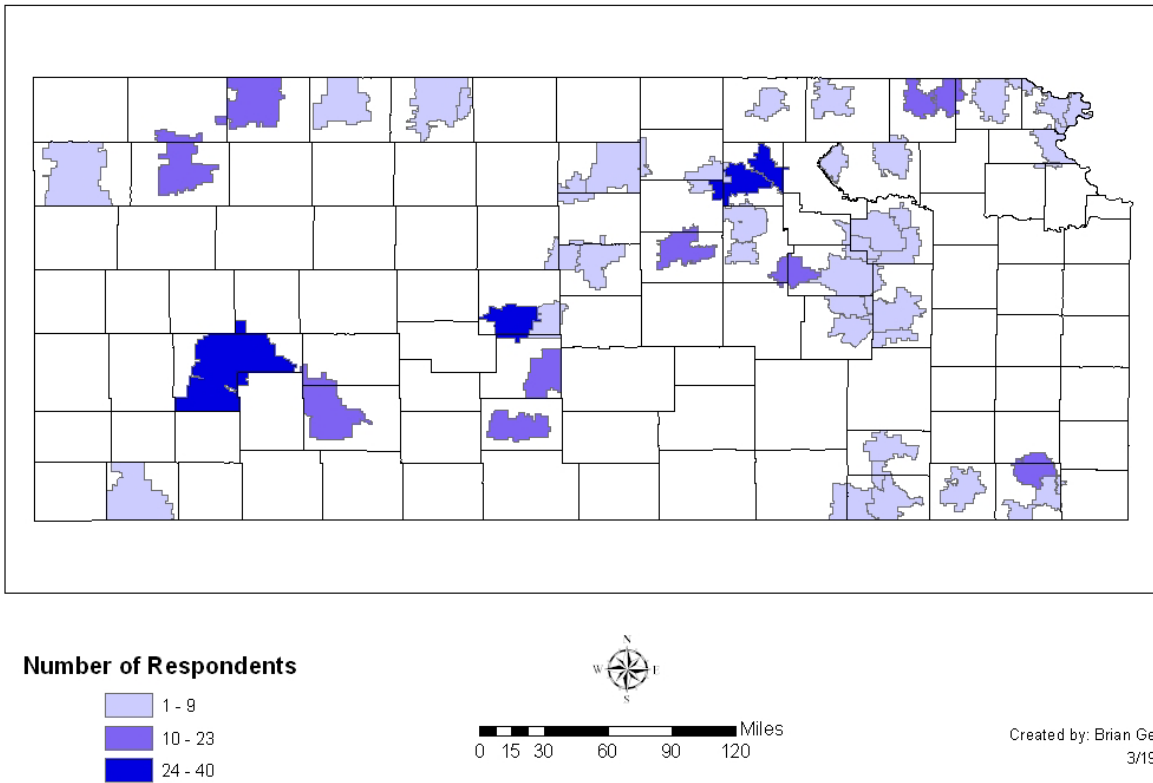


Figure 3.1. Geographic Distribution of Rider Survey Responses in Kansas

3.2.2 Non-Rider Survey Distribution

Non-rider responses were distributed in a similar manner to the rider survey. Distributing surveys to non-riders in rural areas meant that mailing them out to people and then paying for the return envelope was not a reasonable option. Packages of surveys inside pre-paid, self-addressed envelopes were mailed to research assistants, housing authorities, senior centers, work force centers, and medical buildings in rural Kansas.

The last method of distributing the survey was at the Kansas State Fair over two consecutive Saturdays in late summer 2008. K-State Research and Extension gratefully provided the opportunity to distribute surveys out of their booth at the Kansas State Fair to anybody that would accept it. This provided a wider geographic and demographic distribution of the surveys into rural areas than would otherwise have been contacted.

The non-rider survey distribution, locations, and quantity of surveys sent can be seen in Table 3.2. There were 1735 surveys distributed to those willing to hand out non-rider surveys in rural Kansas. There were 557 valid non-rider responses and 28 invalid non-rider responses received, generating a response rate of 33.7% for the non-rider survey.

While a listing of cities and zip codes is informative, it does not convey how widely distributed the survey was throughout the state of Kansas. As can be seen in Figure 3.2, responses from the non-rider survey were received from all over the state. Origin of non-riders was arbitrarily chosen from the survey questions as the feature to map as opposed to destination of non-riders.

Table 3.2. Locations and People Who Assisted in the Distribution of Non-Rider Surveys

Distributor	City	Zip	For	Count
Jose Villarreal	Kansas Airports		Airports	100
Nathan Rose	Great Bend		Farm Coops	100
Kim Sudbeck	Seneca		Home	100
David Leidig	McPherson	67460	Job	50
David Leidig	Hugoton	67951	Home	50
Amber Logan	Wakefield		Home	100
Ben Hohly	Atchison		Job/Home	50
Amanda Clark	Coffeyville/Liberty		Home	50
Matthew Mitchell	Altamont		Home	50
Melissa Meagher	Salina		Family Reunion	50
Trent Mains	Liberal		Family Reunion	50
Manhattan Senior Center	Manhattan	66502		50
Manhattan Workforce Center	Manhattan	66502		50
Area Agency on Aging	Manhattan	66502		25
Manhattan Housing Authority	Manhattan	66502		150
Riley County Community Corrections	Manhattan	66502		25
Manhattan Municipal Band	Manhattan	66502		100
Great Bend Housing Authority	Great Bend	67530		160
Manhattan Health Dept.	Manhattan	66502		150
Lincoln Housing Authority	Lincoln	67455		50
Minneapolis Housing Authority	Minneapolis	67467		75
Will Byer III	Great Bend	64108		50
Russell County Economic Development	Russell	67665		25
Manhattan Adult Learning Center	Manhattan			75
Kansas State Fair				400
			Total Number of Rider Surveys Sent	1735

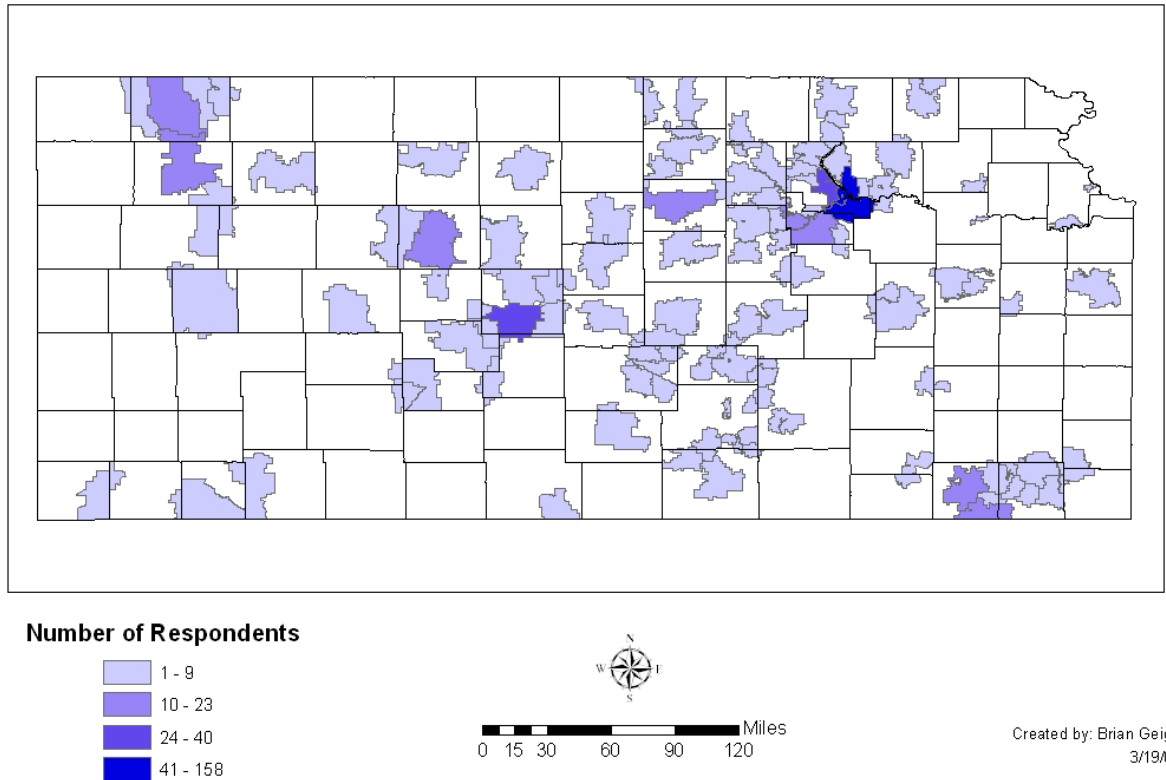


Figure 3.2. Geographic Distribution of Non-Rider Survey Responses in Kansas

3.3 ATA Bus Ridership and Gas Prices

To see if ATA bus ridership correlated to rising gas prices in the summer and fall of 2008, ridership from ATA bus was graphed against the Department of Energy’s “Weekly Midwest regular all formulations retail gasoline prices” (16). ATA bus ridership was taken from the agency’s best available records. Figure 3.3 shows that while ridership did increase overall with gas price, it did not respond quickly to rapid increases or decreases in gas prices.

ATA Bus Ridership vs Price of Gas

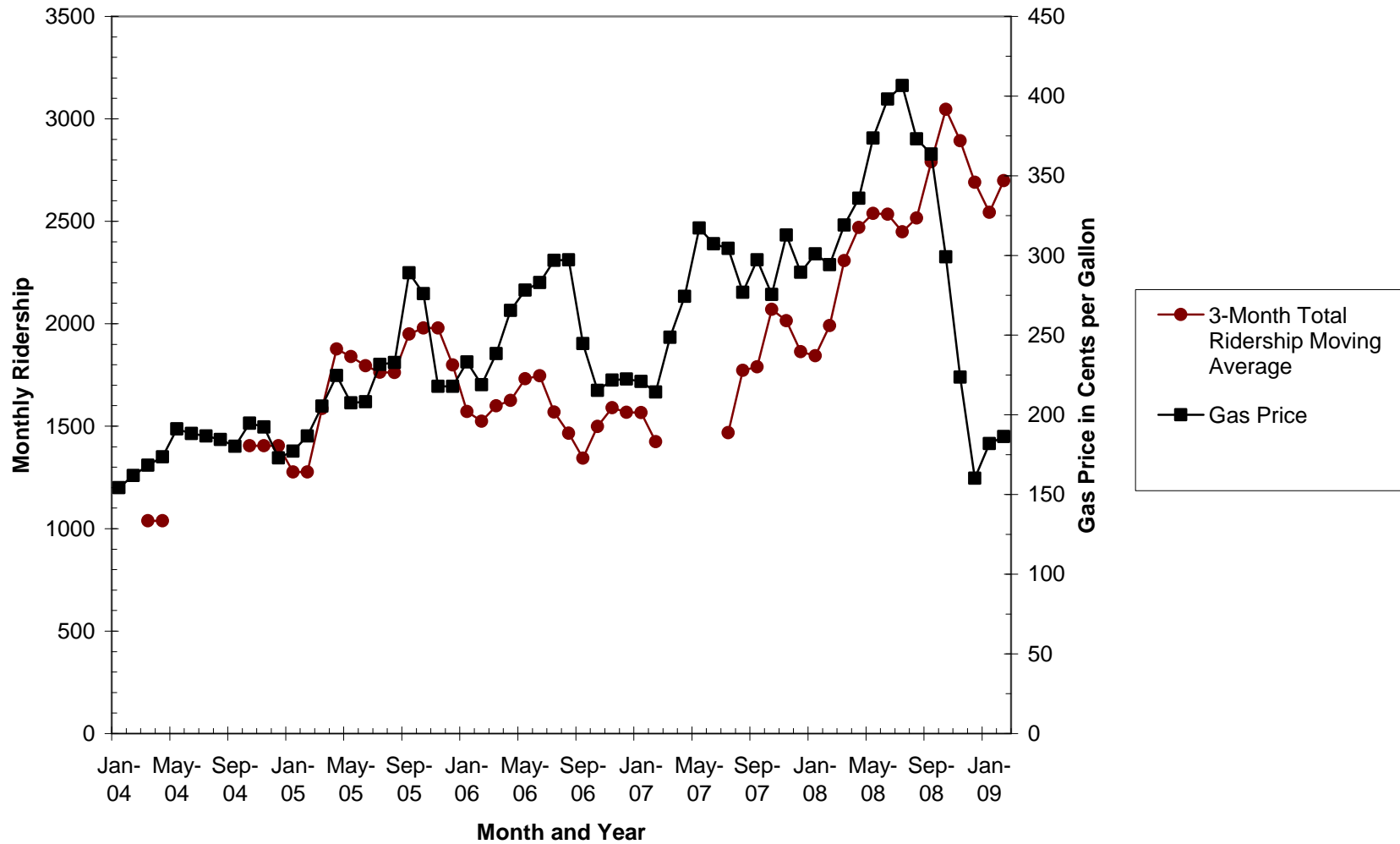


Figure 3.3. ATA Bus Ridership Increases Compared to Gas Price Increases

3.4 Methodology – Chi-Square Test of Independence

Rarely does one know the full population data, but the sample data available can show if results are independent of each other, or whether they are the result of random variability of the data. In order to accomplish this, a chi-square test of independence was performed using contingency tables. Making X and Y stand in for the two categories, X with i number of levels, and Y with j number of levels, these ij combinations had a set number of possible outcomes, in this case 10, which is shown as an example in Table 3.3. The actual survey response was used to fill in the n_{ij} values in the table. The example category X used the number of vehicles a person or their family owns, while the category Y denoted whether or not they knew if public transportation was available in their area. The question the test of independence answered in this example was whether their knowledge of public transportation was independent of the number of vehicles they own.

Table 3.3. Example Contingency Table

Number of Vehicles One Owns (X)	Public Transportation Existence Knowledge (Y)		Total
	Yes	Don't Know/No	
0	$n_{11}=20$	$n_{12}=14$	$n_{1+}=34$
1	$n_{21}=57$	$n_{22}=82$	$n_{2+}=139$
2	$n_{31}=54$	$n_{32}=104$	$n_{3+}=158$
3	$n_{41}=34$	$n_{42}=70$	$n_{4+}=104$
4+	$n_{51}=22$	$n_{52}=72$	$n_{5+}=94$
Total	$n_{+1}=187$	$n_{+2}=342$	$n=529$

Expected outcome frequencies for the contingency table were then calculated, making e_{ij} stand for the expected frequency in the contingency table using the same i rows and j columns.

$$e_{ij} = \frac{(\text{Row } i \text{ total}) * (\text{Column } j \text{ total})}{\text{Sample Size}}$$

$$= \frac{(n_{i+}) * (n_{+j})}{(n)}$$

The test for comparing expected and actual frequencies used the following formula and a chi-square value was determined.

$$\chi^2 = \sum_i \sum_j \frac{(n_{ij}) - e_{ij}}{e_{ij}}$$

Given that the table had i rows and j columns the chi-square statistic had $(i-1)*(j-1)$ degrees of freedom. With the chi-square value determined, it could be compared with the table values at user-selected confidence levels.

In this example, the value was $\chi^2=16.42$. Looking up four degrees of freedom with a 95% confidence level gave a value of 9.48. Since the χ^2 value found from the actual survey was greater than the table value, the knowledge of public transportation was not independent of the number of vehicles they or their family owned, i.e., there was a relationship between the number of vehicles owned and their knowledge of the existence of public transportation.

This statistical method will be shown in a simplified format throughout the text as ($\chi^2=16.42, p<0.002$). The calculated χ^2 value will be shown, and the p value is the confidence level of that statistic. In this example, the level of confidence was greater than 95%, which was denoted as less than 0.05. Any p level less than 0.05 means there is greater than 95% confidence that the data are independent. In many cases throughout this report, the confidence level will be so high it is shown as $p=0.0$ due to rounding and denotes a confidence level near 100%.

CHAPTER 4 - Rider and Non-Rider Results and Findings

Results from the two surveys were grouped to show basic results before combining any interesting and statistically significant sections. Many of the questions were worded to have only one possible valid answer. Along with all possible answers given, two more possible responses existed in the total tally, which can be found in Appendix B and Appendix C. These responses are “invalid” and “blank.” Invalid responses conflicted with the question being asked, had multiple marks for an answer that only asked for a single response, had written comments rather than a box marked, or other similar answers that could not be grouped. Blank answers were obviously no marks at all in the boxes for the given question. Invalid and blank answers were typically not included in the figures in the following sections unless relevant to the comparison. They are typically shown when either response has an unusually higher percentage of responses.

4.1 Demographics of Riders and Non-Riders

This section denotes the differences in demographics between riders and non-riders who responded to the surveys. Table 4.1 shows that females were over represented in both types of surveys as compared to the general population of the state of Kansas. Studies have shown females are more apt to fill out surveys than men, which agrees with these survey findings. Figure 4.1 shows the age distribution of the respondents. There was a distinct relationship between age and the number of responses from riders of public transportation. The increased response rates of older drivers showed that older drivers were more likely to use public transportation in rural areas than younger drivers. The non-rider survey was reasonably well distributed with the exception of those non-riders 90 years of age or greater. It was difficult to find non-riders who were able and willing to fill out a survey.

Table 4.2 shows the distribution of the two surveys according to race or ethnicity along with a comparison to Kansas. These responses showed diversity comparable to Kansas as a whole when realizing that urban centers with a population of 50,000 or more were removed from the survey sample, which should have a higher proportion of African-Americans and Hispanics than rural Kansas.

Table 4.1. Gender of Rider and Non-Rider Survey Respondents

Gender	Riders		Non-Rider		State of Kansas
	Frequency	Percentage	Frequency	Percentage	Percentage
Male	96	21.6%	167	29.98%	49.6%
Female	335	75.3%	382	68.58%	50.4%
Invalid	1	0.2%	0	0.0%	0.0%
Blank	13	2.9%	8	1.44%	0.0%
Total	445	100%	557	100%	100%

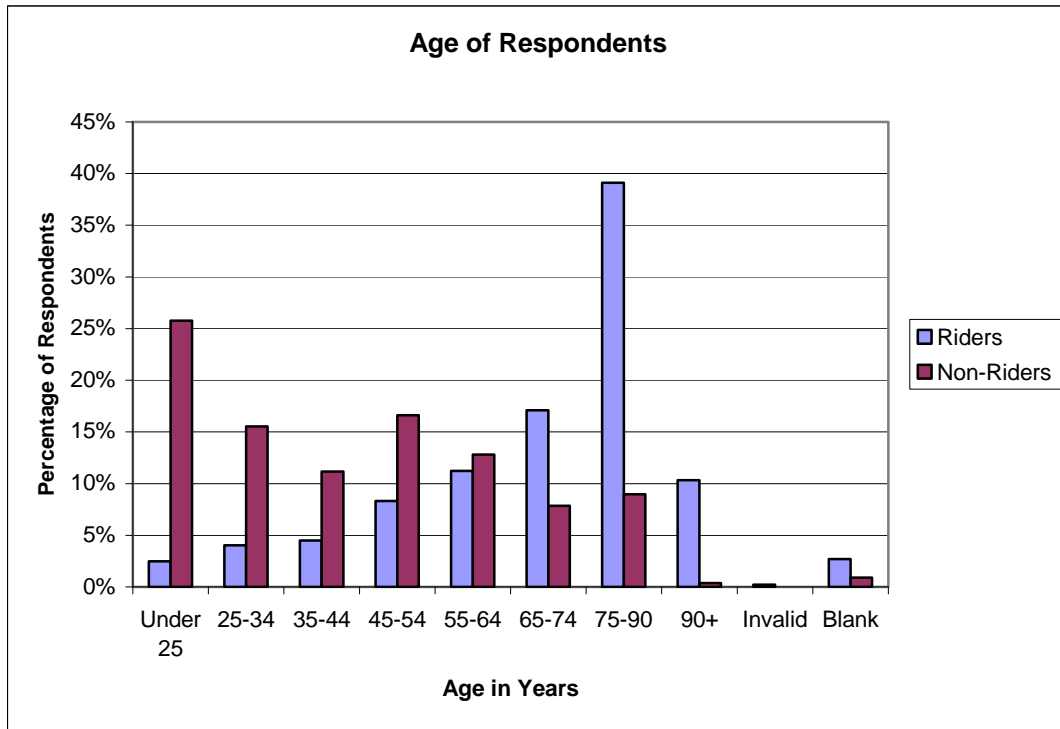


Figure 4.1. Age of Rider and Non-Rider Survey Respondents

Table 4.2. Race or Ethnicity of Rider and Non-Rider Survey Respondents

Gender	Riders	Non-Riders	State of Kansas
White	90.1%	85.8%	81.1%
African-American	2.2%	4.7%	6.0%
Hispanic	1.8%	3.4%	8.6%
Asian	0.7%	1.1%	2.2%
American Indian	0.9%	1.3%	1.0%
Other	0.7%	0.4%	1.1%
Invalid	0.9%	1.8%	0.0%
Blank	2.7%	1.6%	0.0%

4.2 Frequency and Method of Trips for Riders and Non-Riders

Non-riders conduct more frequent trips in their vehicles than riders who use public transportation (Figure 4.2, Figure 4.3). Riders of public transportation may be using other methods to get around during other times of the week, but that could not be determined with the survey data acquired. It also may be that since riders do not have many trips to make during a week, they found owning a personal vehicle unnecessary. It seems to indicate that public transportation in rural areas does not often run six or seven days of the week or that unlike non-riders, riders do not travel six or seven days of the week. Non-riders typically make their trips alone as seen in Figure 4.4. Other common options for non-riders were driving with a passenger or being the passenger in a private vehicle. Even if the non-rider had vehicle problems, he or she would not be likely to turn to public transportation for mobility due to several other options, primarily the availability of personal vehicles that could be used instead (Figure 4.5). Riders, however, were unlikely to turn to driving if transit was unavailable as seen in Figure 4.6. Only 15% of riders said they would drive if transit was unavailable, with 25% of riders not taking their previous trip at all. Twenty-five percent of riders said they would ride with somebody else, implying that either they do not have a vehicle to drive or were unable to drive themselves. This was supported by Figure 4.7 that showed that 60% of riders of public transportation did not have a personal vehicle they could have used to make the trip.

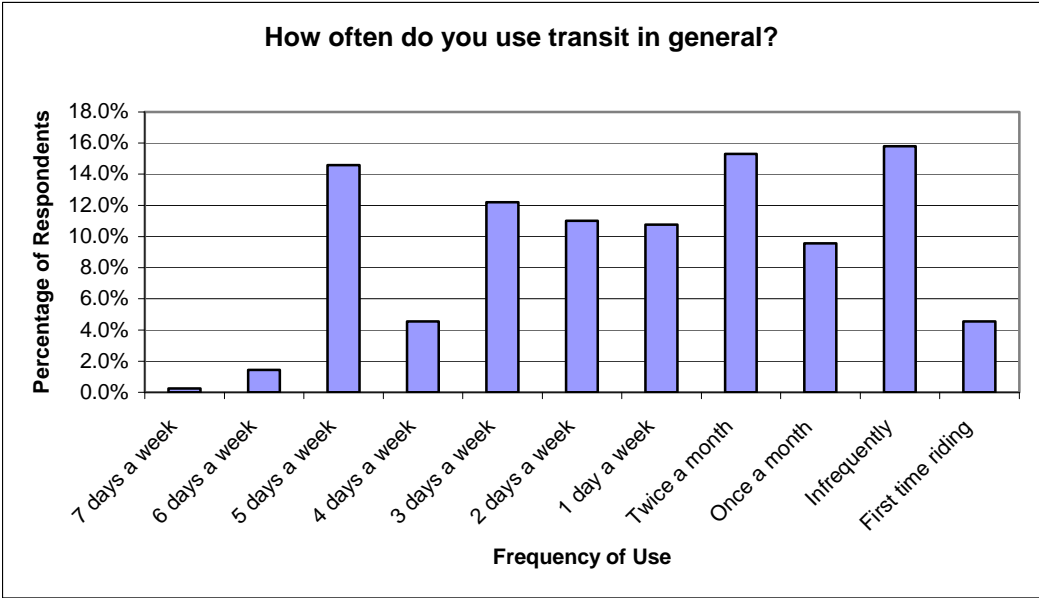


Figure 4.2. Frequency of Trips by Riders

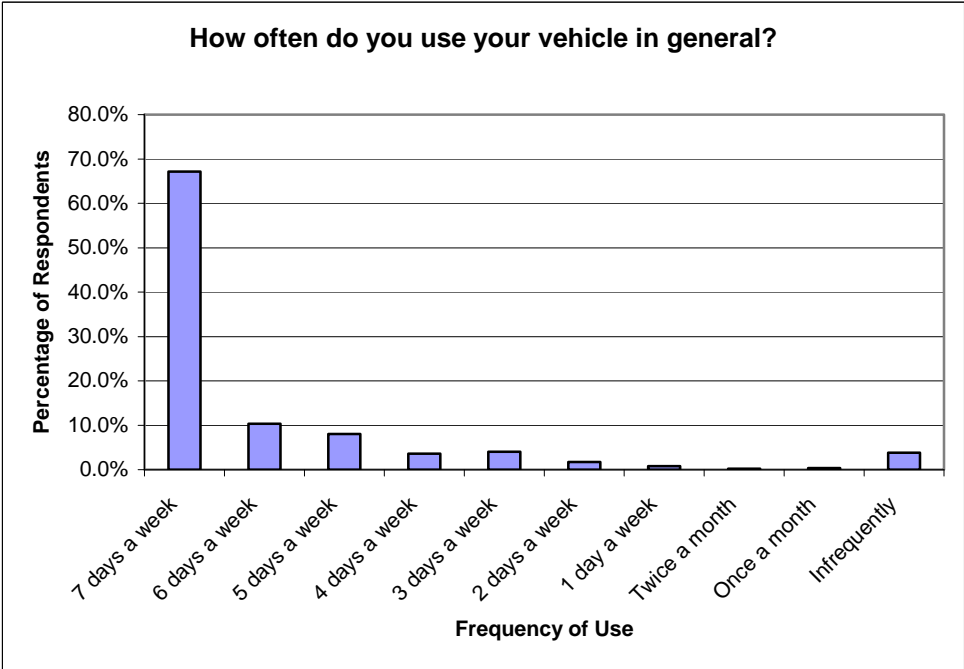


Figure 4.3. Frequency of Trips by Non-Riders

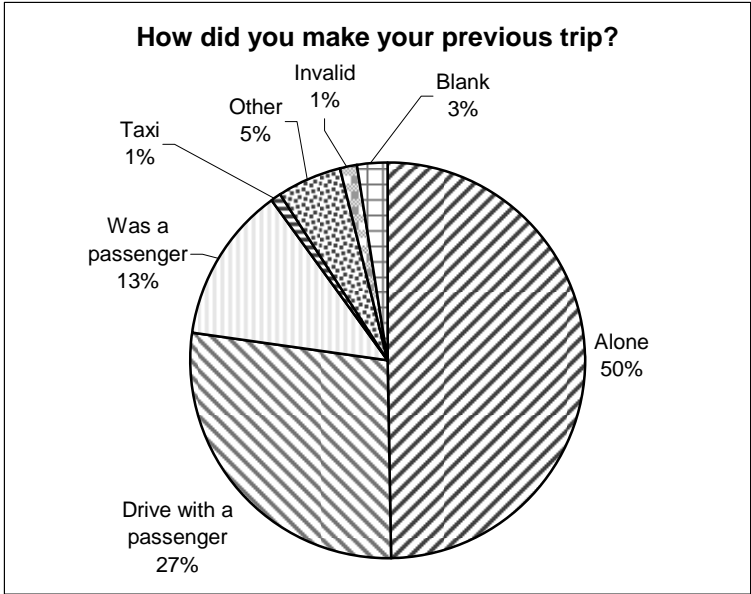


Figure 4.4. Trip Method of Non-Riders

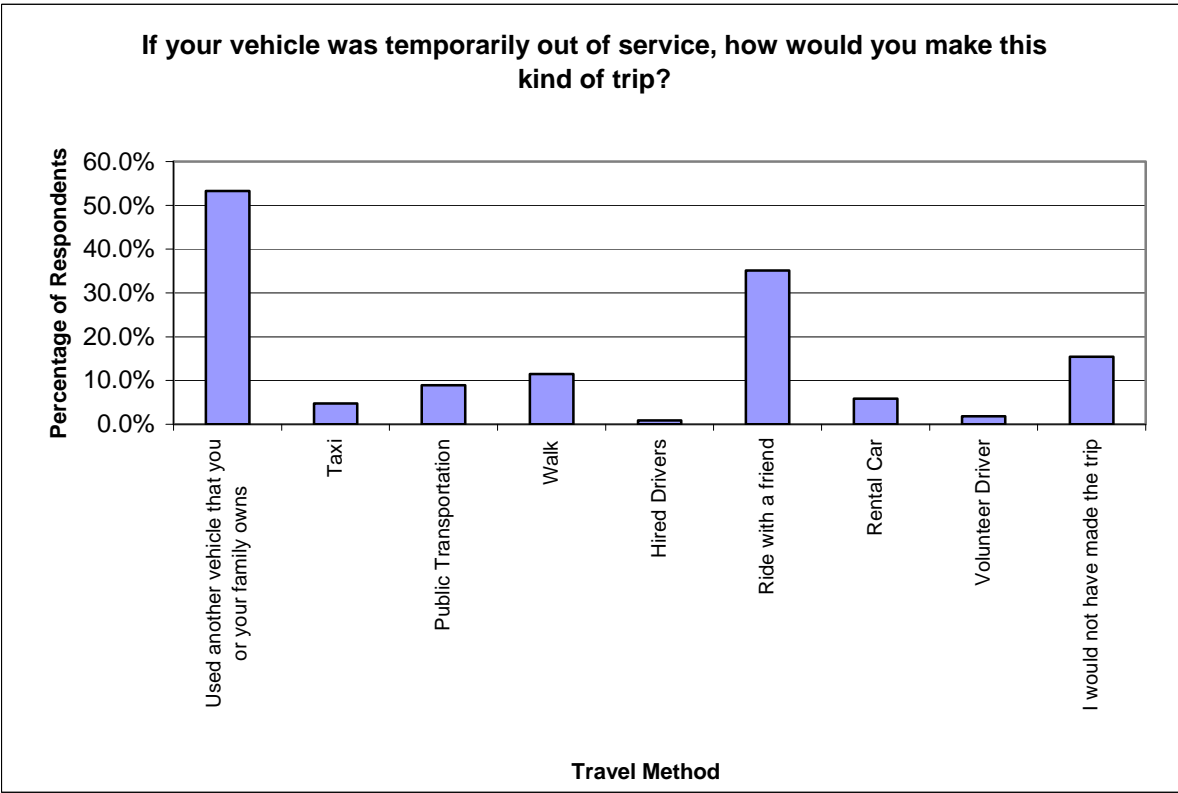


Figure 4.5. Non-Rider Alternative Modes of Transportation

(Seven respondents left all options in Figure 4.5 unmarked.)

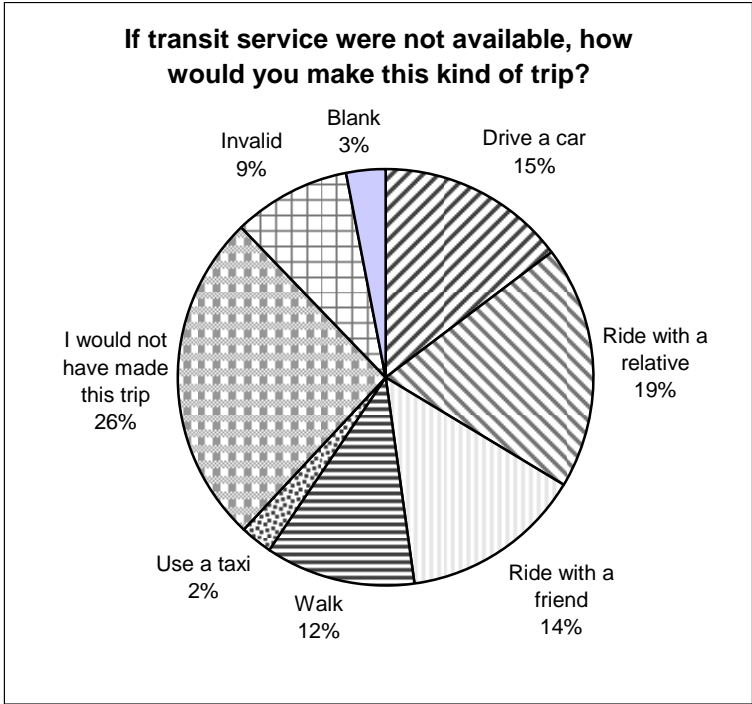


Figure 4.6. Rider Alternative Mode of Transportation

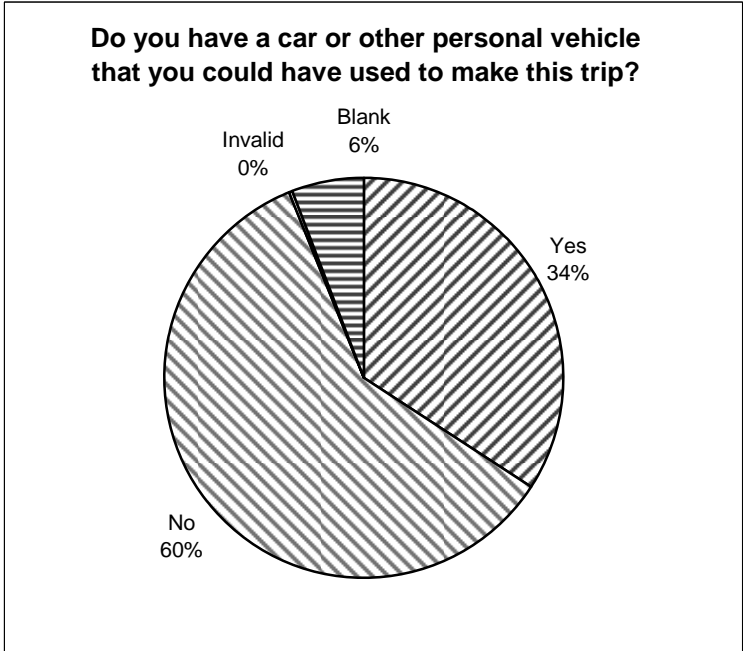


Figure 4.7. Rider Personal Vehicle Ownership

4.3 Rider and Non-Rider Time of Trips

Having public transportation available at the times people want to ride is imperative to increasing its usage. Many transportation providers start their weekday service around 8 a.m., and end in the late afternoon around 5 p.m. This conventional business starting time shows up in the survey results when riders were asked what time they leave home for the day in Figure 4.8. This is in contrast with non-riders who generally leave earlier, as can be seen in Figure 4.9. The closing time also becomes apparent in Figure 4.10, which shows when riders return home and can be contrasted with non-riders in Figure 4.11 who return home later in the day. As the figures show, non-riders leave their houses earlier and return home later in the day than riders. One way to increase ridership of public transportation is to increase the hours of service. Social events often take place at night, which may explain why non-riders return home later in the day than riders, who rely on public transportation that does not run late enough to accommodate these social events.

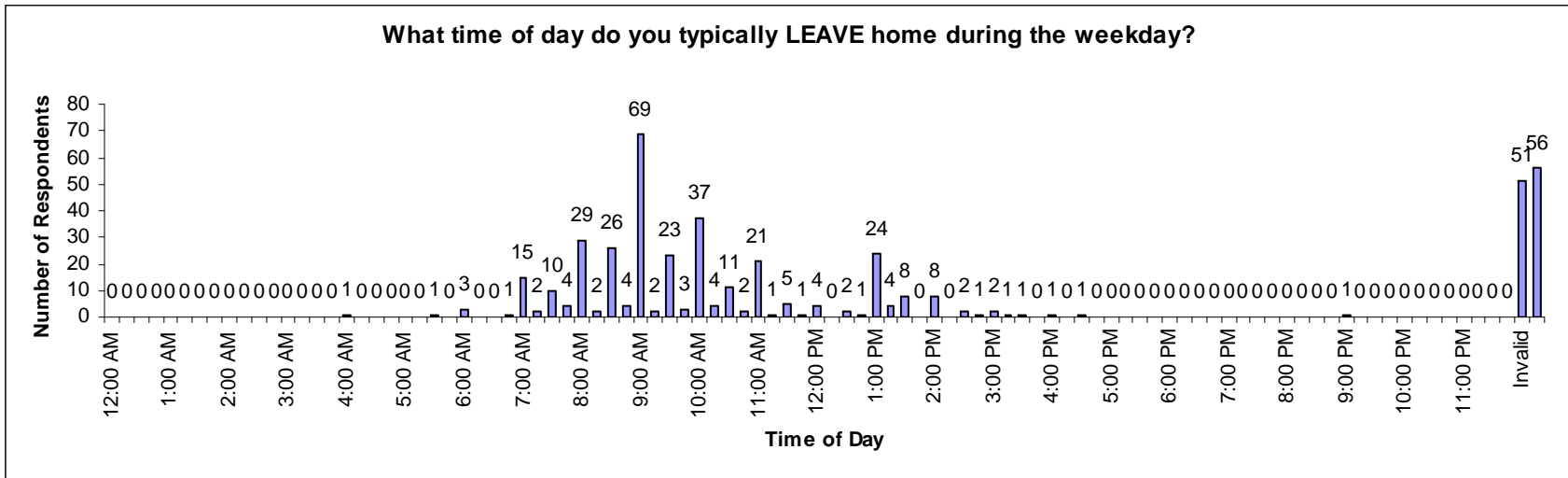


Figure 4.8. Times Riders Leave Home for the Day

The value to the right of “Invalid” is “Blank” in both Figure 4.8 and Figure 4.9.

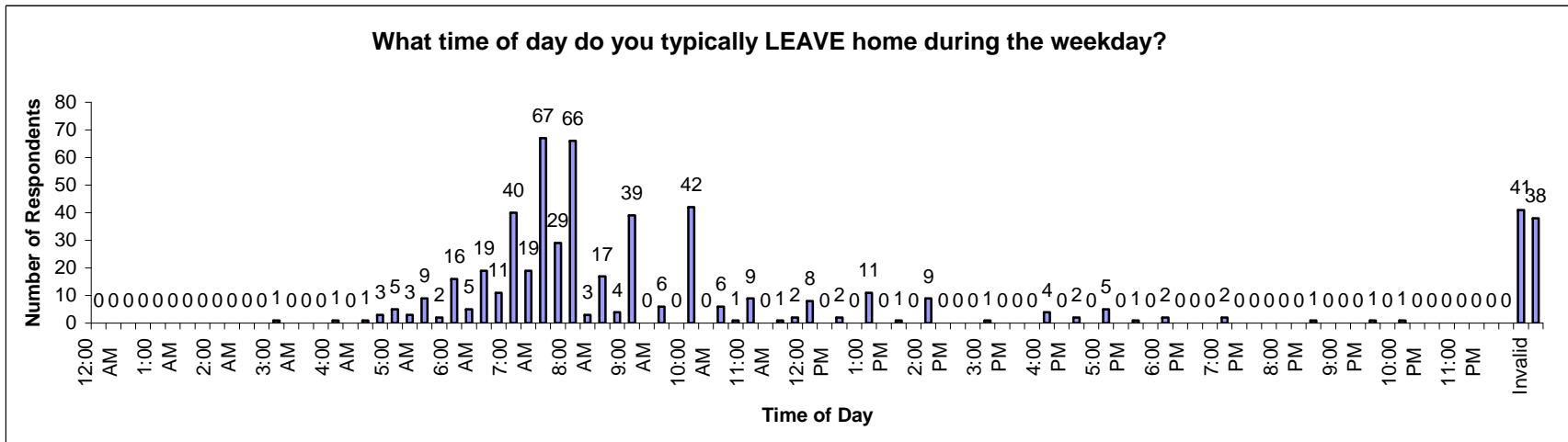


Figure 4.9. Times Non-Riders Leave Home for the Day

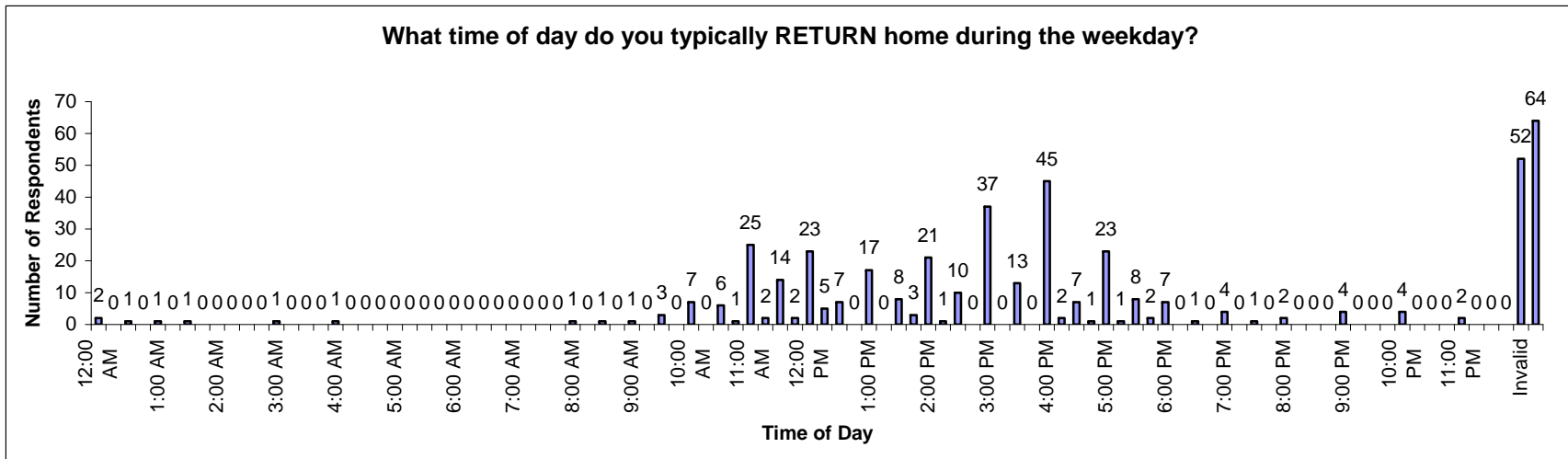


Figure 4.10. Times Riders Return Home for the Day

The value to the right of “Invalid” is “Blank” in both Figure 4.10 and Figure 4.11.

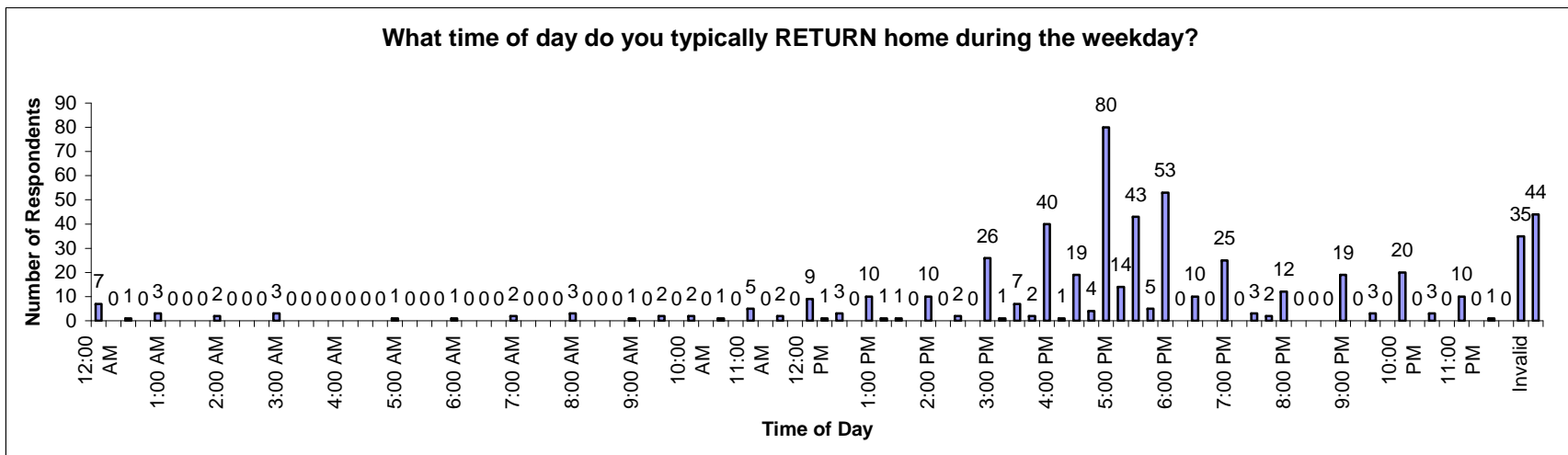


Figure 4.11. Times Non-Riders Return Home for the Day

4.4 Location Type of Riders and Non-Riders

Rider and non-riders were asked about the details of their most recent trips. These origins and destinations for each survey can be found in Figure 4.12 and Figure 4.13. Origins for each type of user were different ($\chi^2=46.22, p<0.0$), but the destination for each population segment was even more different ($\chi^2=121.86, p<0.0$). Riders of public transportation were more likely to be headed to a medical appointment or shopping and less likely to be headed to work or an educational function. This aligns with the fact that older citizens filled out more rider surveys and may no longer be working or attending educational events.

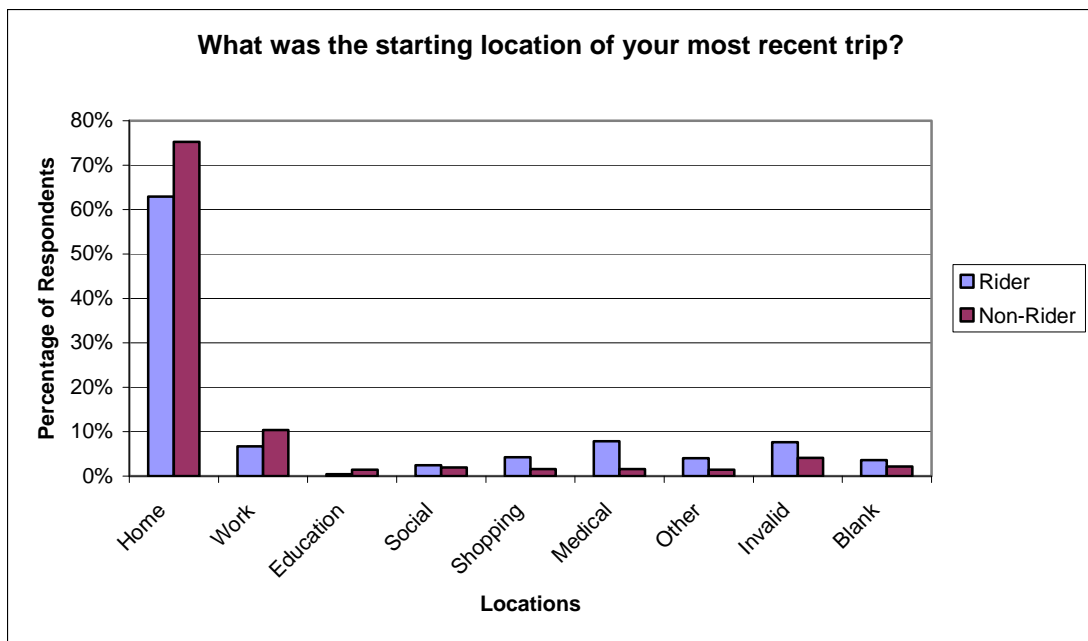


Figure 4.12. Origins of Trips for Riders and Non-Riders

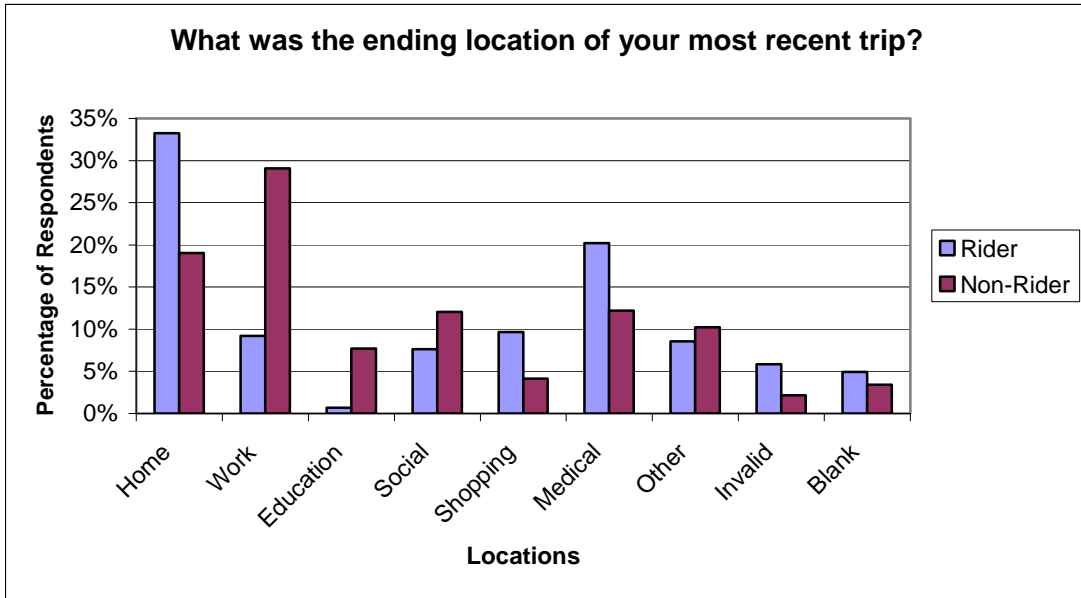


Figure 4.13. Destinations of Trips for Riders and Non-Riders

4.5 Rider and Non-Rider Driver’s Licensing and Handicapped Permits

The ability to legally drive is an important factor in choosing whether to use public transportation or another mode of transportation. As can be seen in Figure 4.14, a significantly higher percentage of riders were without a current driver’s license ($\chi^2=221.73, p<0.0$ with invalid and blank removed). This leads to greater public transportation use, as driving legally was not an option. It is also noticeable in Figure 4.15 that riders of public transportation are more likely to have handicapped parking permits than non-riders ($\chi^2=142.93, p<0.0$ with invalid and blank removed). This permit can be issued for a number of reasons, but most reasons relate to physical mobility (46). Driving can be a difficult task due to physical mobility or visual impairments, and therefore public transportation often would be a better option.

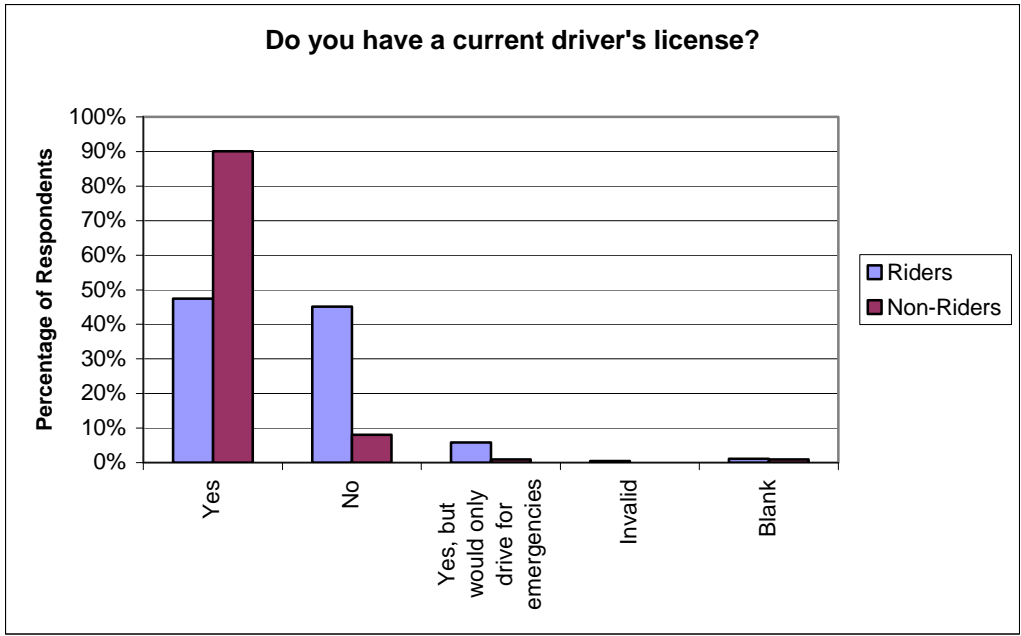


Figure 4.14. Current Driver’s Licensure for Riders and Non-Riders

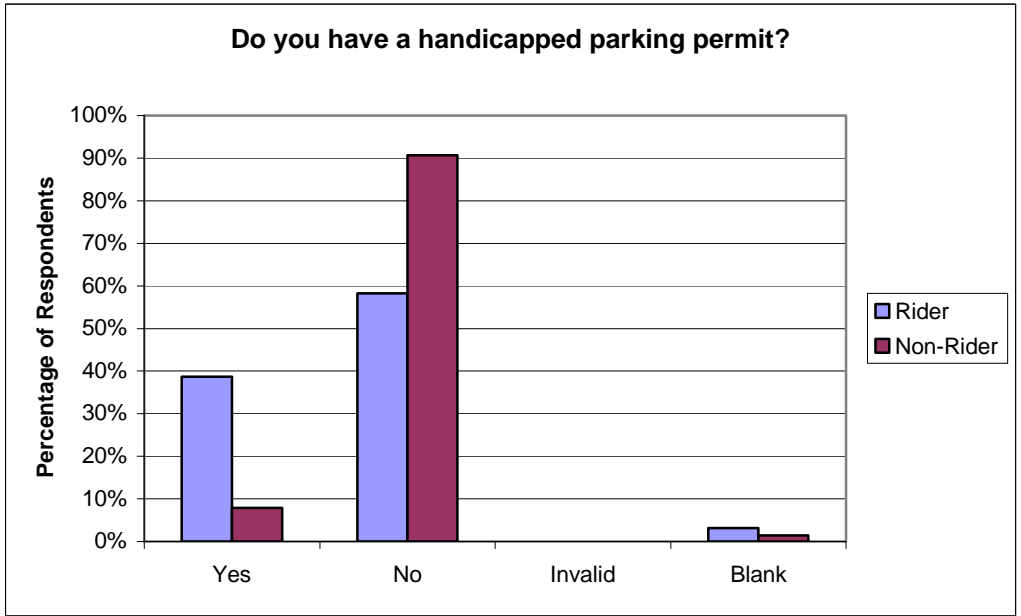


Figure 4.15. Handicapped Parking Permit Usage for Riders and Non-Riders

4.6 Rider and Non-Rider Marital Status

The marital status of riders and non-riders were quite different. Riders were much more likely to be widowed than non-riders that responded to the survey ($\chi^2=166.76,p<0.0$ with

separated, invalid and blank removed). Figure 4.16 shows the marital status of each respondent type.

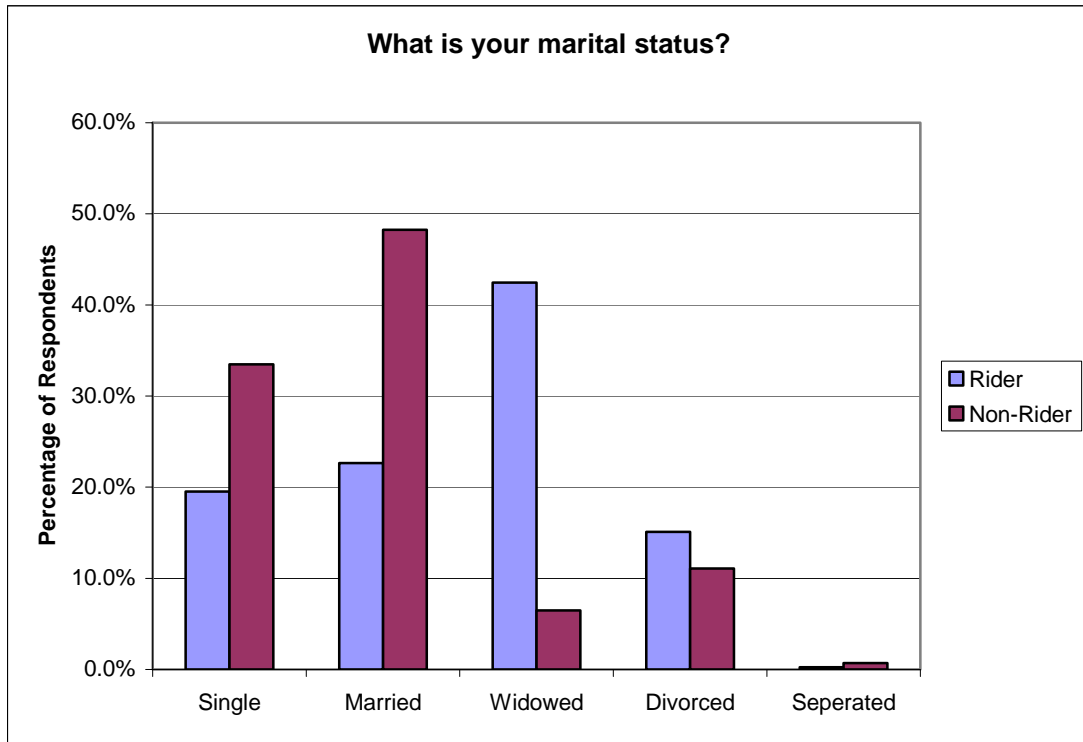


Figure 4.16. Marital Status of Riders and Non-Riders

4.7 Rider and Non-Rider Household Information

Riders of public transportation in rural areas were more likely to live alone than non-riders as seen in Figure 4.17 ($\chi^2=220.58, p<0.0$ with 5 people or more combined). People who live in smaller households tended to use public transportation more often than those who live in larger households. More than 60% of riders lived alone. This trend agrees with Figure 2.1 from the literature review section of this thesis.

Non-riders were asked how many vehicles they or their family own. Zero was a possible answer as they could have been passengers on their previous trip and not actually own a car. Results showed 66.7% of non-riders own, or their families own, more than one vehicle, which makes it easy for them to just switch vehicles if one needed maintenance (Figure 4.18). The ability to easily switch cars makes it difficult to convince this group to use public transportation in rural areas.

A high percentage of those in rural areas obtain their living from the land and therefore it was assumed they do not often change residencies. It is also assumed that when people live in an area longer, they become more familiar with the businesses and opportunities available there, including transportation options. This turned out to be not true for public transportation, and the length of residency appeared to have no effect on public transportation related knowledge or use. Figure 4.19 shows that while many more elderly were riders of public transportation, the length of residence for non-riders and riders was similar ($\chi^2=2.65, p<0.618$ with invalid, blank, and less than 1 year removed). The “less than one year” option is most likely due to a number of students filling it out in the Manhattan, Kansas area, where residencies are changed often.

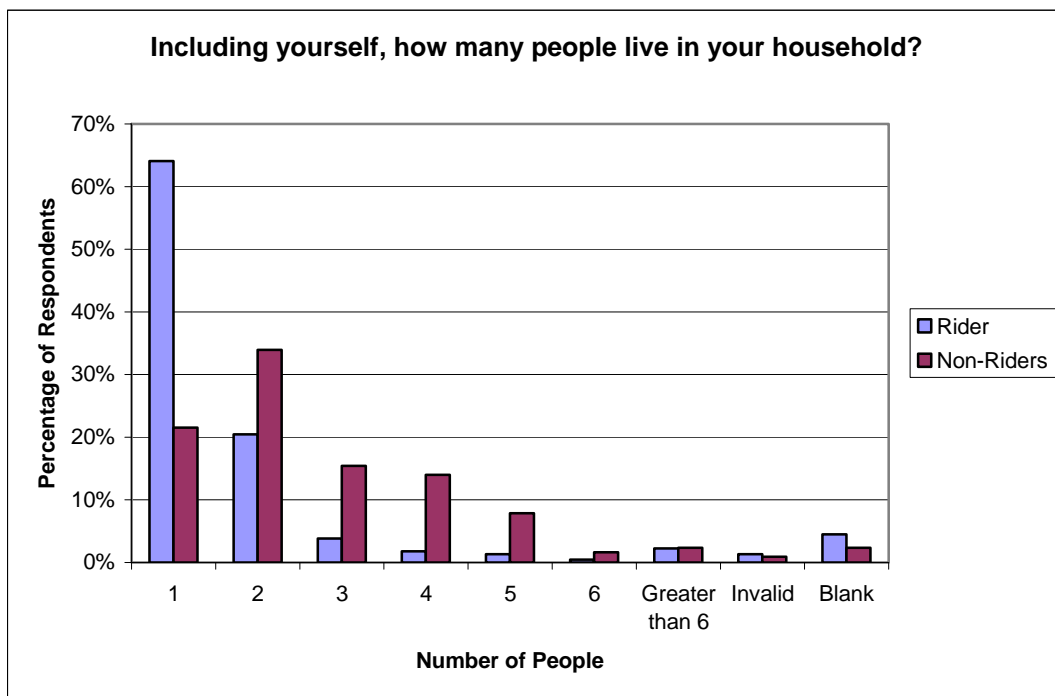


Figure 4.17. Household Size for Riders and Non-Riders

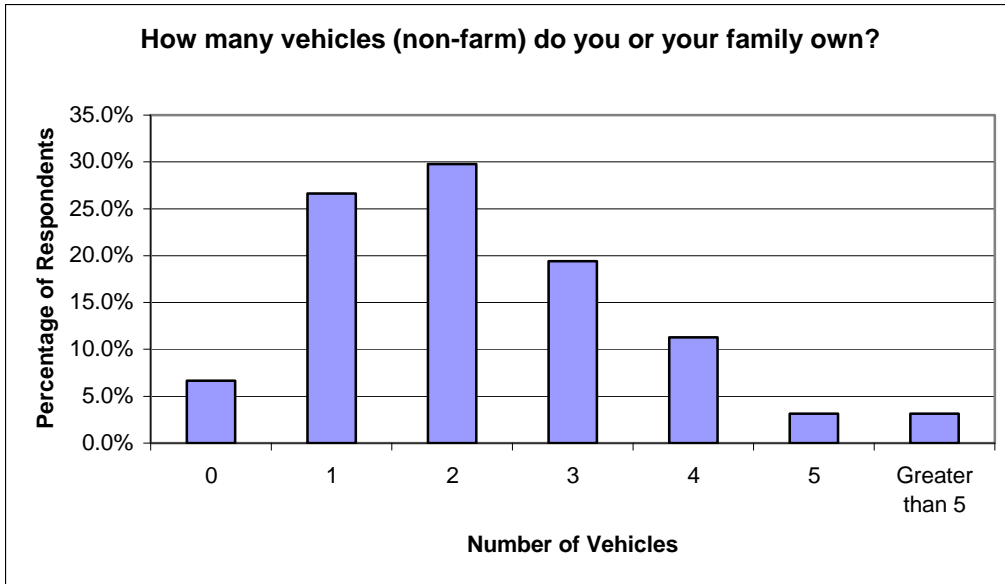


Figure 4.18. Number of Vehicles Non-Riders or Their Families Own

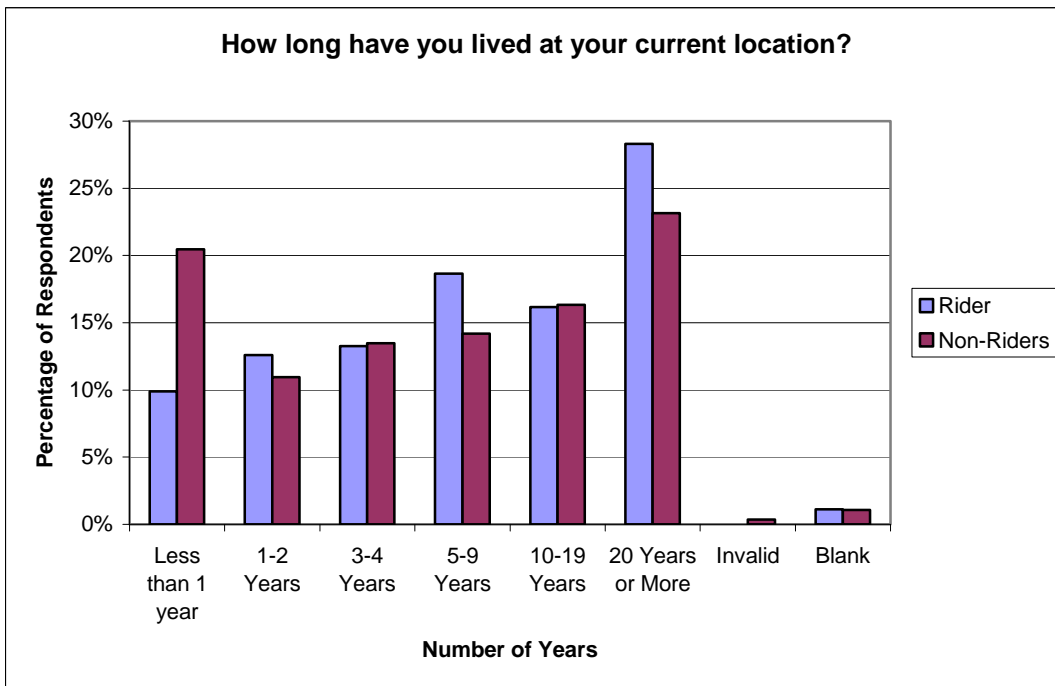


Figure 4.19. Length of Current Residency for Riders and Non-Riders

4.8 Nearest Relatives of Riders and Non-Riders

It was speculated that who use public transportation move to live in an area that is served by public transportation so they have it as a choice of travel modes. Given the length of

residency, shown in Figure 4.19, it does not seem that people moved to an area with public transportation so they could use it. In order to stay mobile, they would then have to ask for favors from friends and family if they could not drive. Family is the usual first choice for people to turn to in hard times, so both riders and non-riders were asked how close they live to other family members. Data from the survey showed a difference between riders and non-riders of public transportation in the distance their nearest relative lived from them ($\chi^2=20.76, p<0.00$) although this difference was not what was expected. The biggest difference was in the rider's lack of relatives. When the "No relatives" answer is removed, however, the difference is no longer significant at a 95% confidence level ($\chi^2=4.27, p<0.2333$). So other than riders' relatives passing away, there was no significant difference between types for the distance they live away from living relatives.

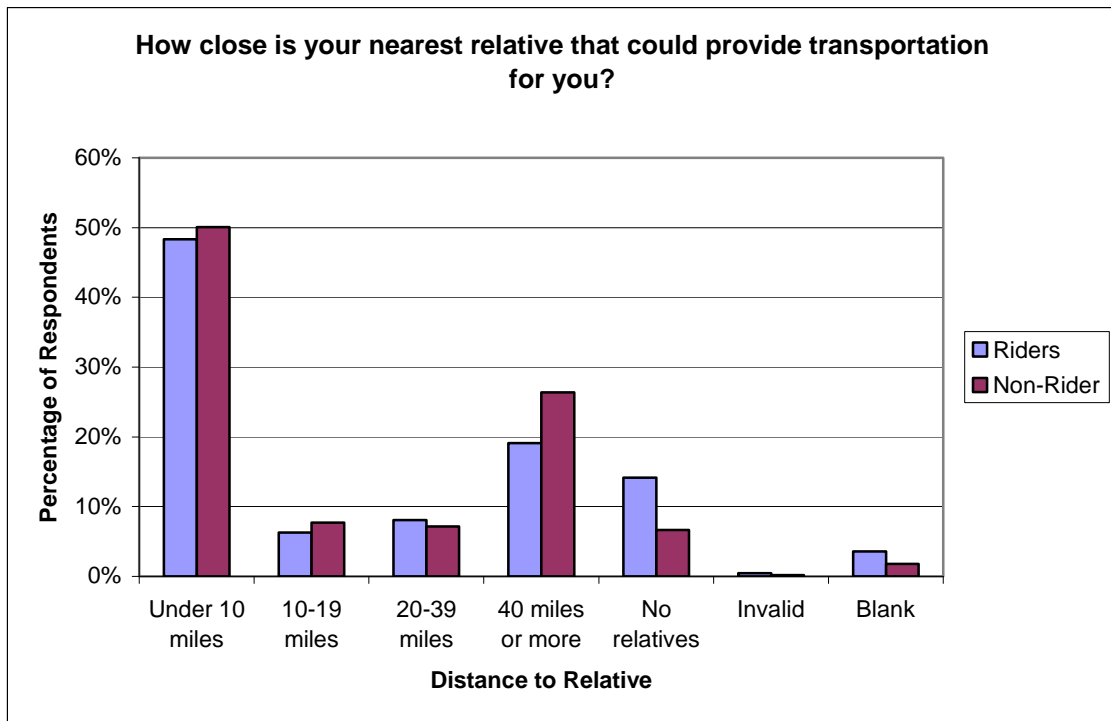


Figure 4.20. Nearest Relatives for Riders and Non-Riders

4.9 Public Transportation Usage and Knowledge

To see if citizens in rural areas had ever used more common or conventional forms of public transportation like buses or subways while traveling or living in previous locations, they were asked if they have ever used such modes of transportation. There was little difference

between the responses of the riders and non-riders (Figure 4.21), as roughly 70% of both segments had never used public transportation in a more conventional form found in many densely populated areas ($\chi^2=1.17, p<0.2797$). It is assumed that unless those living in rural areas were vacationing in a larger city, they would have not previously lived in a large city, and therefore had the opportunity to use more conventional forms of public transportation. This may make it more difficult to increase the ridership of demand-response transportation because the riders have no connection to public transportation. This fits with another response by non-riders when asked if they had ever used public transportation in their area, 71% responded “Never” (Figure 4.22).

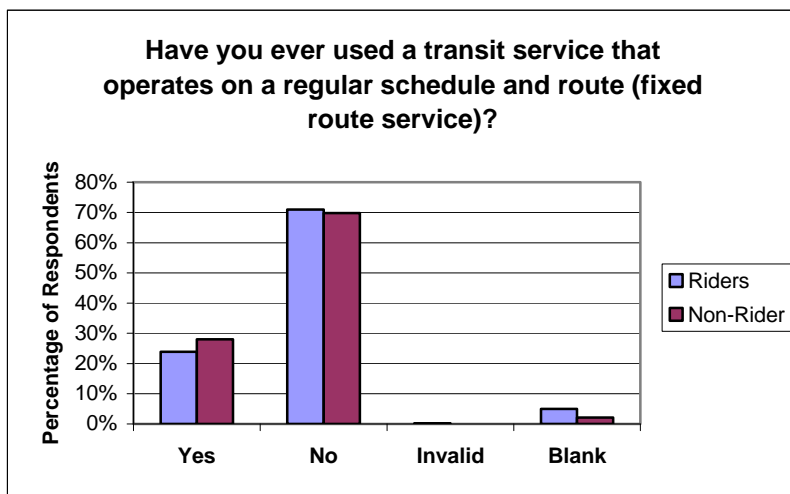


Figure 4.21. Previous Fixed-Route Service Usage for Riders and Non-Riders

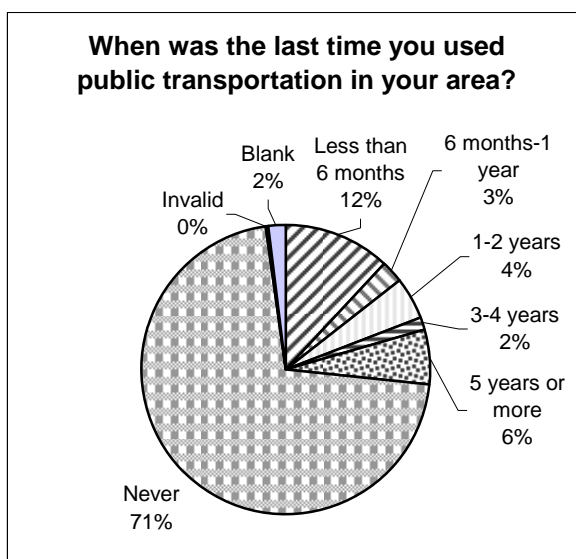


Figure 4.22. Non-Riders’ Public Transportation Usage in Their Local Area

It was further asked if respondents would want fixed routes in their area, and this received mixed reviews from both riders and non-riders (Figure 4.23), although non-riders showed a greater interest in fixed routes than riders ($\chi^2=49.73, p<0.00$ with only Yes and No included). Fixed routes can be associated with more freedom to move about (in large cities with many routes and short headways) and less reliance on other people as compared to demand-response transit. This is most likely a factor in the increased approval of fixed routes from non-riders as they would retain more freedom to travel at their own choosing rather than calling and waiting for demand-response transit. It will be investigated further in Section 4.17 to see if there is a correlation between those that have used fixed routes previously and those that want fixed routes in their area.

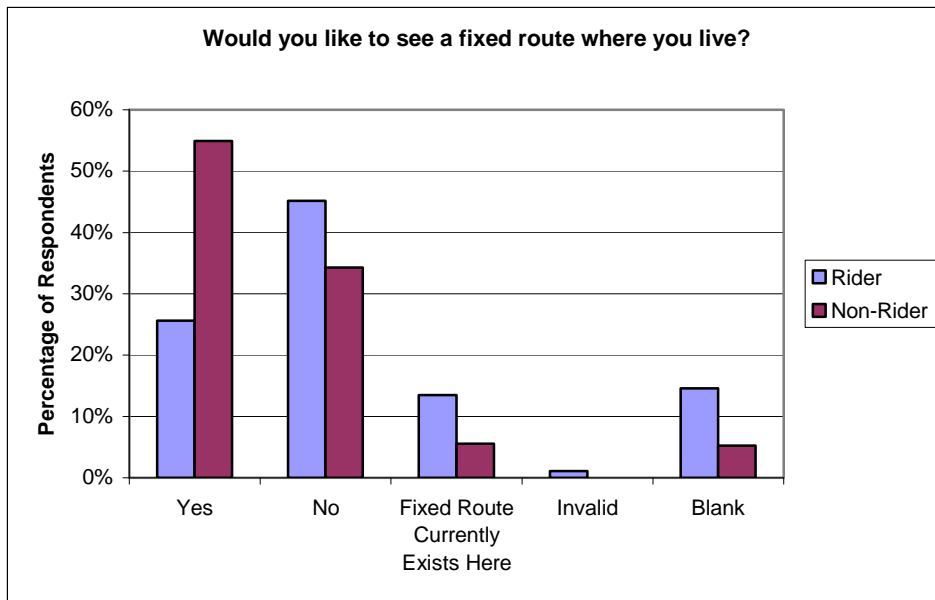


Figure 4.23. Desire for Fixed Routes from Riders and Non-Riders

Non-riders were asked if they knew a public transportation provider existed in their area (Figure 4.24). The majority (43%) said that no public transportation existed in their area, 20% said they didn't know, and 35% said that public transportation does exist in their area. The percentage that said no public transportation exists in their area seemed higher than it should be considering almost every county in Kansas has a demand-response transit provider in it. Therefore, it is assumed that while non-riders do not know whether a service exists in their area, it may exist. Further sections in this report note that differences in age may account for differences in public transportation knowledge in an area.

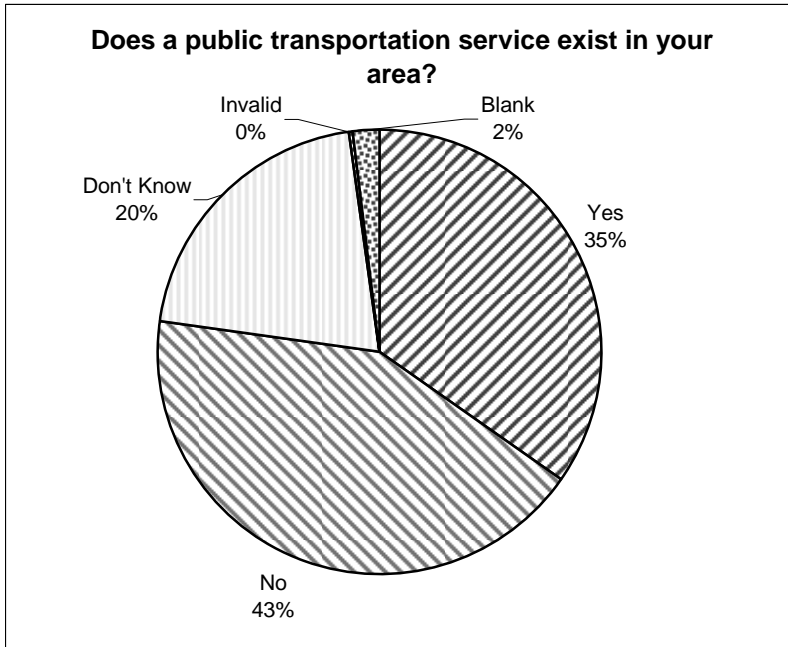


Figure 4.24. Non-Rider Self-Reported Availability of Public Transportation

Since the majority of rural demand-response transit services do not operate every day of the week, both sets of users were asked what day of the week they would like to see service expanded to. Along with the days of the week, non-riders were given the option of “Do not use transit” to represent those who do not know about transit and “No service” to represent those who would either not extend transit service hours or would reduce them. Since 54.2% percent of non-riders fall into the two options described above, those results are removed to make comparison with the riders easier. Full frequencies for this and other questions can be found in Appendix C. Results from this question by riders and non-riders can be seen in Figure 4.25 and Figure 4.26, respectively.

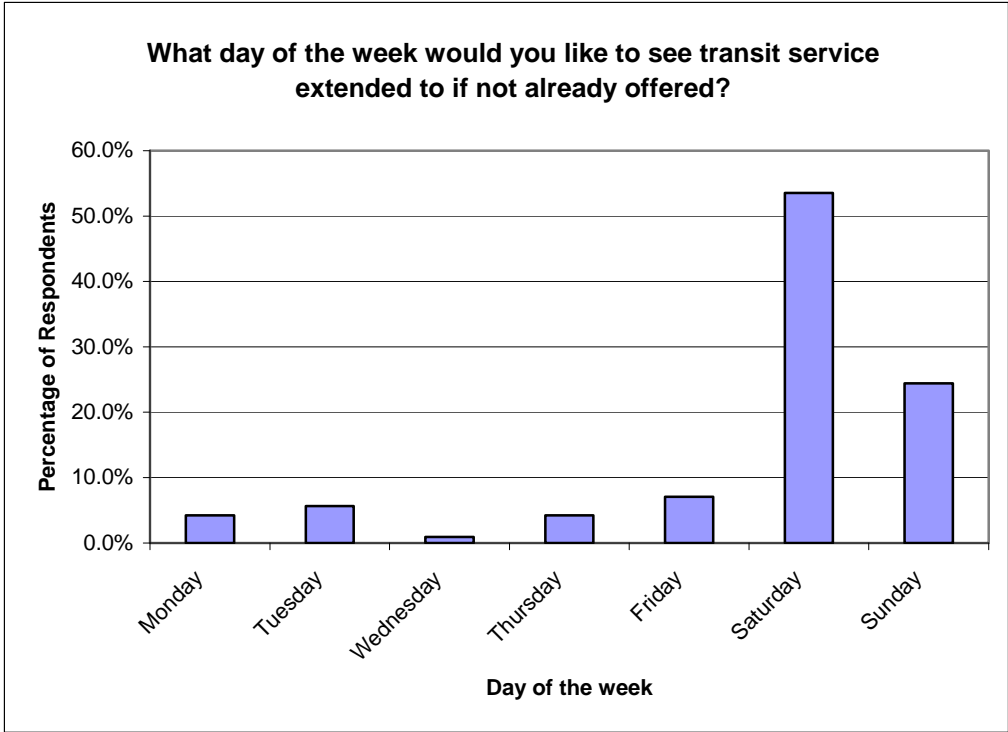


Figure 4.25. Rider Requested Service Extension by Day of the Week

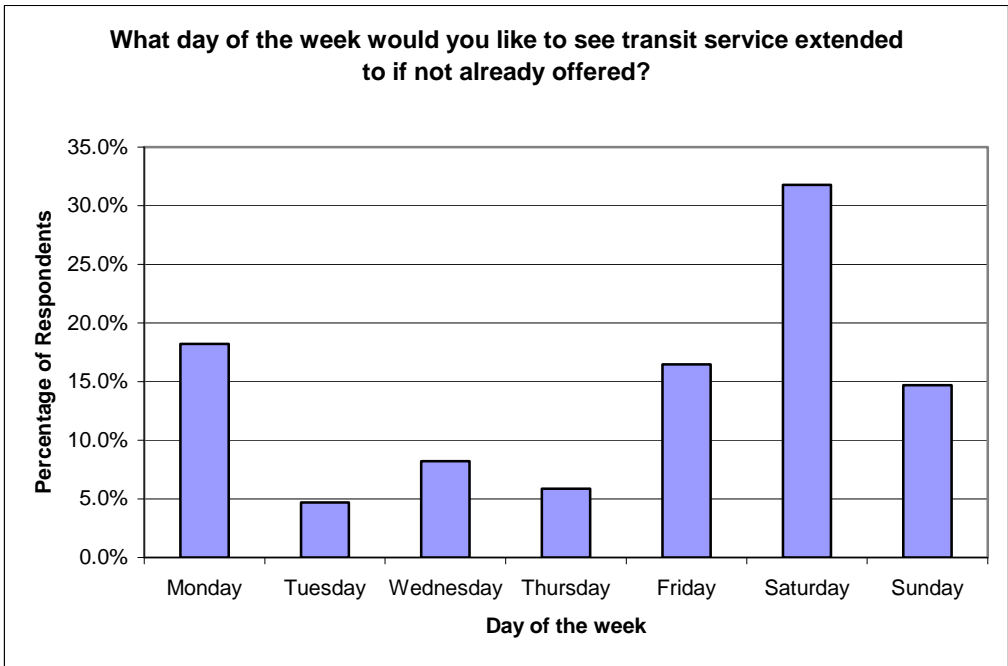


Figure 4.26. Non-Rider Requested Service Extension by Day of the Week

4.10 Education Level of Riders and Non-Riders

Formal education of riders and non-riders was significantly different in distribution as seen in Figure 4.27. Non-riders had a higher level of education than riders ($\chi^2=79.27, p<0.0$, with invalid and blank removed). The high number of blank answers in the non-rider results may be a result of the placement of the question on the non-rider survey.

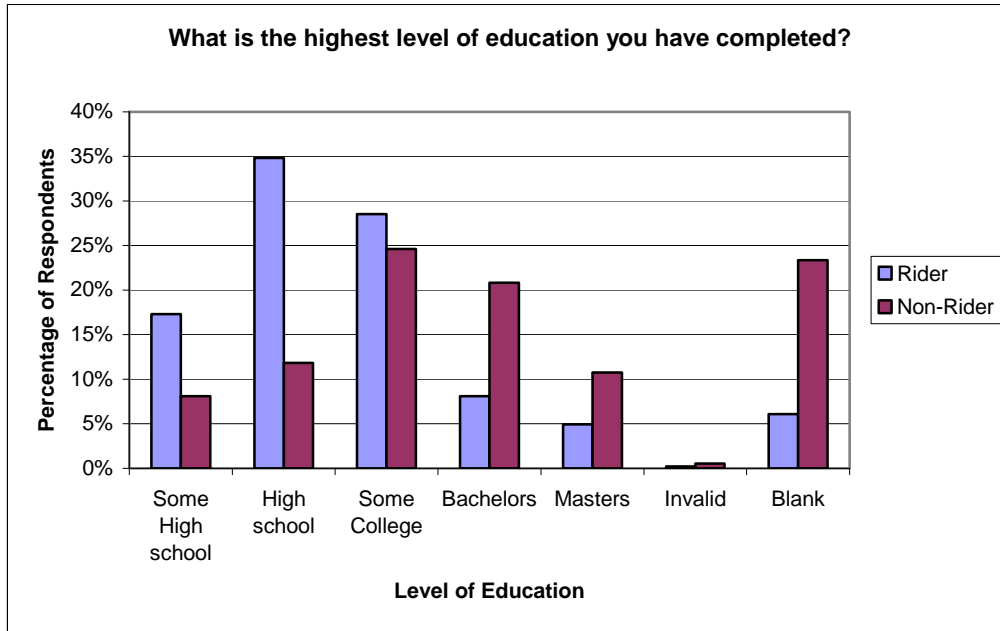


Figure 4.27. Education Level of Riders and Non-Riders

4.11 Information Access by Riders and Non-Riders

Non-riders of public transportation obtained their information from multiple and diverse sources. Some of the sources saw a higher usage rate than others. The source that stood out as being the least used was billboards. Further sections of this paper will show differences between age groups about which sources of information they accessed the most. While TV has the highest usage, word of mouth, which is much cheaper, also had high acceptance. Word-of-mouth recommendations are important to support usage of public transit systems.

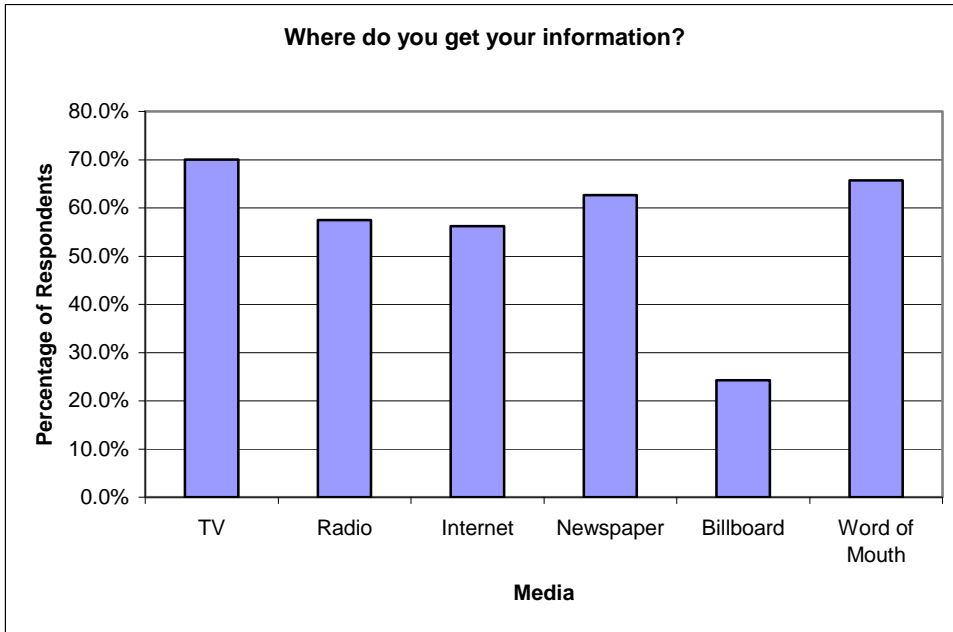


Figure 4.28. Non-Rider Information Acquisition Methods

4.12 Rider Opinions of Transit Service

Rider opinions of their transit service were very high. In Table 4.3, it can be seen that they have a positive view of their service for each question asked. Two of the survey enhancements suggested for riders from these questions would be to decrease trip length and improve communication with the dispatcher. Decreasing trip length is often in contrast to operating efficiently from a provider’s perspective, but these improvements are what riders are requesting.

The questions were weighted based on the responses given to make them easier to compare. An “Always” answer was weighted at 5, a “Never” answer was weighted at 1, with “Invalid” and “Blank” removed. The weighted averages were then ranked based from highest to lowest. The ride length question was inversely weighted due to the nature of the question.

Table 4.3. Rider Opinions of Public Transit

	Frequency	Percentage	Weighted Average	Rank
Are drivers friendly and helpful?			4.836	1
Always	371	83.37%		
Usually	55	12.36%		
Sometimes	4	0.90%		
Rarely	0	0.00%		
Never	2	0.45%		
Invalid	5	1.12%		
Blank	8	1.80%		
Are drivers safe and competent?			4.823	2
Always	367	82.47%		
Usually	63	14.16%		
Sometimes	5	1.12%		
Rarely	0	0.00%		
Never	1	0.22%		
Invalid	0	0.00%		
Blank	9	2.02%		
Are drivers good at waiting for people to board the vehicle or assisting them in boarding the vehicle if needed?			4.814	3
Always	367	82.47%		
Usually	59	13.26%		
Sometimes	9	2.02%		
Rarely	0	0.00%		
Never	1	0.22%		
Invalid	1	0.22%		
Blank	8	1.80%		
Do you regard transit as affordable?			4.786	4
Always	359	80.67%		
Usually	57	12.81%		
Sometimes	10	2.25%		
Rarely	1	0.22%		
Never	3	0.67%		
Invalid	1	0.22%		
Blank	14	3.15%		
Is transit convenient?			4.706	6
Always	334	75.06%		
Usually	67	15.06%		
Sometimes	23	5.17%		
Rarely	3	0.67%		
Never	1	0.22%		
Invalid	1	0.22%		
Blank	16	3.60%		

Rider Opinions of Public Transit (contd.)	Frequency	Percentage	Weighted Average	Rank
Are you getting to your appointments on time?			4.683	5
Always	311	69.89%		
Usually	92	20.67%		
Sometimes	6	1.35%		
Rarely	4	0.90%		
Never	4	0.90%		
Invalid	5	1.12%		
Blank	23	5.17%		
Is the interior of the vehicle clean?			4.682	7
Always	323	72.58%		
Usually	97	21.80%		
Sometimes	10	2.25%		
Rarely	6	1.35%		
Never	1	0.22%		
Invalid	0	0.00%		
Blank	8	1.80%		
Are the seats on the vehicle comfortable?			4.662	8
Always	307	68.99%		
Usually	98	22.02%		
Sometimes	18	4.04%		
Rarely	2	0.45%		
Never	1	0.22%		
Invalid	1	0.22%		
Blank	18	4.04%		
Is the temperature of the vehicle comfortable?			4.634	9
Always	293	65.84%		
Usually	127	28.54%		
Sometimes	14	3.15%		
Rarely	0	0.00%		
Never	1	0.22%		
Invalid	0	0.00%		
Blank	10	2.25%		
Are buses easy to get into and out of?			4.586	10
Always	289	64.94%		
Usually	112	25.17%		
Sometimes	20	4.49%		
Rarely	3	0.67%		
Never	4	0.90%		
Invalid	2	0.45%		
Blank	15	3.37%		

Rider Opinions of Public Transit (contd.)	Frequency	Percentage	Weighted Average	Rank
Are you satisfied with the service you received from calling the transit dispatcher?			4.329	11
Always	221	49.66%		
Usually	139	31.24%		
Sometimes	42	9.44%		
Rarely	10	2.25%		
Never	7	1.57%		
Invalid	3	0.67%		
Blank	23	5.17%		
Is the ride longer than expected?			4.058	12
Always	30	6.74%		
Usually	11	2.47%		
Sometimes	62	13.93%		
Rarely	116	26.07%		
Never	198	44.49%		
Invalid	2	0.45%		
Blank	26	5.84%		
Would you recommend riding transit to a family member, a friend, neighbor or associate?			3.789	13
Always	353	79.33%		
Usually	51	11.46%		
Sometimes	16	3.60%		
Rarely	2	0.45%		
Never	6	1.35%		
Invalid	0	0.00%		
Blank	17	3.82%		

A further set of questions asked riders to order their priorities for improvements to the transit system. These have been weighted in Figure 4.29 with their top response given 5 points, and their lowest response given 1 point. This is the inverse of ordering asked on the questionnaire. This question turned out to be more difficult than was first thought, with some responders leaving various answers blank, while others marked a single ranking through all of the options. Therefore this is the average of all non-blank responses and will include the above issues in the average.

Riders' primary improvements would be to know how long it will be until the vehicle picks them up, and to extend the operating hours of their transit service. Costs did not seem to be a significant concern of the riders, possibly because it is their only source of mobility. Shortening the time window that busses can pick up riders would let potential riders do things other than sit and watch for the bus to show up. Extending transit service hours was a typical request from riders in their written comments shown in later sections along with Appendix B

although it is illustrated here and can be compared easily with other possible service enhancements.

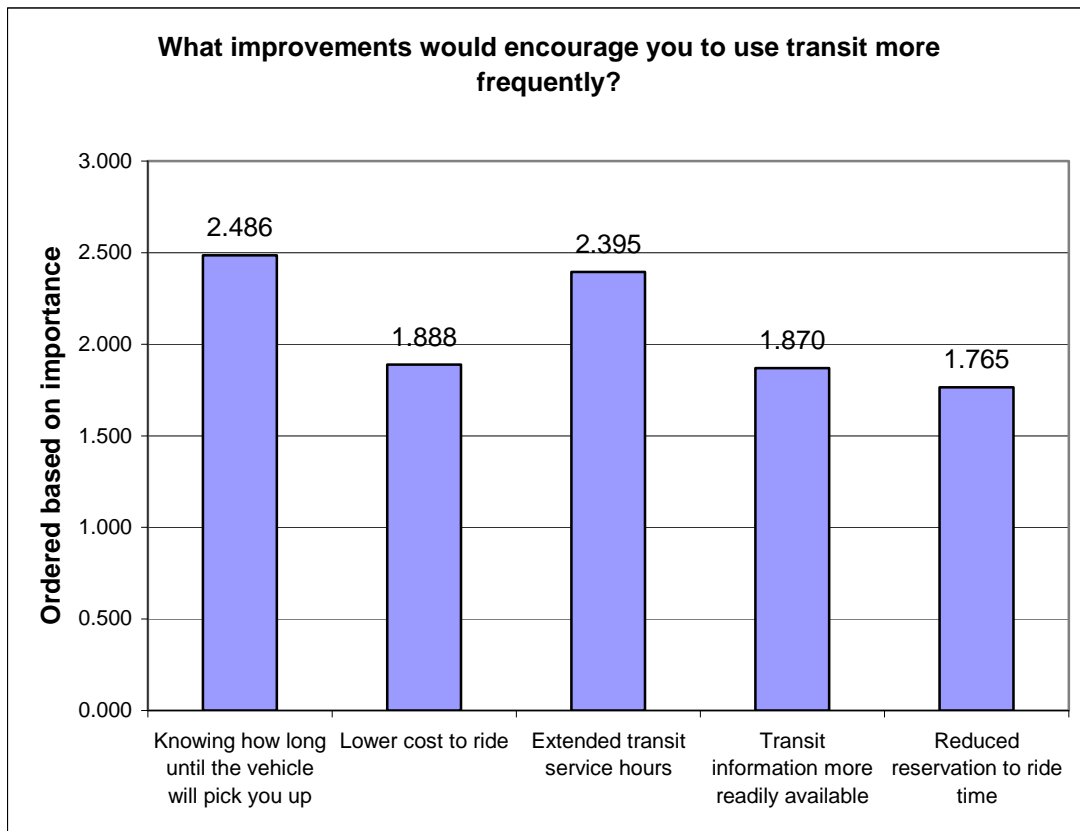


Figure 4.29. Rider Transit Improvement Ordering

4.13 Rider Comments

The last three lines of the rider survey were reserved for written suggestions to improve the transit service. However, it turned into more of a general comments section, which proved equally insightful into the thoughts of the respondents. Total comments in this section were 249 out of 445 surveys returned. Select rider comments are included below, while a full list is included in Appendix B.

- “Drivers need to drive slower. If you’re in a wheel chair and the back of the bus you get bumped up and down a lot. That’s hard on backs and necks etc. Need better suspension, soft rides, for disabled. Thank You!”
- “Everything is fine.”
- “Have no complaints.”

- “I am 95 years old and use a cane. I have trouble with my balance. I ride the mini bus and it is wonderful and I am sure the transit buses are also and just what the people here need. Thank you.”
- “I am very pleased with the service – I have no complaint at all – good drivers, very kind and helpful – they make the trip go fast and also enjoyable as well. It is a wonderful service.
- “I am very satisfied with our current service.”
- “I call they come.”
- “I think that the dispatcher should stay out of personal medical problems.”
- “I would be selfish and out of line to ask for more hours. I feel so fortunate to enjoy the privilege to have this fine service.”
- “I’m most satisfied with schedule and dispatcher. Drive the BEST. Would like to see more people take advantage maybe ads to others – seniors in community. Many thanks!!”
- “I’m so happy we have buses. Otherwise I could not go to the center to eat.”
- “It is just fine.”
- “No improvements, they do a good job.”
- “None – only if could be available on Saturday and Sunday.”
- “Start 15 minutes earlier than 8 am so I could be at work before 8 am.”
- “To be available for Sunday for church and Saturday.”
- “Weekend service.”
- “Would like the bus to run at least 10 pm weekdays.”

The majority of the riders fell between being content with the service to being ecstatic with the service provided. Some riders described their personal situation and why they use the service. Often it was due to age or a physical handicap. A small number of riders wanted extended service hours. These requests included both hours of the day and days of the week service extension.

Reactions were mixed on the drivers, with responses ranging from thanking them for their kindness to asking them to slow down and be more patient. This question was obviously very provider-and-driver specific, although overall showed drivers seem to be a non-issue for current riders in most cases.

These comments aligned with the survey questions covering opinions of transit. As can be seen from the cross section of comments, users of public transportation in rural Kansas are

generally quite pleased with the service being provided. The only two suggestions that arose throughout the comments were hours of operation and customer service. Riders typically wanted weekend, usually Saturday, service over longer daytime hours. A small number of riders had complaints about the dispatcher's service and friendliness, while an even smaller number had complaints about the driver.

4.14 Non-Rider Opinions of Transit Service

Since those who use public transportation were content with the service provided, it could lead non-riders that have used public transportation to have a positive attitude about it as well. However, demographics and attributes of riders and non-riders were significantly different, and expectations of each type were different as well. These differences surfaced in the opinions of non-riders when asked about their opinion of public transportation.

A large percentage of non-riders had never used public transportation in their area, or were unsure if it even existed in their area. This was aptly demonstrated in the high percentage of "Don't Know" responses each of the questions generated. When questioned about the cost of ownership for personal vehicles, or the increases in gas prices through the summer and fall of 2009, the results were mixed, although less people "Don't Know" and the answers were fairly evenly divided through the remaining five conventional answers.

The last question on the survey asked if non-riders would recommend public transportation to others. While a full 29% still didn't know if they would recommend it, the majority of the others responded either "sometimes" or more positively. Very few responded negatively, even when on a previous question 42% had said it was either "Never" or "Rarely" available when they needed it themselves. The underlying current seemed to be that public transportation was for other people in rural areas, but not oneself.

Table 4.4. Non-Rider Opinions of Public Transit

	Frequency	Percentage	Weighted Average	Rank
Is public transportation safe to ride in?			4.006	1
Always	83	14.90%		
Usually	206	36.98%		
Sometimes	35	6.28%		
Rarely	11	1.97%		
Never	8	1.44%		
Don't know	191	34.29%		
Invalid	1	0.18%		
Blank	22	3.95%		
Do you regard public transportation as affordable?			3.958	2
Always	82	14.72%		
Usually	137	24.60%		
Sometimes	48	8.62%		
Rarely	8	1.44%		
Never	10	1.80%		
Don't know	241	43.27%		
Invalid	0	0.00%		
Blank	31	5.57%		
Would you recommend using public transportation to a family member, a friend, neighbor or associate?			3.625	3
Always	113	20.29%		
Usually	95	17.06%		
Sometimes	98	17.59%		
Rarely	33	5.92%		
Never	29	5.21%		
Don't know	159	28.55%		
Invalid	0	0.00%		
Blank	30	5.39%		
Is public transportation convenient?			3.441	4
Always	58	10.41%		
Usually	93	16.70%		
Sometimes	88	15.80%		
Rarely	33	5.92%		
Never	23	4.13%		
Don't know	229	41.11%		
Invalid	0	0.00%		
Blank	33	5.92%		

Non-Rider Opinions of Public Transit (Contd.)	Frequency	Percentage	Weighted Average	Rank
In general, I avoid the use of public transportation if I can help it?			3.272	5
Always	129	23.16%		
Usually	82	14.72%		
Sometimes	44	7.90%		
Rarely	36	6.46%		
Never	99	17.77%		
Don't know	123	22.08%		
Invalid	2	0.36%		
Blank	42	7.54%		
Are you concerned about the cost of owning a personal vehicle?			3.152	6
Always	125	22.44%		
Usually	71	12.75%		
Sometimes	171	30.70%		
Rarely	75	13.46%		
Never	83	14.90%		
Don't know	19	3.41%		
Invalid	1	0.18%		
Blank	12	2.15%		
Does the recent increase in gas prices make you more likely to use public transportation?			2.906	7
Always	91	16.34%		
Usually	70	12.57%		
Sometimes	86	15.44%		
Rarely	64	11.49%		
Never	114	20.47%		
Don't know	104	18.67%		
Invalid	0	0.00%		
Blank	28	5.03%		
Is it hard to get information about public transportation?			2.816	8
Always	25	4.49%		
Usually	50	8.98%		
Sometimes	100	17.95%		
Rarely	53	9.52%		
Never	49	8.80%		
Don't know	242	43.45%		
Invalid	4	0.72%		
Blank	34	6.10%		

Non-Rider Opinions of Public Transit (Contd.)	Frequency	Percentage	Weighted Average	Rank
Is the bus late or unreliable in your opinion?			2.564	9
Always	10	1.80%		
Usually	20	3.59%		
Sometimes	51	9.16%		
Rarely	53	9.52%		
Never	29	5.21%		
Don't know	348	62.48%		
Invalid	1	0.18%		
Blank	45	8.08%		
Is public transportation available when I need it?			2.136	10
Always	27	4.85%		
Usually	44	7.90%		
Sometimes	53	9.52%		
Rarely	62	11.13%		
Never	173	31.06%		
Don't know	179	32.14%		
Invalid	1	0.18%		
Blank	18	3.23%		

A further set of questions asked non-riders to order their priorities for improvements to their local public transportation system. The ordering has been weighted in Figure 4.30 with the top response given five points and the lowest response given one point. This is the inverse of ordering asked on the questionnaire. This question turned out to be more difficult than was first thought, with some responders leaving some answers blank, while others marked the “1” rank through all of the options. Therefore, this is the average of all non-blank responses.

It can be seen in Figure 4.30 that non-riders would like greater geographic coverage from their transit service along with a lower cost to ride. Perhaps the most interesting answer is that while 43% of non-riders didn’t know if it was hard to get information about transit, having transit information available would be the least likely to encourage them to ride according to Figure 4.30. This seemed to show that many of the non-riders had no desire to ride, even if given information about transit.

Even though a lower cost to ride was the second highest indicator to increasing transit usage, a similar question in Table 4.4 shows that only 3% of non-riders think transit was “never” or “rarely” affordable. These two responses conflict, leading one to assume that the majority of riders would not switch or use public transportation based on a single service improvement. It is doubtful that majority of the non-riders would use public transportation even if it was free

because the service would not conform to the freedom of choice a personal vehicle allows people in rural areas.

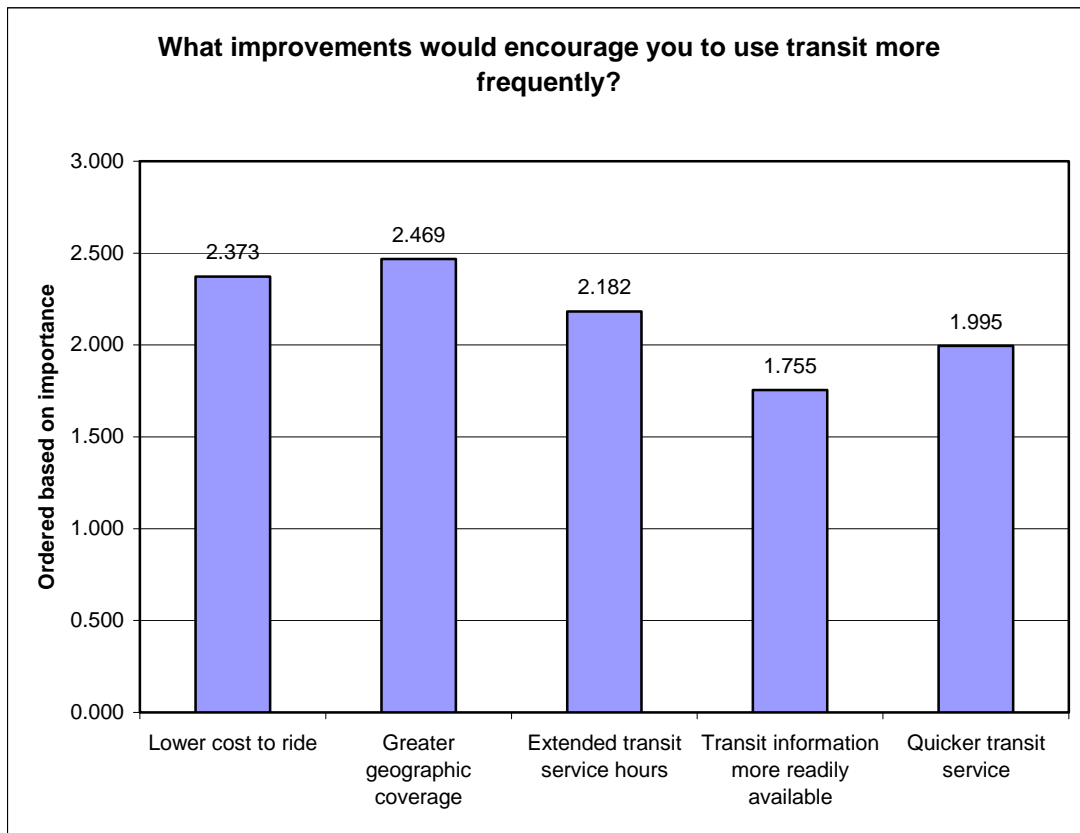


Figure 4.30. Non-Rider Transit Improvement Ordering

4.15 Non-Rider Comments

The last three lines of the survey were reserved for suggestions to improve local public transportation. However, it turned into more of a general comments section, which proved equally insightful into the thoughts of the respondents. Out of 557 surveys returned, 236 non-riders made some sort of comment on in this section. A small cross section of comments is included below.

Non-rider comments were much more diverse overall than rider comments. While it was more difficult to group large numbers of comments together, some types of comments did show up multiple times. Some non-riders said public transportation would be great in their area and they would like it to be available. These are interesting comments because they did not say they would use it, only that they wish it was available. Others said they lived in rural areas so it

wasn't practical for public transportation to operate that far out from the city. A few said it was only for seniors or disabled, but most seemed to indicate it was not available at all.

- “Available 7 days/week until 6 p.m. Have at least one day per month (possibly the 1st) when someone would carry in packages for me.”
- “Better paved street, better drainage of rain water in street on Pierre.”
- “Busses are more for senior citizens. Most younger people won't use it.”
- “Expanded hours/days.”
- “Fixed routes.”
- “I don't use it. So, I don't care.”
- “I live in a rural area. I don't see public transportation ever working here.”
- “I live in a small town. The city bus customers are mainly the elderly or handicapped.”
- “I live in town, but I farm full time. My farthest piece of land is 45 miles from home. Public transportation is not a viable option for me. I drive a lot of miles every day.”
- “I was unaware of Manhattan's public transit system until recently. I am afraid that most people are likewise unaware of its existence. Better advertising would be advised.”
- “I would like to see public transportation in our area period.”
- “It is not available.”
- “I've not thought about it.”
- “Like to actually have one!”
- “None in rural area - limited amount for seniors, I think.”
- “Not interested at all at this time. 20 blocks from work. Ask me again in 20 years!”
- “Nothing unless you can lower the cost of gas.”
- “The closest location we have is 30 miles south of here. I wouldn't ride the bus anyway - I prefer to drive myself - it's convenient - but it's a great service for those that don't have a vehicle.”
- “To establish service to the aging rural population.”
- “We are in such a rural area - I can't see it would be used except by the elderly with no relatives.”

Results from the open-ended question to non-riders showed a wide range of opinions. Some people stated that it didn't exist in their area, which may or may not be true. Others

wanted longer service hours and fixed routes. Some people just wanted to have “it,” which they may not realize are not fixed-route services and are instead demand-response for rural areas.

4.16 Rider Characteristics Grouped

Basic information taken from the survey provided a background for more interesting comparisons. This section grouped people by age from the rider database to see if there was a correlation between the individual groups. These comparisons can then be used to show where information and services are lacking, or what groups of people think. All data in this section had invalid or blank answers removed for simplicity and readability.

Riders who were younger than 55 were more likely to not be as pleased with the dispatcher as those who were 55 or older (Figure 4.31). This is possibly because younger people have become accustomed to automatic systems or just driving themselves, which does not involve working with other’s schedules through a dispatcher. It is often difficult to tell the age of a person calling the dispatcher, but if it were somehow known, the dispatcher could ensure the younger rider’s time during the interaction with the dispatcher is pleasant and the rider is satisfied with the result. No general comments were made that would explain this difference in satisfaction between the younger and older riders. When each age group had their “Sometimes” or lower values combined, the differences in dispatcher service by age was strong ($\chi^2=35.947, p<0.0$). Frequencies for each percentage are shown within the figure columns.



Figure 4.31. Rider Opinion of Dispatcher Service by Age

Of riders who accessed a transit service that did not currently run seven days a week, the day of the week riders would like to see service extended to was Saturday (Figure 4.32). Older riders also requested other days of the week at a higher rate than did the younger age groups.

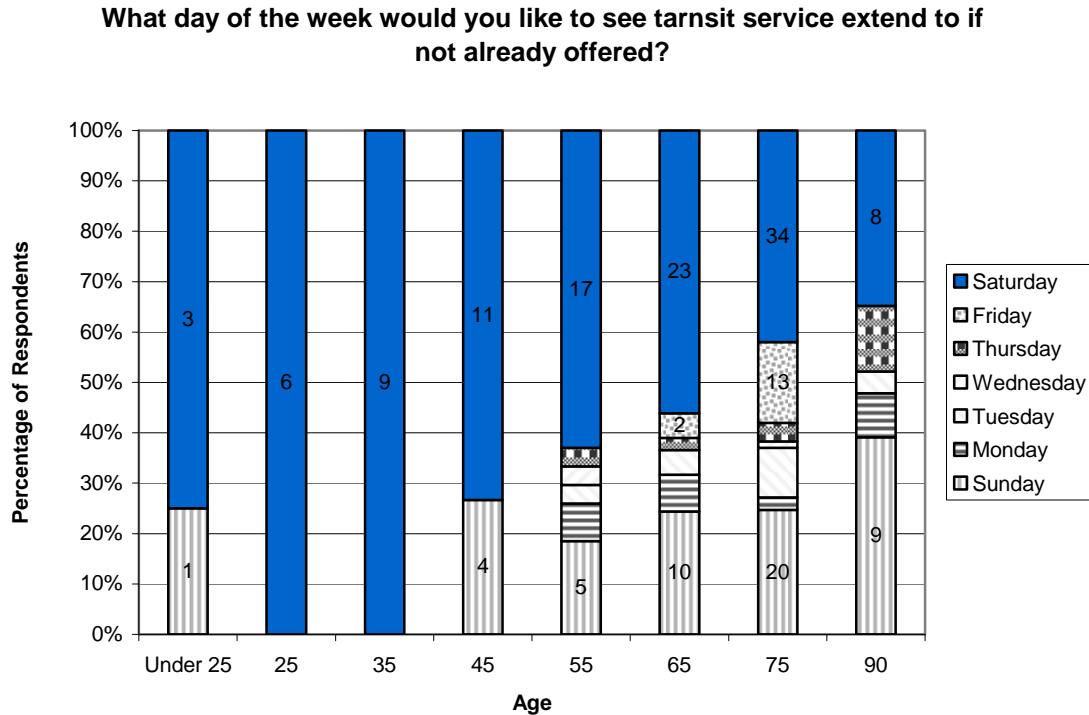


Figure 4.32. Age Differences in the Day of the Week Requested for Extended Transit Service

Aging riders are physically unable to move around as easily as they could when they were younger, and this is shown when riders were asked about accessing the bus (Figure 4.33). The “always” value declined slowly with age and the “usually” and lower values slowly became more apparent. There is little for a provider to do knowing this that will directly increase transit ridership other than to possibly schedule a few extra seconds for the older riders to board. Low-floor busses may provide a solution to make the busses more accommodating for older riders, but the routes the buses take would have to be test driven to make sure they don’t bottom out on bumps along common routes in rural areas.

In order to run a test for significance, some groups were combined. Ages 44 and younger were combined. Usually or less were combined for opinions. This gave a significance of ($\chi^2=10.23, p<0.0688$).

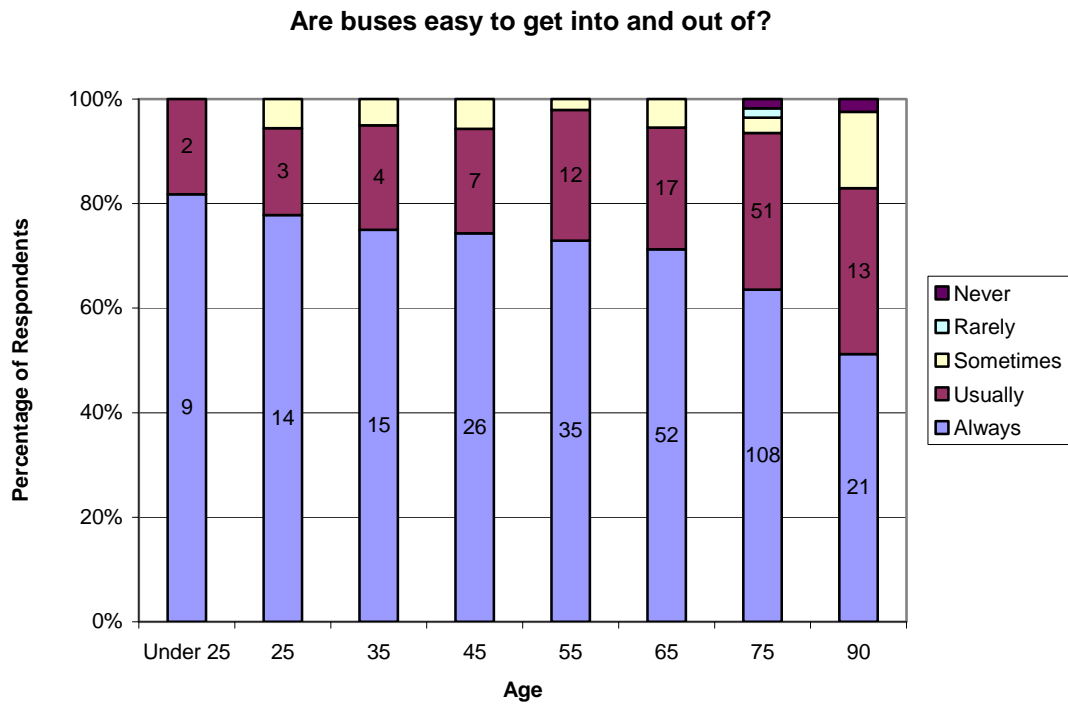


Figure 4.33. Ease of Bus Access by Age

4.17 Non-Rider Characteristics Grouped

Basic information taken from the survey provided a background for more interesting comparisons with non-riders as well. This section grouped people by age or by handicapped permit from the non-rider database to see if there was a correlation between the individual groups. These comparisons can then be used to show where information and services are lacking, or what groups of people think. All data in this section had invalid or blank answers removed for simplicity and readability. There was only a single non-rider over the age of 90 that typically provided a valid response, so that response was combined into the former 75-90 age group and renamed 75+ if required.

Non-riders tended to drive less and less as they got older (Figure 4.34). After the age of 65, many people were not employed full time or were retired. This led to a decrease in driving. At some point though, they may not be physically able to drive and this accelerated the decline in personal car usage and shifted their mobility choice to another mode. With five days or less combined for all age groups, it was significant ($\chi^2=23.20, p<0.000$).

How often do you use your vehicle in general?

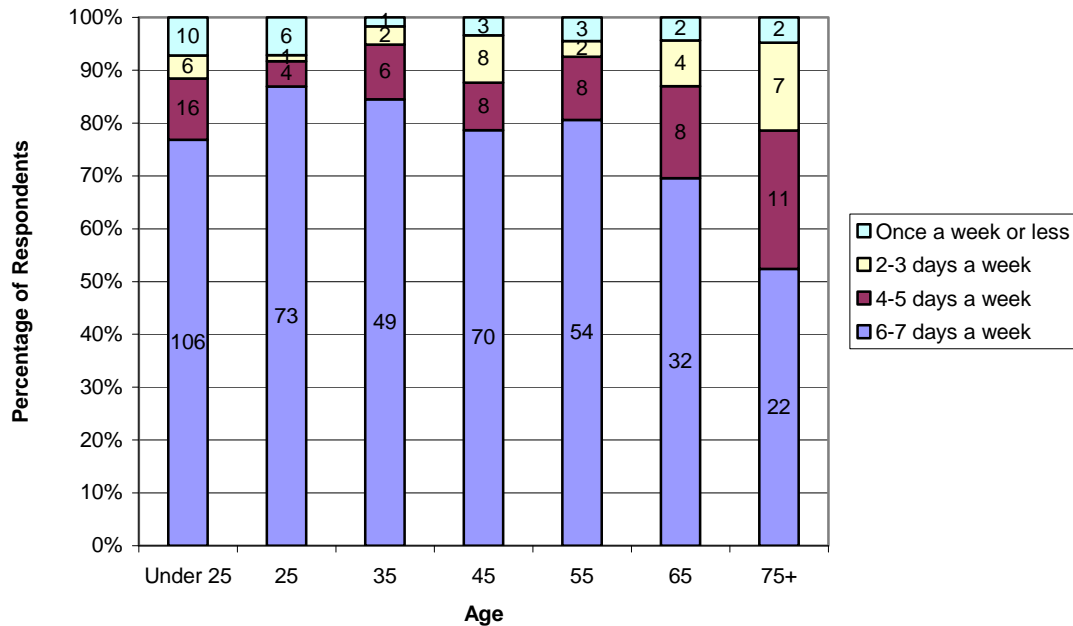


Figure 4.34. Non-Rider Daily Vehicle Usage by Age

Non-riders had increasing access to cars until about midlife, at which point the availability of other personal vehicles decreased ($\chi^2=24.65, p<0.000$). This was most likely because their children had moved off to college or out of town to work or other reasons. From age 55 to 75+ there was a noticeable decline in their ability to use other cars that their family owned if their primary car broke down. This might lead them faster to public transportation than other non-riders, as younger people in rural areas often have another vehicle they could use to get around. People under the age of 25 may be away at college or work, but could get a ride with a local friend instead. The elderly may not have as many friends they can call on that are still comfortable driving. Many people will not be married yet either if they are under 25, but many are getting married from age 25 to 34. Once married, each partner may own a car which makes it relatively easy to borrow the spouse's vehicle if the one vehicle does not work (Figure 4.35).

**If your vehicle was temporarily out of service,
how would you make this kind of trip?
(Used another vehicle that you or your family own reponse)**

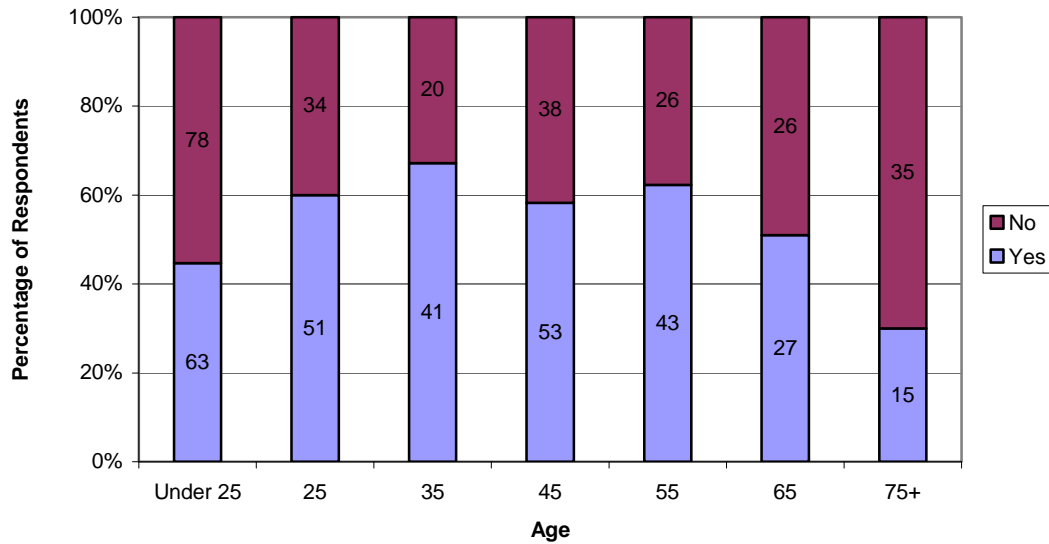


Figure 4.35. Non-Rider Fixed Route Usage by Age

Non-riders over the age of 65 were more likely to turn to public transportation in rural areas than those under the age of 65 (Figure 4.36). In later years, those who were married were starting to become widows. At this point it would be common to sell the second vehicle if there was one and using public transportation rather than another vehicle the family owns became more likely.

**If your vehicle was out temporarily out of service,
how would you make this kind of trip?
(Public transportation response)**

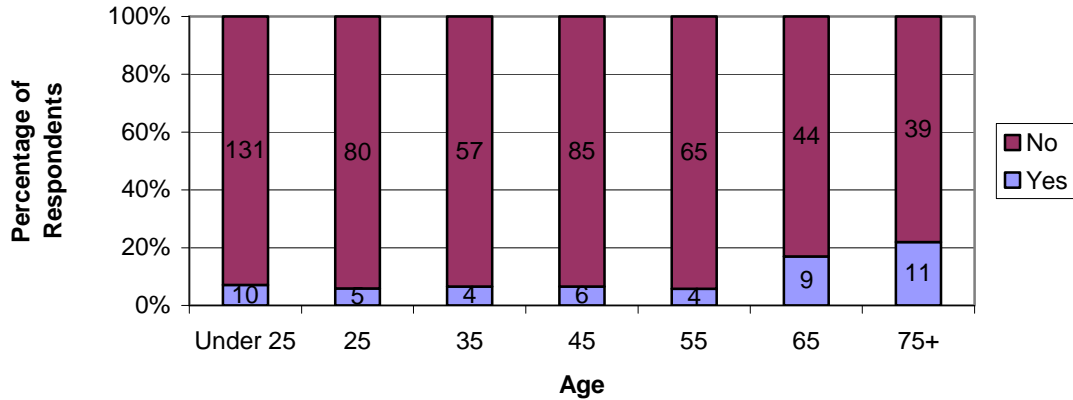


Figure 4.36. Public Transportation as a Mobility Option for Non-Riders by Age

Data from Figure 4.37 and Figure 4.38 show that people who have used fixed routes in other areas want them in their area more than 80% of the time, and that even those who have not used fixed routes want them more than 50% of the time. Fixed routes are perceived as providing more freedom and flexibility than demand-response transit due to the nature of fixed-route operations. Demand-response transit may be more flexible than fixed routes, but the ride must be requested in advance. This desire for fixed routes from non-riders is one of the best indicators that most non-riders just want the convenience and flexibility that a personal vehicle offers them over demand-response public transportation.

Respondents that have used a fixed-route service and asked if they would like to see fixed routes where they live

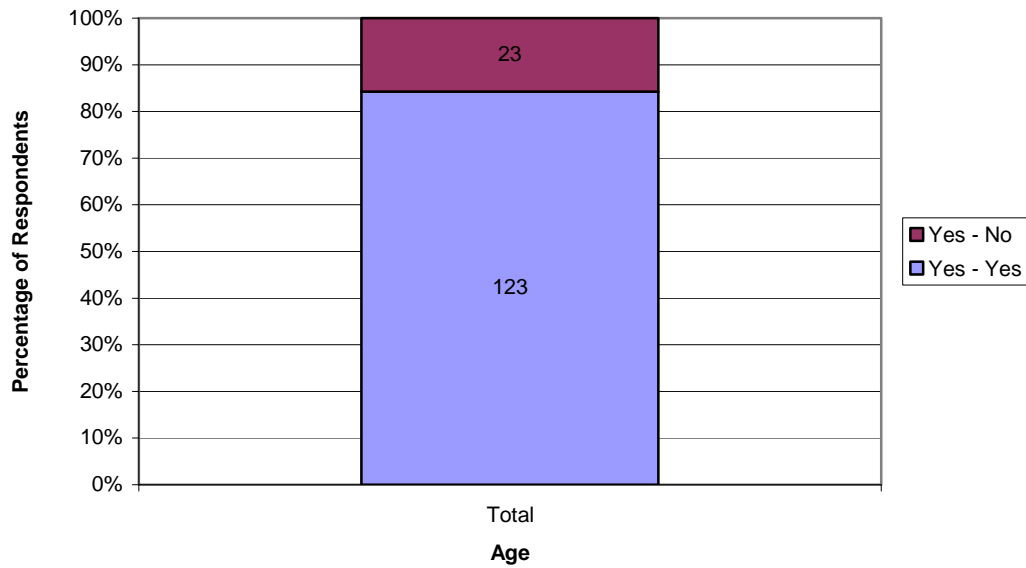


Figure 4.37. Non-Riders with Prior Fixed-Route Usage and Their Desire for Fixed Routes

Respondents that have not used a fixed-route service and asked if they would like to see fixed routes where they live

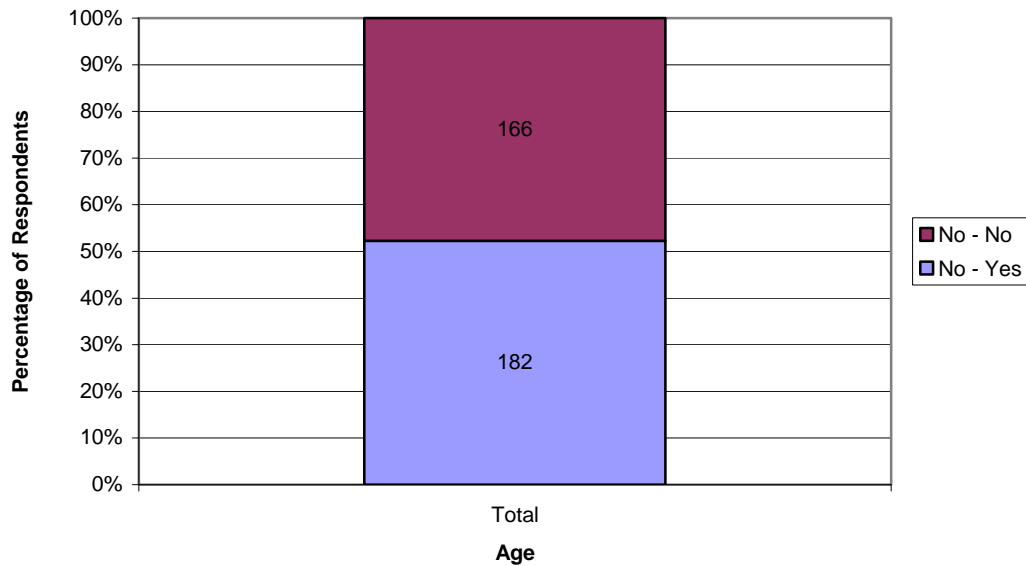


Figure 4.38. Non-Riders Without Prior Fixed-Route Usage and Their Desire for Fixed Routes

Knowing public transportation exists increases with age, and responses of “don’t know” decrease with age ($\chi^2=23.50, p<0.000$). At this point the elderly are increasingly looking for transportation and mobility help which drives them to find the local transportation provider (Figure 4.39). It is assumed that this also accounts for the decreasing “Don’t know” percentage from age 65 and over as well. A large percent under the age of 35 don’t know if public transportation exists in their area. Many in this age group have no need for public transportation as they have their own personal vehicle, or will ride with their friends. It is assumed most have not even looked into seeing if public transportation is available in their area due to lack of interest.

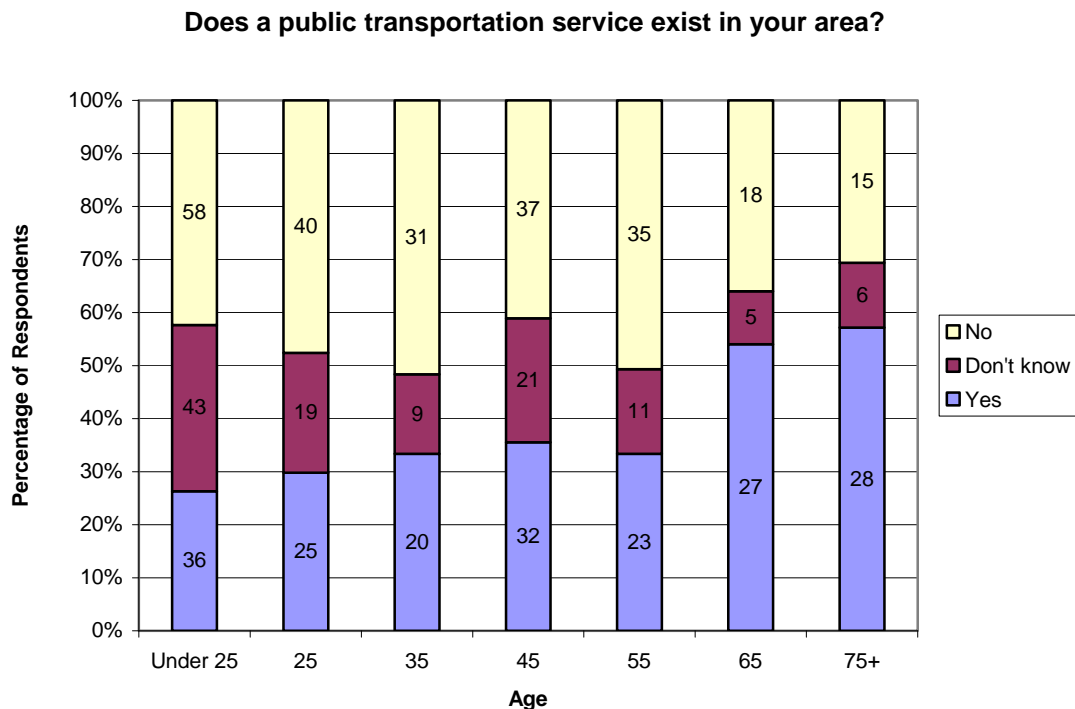


Figure 4.39. Non-Rider Public Transportation Knowledge by Age

Four of the sources of information showed no notable difference over age. There seemed to be a cap at around 70% for most sources of information; it is assumed the remaining 30% acquired their information from a different source. Newspapers showed a slight increase in usage as an information source as people grew older and increased from slightly less than 50% to slightly less than 70% over a lifetime ($\chi^2=29.52, p<0.00$). Using the Internet for information,

however, showed a large disparity over age ($\chi^2=69.42, p<0.00$). As the Internet became popular in the 1990s, many older people never became familiar with it when it was in its infancy (Figure 4.40). Younger generations grew up with the Internet and do a lot of their information retrieval using it as a tool. Data from the provider survey, which will be analyzed in a further section, showed that 50% of public transportation providers in rural areas did not even have a Website. To younger people using the Internet, it effectively means providers cannot be found. It is equivalent to not being listed in the phone book for older generations. While widows can be of any age, they are often associated as people in their later years. Lack of Internet usage for information for widows is apparent in Figure 4.41. Divorcees also show decreased Internet usage, which is assumed to be attributed to lower income and free time as compared to a married couple. Public transportation providers should be able to be found through all usual sources, which anymore includes the Internet.

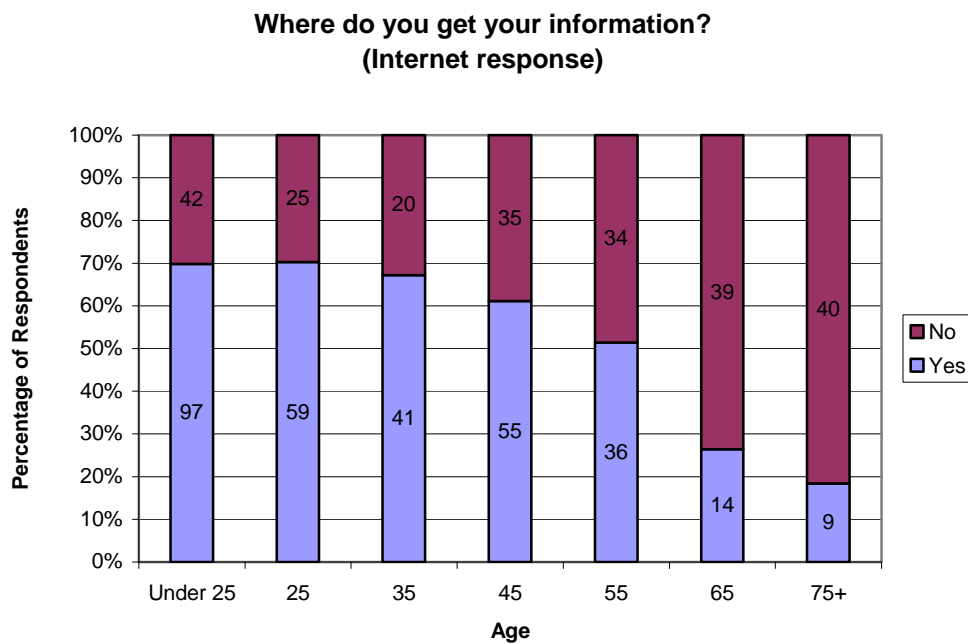


Figure 4.40. Non-Riders Information Acquisition from the Internet by Age

**Where do you get your information?
(Internet response)**

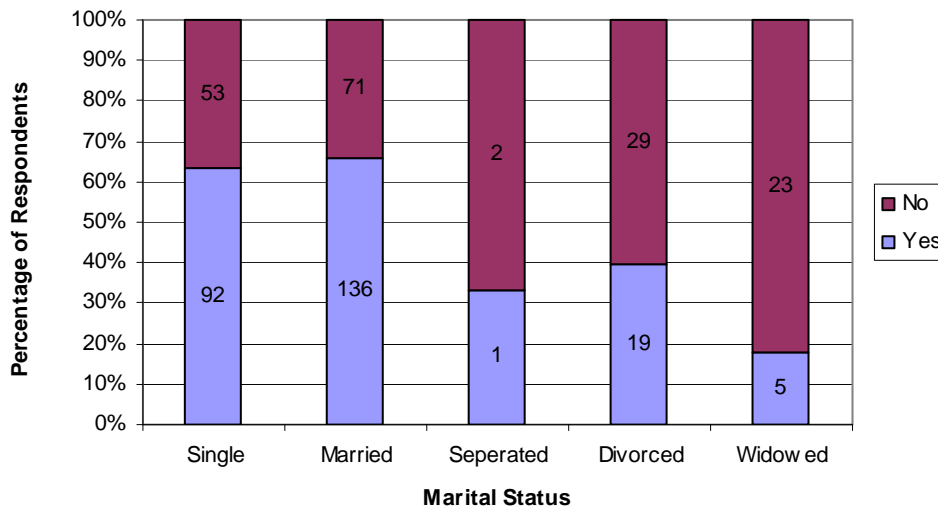


Figure 4.41. Non-Rider Information Acquisition from the Internet by Marital Status

Aging drivers that previously drove alone were switching to being passengers as they got older (Figure 4.42). From age 55, older former drivers were riding with others driving. The human body declines in later years, and the abilities needed to drive efficiently and safely also decline. These age groups might be more likely to use public transportation than other groups as an alternative to asking somebody to drive them. The elderly that feel like they are infringing upon somebody else to take them somewhere are good candidates for demand-response public transportation usage.

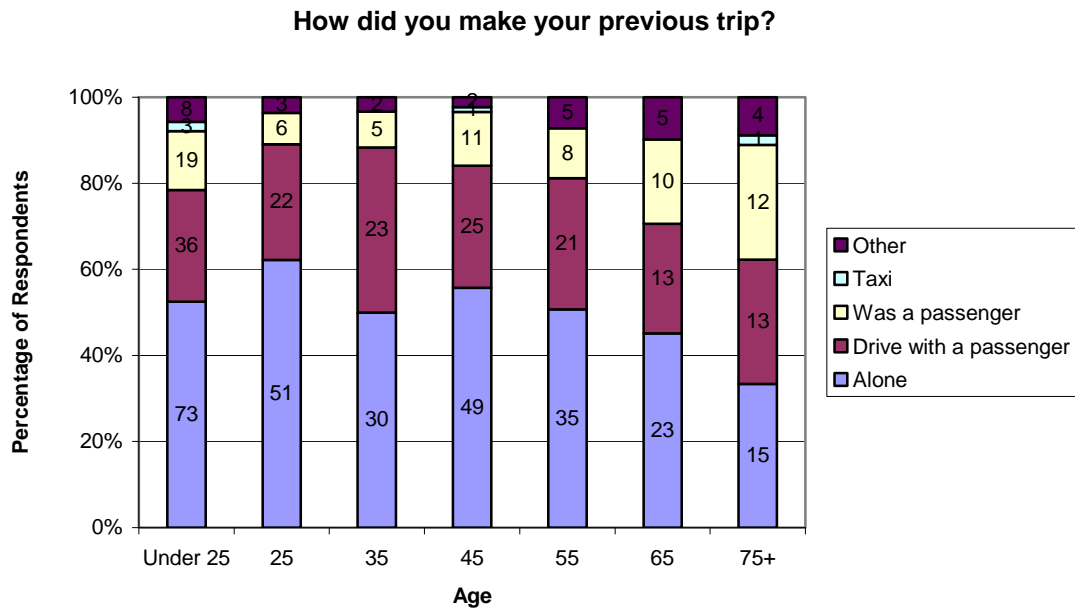


Figure 4.42. Non-Rider Trip Method by Age

Handicapped non-riders often live alone, or with a fewer number of people than non-handicapped. Based on Figure 4.43, Figure 4.44, and Figure 4.45, it seems clear that the handicapped riders are often elderly, widowed, and live alone. Seeing this, most provider service improvements that increase ridership of the elderly will also increased usage by the handicapped.

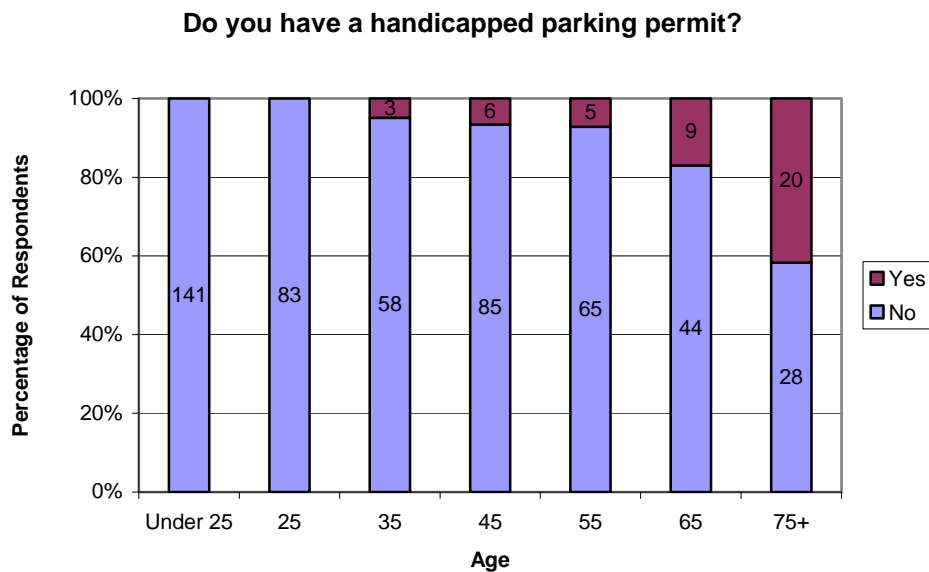


Figure 4.43. Non-Rider Handicapped Parking Permits by Age

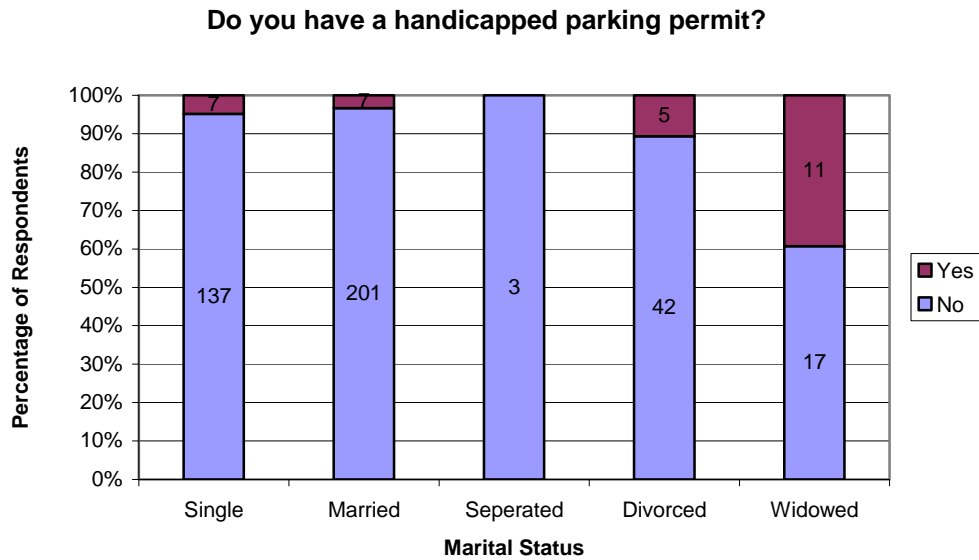


Figure 4.44. Non-Rider Handicapped Parking Permits by Marital Status

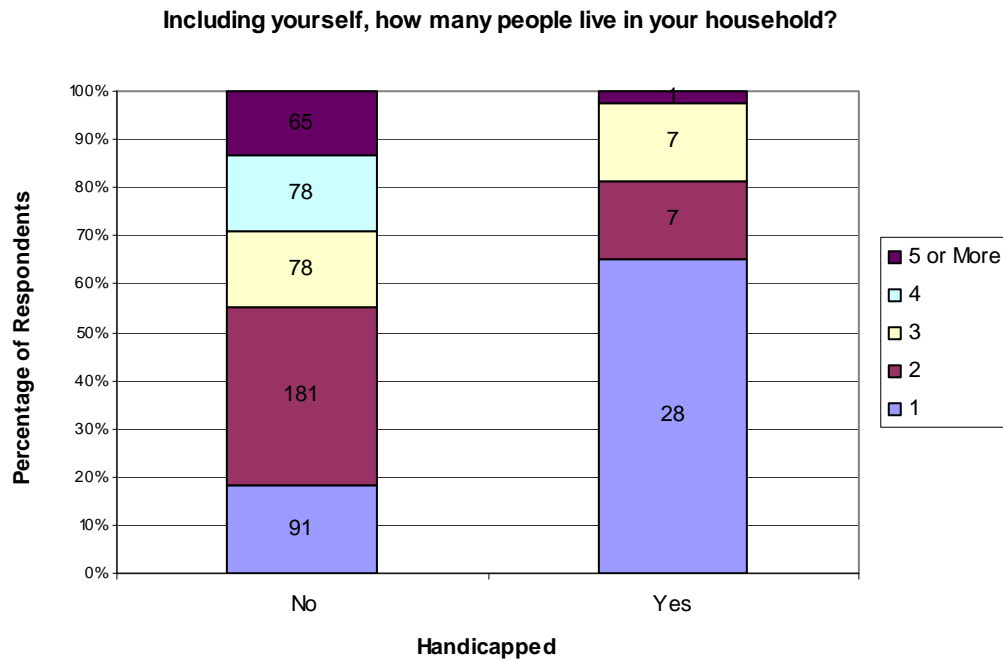


Figure 4.45. Non-Rider Household Numbers by Handicapped Parking Permit

While it has already been shown that the majority of people with handicapped parking permits were over the age of 65 and therefore elderly, people who had handicapped parking

permits were also more likely to know about the local transportation service in their area ($\chi^2=12.37, p<0.002$). This is shown in Figure 4.46.

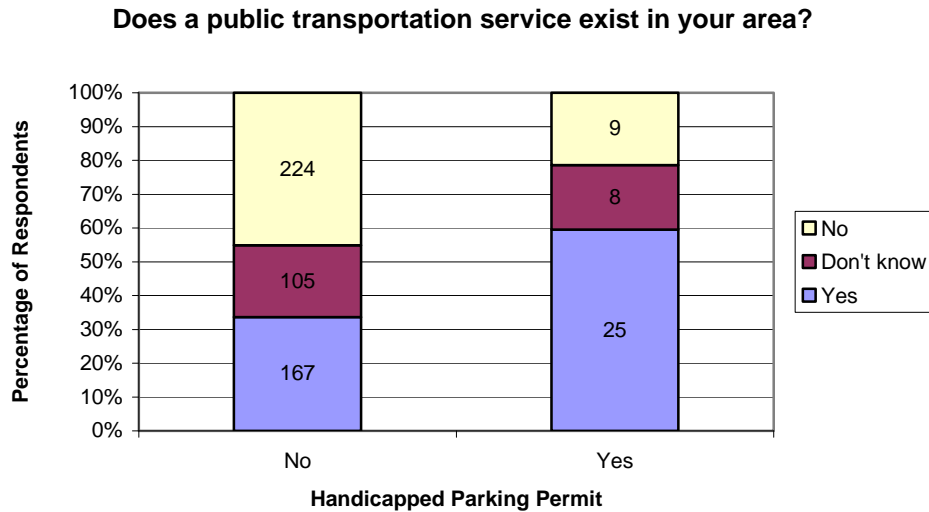


Figure 4.46. Non-Rider Public Transportation Knowledge by Handicapped Parking Permit

Non-riders who have used transportation more recently were more likely to look at the possibility of using public transportation as an option for getting around town if their primary vehicle is out of service, than those who have not used public transportation recently as shown in Figure 4.47.

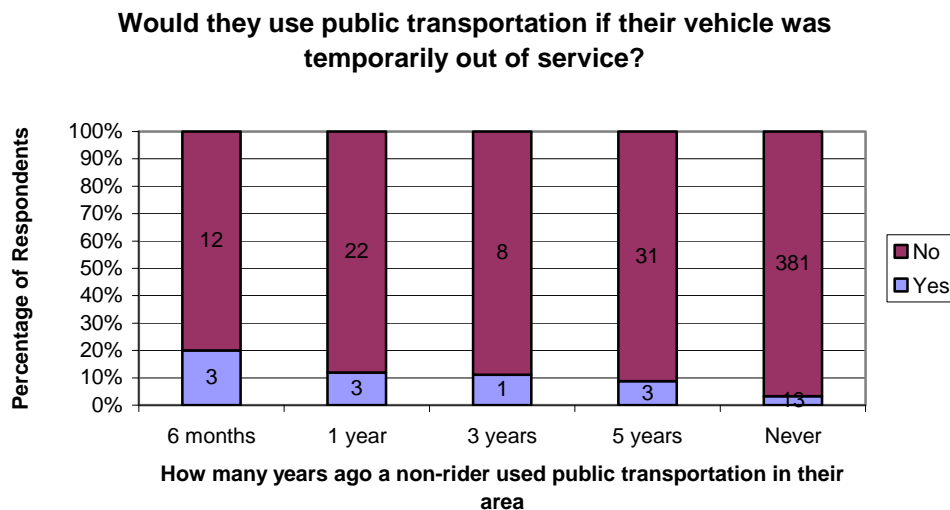


Figure 4.47. Non-Rider Likelihood To Use Public Transportation by Recent Public Transportation Use

The more vehicles a non-rider has access to, the more often they say transportation service does not exist in their area (Figure 4.48). This seems to be because if they have access to more vehicles, they are very prone to driving themselves or riding in personal vehicles. Their interest in even finding out if public transportation exists may be minimal. It is questionable if the high number of “no” responses is accurate for those with ownership of a high number of vehicles and should perhaps have been marked more accurately as “don’t know,” although with a larger number of people, information may be passed around more often so they would know one way or the other. It is significant when the last three columns are combined into a 4+ vehicle category, and “No” and “Don’t know” values are combined ($\chi^2=23.20, p<0.002$).

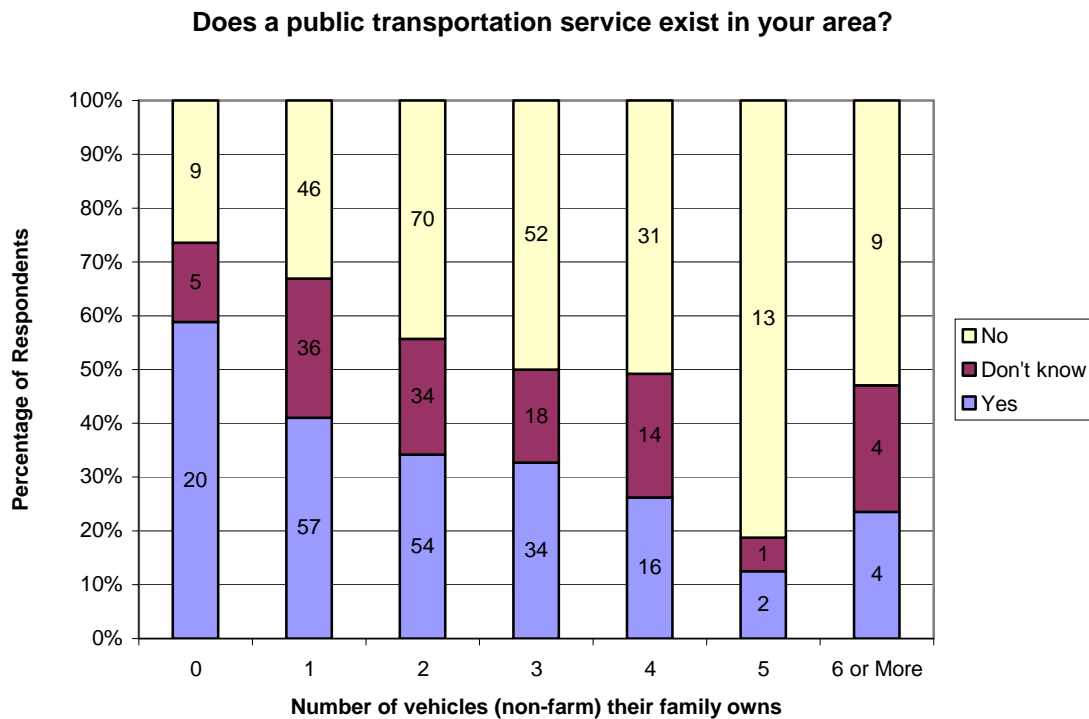


Figure 4.48. Non-Rider Public Transportation Knowledge by the Number of Vehicles They Own

A similar figure (Figure 4.49) can be created using vehicles per person in a household, which results in the same conclusions as the previous figure ($\chi^2=21.81, p<0.016$). A value of one means there is one vehicle per person, higher than that means there are more vehicles than people. Those with more vehicles per person were less likely to know about public transportation in their area.

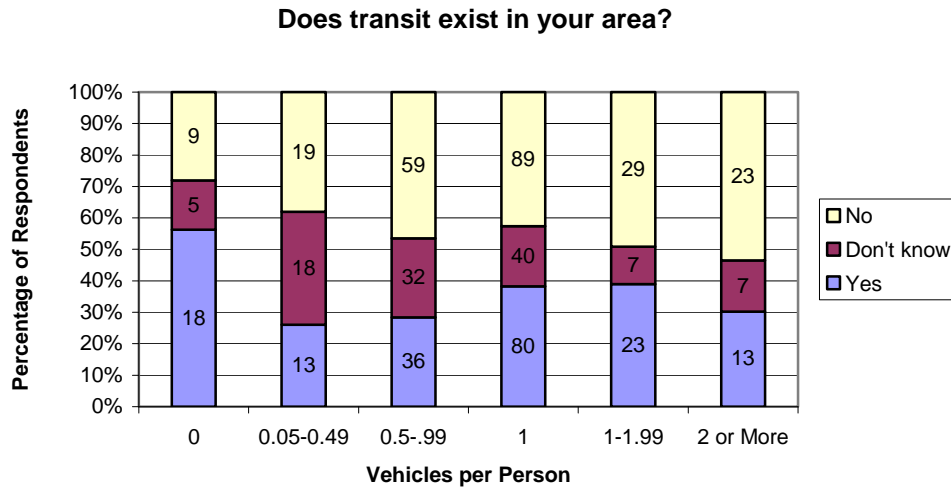


Figure 4.49. Public Transportation Knowledge by the Vehicles Per Person Non-Riders Own

Riders and non-riders had very different characteristics and demands for mobility. Riders were often transit dependent whereas non-riders were choice riders. The current demand-response systems in rural Kansas are not set up for choice riders, and cannot compete with the other mobility options choice riders have.

CHAPTER 5 - Provider Survey

This chapter discusses the steps and reasoning behind the transit provider survey. At the end of the chapter are results and findings from the survey. This survey was not part of the initial list of tasks set forth from the project, but one which the author thought might provide some understanding and insight for the project.

5.1 Provider Survey Creation

The questions for the providers' survey were primarily an assortment of questions that were not linked to previous studies. After speaking with many of the transit providers during the distribution of the rider, survey the author became aware that the information posted on the Kansas University Transportation Center Website was not always accurate. As such, part of the provider survey questions were delegated to find out exactly who their clients were, along with basic attributes of the service provided like time and days of operation, type of transportation, number of vehicles, and budget. Other questions relate to marketing and ridership, along with the perception of public transportation from the community. Originally it was thought that a proposed level of service for rural, demand-response agencies developed using geographic information systems would be useful for rural Kansas, so the required questions for demonstrating that were included as well (21). Initial results from the suggested GIS-based LOS were not constructive and were dropped from this report. The provider survey was also run by the director of the Riley County Area Transportation Agency and some changes were made to it before it was distributed to rural public transportation providers in Kansas.

5.2 Provider Survey Distribution

The provider survey was mailed with a pre-paid and self-addressed envelope inside to 153 rural transportation providers listed on the KUTC site. The included providers listed their mailing address in cities with a population of 50,000 or less, along with a service description related to general public transportation in the University of Kansas Transportation Center Kansas Transit Provider Directory. The mailing also contained a letter explaining what the project was about and provided basic instructions.

Responses were received from 65 public transportation providers in rural Kansas, and six with invalid addresses, for a provider survey response rate of 46.4%. Figure 5.1 shows the zip codes the 65 providers operate in. This map does not account for five providers that ran out of room or provided vague geographical areas. The five responses were “these zip codes and more,” "all of north central KS," "all of Lincoln County," "all of Shawnee County," and "all zip codes in Topeka."

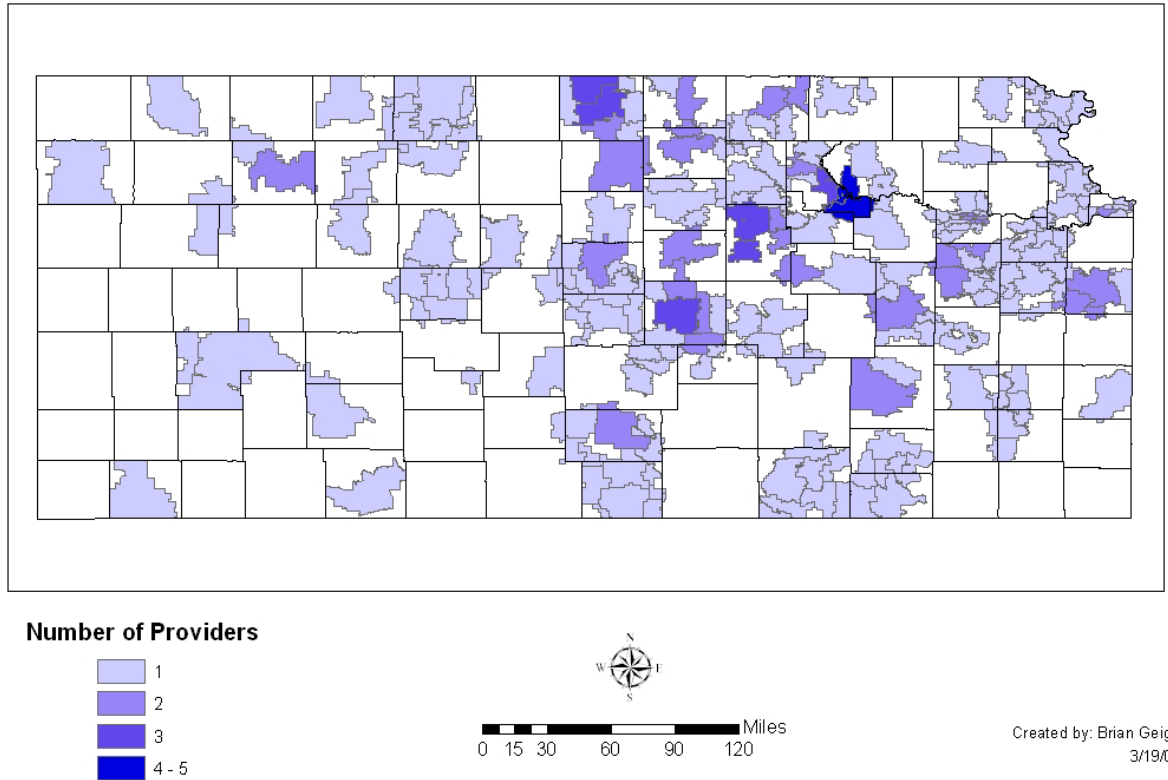


Figure 5.1. Geographic Distribution of Provider Service by Zip Code in Kansas

5.3 Provider Results

Results from the survey were grouped into similar areas to show basic results as much as possible. The provider survey was much more open-ended than the rider and non-rider surveys and therefore, more difficult to provide a summary for all the providers. Along with all possible answers given, two more possible responses existed in the total tally. These responses were “invalid” and “blank.” Invalid responses are those that conflict with the question being asked, have multiple marks for an answer that only asked for a single response, written comments rather than a box marked, or other similar answers that could not be grouped. Blank answers were

obviously no marks in all the possible answers given. Invalid and blank answers were not included in the figures shown below.

Although the initial emphasis of the project was to find general public providers, it was recognized after the receipt and data entry of many of the rider survey responses that the majority of riders were going to be elderly or disabled. Therefore, even though not all of the provider survey respondents marked on the provider survey that they were general public transit operators, their responses were included in the results of the provider survey.

Information from the providers includes questions about their operating characteristics, as well as their ability to communicate with the community around them.

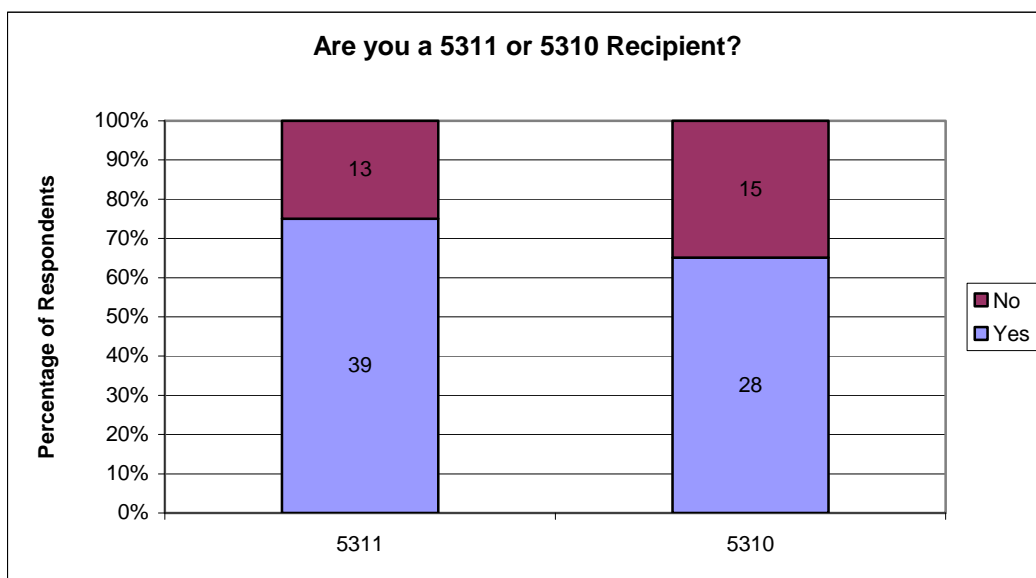


Figure 5.2. Public Transit Funding Sources

The type of funding a demand-response transit provider receives will dictate what type of service it provides. As mentioned before, Section 5311 funds are for public transportation in rural areas. Section 5310 funds from the Federal Transit Administration are for elderly persons and persons with disabilities. Rural providers are able to obtain funds from both pools of money if that aligns with the goals of their transit system.

With gas prices increasing over time and a large spike in prices in the summer and fall of 2008, many of the providers were passing on the increased cost to their riders. Thirty-three percent of providers had adjusted their charges for riding in the past year. All of the changes were increases in the amount charged customers, and when a reason was given, the providers said it was always because of the increase in gasoline costs to the provider.

Providers start their hours most often at 8 a.m. (48% of providers), with 36% of providers starting between 6 a.m. and 8 a.m., with the last 16% starting between 8 a.m. and 10:30 a.m. Providers end their hours most often at either 4 p.m. (24%) or 5 p.m. (30%). Other closing times range from 1 p.m. to 10 p.m. While these hours coincide with normal working hours for most businesses, it is not always enough for the riders. If a rider is supposed to work normal working hours, he or she may have to make arrangements to arrive late every day and leave early in order to get a ride home. Limited hours at night means social activities most people enjoy, may not be able to be attended by the transit dependent unless other arrangements are made.

The ability for providers to market their services is crucial to obtaining and keeping choice riders. Branding and logos are well known methods to increase the usage of a product. Agencies were asked if they had a logo, assuming that if they did, it may be more readily identifiable around their areas of operation. Creating a logo could increase ridership of a system with little cost to introduce it. Fifty-five percent of agencies have a logo, with 2% in the process of creating one. The remaining 43% said they currently did not have a logo.

Current ridership for each of the providers in Kansas varies widely (Figure 5.3). Some are small city or county transportation agencies, which may transport as few as eight riders per month, to large human service organizations whose primary mission is not public transportation, but providing transportation to their clients with up to 63,622 rides provided per month.

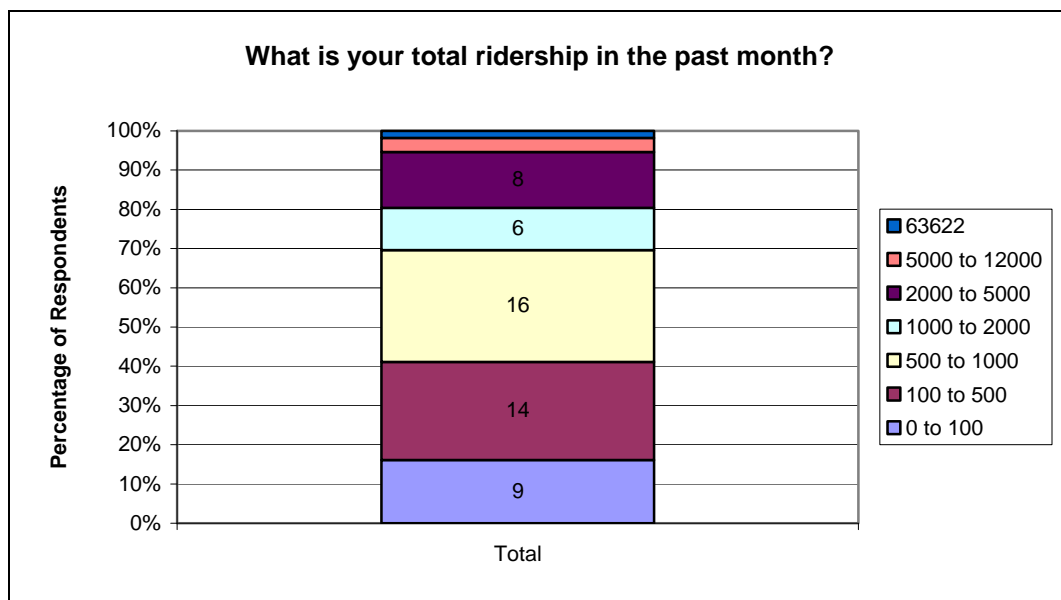


Figure 5.3. Provider Ridership Per Month

Confirming rider surveys in which ridership is skewed strongly toward older riders, the providers themselves stated that many of their riders are age 65 or older. Figure 5.4 shows the percentage of riders age 65 or above for each of the demand-response transit providers.

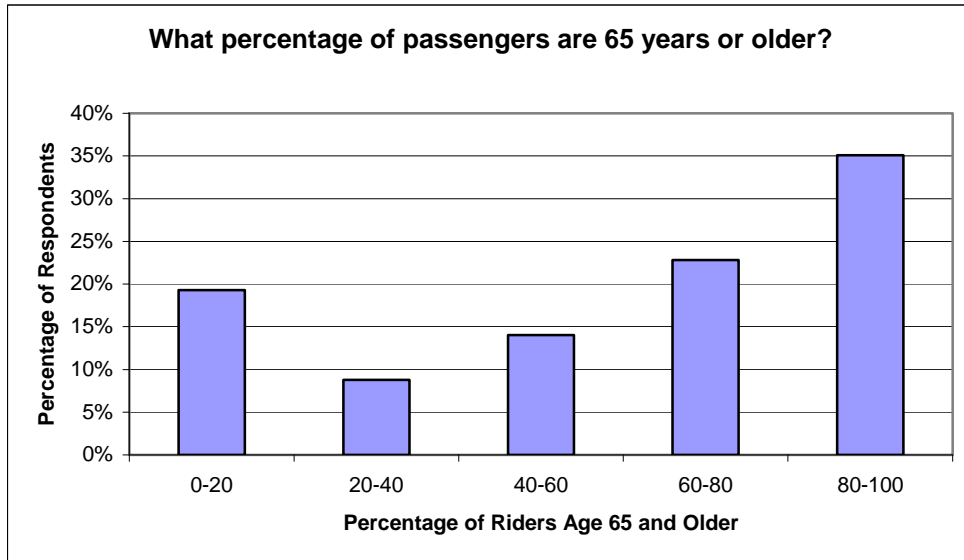


Figure 5.4. Percentage of Elderly Riders for Rural Demand-Response Transit Providers

The community perception of public transportation is important for providers of public transportation. In Figure 5.5 the provider’s opinion of the community’s support for the elderly or disabled as well as general public transportation is shown. The providers noted that while public transportation is perceived well for the elderly and disabled in their communities, the community thinks slightly less of public transit for general public use. This is likely because while they see the elderly and disabled using the service, many of those who are not elderly or disabled have never used it and do not understand the mobility it provides to the entire community.

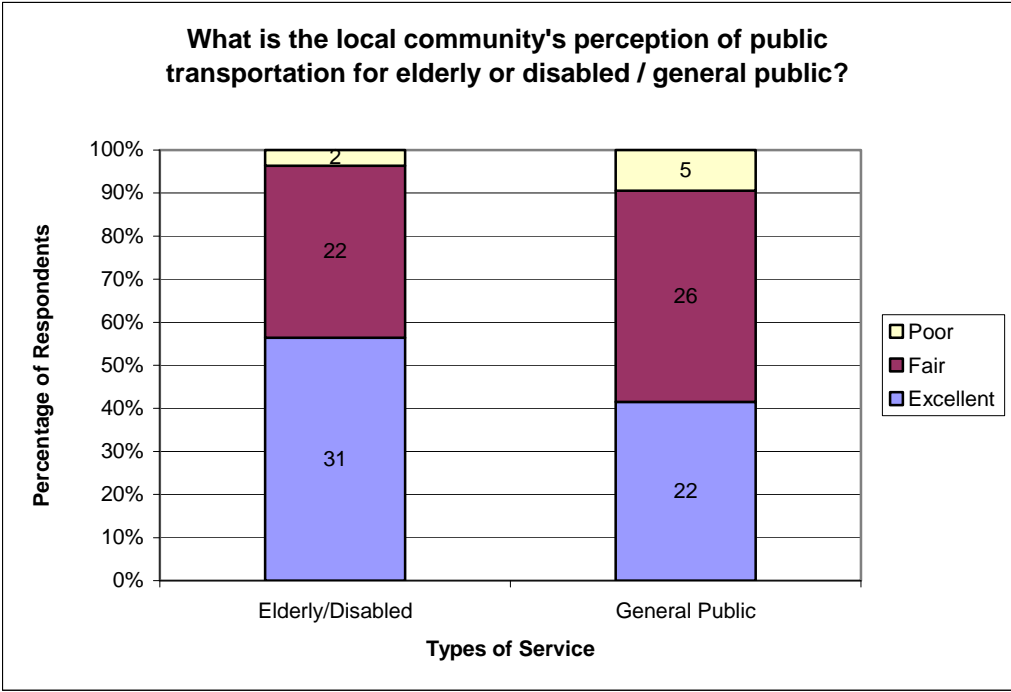


Figure 5.5. Local Community Perception of Public Transportation for Two Different Types of Groups

Finding people to staff demand-response transit agencies is often difficult, with drivers’ wages not being very high. Administrators have a challenge of finding funding or the local match for state and federal funds. Many demand-response agencies in rural Kansas operate with a limited number of people, as seen in Table 5.1. As with all types of transportation in the America, rural transit is heavily subsidized similar to the rural highway and road network, although increasing funding for transit is less well received than increasing roadway funding.

Table 5.1. Demand-Response Transit Provider Staffing Levels

	Median	Average
Full-Time Paid Staff	1	2.3
Part-Time Paid Staff	0	0.28
Full-Time Volunteers	1	3.54
Part-Time Volunteers	0	1.11

In the previous chapter, non-riders were asked where they acquire their information. Television, radio, newspapers, billboards, vehicles, and word of mouth all received about the same acceptance level for all groupings of people. Acquiring their information from the Internet

however, decreased rapidly with age. While elderly riders currently may not use the Internet as much for information acquisition, future generations of elderly will. It also may not always be the elderly looking for transportation in rural areas. It could be younger people, or the elder's children and grandchildren looking to help their family member stay mobile. Those looking to help may turn to the Internet first, and if a transit provider cannot be located, it may be assumed one does not exist in their area. If the provider puts some basic information about its service on a website, this alone could increase the ridership of the rural demand-response transit providers. Currently 45% of providers have Websites showing information about their services, with 7% in the process of creating one. Forty-eight percent of providers do not have a Website and are missing out on the way to connect with the community around them.

Most providers are interested in increasing their ridership. Seventy-nine percent of providers have attempted to increase their ridership in the past while only 21% have not. Currently 66% of providers are trying to increase their ridership, 17% are indifferent to increasing their ridership, and 17% are currently not interested in increasing their ridership.

No providers submitted how much ridership increased after a given advertising method. They did however mention methods used to try and increase their ridership. These included ads in the newspaper, radio, flyers in local stores, word of mouth, and free rides. In increasing the ridership of their system, providers think they will benefit their area as a whole as seen in Figure 5.6.

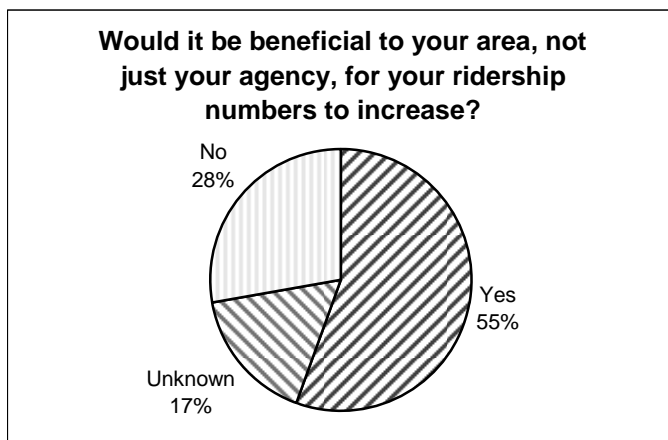


Figure 5.6. Increasing Ridership Benefits the Community

Depending on their acceptance of liability, providers can assist riders with different types of demand-response transit service. The two common types are door-to-door and curb-to-curb

service. Results showed 67.3 percent of providers operated door-to-door service. The other 32.7 percent operate curb-to-curb service. Door-to-door service is where the driver will pick riders up at the door and often assist them in getting in the vehicle, or help with packages the rider may have. This provides more assistance to the riders but is more time intensive than curb-to-curb service. Curb-to-curb service is faster and more efficient for the transit provider, but the riders must be able to get to the curb where the bus will pick them up.

Providers were given three non-mutually exclusive options for who their service is directed towards. Of these, 72.8 percent say their service is directed towards the general public, 83.1 percent say their service is directed toward the elderly, and 79.7 percent say their service is directed toward the disabled.

Marketing to the elderly and disabled, along with presumably people with low income, would be the most likely way to increase ridership for rural Kansas transit systems. The difficulty with this is that the providers have very limited funding to begin with so little can be spared for marketing the system. The median marketing spending for each provider is \$1200/year, with the average being \$1411.58 in 2008.

The providers' biggest obstacle to providing or expanding their service was most often funding. Other responses included finding drivers, paying for buses, and increases in gas prices. When taking into account rider and non-rider responses, it does seem that while expanded hours would increase ridership, it would be those same people taking the rides at the expanded hours or days. Some of the trips are those that otherwise might have been taken during the provider's previous condensed hours, resulting in limited net gain in ridership.

When asked what improvements or changes would help increase ridership, providers had many suggestions. Among these were more funding for extended hours and days, more vehicles, and implementation of fixed routes. One provider conspicuously stated that to increase ridership it would have to be "economically not feasible to drive [a] personal vehicle, [or] public transportation being free."

CHAPTER 6 - Conclusions and Recommendations

This chapter will tie together all of the findings from the literature review, and rider and non-rider surveys along with the provider survey. Suggestions will be made as to how demand-response transit providers can increase their ridership.

6.1 Conclusions

Riders of demand-response transit systems in rural Kansas are pleased with the service provided as a whole. The only repeated suggestion or complaint the riders provided was their desire for increased operating hours and days. All areas of questions about using public transportation systems in rural Kansas scored well with riders.

Ridership is significantly skewed toward the elderly, disabled, and those who either choose not to drive or are unable to drive. For most of the riders, public transportation is their only reliable method of mobility and they are transit dependent for mobility. Only 15% of riders would drive themselves if public transit was unavailable. Other methods either take longer or constantly require asking for favors from others to drive them around.

Non-riders are ambivalent toward demand-response transit service. They appreciate the fact that in many cases general public transportation services exist, but they are also generally unwilling to use it themselves. These are typically choice riders and are unlikely to switch to demand-response transit due to their other mobility options. Many non-riders recognized the fact that the elderly in particular use the service and a handful put forward that they may even use it themselves in the future as they increased in age. In their current state though, non-riders typically have access to a personal vehicle and find the hassle of calling in advance and then waiting for a public bus in rural areas less convenient than just driving themselves. It could be suggested that a fixed-route system would be more accepted and better used than the current demand-response type of system, but fixed routes in rural areas are almost always entirely uneconomical for the provider and would provide a low level of service for riders.

Findings of the non-rider survey in particular agreed with a similar study that investigated intelligent transportation system (ITS) improvements to improve usage of transit services in rural areas. The study found that most non-riders chose to drive alone and the majority of non-riders

had one or more vehicles per licensed driver in each household. It also found that many non-riders had limited experience with transit and that 75% had never used public transit locally (47). The non-rider survey conducted for this report found 71% of non-riders had never used public transit locally.

Interest in public transit among non-riders is low, even when it was obvious many non-riders did not know if a transit service existed in their area or thought it did not exist. Similar findings were discovered by the rural ITS report, where their respondents “made limited use of general travel information” even though many of them had access to basic communication technology (47). In rural areas, traffic volumes are typically low and public transit usage to avoid congestion is nearly unheard of. The rural ITS report strongly suggests rural residents are unlikely to switch to public transit. Findings in this survey would agree with that conclusion.

The only demographic where new riders could be found in significant numbers in rural areas was the currently non-riding elderly and disabled. Depending on the disability, the disabled may not be able to stay mobile on their own without significant help from a public transportation provider. Often those who have disabled parking permits are the elderly, however, in such cases there is sometimes a decrease in their ability to drive. These elderly and soon-to-be-elderly non-riders would be excellent candidates to introduce to public transit in rural areas. Early introduction among all ages would be beneficial to increasing ridership in later years where they might otherwise have never used public transportation. Some non-riders think public transportation is great for other people, but it’s not for them. Friends and relatives of currently non-riding elderly sometimes think a particular elderly person should try using public transportation for their own safety and the safety of others.

One of the most important aspects about providing transportation for rural riders is that the service must be tailored to the riders and their geographic area. Only by tailoring the transit service to the individual region and its population will a service be successful (34, 48). Surveys of specific smaller geographic areas may be able to determine what exactly people in smaller geographic areas require for public transit. Other studies have stated that future usage of public transportation is sometimes overstated, so care should be taken to only count those who say they would use public transportation (48). Mobility for those who need and use public transportation is the real service, not just increasing ridership for the sake of it.

External and internal factors dictate transit ridership. External factors such as gas prices increasing are a double-edged sword for providers as it increases ridership but also drives up the cost of providing the service. Internal factors such as price, quality of service, hours of operation, and marketing of the service are factors transit providers have control over. Recommendations for increasing transit ridership will cover only the internal factors that are within the control of a transit provider.

Providers must concentrate on increasing the usage of likely riders, including the elderly and disabled and those who are transit dependent. Choice riders are unlikely to switch, and little time and effort should be wasted on trying to get them to use public transportation.

6.2 Recommendations

Transit providers' first priority should be to increase mobility for those who desire it in rural areas. Rural areas are unlikely to see high traffic volumes or congestion that may drive transit ridership in more dense or populated areas. Certain demographics of the general population are more likely to desire public transportation in rural areas and these should be pursued in order to increase transit ridership. The two demographics that this report was able to determine were the elderly and handicapped. Often these two demographics overlap.

The elderly have increased use of public transportation because of their decreasing physical and mental ability to operate vehicles safely on the roadway. Sometimes seniors realize their driving ability has decreased significantly and are willing to let others take them around. The elderly should be encouraged to use public transit slowly and over time, as commonly there is initial resistance to giving up driving. It may need to be suggested they use it once for a doctors appointment that a friend or relative cannot take them to so they can see how public transit operates. The handicapped are more often users of public transportation in rural areas for the same reasons as the elderly— lack of ability to drive themselves.

The elderly and handicapped can be contacted numerous ways. Ads through different types of media can show well-known individuals using and riding the system, along with how to schedule a ride. Speaking with operators of assisted-living and nursing homes to encourage transit usage can bring new elderly riders. Religious services and activities are another location to speak with groups of elderly to promote and explain public transportation. These sessions can

not only be about public transportation in general, but often instructions on how to ride and the process to obtain a ride.

Some methods are general methods that can spark conversations about local public transportation or encourage new riders. While marketing money is often sparse, the following methods often do not have excessive costs associated with them. Providers could establish a presence on the Internet. The Website should contain basic information about the service including costs and directions on how to obtain a ride. Providers can also attend parades and school or local fairs to show off their vehicles and answer questions the general public has about the service. The public can be allowed on the vehicle in order to feel comfortable riding and to reduce the stigma sometimes associated with the vehicles as being only for the elderly or low-income.

Short-term improvements to the provider's system, like extending operating hours and days, may bring higher ridership as well. This may only increase the number of rides by the same current riders though, with few new riders gained. Another improvement for riders includes providing "guaranteed ride home" services and providing vehicles for special events. Polite and courteous drivers are also appreciated by all riders, seniors especially (49).

Another improvement to demand-response transit systems is to reduce the time riders spend waiting for the bus in the larger rural cities. This can be done by tying the buses into a GIS system and phoning riders shortly before the bus arrives, thereby eliminating a long period of waiting and watching for the public transportation vehicle.

Long-term improvements providers can develop are encouraging people to use other modes of transportation while they are still young and driving, which may mean they are more likely to come to a more reasoned and open-minded conclusion when they cease driving (30). This open mindedness can decrease resistance to turning to public transportation in order to retain their mobility in the future.

Increasing ridership should not be the objective of public transportation in rural areas. It should be to assist the public in staying mobile in order to improve the quality of life in the area. Demand-response transit providers are in a position to improve the mobility of the public and should attempt to assist those who request their service to the best of their ability.

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Appendix A - Example Surveys

Rural Public Transportation Survey

KSU Rider Survey

We are conducting a survey with the intention of improving rural transit in Kansas. Please show your support by answering the following questions. Information collected will be used for research purposes only. Participation in the survey is completely voluntary and you may quit at any time. If you have any questions please feel free to contact Dr. Sunanda Dissanayake, 2118 Fiedler Hall, Kansas State University, Manhattan, KS 66506. Telephone: 785-532-1540

Please check the appropriate response(s).

What was the starting location of your most recent trip involving public transportation?

- Home Work/Work-Related Shopping
 Education Medical
 Social/Religious/Personal Business Other

Which is located in: City _____
 Zip _____

What was the ending location of your most recent trip involving public transportation?

- Home Work/Work-Related Shopping
 Education Medical
 Social/Religious/Personal Business Other

Which is located in: City _____
 Zip _____

How often do you use transit in general?

- 7 days a week 3 days a week Once a month
 6 days a week 2 days a week Infrequently
 5 days a week 1 day a week First time riding
 4 days a week Twice a month

Do you have a car or other personal vehicle that you could have used to make this trip? Yes No

If transit service were not available, how would you make this kind of trip? (Mark only ONE choice)

- Drive a car Walk
 Ride with a relative Use a taxi
 Ride with a friend I would not have made this trip

How long have you been a regular transit rider?

- Less than 1 month 1-2 years
 1-6 months 3-4 years
 6-11 months 4 or more years

I am... Male Female

My age is: Under 25 25-34 35-44 45-54
 55-64 65-74 75-90 90+

What is your race or ethnicity?

- White African-American Hispanic Asian
 American Indian Other

How long have you lived at your current location?

- Less than 1 year 5-9 years
 1-2 years 10-19 years
 3-4 years 20 years or more

What time of day do you typically LEAVE home during the weekday? (Please fill in the time and circle AM or PM) _____ AM PM

What time of day do you typically RETURN home during the weekday? (Please fill in the time and circle AM or PM) _____ AM PM

Do you have a current driver's license?

- Yes No
 Yes, but would only drive for emergencies

Do you have a handicapped parking permit?

- Yes No

Including yourself, how many people live in your household? (Please fill in the blank) _____

How close is your nearest relative that could provide transportation for you?

- Under 10 miles 20-39 miles No Relatives
 10-19 miles 40 miles or more

Last week, how many round trips did you make using transit for each of the following activities? (Please fill in a number next to each)

- _____ Shopping _____ Work/Work Related
 _____ Medical _____ Social/Religious/Personal
 _____ Education _____ Other

Have you ever used a transit service that operates on a regular schedule and route (fixed route service)?

- Yes No

Would you like to see a fixed route where you live?

- Yes No Fixed route currently exists here

What day of the week would you like to see transit service extended to if not already offered? (Mark only ONE choice)

- Monday Thursday Sunday
 Tuesday Friday Currently 7 days/week
 Wednesday Saturday

Continued on Back....

What is the highest level of education you have completed?

- Some high school or less
- High school diploma
- Some college
- Bachelor's degree
- Master's degree or higher

What is your marital status?

- Single
- Married
- Widowed
- Divorced
- Separated

(Please check the appropriate response).

	Always	Usually	Sometimes	Rarely	Never
Are drivers friendly and helpful?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are buses easy to get into and out of?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are drivers good at waiting for people to board the vehicle or assisting them in boarding the vehicle if needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are drivers safe and competent?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the interior of the vehicle clean?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the temperature of the vehicle comfortable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the seats on the vehicle comfortable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you regard transit as affordable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is transit convenient?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are you satisfied with the service you receive from calling the transit dispatcher?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the current hours of operation enough for your transportation needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are you getting to your appointments on time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the ride longer than expected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Would you recommend riding transit to a family member, a friend, neighbor or associate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What improvements would encourage you to use transit more frequently? Please order the following based on importance from 1 (Highest) to 5 (Lowest).

Knowing how long until the vehicle will pick you up	Order (1 – 5)
Lower cost to ride	_____
Extended transit service hours	_____
Transit information more readily available	_____
Reduced reservation to ride time	_____

What improvements would you like to see in this transit service?

Rural Public Transportation Survey

KSU Non-Rider Survey

We are conducting a survey with the intention of improving rural transit in Kansas. Your participation would be greatly appreciated. Information collected will be used for research purposes only. Participation in the survey is completely voluntary and you may quit at any time. If you have any questions please feel free to contact Dr. Sunanda Dissanayake, 2118 Fiedler Hall, Kansas State University, Manhattan, KS 66506. Telephone: 785-532-1540

Please check the appropriate response(s).

What was the starting location of your most recent trip? (Could be a personal vehicle)

- Home Work/Work-Related Shopping
 Education Medical
 Social/Religious/Personal Business Other

Which is located in: City _____
Zip _____

What was the ending location of your most recent trip? (Could be a personal vehicle)

- Home Work/Work-Related Shopping
 Education Medical
 Social/Religious/Personal Business Other

Which is located in: City _____
Zip _____

How did you make your previous trip?

- Drive Alone Taxi
 Drive with a passenger Other
 Was a passenger in a private vehicle

How often do you use your vehicle in general?

- 7 days a week 3 days a week Once a month
 6 days a week 2 days a week Infrequently
 5 days a week 1 day a week
 4 days a week Twice a month

If your vehicle was temporarily out of service, how would you make this kind of trip? (Mark all choices)

- Used another vehicle that you or your family owns
 Taxi Ride with a friend
 Public Transportation Rental Car
 Walk Volunteer Driver
 Hired Driver I would not have made the trip

I am... Male Female

My age is: Under 25 25-34 35-44 45-54
 55-64 65-74 75-90 90+

What is your race or ethnicity?

- White African-American Hispanic Asian
 American Indian Other

When was the last time you used public transportation in your area?

- Less than 6 months 3-4 years
 6-11 months 5 years or more
 1-2 years Never

How long have you lived at your current location?

- Less than 1 year 5-9 years
 1-2 years 10-19 years
 3-4 years 20 years or more

What time of day do you typically LEAVE home during the weekday? (Please fill in the time and circle AM or PM) _____ AM PM

What time of day do you typically RETURN home during the weekday? (Please fill in the time and circle AM or PM) _____ AM PM

Do you have a current driver's license?

- Yes No
 Yes, but would only drive for emergencies

Do you have a handicapped parking permit?

- Yes No

Including yourself, how many people live in your household? (Please fill in the blank) _____

How many vehicles (non-farm) do you or your family own? (Please fill in the blank) _____

How close is your nearest relative that could provide transportation for you?

- Under 10 miles 20-39 miles No Relatives
 10-19 miles 40 miles or more

How many trips to each of the following did you make last week? (Please fill in a number next to each)

- ____ Shopping _____ Work/Work Related
____ Medical _____ Social/Religious/Personal
____ Education _____ Other

Have you ever used a transit service that operates on a regular schedule and route (fixed route service)?

- Yes No

Would you like to see a fixed route where you live?

- Yes No Fixed route currently exists here

Continued on Back...

Does a public transportation service exist in your area?

Yes No Don't know

What day of the week would you like to see transit service extended to if not already offered? (Mark only ONE choice)

Monday Thursday Saturday
 Tuesday Friday Sunday
 Wednesday Do not use transit No service

Where do you get your information? (Mark all that apply)

Television Internet Billboards or vehicles
 Radio Newspaper Word of mouth

What is your marital status?

Single Married Widowed
 Divorced Separated

What is the highest level of education you have completed?

Some high school or less
 High school diploma
 Some college
 College graduate
 Graduate school or higher

(Please check the appropriate response).

Is public transportation available when I need it?

Are you concerned about the cost of owning a personal vehicle?

In general, I avoid the use of public transportation if I can help it?

Is public transportation safe to ride in?

Is the bus late or unreliable in your opinion?

Do you regard public transportation as affordable?

Is public transportation convenient?

Is it hard to get information about public transportation?

Does the recent increase in gas prices make you more likely to use public transportation?

Would you recommend using public transportation to a family member, a friend, neighbor or associate?

What improvements would encourage you to use transit more frequently? Please order the following based on importance from 1 (Highest) to 5 (Lowest).

- Lower cost to ride
- Greater geographic coverage
- Extended transit service hours
- Transit information more readily available
- Quicker transit service

Always
 Usually
 Sometimes
 Rarely
 Never
 Don't know

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Order (1 - 5)

What improvements would you like to see in your local public transportation?

Rural Public Transportation Survey

We are conducting a survey with the intention of improving rural transit in Kansas. Please show your support by answering the following questions. Information collected will be used for research purposes only. Participation in the survey is completely voluntary and you may quit at any time. If you have any questions please feel free to contact Dr. Sunanda Dissanayake, 2118 Fiedler Hall, Kansas State University, Manhattan, KS 66506. Telephone: 785-532-1540

Please check the appropriate response(s). These questions apply only to the paratransit or demand response part of your system.

What is the name of your agency?

Are you a 5311 (general public) recipient?

Yes No

Are you a 5310 (elderly/disabled) recipient?

Yes No

What are the zip codes your agency serves?

Does your agency have a logo?

Yes No No, but we are creating one currently

What is the fare charged per ride?

Has your fare changed in the last year? Yes No

If Yes, how much did it change, when, and what was the reasoning for the change?

What is the agency's cost per ride? _____

What is your cost per vehicle mile? _____

How many rides per day do you provide? _____

What was the total ridership in the past month?

What percentage of passengers are 65 years or older?

KSU Provider Survey

What was the total miles driven by your vehicles in the past month? _____

What percentage of the budget is consumed by administrative costs? _____

What is the average rider capacity of your vehicles?

What is the total number of vehicle in your fleet? _____

What is the average age of your fleet in years? _____

What is your total annual budget? _____

Over the past few years has your budget been...

Increasing Decreasing Staying the same

Is local government supportive of public transportation?

Yes No Sometimes

What geographical area is your service limited to?

City County Coordinated Transit District

Other _____

How many full time staff do you have for transportation?

Paid _____ Volunteer _____

How many part time staff do you have for transportation?

Paid _____ Volunteer _____

What is the local communities' perception of public transportation for the elderly or disabled?

Excellent Fair Poor

What is the local communities' perception of public transportation for the general public (non-elderly or disabled)?

Excellent Fair Poor

Have you conducted previous customer surveys with your riders? Yes No

If Yes, how many years ago? _____

Does your agency have a website that shows information about your service?

Yes No No, but we are creating one currently

Continued on Back...

Has your agency tried to increase its ridership in the past? Yes No

Are you currently interested in or trying to increase your ridership? Yes No Indifferent

If Yes, how did you attempt to increase ridership and what were the results?

Would it be beneficial to your area, not just your agency, for your ridership numbers to increase? Yes No Unknown

Do you provide door-to-door or curb-to-curb service? Door-to-door Curb-to-curb

Who is your ridership directed toward? (Mark all that apply)
General Public Elderly Disabled

How much assistance do drivers provide customers?

Do you provide any funding for marketing or advertising? Yes No

If Yes, how much per year? _____

Does your agency have access to expertise in marketing? Yes No

Does your agency have access to expertise in operations? Yes No

Does your agency have access to expertise in long term planning? Yes No

What is your policy on personal care attendants?

Is your agency listed in the local phone book? Yes No

What would you describe the purpose of your service as?

Do you use computerized dispatching software?

Yes No We are conducting a trial run only with computerized dispatching

If Yes or Trial, what is the title of the program?

How are fuel costs affecting your service?

What percentage of your service trips do you estimate are for:

Home _____ Work/Work-Related _____
Shopping _____ Education _____
Medical _____ Other _____
Social/Religious/Personal Business _____

Which days of the week do you offer general public transportation? (Mark all that apply)

Monday Thursday Sunday
Tuesday Friday
Wednesday Saturday

What time of day does your agency start providing transportation during weekdays? _____

What time of day your agency stop providing transportation during weekdays? _____

Has your agency ever discussed operating routes on a regular schedule and route (fixed route service)?

Yes No Currently also operate fixed routes

What is your biggest obstacle to providing or expanding your service?

What improvements or changes do you think would help increase your ridership?

Appendix B - Rider Results

What was the starting location of your most recent trip involving public transportation?

Home	Work	Shopping	Education	Medical	Social	Other	Invalid	Blank
280	30	19	2	35	11	18	34	16

What was the ending location of your most recent trip involving public transportation?

Home	Work	Shopping	Education	Medical	Social	Other	Invalid	Blank
148	41	43	3	90	34	38	26	22

How often do you use transit in general?

7 days	6 days	5 days	4 days	3 days	2 days	1 day	Twice	Once	Infreq.	First	Invalid	Blank
1	6	61	19	51	46	45	64	40	66	19	12	15

Do you have a car or other personal vehicle that you could have used to make this trip?

Yes	No	Invalid	Blank
152	266	1	26

If transit service were not available, how would you make this kind of trip?

Car	Relative	Friend	Walk	Taxi	No Trip	Invalid	Blank
65	85	63	52	11	115	41	13

How long have you been a regular transit rider?

Less	1-6	6-11	1-2 yrs	3-4 yrs	4+ years	Invalid	Blank
34	59	33	109	61	117	5	27

I am...

Male	Female	Invalid	Blank
96	335	1	13

My age is:

Under	25	35	45	55	65	75	90	Invalid	Blank
11	18	20	37	50	76	174	46	1	12

What is your race or ethnicity?

White	African	Hispanic	Asian	Indian	Other	Invalid	Blank

401	10	8	3	4	3	4	12
-----	----	---	---	---	---	---	----

How long have you lived at your current location?

Less	1-2 yrs	3-4 yrs	5-9 yrs	10-19 yrs	20+ yrs	Invalid	Blank
44	56	59	83	72	126	0	5

Do you have a current driver's license?

Yes	No	Emergencies	Invalid	Blank
211	201	26	2	5

Do you have a handicapped parking permit?

Yes	No	Invalid	Blank
172	259	0	14

Including yourself, how many people live in your household?

1	2	3	4	5	6	7+	Invalid	Blank
285	91	17	8	6	2	10	6	20

How close is your nearest relative that could provide transportation for you?

Under 10	10-19 mi	20-39 mi	40+ mi	No Relatives	Invalid	Blank
215	28	36	85	63	2	16

Have you ever used a transit service that operates on a regular schedule and route?

Yes	No	Invalid	Blank
106	316	1	22

Would you like to see a fixed route where you live?

Yes	No	Currently Exists	Invalid	Blank
114	201	60	5	65

What day of the week would you like to see transit service extended to if not already offered?

Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Currently	Invalid	Blank
9	12	2	9	15	114	52	61	30	141

What is the highest level of education you have completed?

Some HS	HS	Some Coll	Bachelors	Masters+	Invalid	Blank
77	115	127	36	22	1	27

What is your marital status?

Single	Married	Widowed	Divorced	Separated	Invalid	Blank
75	87	163	58	1	1	60

Comments not made in blank areas on the survey, but not on the lines for this question are in brackets. Brackets are also used when the author is unable to read the handwriting. All comments are original, with some spellings corrected to improve readability.

What improvements would you like to see in this transit service?

- [?] Our service is as good as practical with few number of persons to use.
- [College dorm is home.]
- [Does not use for appointments. Her service doesn't schedule or calling.]
- [Mentioned that the busses are not currently easy to get into due to knee injury.]
- [Rode because of eye surgery]
- [To Saturday.]
- [Unreadable, but something about making sure he gets to classes on time and needs to know if they are late.]
- [Unreadable.]
- [Unreadable.]
- [Unreadable]
- [Wants hours on Sunday for Church.]
- [We have county bus not transit. States that her vehicle is not running.]
- Add Sunday AM pick up for church.
- All is fine.
- Already covered in questions above.
- Always there when you need it.
- Appointment time to pick up on return trip.
- As I have never ridden a transit bus, I would like to be able to. I am 88 years old and I don't want to drive in traffic anymore. The transit would be wonderful.
- At least Saturday service.
- At the present time I drive my own vehicle and have not used the bus but signed up so I can if and when I need to, but I'm sure a lot of people are making good use of the buses.
- At this time I am not aware of anything that is needed.
- Availability - serves all of county now.
- Availability. My son needs picked up after school, but there is no space for him. Also, my daughter should arrive at preschool at 8am, but the driver drops her at 7:45 causing additional fee for being early by the preschool. But we LOVE our drivers.
- Available more hours, more days.
- Available on Saturdays.
- Be able to use on Saturdays.
- Better drivers - More assistance with getting on and off and into building! [Wrote a 3 page letter dated Aug 28, signed by Gevon Holt.]
- Bigger busses.
- Bus only, not the medical van.
- Can't complain and any they do a good job. Some people might like to on weekends.
- Can't think of any - very happy with the service.

City link is new in Garden City. I have ridden on two of four routes. I'm retired so I would only use it to go shopping. I think it's great! But I have not been riding regularly. Would like unlimited rides for \$30.00 a month. Maybe Saturday service.

Closes at 3 PM would prefer 6 or 7 pm. Would like a larger pick up area.

Daytime hours for bus - great! Say 5-9pm, bus service available perhaps like Tuesday-Friday-Saturday evenings - (not every night) even a small larger fee for evenings. After 4pm there is no means of public transportation other than that - all's great! Thank you!

Dispatchers NOT accommodating and sometimes downright RUDE. 24-hr call prior to needed ride rarely sufficient. Constantly have to re-schedule or cancel appointments. Altogether I am wheelchair bound and no other transportation available. Have to sit out in rain/snow to wait sometimes 30-40 minutes, if not out there, they drive off. Limited to 3 riders per week.

Don't know of any at this time.

Drivers need to drive slower. If you're in a wheel chair and the back of the bus you get bumped up and down a lot. That's hard on backs and necks etc. Need better suspension, soft rides, for disabled. Thank You!

Evening hours available to riders also or at least till 5pm like bigger cities bus transportation that are open.

Everything is fine for me.

Everything is fine.

Everything is fine.

Everything is good at this time.

Everything is great with my transportation service, I wouldn't change anything.

Excellent - I love the bus!

Extend the day from 8-4 to 8-5 and run Saturday and/or Sunday.

Extended hours. Only transportation for my children and I for Drs. Appointments, school appointment or shopping. I would love to have transportation to Manhattan, Hope, Salina, for Dr. appointment.

Extended to Saturdays.

Fine the way it is handled currently.

Fixed or scheduled service along the US 36 and 75 Route. Regular schedule route to Topeka.

Fixed rate. Pay one cost.

Getting info on Friday for following Monday transit. The office here isn't open on Friday.

Getting to work on time. When scheduled to be picked up early. Getting home in evening instead of riding around!

Give the driver a phone so he can organize the priorities. The driver knows the people and could do a better job.

Going for longer trips. We are only allowed 100 miles as the crow flies.

Has worked ok for what we have to do. Trouble getting people to ride. Bus driver and wife does very well. Enjoy the trips every other Monday from Hunter, KS.

Have no complaints.

Have the bus pick up after the high school ball games.

Have transportation for me to go to work and stop telling me they going to send me a cab. I don't have cab fare.

Have transportation on the weekends please.

Having them open later in the evening.

Hours extended to 6:30 pm.

I am 95 years old and use a cane. I have trouble with my balance. I ride the mini bus and it is wonderful and I am sure the transit buses are also and just what the people here need. Thank you. I am glad to see that you have extended hours of availability.

I am in a scooter I have never been unassisted. I have always helped to get into building I have always been helped with purchases and [unreadable]. I have no other transportation.

I am satisfied as it is.

I am satisfied with the service we are provided.

I am so happy with this service. Mr. Trent is so very accommodating. Thank you.

I am very pleased with the service - I have no complaint at all - good drivers, very kind and helpful - they make the trip go fast and also enjoyable as well. It is a wonderful service.

I am very pleased with the service.

I am very satisfied with the mini-bus service because I can ride with a daughter, with whom I live, when she is not working. When she is not available I can count on the mini-bus service.

I am very satisfied with our current service.

I am very satisfied with the service as it is!

I call they come.

I can't think of anything that could be improved. Everything is great.

I do appreciate the senior citizens bus service. I could hardly manage to live alone without this service.

I do not drive at all. I am 82 years old. So stay home all through the week. I would like to see a bus on route stopping very close to stopping at 1809 Page Ave, Salina, Ks. Then I could go get my prescriptions, groceries, ect, and feel like getting out to shop.

I do not ride it that much because I take my car because some times I end up going out of town I am alone and time doesn't mean that much.

I do not use the transit often I do not drive. IT is handy do use when my husband needs to see a doctor. Is recommended not to drive. The driver is always willing to pick us up. Get us home early or late. This is a great service for this community.

I don't drive and can't hardly walk very far, it would be nice if there was a bus on Saturdays.

I don't have an answer to the above. We still go to our Dr. - Dental - Grocery and Church appointments. It would be a secure feeling to have bus rides ready to use, as we continue...

I don't know as I only rode the bus once. Thanks.

I don't know how any improvements could be made at the present time. Actually I'm not concerned about any of these issues. Would not change anything about our service here. Very happy with it.

I have good service any time I have used the bus. Bus being taller.

I have not ridden the bus much and only in a wheel chair and I see very little that would help me.

I have only used our transit 3 times in over a year, but has been good for me when I needed. They are courteous and helpful.

I like it as it is.

I need assistance and my drivers is GREAT. I would like to be able to go to other towns near here. Have service on weekends and early evening.

I ride the bus because I have a walker. The driver was not kind to me and didn't help me with my walker and I fell on 1st step fortunately for both of us I did not get hurt bad.

I ride the bus to our nutrition site and so far that is all, but we get very good service I think.

I ride the mini bus - to work - to the di [da?] and for groceries. I am very pleased with the service and grateful to have it.

I see no need to change this transit service just add to it. Only another bus would be a big help when wheel chair need. Good to be moved for patient use when needed.

I think that dispatcher should stay out of personal medical problems.

I think the drivers are friendly and dispatchers too. Only improvement I can think of is for the dispatchers to make sure the pickup time is right and on the schedule. The first time I used transportation my pickup time wasn't even on he schedule so I had to call and be picked up.

I think they are always friendly and gets me where I need to, could be a little cleaner inside.

I think we have excellent opportunity to go on bus 2x month and we have a very good considerate and dependable driver.

I would be selfish and out of line to ask for more hours. I feel so fortunate to enjoy the privilege to have this fine service.

I would like to see them run until 11 or 12.

I would like the bus to go another week to get what I've forgotten.
I would like to know if they are running late if they could let me know. A few times this year I have been late to work.
I would like to see a fixed route around town maybe 3 times a day with the call in between routes.
I would like to see transit service to Salina for shopping at least once a month.
I would really like to see a fixed route bus service in this city. What is available now is not reliable.
If it be possible 2 more hours.
If you are to be picked up at 8:30 am do not pick up early. Be more flexible in take home time.
If you could run the buses on Sundays.
I'm happy with our service drivers and ...[unreadable. Something about how the questions above don't apply in their area maybe.]
I'm most satisfied with schedule and dispatcher. Drive the BEST. Would like to see more people take advantage maybe ads to others - seniors in community. Many thanks!!
I'm quite happy with the service. [States that he lives in the country.]
I'm satisfied with the service received.
I'm satisfied.
I'm so happy we have buses. Otherwise I could not go to the center to eat.
I'm using transit as it my best option at this time. Therefore, I deal with and accept the way things are.
I'm well satisfied with the service.
It is great. Driver is extremely helpful and courteous. It's a lifesaver.
It is just fine.
It 's good as it is.
It would be nice to have a low cost punch card for rural riders to catch the bus occasionally. My job is temporary so I won't be purchasing a month pass again until Jan but I really look forward to having this service during the winter months.
It's a great service! Before my husband died in April I used the bus daily to ride to the long-term care facility to visit with him. I had surgery and was using a walker and couldn't drive. The bus was a life saver. Thank you. The driver was extremely helpful and polite.
It's a lifesaver for me. I am very happy with the service I get.
It's fine now.
It's good.
Just that we would want all drivers to be on time. I don't know his name but he drives the van he is wonderful we love him and he's always on time.
Kneeling bus. 1st step is sometimes difficult. Better way of stowing groceries, ect. Eliminate the policy of no pickup at grocers after lunch until 2pm on Mon, Wed, and Friday and only 1 plus per hour on those days. There are two full time drivers on those days.
Later hours and weekend transportation as well as have enough buses available on weekends to reduce 1 hr or longer waiting times.
Later hours and Saturday and Sunday service.
Less money. Open more days and night.
Like it the way it is.
Longer hours lower rates.
Longer hours.
Longer hours. Less reservation time.
Lower rates for groups traveling within several mile radius.
Make sure you get to your Dr. Appointments on time and short wait time to get picked up and brought home.
More hours early in the morning - Lunch time 11:30 to 12:30 and later in the evening.
More hours.
More people going and at least 1 trip occasionally to a casino.

More service hours - Weekend - More Hours in day.

More volunteer bus drivers

More weekends.

My son rides the service - he goes to school in Phillipsbury and his daycare lives right outside of Glade - School buses won't allow him to ride so the city service cost but works great. We are very thankful for the help. He's not old enough to stay home alone. Thank you!

Need more buses on the roads.

Need more drivers/vehicles. During hours 10 AM to 5 PM. Drivers need to be on time for pick ups not overloaded on pickups and allowances for time to pick up handicapped riders. [Rest is unreadable].

New van. Make sure the dispatcher notifies the van driver.

No improvements needed.

No improvements, they do a good job.

No improvements. Everything's ok.

No improvements. I'm very satisfied with service as is. Saturday service would be appreciated.

Or 1 hr longer on weekdays if possible.

None - only if could be available on Saturday and Sunday.

None really [unreadable] Maybe our driver get a raise, he's a good driver.

None, they are good.

None. I use wheelchair and everyone that has driven mini bus is always polite and helpful in every way.

Not any, it's good as it is.

Not so grumpy drivers. Someone to help us on and off with walkers and canes. Run later in the afternoon. I get stranded at the doctors office if the[y] run late. The bus stops at 3pm.

Not so rough and seat rattles.

Nothing that I can think of they've done great and are wonderful. If I had to say one it would be longer hours if possible.

Nothing. I like everything.

Offering weekend hours and extended pm hours during the week.

Ok so far.

Only have used for work purposes - not best person to ask questions about.

Open to all people (as it is now.)

Operate on Saturday and operate longer hours for people who work late shifts at their job. A more reliable scheduled time when transit ill pick up people.

Other Comments

Our bus is a county bus. We have to call ahead to get it unless an emergency.

Paid drivers.

Perhaps one Saturday monthly to do shopping out of town.

Possible Sat and Sun

Really their very great always on time, courteous, funny, try to help in anyway possible. This is like family. If I would stay awake I would drive too! Our bus quit once and we only sat about 30 min long enough for the other bus to pick us up their great all of them. Keep up the great work.

Right now not anything they have always worked with me getting me to work on time. Maybe Saturday and Sunday.

Run in the evenings for disabled individuals. There are so many places they would like to go but are unable to do so because there is no transportation at night from 6:00 pm to 9:00 pm. Thank you.

Saturday service - Hours 8am to 6pm Daily. Would like to go from Abilene to Salina or Junction City and back would be perfect.

Saturday service and Sunday for church.

Saturday service.

Saturday service.
Saturday service.
Saturday transportation. [? - I think longer hours till 6 or 7pm]
Saturdays would be nice, at least half a day.
Seems what we have pretty well covers it.
Service is just fine.
Service on Saturday.
Service on weekends and later in evenings.
Services on Saturday and Sunday.
Servicing of vehicles seems like the minivan needs new shocks. May be a problem for the elderly with osteoporosis or other problems I had to get in front seat because of the ride in back passenger seat was bone jarring.
Several times transportation is late or forgets to come. Buses are broke down and cannot get a reservation.
Shopping out of town more often.
Since I have only just sold my car, I really don't have a large base of experience.
Sometimes I have to wait too long to be picked up but I am pretty satisfied with the bus service here.
Sometimes on Saturday at least till 3pm. Don't cost so much to go to Golden Eagle or Sac + Fox. Valubus only charges 5.00 to ride to each casino.
Sometimes the person gets picked up too early.
Start 15 minutes earlier than 8am so I could be at work before 8 am.
Stop wasting taxpayers money.
Sunday bus.
Sunday morning service to churches. Smoother riding buses.
Sunday?
That it runs on weekends.
The bus can be noisy, due to lift in back.
The bus is great. I have no complains. It is great.
The drivers are doing a very good job. I don't think I would wish for anything else. They're great.
The drivers food and expenses should be paid for. Some people would be drivers if they did not need to pay these costs. When several go shopping there is not enough room for TP or towels along with the rest of the necessary items.
The min-bus for seniors and disabled has been a blessing for us who have no transportation, on a limited income. We cannot afford a taxi. Really appreciate this service.
The only public transportation I use is the Pottawatomie County Senior bus once a month for short trips. I would like to have more.
The service has been wonderful. I can not longer drive. No complaints.
The west and NW parts of Morris County are far from Council Grove, as 24-30+ miles, and some families I have asked didn't know that they can reserve and use public transportation. Some don't know they can call White City or Council Grove. Ads are put in CGRepublican and Prairie Post (White City), but need to be in Herington Times as W. Morris Co. citizens take only Herington Times. Let us reach every resident of Morris Co. with knowledge of services available. All people need to know of Public Transport and our mgr. has tried hard. She does good job. There isn't enough advertising money for 2 ads in 2 newspapers I'm told. My wife and I need van sometimes. A good service.
There are no improvements needed. Our buses and schedules are most often ideal for everyone!
There are none I can think of. The driver is the gracious transit driver, as service I am happy with the time and hours.
There is a dispatcher mess up my work pick up and drop-off times you need to [unreadable].
There is a good service in place - I am grateful that we have a transit bus service in our town and city.

They are good.
They do a wonderful job.
They do an awesome job. As far as we know they do a very good job and see nothing in change.
They do well.
This is for county bus only - Med [unreadable] is different.
This is for the bus only.
This is my first time the man that picked me up was very nice.
To be able to go to bigger towns to shop at least once a month or two.
To be able to go outside city limits for a short distance maybe 1.5 to 2 miles.
To be available for Sunday for church and Saturday.
To be running on Saturday.
To run on Saturday and Sundays if possible.
To run on Saturday.
Transit to bigger towns/cities with bigger and better shopping and resources.
Two be able to on Sat. [misspelled]
Van very hard to get into - need lower level loading more rails. Sometimes dusty and need to be vacuumed. They need a different bus than the van. It is too high and have a hard time getting in and out of it. The step is so narrow that I'm afraid of falling. would be nice to have a smaller vehicle like the big bus only smaller - the van is too compact for Manhattan trips need to be easier getting on and more room also.
Very good service. Better seat belt, please, please don't take our bus away from us!
Very happy with current service.
Very pleased as it is.
Very satisfied.
Very well satisfied. Drivers and dispatchers are all very very efficient and friendly.
We are very fortunate to have our service bus. It works really well for our transportation.
We are well pleased with the transit service.
We have a wonderful transit service. I am very satisfied with it. It's a blessing to me. When I have medical appointments that I don't have to drive.
We have an excellent bus service, always accommodating everyone, on time and reliable doesn't need improvement, is my opinion.
We have no Bus Service. Our transportation Service is a mini-bus that is operated by the county. It takes me to the nutrition center for my meals, doctors appointments and grocery shopping when needed. It would be nice to have bus service to take me to my doctors appointments in Topeka. I am legally blind, so I have to depend on my family for out of town transportation.
We have no need for any changes. In Sabetha everything is perfect.
We like having the bus.
We need bus service for students to school and home!
We need more funding.
We very lucky to have a good transit services. I will be using it now often as I stop driving.
Weekend Availability.
Weekend service.
Weekend transportation.
Weekend vans please!
Which trips could be there to shop in other cities?
Would like a weekend bus.
Would like the bus to run at least 10 pm weekdays.
Would like to have a bus on Saturdays once a month to go to Salina for shopping. Or to Walmart once a month in Junction City on Saturday.
Would like to some early start time for those who need a ride to get to work.

Yes, when we get there and the place is closed. There was not or the other closed 2 weeks ago.
[sorta makes sense]

You are doing a wonderful job. I can ride everytime I need to. Thanks.

You have to be able to take people to work and bring them home if you want this to work. That means start at 5am and stop at 7pm at least. If you don't get the working people on the bus it won't work.

You need more drivers like [unreadable].

You need to put more buses on the street.

Appendix C - Non-Rider Results

What was the starting location of your most recent trip?

Home	Work	Shopping	Education	Medical	Social	Other	Invalid	Blank
419	58	9	8	9	11	8	23	12

What was the ending location of your most recent trip?

Home	Work	Shopping	Education	Medical	Social	Other	Invalid	Blank
106	162	23	43	68	67	57	12	19

How did you make your previous trip?

Alone	w/ Passenger	Was a passenger	Taxi	Other	Invalid	Blank
277	153	71	5	29	8	14

How often do you use your vehicle in general?

7 days	6 days	5 days	4 days	3 days	2 days	1 day	Twice	Once	Infreq.	Invalid	Blank
352	54	42	19	21	9	4	1	2	20	1	32

If your vehicle was temporarily out of service, how would you make this kind of trip?

(Checked boxes, 7 surveys left blank)

Family	Taxi	Public	Walk	Hired	Friend	Rental	Volunteer	No Trip
293	26	49	63	5	193	32	10	85

I am...

Male	Female	Invalid	Blank
167	382	0	8

My age is:

Under	25	35	45	55	65	75	90	Invalid	Blank
141	85	61	91	70	53	49	2	0	5

What is your race or ethnicity?

White	African	Hispanic	Asian	Indian	Other	Invalid	Blank
478	26	19	6	7	2	10	9

When was the last time you used public transportation in your area?

Less	6-11	1-2 yrs	3-4 yrs	5+ years	Never	Invalid	Blank
66	15	25	9	34	396	1	11

How long have you lived at your current location?

Less	1-2 yrs	3-4 yrs	5-9 yrs	10-19 yrs	20+ yrs	Invalid	Blank
114	61	75	79	91	129	2	6

Do you have a current driver's license?

Yes	No	Emergencies	Invalid	Blank
502	45	5	0	5

Do you have a handicapped parking permit?

Yes	No	Invalid	Blank
44	505	0	8

Including yourself, how many people live in your household?

1	2	3	4	5	6	7+	Invalid	Blank
120	189	86	78	44	9	13	5	13

How many vehicles (non-farm) do you or your family own?

0	1	2	3	4	5	6+	Invalid	Blank
36	144	161	105	61	17	17	2	14

How close is your nearest relative that could provide transportation for you?

Under 10	10-19 mi	20-39 mi	40+ mi	No Relatives	Invalid	Blank
279	43	40	147	37	1	10

Have you ever used a transit service that operates on a regular schedule and route?

Yes	No	Invalid	Blank
156	389	0	12

Would you like to see a fixed route where you live?

Yes	No	Currently Exists	Invalid	Blank
306	191	31	0	29

Does a public transportation service exist in your area?

Yes	No	Don't know	Invalid	Blank

194	236	114	2	11
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What day of the week would you like to see transit service extended to if not already offered?

Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Do not use	No Service	Invalid	Blank
31	8	14	10	28	54	25	192	110	27	58

Where do you get your information? (Checked boxes, 6 surveys left blank)

Television	Radio	Internet	Newspaper	Billboards	Word of Mouth
390	320	313	349	135	366

What is your marital status?

Single	Married	Widowed	Divorced	Separated	Invalid	Blank
145	209	28	48	3	0	124

What is the highest level of education you have completed?

Some HS	HS	Some Coll	Bachelors	Masters+	Invalid	Blank
45	66	137	116	60	3	130

Comments not made in blank areas on the survey, but not on the lines for this question are in brackets. Brackets are also used when the author is unable to read the handwriting. All comments are original, with some spellings corrected to improve readability.

What improvements would you like to see in your local public transportation?

[Bad weather would cause her to ride public transit] Ottawa County does good for the senior citizen. I know nothing about other.

[Can't see fixed routes working though.]

[In the Job Corps.]

[Notes public transportation isn't available there. [Most likely true.]]

[Probably wouldn't care about the ordering for transit.]

[Says that public transportation would be unfeasible.]

A bus system.

A bus that has a regular schedule and route more often then at a certain time on a certain day. Daily route and on time like in the cities so people can use it to go to work ect. [Says no public transportation exists but does mention ATA. Also says that they would usually suggest using transit to friends/family but only "if good."]

A bus to that run Monday and Friday and went around Manhattan without 24 hr to ATA Bus or GB not showing up. No taxi Monday to Wed.

A greyhound or charter bus to get you somewhere you need to go.

A reliable network of scheduled transit connecting area small towns.

A system started.

A transportation service from Larned to Great Bent 5 days a week. I have inquired about this numerous times to the Larned Chamber - but they just react like I'm uneducated and poor asking for assistance. I'm just looking to save \$. :) I now car pool with a fellow employee at my work and it works great. Thank you for asking and conducting this survey! Also, I tote 2 children to and from Great Bent - Barton College so it would have to transport children to day care.

A weekend bus service to Wichita, Hays, and Salina from Great Bend.

Actually have a transit system.

Ask the Seniors that need it, and the disabled.

ATA requires 24 hour notice that you need a ride. There is not a service that has a set route with set times to arrive at certain locations. So now public transportation is limited.

Availability on Weekends and after 7 pm.

Availability.

Available 7 days/week until 6pm. Have at least one day per month (possibly the 1st) when someone would carry in packages for me.

Available extended hours and two locations I need to go.

Awareness.

Because I'm not too sure about public transportation in Manhattan, I would just like to see more information about it.

Being on time. If they could have a route with regular stops.

Better coverage, schedules and availability.

Better paved street, better drainage of rain water in street on Pierre.

Better publication of schedules and access points. Contact phone numbers for services available and on a web page. I live on a farm outside the city so don't use service here, but do when traveling.

Better roads.

Better service.

Bring back the Care van that used to go from Colby Ks to Hays KS because from Harp (?) they have an airport and would be able to get out of Colby. [Also wrong 2 page letter dated 8-29-08 signed by Ms. Elsie Bryan.]

Bus like big cities more taxis.

Bus service such as Greyhound in this area.

Bus service.

Buses = lower traffic. More availability = lower cost. Increased safety = more bicycle and pedestrian friendly routes.

Buses, cheaper taxis.

Busses are more for senior citizens. Most younger people won't use it.

City bus.

City bus.

Cleaner. Greater geographic coverage. More knowledge of service times, locations.

Clearer routes and times.

Could start with some sort of trans.

Create a bus system. I don't like the local taxis.

Currently we have the ATA bus and Taxi service or G&B transport. They are very busy and cannot always provide service. A regular bus system with regular routes would be very nice especially when I am not well enough to drive or cannot borrow a car from my daughter.

Didn't really know we had any.

Do not have public transportation.

Does not apply. No public transportation. [Left most of last page blank.]

Don't know cause I don't ride.

Don't have any.

Don't have to call a day before.
Don't know of any here, just moved here.
Don't know.
Don't pay attention to general transportation.
Don't use it! Don't know enough about it.
Easier to use for my clients - hard to make some appt. - 24 hours in advance.
Existence.
Expanded hours/days.
Extend ATA to Weekends. Bus service (like Greyhound) stop in Manhattan. General route in city instead of ATA service.
Extended geographic location.
Extended hours and pickup points (stops).
Extended hours that public transportation could be used.
Extended hours.
Extended service area and hours - maybe Saturday too.
Extended summer hours. Be able to recreation events during evening hours with a ride home.
Extending to outside city limits of Great Bend.
Fixed route transportation service (buses or shuttles) available for across-town trips to high-traffic locations (walmart, grocery store, mall, campus) for general population.
Fixed routes.
From Manhattan to Kansas City, Omaha, Chicago
GET ONE! One or two buses go around campus? That's sad! We have no great means of public trans! Frustrating.
Get some.
Get to use it more often.
Greater geographic coverage.
Have broad coverage to meet a variety of community needs.
Have it available.
Have some
Have some.
Have the service.
Having a way to shop in other towns.
Having one [fixed routes?] would be fantastic!
How much population do you need for Bus Service?
I [unreadable] like a bus! I would use public transportation [unreadable] a week for personal and work related business if it was available!
I believe Manhattan does not have public transportation, I use the ATA Bus, but they only run M-F, No holidays, and you must notify 24 in advance if you use their service.
I do not know. I do not use it.
I don't know that it exists.
I don't think we have any besides taxis, so that can be improved by implementing a bus service.
I don't think we have any.
I don't use it. So, I don't care.
I don't use public transportation, so I have no idea!
I don't use public transportation.
I just [unreadable] to Lincoln and I find no problems with transportation.
I live in a rural area near small towns. I would use public transportation to other towns (county seat size towns in Kansas) It would be helpful when I make a trip alone.
I live in a rural area. I don't see public transportation ever working here.
I live in a small town. The city bus customers are mainly the elderly or handicapped.

I live in the country. Question does not apply personally. I would like more availability with a regular schedule for those in poverty and BCCC students.

I live in town, but I farm full time. My farthest piece of land is 45 miles from home. Public transportation is not a viable option for me. I drive a lot of miles every day.

I rarely use public transportation, but many of my clients rely on this. The hours are too short and when they are dropped off for an appointment, they wait a minimum of 1-2 hours to be picked up. We need more transportation options in Hays, KS.

I think the public transportation is really necessary for us. It's convince, useful, cost less. So I hope there is a public transportation this year!

I use my own vehicle and own it.

I was unaware of Manhattan's public transit system until recently. I am afraid that most people are likewise unaware of its existence. Better advertising would be advised.

I wish we had it so our elderly people could get around and it would be affordable for them to use.

I would like to have one [Public transportation - assuming they meant fixed routes].

I would like to have public transportation available in our city.

I would like to see a public transportation service in this town.

I would like to see a regular route between Great Bend, Hoisington, Clenwood and the College.

I would like to see it more actually heard of because I didn't know we had a transit in Manhattan.

I would like to see one form started in my area.

I would like to see public transportation from the small towns to the larger towns.

I would like to see public transportation in Great Bend, Kansas.

I would like to see public transportation in Manhattan.

I would like to see public transportation in our area period.

I would like to see transit service in Manhattan I believe Manhattan is a big enough city to have one probably be less vehicles on the streets. It would pay for itself over the years. I am this too our congresswoman?

I would love to see some form of mass transit within Manhattan and extended to surrounding areas within a 15 miles radius.

I'd like one to go from Riley/Leonardville area to Manhattan.

If we had one I think that would be great.

If we had transportation services I would expect a fair price and quality drivers and have friendly service.

Information on where it runs, cost, hours, and time to get to your area.

Installation of fixed rail electric trolley cars to run to key spots in town.

Is there any good public transportation?

It is not available.

It need to exist.

It ok if ya don't have your own Saturdays and Sundays aren't available however the taxi most of the time city are times town never. [Doesn't make sense at all.]

It works for this "small" community.

It would be good to have public transportation in our area. None exists now.

It would be great to have.

It would be nice to have some.

I've not thought about it.

Light rail 1st. Buses that run in the county (gravel roads).

Like to actually have one!

Live in rural community. Public transportation not available. RCAT (Reno City Area Transit) does not cover rural areas routinely.

Living downtown I would like to see service on the weekends especially to target and the carmike seth childs theaters.

Longer hours. More transportation at night.
Make it available in more places!
Manhattan can use a public transportation service - PLEASE!!
Manhattan currently doesn't offer public transit
Maybe actually getting one usable to non-handicapped persons.
More and cheaper available.
More availability.
More availability.
More available during the daytime.
More available in rural areas.
More cabs or buses available to those in need of a ride. I do not use public transportation, my work is very close to home.
More choice. Regular schedule and fixed route of service. Lower cost.
More day trips for social functions.
More evening hours, Sat and Sunday increase in area.
More hours and information on price and where it goes.
More hours in evening - to Junction City area (VA Health Clinic) couple of good oriental restraurants.
More information about possibilities on how to use one and how much it costs.
More of it!!
More of it, we don' have a lot of it available.
More of it.
More of it. ATA Bus has limited hours - days and geographic areas.
More options of times.
More readily available. I work in a nursing home and I have seen residents wait for hours due to transportation taking so long, or not being open.
More stops.
More transportation available for occasional (when needed) for those who don't have a vehicle.
Trips out of town for elderly to doctors or hospital visits.
More vehicles available.
My daughter is disabled and will never be able to drive. Without public transportation she will have great difficulty getting employed. There should be something that could help this population with transportation.
Need public bus.
Need transportation more for school-aged children and mental health consumers. The hours needed most are not available. It is \$5.00 one way, too high.
Never used it, so no comment.
New to state don't know.
No public transportation.
None currently available.
None in rural area - limited amount for seniors, I think.
None that I know of.
None they are fine.
Not available to rural areas. (Denmark area.) I would use for every trip if it was.
Not have to call the day before ATA.
Not interested at all at this time. 20 blocks from work. Ask me again in 20 years!
Not qualified to answer. Have not used public transport in 40 years.
Not so trashy looking.
Nothing unless you can lower the cost of gas.
Offered at community gathering points - in Yoder - the school on regular and dependable buses.
[Mentions that public transportation is convenient in DC, Seattle, San Antonio.]

Only have Senior bus in Derby.

Only lived here a short time but have not noticed a public transit system. Used public transit regularly in Philadelphia and would continue use here if available.

Our city does not offer public transportation.

Our town is a town of 40,000 so no public transportation is available on a regular route [unreadable].

Our transportation is provided by our local city.

Pick me up when I say to, and pick me up the same way.

Possibly I would use it if it was readily available to all the areas and service we use. Right now I would probably not use it.

Public transportation in Junction City too.

Public transportation readily available to all people all day and to 10pm at night.

Regular routes.

Regular routes.

Regular schedule and posted hours.

Remember Ogden, Keats, Riley - elderly and other could use the services don't forget all trailer counts East of Manhattan and north to Marlatt. Thank.

Run from 5 am to 11 pm for work hours, that's how Omaha, NE is.

Running 24 hrs!

Shorter advance call in.

Shorter than the present 24 hour notice.

Since I don't have a need for public transportation, I don't care.

Smaller busses more coverage - area and times available.

Sooner pick up for elderly, shelter areas to wait for bus. Special pricing for elderly and special population.

Take us to local activities - evenings. [Also noted that the last time she used transit was the 1940s.]

The "County Clerk" is in charge of transportation arrangements - Her office is closed at 5pm and weekends. She won't take calls at home. The job needs to be "returned" to the sheriff's office dispatch/open 24-7.

The closest location we have is 30 miles south of here. I wouldn't ride the bus anyway - I prefer to drive myself - it's convenient - but it's a great service for those that don't have a vehicle.

The closest train is 1hr from Atwood in Nebraska. The closest public bus is 30 miles. There is no public transportation here for the older people.

The lady that drives for public transportation is so rude and nasty that I would Denver take public transportation. Her name is Inez Overton.

The last time I rode in a taxi, it was filthy! The seats were torn also.

The local public transportation is only with prior reservations. Would like to see something more readily available and that would travel out of town.

The transportation is fine. Got ride anytime I need one.

To actually have one.

To establish service to the aging rural population.

To have local transportation.

To have on, but private so we don't waste government money.

To have public transportation.

To have some! Right now we don't have any. I would be interested in some sort of commuter transportation. There are several / many people who live in Marion and work in Newton or Wichita.

Train transportation for trips.

Transit from Manhattan through Ft. Riley and Junction City.

Transportation on weekends.

Transportation that would have a convenient route from Great Bend to the college 7 days a week.

Trolley from SE to West and back on routine basis.

We are in such a rural area - I can't see it would be used except by the elderly with no relatives.

We don't have any.

We don't have any.

We don't have local public transportation it is a small rural town.

We don't have public transportation - it is not feasible.

We have no public transportation and it would not be feasible. If it were possible to ride the school bus it might work.

We have no public transportation.

We have no public transportation.

We have no public transportation. We live in rural Kansas. I think Liberal, KS - 60 miles away has taxis.

We have no service and live in a very rural area.

We have none.

We have very limited transportation available due to people have to schedule ride days in advance and have limited hours of operation. The drivers are often late when picking up and dropping off therefore causing employment issues if late for work.

We live "out in the country" so we doubt that public transportation will be available to us - as long as we live here.

We live in a rural area 3 miles from the city limits so none of this seems to apply to us.

We live in the country so I do not know much about the public transportation in Belleville. I think it is great for the people who use it.

We live too far out in the country for public transportation to be a viable option. Until fuel prices come down, our senior citizens are at a distinct disadvantage.

We need coverage on Sundays to go to church. When I don't have my car.

We need it.

We need to have some!!! Buses.

We only have a small city bus I think. Calis [sp?] or single car transport would be nice too.

Weekend availability.

When the driver is sick there is no service.

Wish there was bus service readily available both local and across state. Transit people stuck in Barton Co. with no ride to bus service.

Would like one to take me to Manhattan for work and back.

Would like to have transportation least be an option.

Appendix D - Provider Results

Are you a 5311 (general public) recipient?

Yes	No	Invalid	Blank
39	13	0	13

Are you a 5310 (elderly/disabled) recipient?

Yes	No	Invalid	Blank
28	15	0	22

Does your agency have a logo?

Yes	No	Creating	Invalid	Blank
32	25	1	0	7

Has your fare changed in the last year?

Yes	No	Invalid	Blank
19	38	0	8

Over the past few years has your budget been...

Increasing	Decreasing	Staying the same	Invalid	Blank
38	5	12	0	10

Is local government supportive of public transportation?

Yes	No	Sometimes	Invalid	Blank
50	3	5	0	7

What is the local communities' perception of public transportation for the elderly or disabled?

Excellent	Fair	Poor	Invalid	Blank
31	22	2	2	8

What is the local communities' perception of public transportation for the general public (non-elderly or disabled)?

Excellent	Fair	Poor	Invalid	Blank
22	26	5	3	9

Have you conducted previous customer surveys with your riders?

Yes	No	Invalid	Blank
25	34	0	6

Does your agency have a website that shows information about your service?

Yes	No	Creating One	Invalid	Blank
26	28	4	0	7

Has your agency tried to increase its ridership in the past?

Yes	No	Invalid	Blank
42	11	0	12

Are you currently interested in or trying to increase your ridership?

Yes	No	Indifferent	Invalid	Blank
34	9	9	1	12

If Yes, how did you attempt to increase ridership and what were the results?

5316 (JARC) 2009. 5 5310 vehicle (expansion)

Advertise in local paper, word of mouth. Increased ridership. Main taxi company no longer in business due to death of owner.

Advertised and better customer relations. Slight increase.

Advertising

Advertising - post fliers.

Advertising in newspaper. New magnetic signs on vans.

Advertising.

Advertising. Yes ridership has increased by about 60%. Very very busy drivers and dispatchers.

Extra advertising. Fliers.

Fliers - Minimal, Newspaper Ads - Minimal, Promotional excursions - fair

Flyers in local stores and hotels with a suggested donation list of locations.

Free rides - tickets

Free rides. Schedule trips and local service trips. Picked up a few more riders.

Help at rest homes. Radio AD - daily. Covered Dish Supper (Monthly). Give free pass to new residents.

Increases by word of mouth.

Increasing advertising showed very little change.

Increasing by amount of clients that come into program daily.

Increasing Partnerships and marketing expanding service area. OCKK is starting a fixed route service in Nov.

More options on trips offered = slight increase; Incentive programs = Just getting started.

More public education which was successful

More trips for patients

New ads in newspaper, yellow page ads, free radio ads, local tv commercials, and word of mouth. Picked up 2 or 3 riders once a week in WARM WEATHER.

Newspaper ads

Offer free day for all passengers. Attend fairs, clinics and public meetings with displays/booths. Newspaper coverage.

Offered free rides thru Council of Aging for lunch at the senior center. Only 2 people participated and no one took advantage in October. An ad runs in the county paper every week.

Our service continues to increase with out effort on our part.

Perodic announcement.

Public outreach through affordable media, presentations to local organizations, businesses and churches = Ridership increased.

Ridership increases without efforts.

Since gas prices has raised ridership is up.

This year we have seen a nearly 44% increase in growth.

Through our current riders, through television, through newspaper ads, put flyers in stores and apartment complexes.

Tried to provide fixed route service to the underserved part of county. Worked through the senior centers in the smaller towns. Could not establish a rider base.

We are always advertising

We are attempting to add fixed route service if the local funding is available. [Increased ridership by 21.5% in last year}

We have increased with add Wichita trip 5 day a week for people.

We offer transportation to all RSVP volunteers as they enroll and to those existing volunteers whose changing circumstances dictate (emerging) need for transportation service. Ridership numbers rise and fall accordingly, but have generall increased.

We only transport members of Foster Grandparent Program.

We pass out flyers and call on people.

Word of mouth advertising, Brochure Ads, Newspaper Ads

Would it be beneficial to your area, not just your agency, for your ridership numbers to increase?

Yes	No	Unknown	Invalid	Blank
30	9	16	0	10

Do you provide door-to-door or curb-to-curb service?

Door-to-door	Curb-to-curb	Invalid	Blank
33	16	3	13

Who is your ridership directed toward?

	Yes	No	Invalid	Blank
General Public	43	16	0	6
Elderly	49	10	0	6
Disabled	47	12	0	6

How much assistance do drivers provide customers?

Aid getting on and off vehicle.

All that is needed to insure safe passage of the client.

All they need

Anything needed door to door only
As much as is necessary
As much as is needed
As much as needed
As much as needed and can be done legally
As much as needed to get to and into vehicle.
As much as needed.
As much as possible when necessary
As much as necessary
As needed
As needed
Assist passengers in and out of van if needed.
Assistance is available to all that need it.
Assistance off and on the bus and carry groceries, bags to their door.
Assistance with entering and exiting the vehicle.
Blank
Boarding and Exiting. Assistance with Bags (groceries, etc)
Door to door service for disabled. See brochures section 7 and 13.
Drivers help people to their doors. Carries groceries too.
From door to vehicle, in and out of wheel-chair ramp.
Hand to steady entrance and exit from vehicle - carry bags to door.
Help in and out of vehicle. Carry groceries, walkers, ect.
Help on and off vans and whatever needed to get
Help people on and off bus. Buckle them in their seat. Carry items to the door for them.
Help rider when enter and leave, as needed. Carry grocery to home and inside if needed.
Whatever needed.
Help riders enter and exiting van and loading and unloading packages. No physical hands on with riders.
In and out of the vehicle and reasonable assistance when asked.
In and out of vehicle and carry groceries
Minimal - will carry bags
Minimal to zero.
More than required - assist with bags to door
Only activities related to gboarding and exiting bus
Some
Sometimes they even go inside to put on shoes and coats they help them down steps, ect.
Strictly curb to curb other than load a walker or wheelchair if person transfers.
they can assist passengers in entering/exiting vehicle. We have a wheelchair-equipped vehicle for physically disabled.
They help our clients both loading and unloading from the bus. Help with items they have alos.
To and from vehicles
Too much.
Up to total assistance
Varies with the physical condition of the passenger
Very little.
We are a nursing home and our driver takes care of all the residents.
We are trained in first aid - [unreadable] CPR.
We do customer service.
We open the door for them.
We provide assistance with a paid aide on half the trips. Help people on the lift or up the steps.

We transport only children, so some, but not an extreme amount
 Whatever is needed at the time.
 Whatever is needed.
 Whatever their needs are: physical assistance to communication.
 Will help with entering and leaving vehicle. Will assist with packages if needed.
 Will help with packages.

Do you provide any funding for marketing or advertising?

Yes	No	Invalid	Blank
38	20	0	7

Does your agency have access to expertise in marketing?

Yes	No	Invalid	Blank
20	36	0	9

Does your agency have access to expertise in operations?

Yes	No	Invalid	Blank
34	21	0	10

Does your agency have access to expertise in long term planning?

Yes	No	Invalid	Blank
32	23	0	10

What is your policy on personal care attendants?

Any person can ride along. We would like a caregiver to go if client needs help - can't require.
 Attendants ride free as long as they are providing assistance to the vehicle and from the vehicle for the same ride.
 C.N.A.s
 Care attendants and caregivers are give rides upon request.
 Care attendants ride free.
 Determined on a case by case basis. Generally allow.
 If they are our employees, they can ride.
 May accompany client. When transport from local nursing home, require attendant to accompany.
 No policy.
 None.
 None.
 Not applicable.
 One personal care attendant may ride at no charge (section 7)
 Personal Care Attendants ride with passenger for free.
 Require someone to go along with individuals to help them.
 Ride for free - required if obviously needed
 Ride for free when assisting paid passenger - if driver is unable to meet this need.
 Ride for free with their care client/patient.
 Ride free.
 Ride with them
 Riders may have one PCA ride for free. We reserve right to require riders to use PCA.
 That is our full time job.

The members who choose to have personal care attendants are welcome to ride the van together with their attendants.

They are permitted without a fee.

They are welcome and they ride free.

They are welcome to ride along to help with individuals.

They are welcome to ride for free.

They are welcomed and encouraged the fee is not charged for attendants.

They are welcomed and ride at no charge.

They have to be a "C.N.A."

They ride at no cost.

They ride for free.

They ride for free.

They ride free

They ride free

They ride free.

They ride with person at no charge.

This is available with home health and to other plans which we use.

This is not a request with our service, but would be allowed if necessary. We do allow service animals if passenger has a disability requiring use.

We do not have a set policy.

We do not provide personal care attendants (except as furnished by drivers)

We do our very best in helping all of our clients no matter age or what their need may be. If it is something we can't do then we would ask family or friends to help with the person. Independence is a large thing for most seniors.

We have them with the D.D. pop

We provide them when needed.

When dealing with elderly we feel it is important to have a personal attendant accompany the elderly on most trips.

When they are required, they ride at no charge.

Is your agency listed in the local phone book?

Yes	No	Invalid	Blank
56	1	0	8

What would you describe the purpose of your service as?

5310. 5316 JARC

Affordable Transportation.

Community Service and what ever each rider can afford to contribute.

Demand response general public transportation.

For our LTE patients

General public transportation for general public, elderly and disabled patrons.

Helping citizens to where they have to go.

Jackson County General Public Transportation

Keep residents in their home (independent) as long as they desire.

Mainly providing transportation for nutrition side attendance, shopping, and personal business.

Nursing Home

Nursing home. Assisted Living Apartments.

Primarily to obtain medical services for our residents. 2nd provide social transportation.

Provide general transportation to Osage county citizens

Provide needed transportation (as much as possible) to those who are transit dependant.

Provide quality transportation service.
 Provide transportation to rural residents.
 Provide transportation to the people in the area who need it.
 Providing Transportation
 Providing transportation for our elderly, so they may remain independent as long as possible.
 Public transportation for residents in Miami County. Trips are welcomed to them out of county.
 Public Transportation.
 Public Transportation.
 Public Transportation.
 Serve adults with developmental disabilities in a day service setting.
 Service to the communities we serve
 Serving the general public.
 Taking people where they need to go - medical, shopping, work, school, ect.
 The main us of our transportation program is to provide transportation to clients so they can attend mental health and medication appointments within our agency.
 The purpose is to transport members to and from the clubhouse.
 To aid those that can no longer drive or have no means to transportation.
 To assist people to run errands and get to local functions and nursing homes [unreadable].
 To assist seniors to remain independent and active in the community as possible.
 To get people where they need to go.
 To help all ages to get to doctors - store, where ever their needs may be in a kind helping safe manner.
 To provide general public transportation services to Manhattan/Riley County.
 To provide general public transportation throughout Phillips County.
 To provide general public transportation.
 To provide safe and convenient transportation to the city and of Cowley county.
 To provide safe and dependable transportation to the citizens of Atchison County.
 To provide safe passage for our resident whether it is medical or person.
 To provide service to elderly disabled and the general public to people in wheelchairs.
 To provide transportation in a safe way for the elderly in the community as a means for quality service.
 To transport Passenger to doctors, shopping, work, etc.
 To transport senior volunteers and volunteers with transportation - challenging disabilities to and from their volunteer service sites.
 Transit to all G.P.
 Transport DO clients to job sites, grocery, medical, and entertainment. Provide transportation to General Public.
 Transport individuals to and from their desired locations within city limits.
 Transportation for anyone who needs it.
 Transportation of elderly / low income to work stations.
 We [unreadable] and take Seniors to the Center for meals and then take them home. We take them for medical.
 We transport our clients to and from our services if, and only if, they have no other alternative and cannot qualify for medicaid transport.

Do you use computerized dispatching software?

Yes	No	Invalid	Blank
3	56	0	6

Computerized dispatching responses:

“Maintain schedules in MSWord daily.”

“Para Plan Lite”

“Trapeze Pass”

“Microsoft Access Database”

What days of the week do you offer general public transportation?

	Yes	No	Invalid	Blank
Monday	49	6	0	10
Tuesday	49	6	0	10
Wednesday	48	7	0	10
Thursday	48	7	0	10
Friday	48	7	0	10
Saturday	7	48	0	10
Sunday	6	49	0	10

Has you agency ever discussed operating routes on a regular schedule and route (fixed route service)?

Yes	No	Currently Do	Invalid	Blank
10	40	8	0	7

What is your biggest obstacle to providing or expanding your service?

[unreadable]

Always the money.

At this time I don't see a need to expand the fleet. Expanding hours of service we do not see the demand.

Budget and Vehicles.

Budget decreases.

Budget.

Budgetary concerns and [unreadable] to service our regular areas.

Cost

Cost of operation.

Cost. Only so much from KDOT.

Demand of time and distance constraints with one vehicle providing the entire service. Potential limits of # of volunteer drivers available.

Dollars needed to expand.

Don't have money to hire an extra driver.

Driver wage and availability.

Drivers and money.

Federal Funding of 76P Programs.

Finance. Paying a salary to keep experienced drivers.

Finding enough volunteer drivers. Maintaining the buses with repairs. Gas prices.

Funding

Funding (capital/operations)
Funding and additional personnel.
Funding for staffing beyond hours and stigma of using public transportation.
Funding to purchase new van and the funding for staff and operating costs.
Funding, manpower
Funding.
Funding.
Funding.
Gasoline increase vs budget cutbacks.
Hiring more Staff
KDOT Funding
Lack of funding.
Lack of volunteer drivers
Matching funds.
Money
Money to commit to building and expanding the program.
Money, Vehicles
Money.
No obstacles, just need more riders.
None
None
Not enough funds
Our service is limited to our healthcare, assisted living, and independent living residents.
Personnel and finances
Riders and drivers.
Small community - few riders.
Staff
The cost of operating the transportation services to our clients.
The county backing for extra hours.
The funding.
The time it takes to get from 1 stop to another.
To get drivers to take and drive out of town - most only want the in town driving.
Transportation is provided for program participants. Lack of available funding prevented increasing our clientele.
We are a provider of last resort. If other alternative existed we would HAPPILY shut down our transportation program.
We are currently providing service to all residents requesting service.
We sold our van because we couldn't afford the insurance. Our people are getting fewer and fewer here at the senior center. It was hard to find drivers so we are not involved here with transportation. Thank you for caring. Lois Janzen.

What improvements or changes do you think would help increase your ridership?

[Unreadable.]

Actually we are trying to reduce our ridership due to the expense and no reimbursement because of the competition. We are trying to get a medical doctor in town to save trips.

Adding weekend service.

Additional match money so we could have a paid drive. Most of our trips are for medical 30 to 75 1 way. [Would run other hours though including Sat and Sun if needed]

Another vehicle - van type.

Better coordination, weekend service hours.

Don't want to service anyone other than those with mental retardation.

Economically not feasible to drive personal vehicle, public transportation being free.

Education the clients on the need to schedule rides by calling the office.

Expanded hours and paid drivers.

Fixed route service [Also Ending Ride time is 10 pm 4 days, 3 am for 3 days per week.]

Funding for the MR/DD state waiting list of approximately 3,000 persons.

Have a mini-van service. Weekend hours possibly.

I believe we have a good thing the way we are. Maybe more out of town trips for doctor appointments. I would like to see possible to go to Salina. Also I would like to see yearly driving classes for our drivers not classroom time but time driving.

If we began running early and closed lately!

If we could maybe have weekend service - Maybe.

Implementation of fixed routes.

In rural territory - we travel a lot of miles to pick up ONE passenger and return one passenger many miles EMPTY to pick them up - then to Apt and same on the return. It's is 4 trips. Only count 2 with passenger.

Increase hours and weekends.

More driver, vehicles, dollars.

More funding, less reporting/audit requirements.

More public knowledge.

More vehicles

More vehicles and more drivers

No dramatic increase desired with current resources! (nor need anticipated.)

Nothing. We love our riders and they could not find better care or assistance.

Obviously, expansion.

Our ridership has increased in the last three months. I'm sure due to the gas issue. If we went out of district for medical trips [it would increase].

Program expansion.

Providing mid-day rides for members.

Public more receptive to this service.

Riders need to spread the word. Higher gas prices seems to help.

Ridership increases on its own.

Unknown.

We are currently booked 1 year in advance. Additional funding to hire more full time drivers.

We are no longer in the transit program. Signed by Kidron Bethel Marilyn

We believe all area covered as this is our pledge - to keep persons in home as long as they desire.