



CARSON CITY TRANSIT DEVELOPMENT PLAN

FOR FY 2014 – 2018

Prepared by: Carson Area Metropolitan Planning Organization

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CHAPTER 1: INTRODUCTION

In 2002 the Carson City urbanized area received the designation of metropolitan planning organization. As a result, the newly created Carson Area Metropolitan Planning Organization (CAMPO) became eligible to receive additional transportation-related funding, and determined it would be useful to complete a Short Range Transit Plan. In June of 2005, a Short Range Transit Plan was completed for CAMPO which examined the potential for expanding the existing transit service—the Carson City Community Transportation (CCCT) system. The plan sought to address two key issues of the CCCT service: improvements to enhance demand response service in the region; and, the feasibility of providing fixed-route service. The Jump Around Carson system began fixed route and complementary paratransit service in October 2005. Since then, the demand response service has evolved, operating as a paratransit system for the past several years, and a successful fixed route system, now known as Jump Around Carson (JAC), has been implemented and has experienced steady growth. The purpose of this Short Range Transit Development Plan is to identify service gaps as well as potential improvements and expansion. The plan will not only provide a detailed account of the existing system, but will seek to guide the development of mobility services for residents of and visitors to the Carson City area over the next five years.

This Transit Development Plan was developed to meet local priorities for Carson City’s existing transportation services, including capital improvements, operating changes to the existing system, and how Carson City will fund existing program needs over the next five years. This study was conducted using an analysis of past and present characteristics of the JAC system, including ridership data, performance measures, and budgetary/expense figures, as well as census data, public input, and the locations of various services relative to the JAC coverage area. The following chapters will provide a detailed discussion of this information, evaluate potential system improvements, and conclude with recommendations of staff based on the findings in the report.

CHAPTER 2: EXISTING SYSTEM

Basic knowledge of the operating characteristics and ridership levels of the JAC system is a fundamental component of a sound transit development plan. This knowledge is based on an in-depth examination of operating characteristics and ridership levels of the current system as well as that of its immediate past. This chapter will describe JAC service characteristics as well as existing facilities and equipment and operating expenses. While the JAC system is the most prominent service in the area, it is not the only transit provider. As such, this chapter will also highlight the various other transportation options available to Carson City's citizens, including intercity bus service and specialized transportation for elderly and disabled persons.

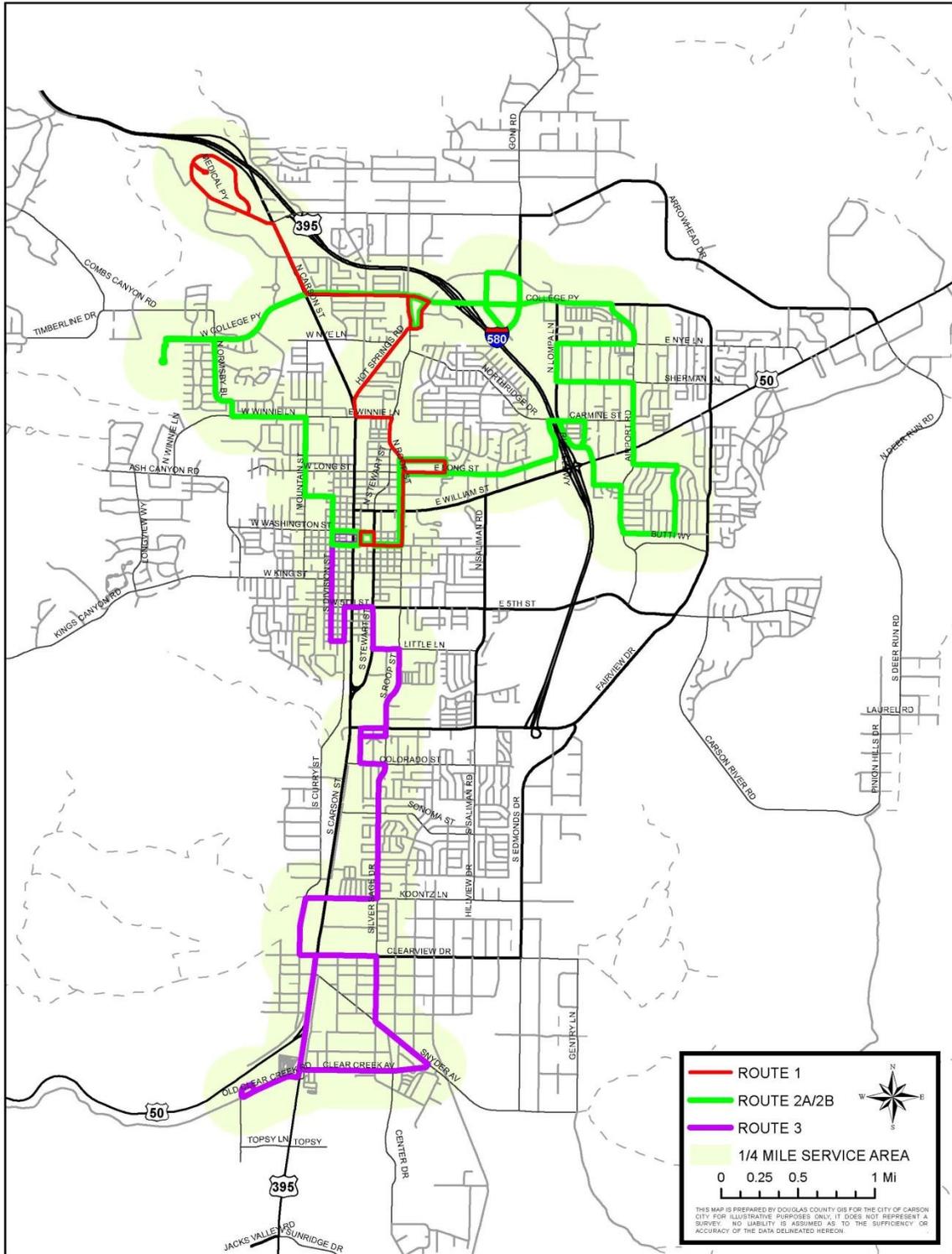
History and Background

Jump Around Carson has existed in its current form—with fixed route JAC buses and complimentary paratransit JAC Assist buses—since October 2005. As a result of the designation of the Carson City Urbanized Area and formation of the Carson Area Metropolitan Planning Organization (CAMPO), a significant amount of additional Federal funding for transportation services became available to Carson City. The result was the expansion of the Carson City Community Transportation demand-response service to include fixed route service. The service was also rebranded as Jump Around Carson (JAC)—a name (and logo) that capture the spirit of the jackrabbit, a Northern Nevada icon. Currently, expenses of operating the JAC system are covered by various Federal grants, as well as contributions from Carson City's General Fund. A portion of these expenses are also recovered through fares paid by JAC and JAC Assist passengers.

The JAC system is overseen by the Carson City Regional Transportation Commission (RTC), and is managed by the Transportation Manager and Transit Coordinator. The RTC contracts with MV Transportation, Inc. (MV) to operate these services with private employees, while remaining under the direct supervision of the RTC. The RTC is responsible for overall policy development, budgeting, fleet procurement, major fleet maintenance, and contract oversight. MV is responsible for the day-to-day operations of the service, including: client registration; hiring, training, and supervising operations staff; trip booking; scheduling and dispatch; vehicle operations; and, minor preventive maintenance. The MV employees enlisted to carry out the contract with JAC include a General Manager, an Operations Manager, dispatchers, and 18 drivers, 14 of which are part-time employees. Trip routing and scheduling are assisted with the use of scheduling software provided by the RTC, and maintenance is performed by employees of the Carson City Public Works Fleet Maintenance Division.

JAC's fixed route system (Map 2-1) operates one bus on each of four routes with 60 minute headways six days per week. Buses operate every 60 minutes from the Downtown Transfer Plaza starting at 6:30 a.m. and ending at 6:30 p.m. Monday through Friday; buses run from 8:30 a.m. to 4:30 p.m. on Saturdays and do not operate on Sundays or select holidays. Cash fares are \$1.00 for an adult one-way trip, and seniors, persons with disabilities and youth may ride for a reduced fare of \$0.50 per one-way trip. Children under age five ride free. Discounted fares are offered

Map 2-1: JAC Service Area



through the purchase of Monthly or 10-Ride passes; tickets and passes are available at several convenient locations throughout Carson City. These fares have remained stable since the inception of the service. Transfers are free to and from other JAC buses (with the exception of transfers between Route 2A and Route 2B); transfers are also free from other transit providers (i.e. RTC INTERCITY and BlueGO), and transfers to other transit providers are offered at a reduced rate. All JAC fixed routes provide the opportunity for passengers to transfer to these other services at the Downtown Transfer Plaza. Opportunities for transfer within the JAC fixed route system itself are available both at the Downtown Transfer Plaza as well as at several stops in the city.

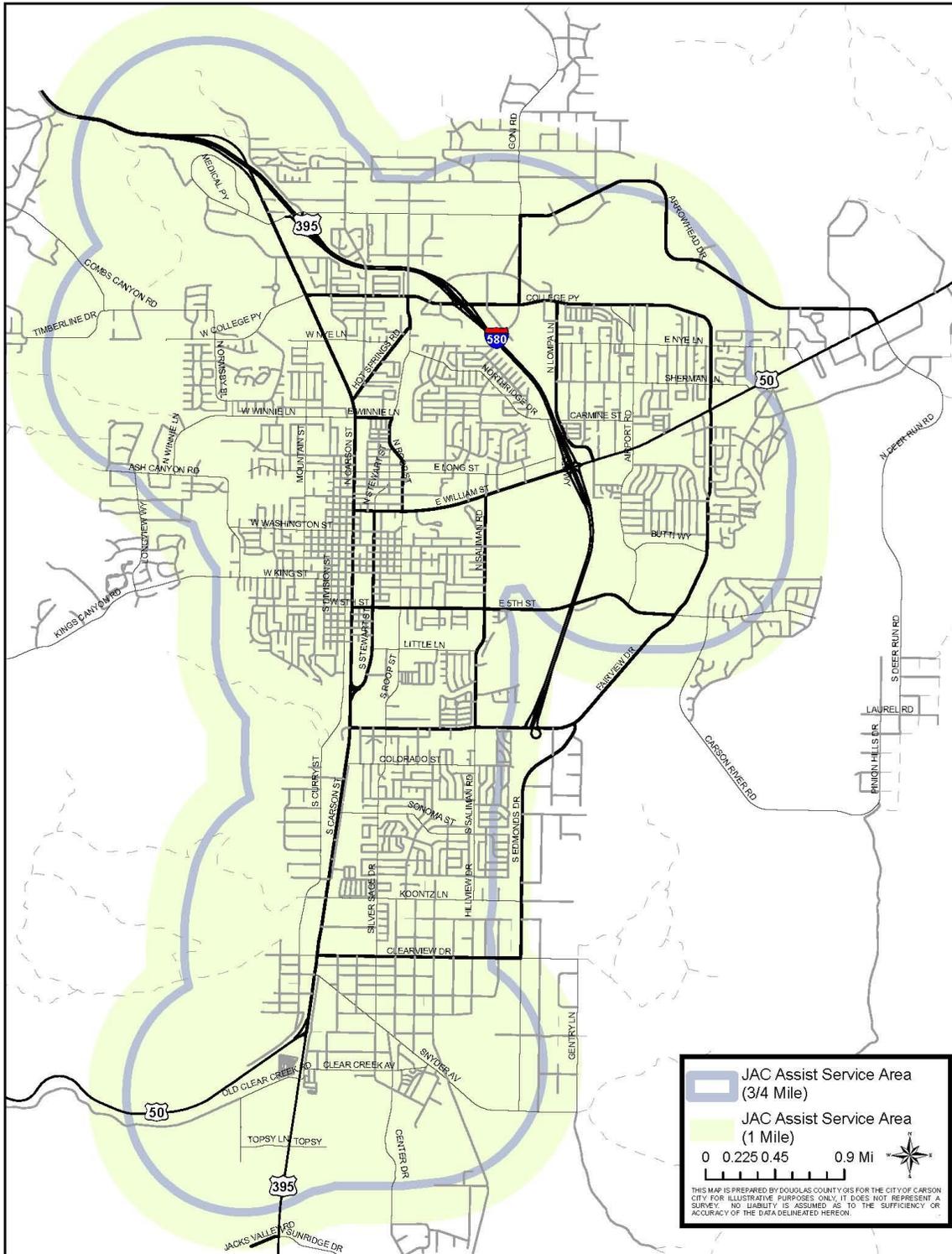
JAC Assist provides complementary paratransit service in order to serve the travel needs of disabled individuals. The service is provided with smaller vehicles as “origin to destination” service. The cost for this service is \$2.00 for each one-way trip within $\frac{3}{4}$ mile of any fixed route, and \$4.00 for each one-way trip between $\frac{3}{4}$ mile and 1 mile of any fixed route (Map 2-2). JAC Assist buses operate during the same days and hours as the JAC fixed route service. This service is provided to comply with regulations of the Americans with Disabilities Act (ADA) of 1990, which require each recipient of Federal funds operating a fixed route transit system to provide a complementary paratransit service for disabled individuals who are unable to use fixed route. Individuals who wish to be considered for JAC Assist must complete an application, have the information verified by a medical professional, and be certified by JAC as ADA paratransit eligible. A policy has been adopted which governs the application of ADA-compliant service.

Equipment and Facilities

The current Jump Around Carson fleet consists of 15 vehicles including the following:

- Seven fixed route buses. All are ADA compliant and equipped with wheelchair ramps, securement areas and a bicycle rack capable of carrying two bicycles. All of these vehicles are partial low-floor vehicles. The age of the fleet ranges from model year 2009 to 2013. Bus size and carrying capacity ranges from 34-35feet and 21-32 ambulatory passengers with zero to three wheelchair passengers. These buses are primarily purple with green accent coloring.
- Seven paratransit buses. All are ADA compliant and equipped with wheelchair lifts or ramps, securements areas, and some are equipped with a bicycle rack capable of carrying two bicycles. The age of the fleet ranges from model year 2007 to 2012. Bus size and carrying capacity ranges from 21-24feet, and 4-21 ambulatory passengers with one to three wheelchair passengers. The buses are primarily green with purple accent coloring.
- One minivan. This vehicle is ADA compliant and equipped with a wheelchair ramp. It is used primarily for transporting bus drivers to and from the transfer plaza during shift changes, but is also used as needed for JAC Assist service.

Map 2-2: JAC Assist Service Areas



The fixed facilities used by the transit system are shown on Map 2-3 and consist of the following:

- A total of 19 bus passenger shelters sited at various locations throughout the transit service area, with seven of the shelters being used by multiple routes. All shelters include a bench for waiting transit patrons. Other bus stop amenities (not portrayed on the map) include unsheltered benches and trash receptacles, and are also sited at various locations throughout the service area.
- The Public Works storage, maintenance, and office complex located in the eastern portion of the City. The transit program functions operate out of three buildings at the Public Works site, sharing two with other City programs.
- The Transfer Plaza, located in downtown Carson City outside the Federal Building, which includes two of the 19 passenger shelters.

Route Characteristics

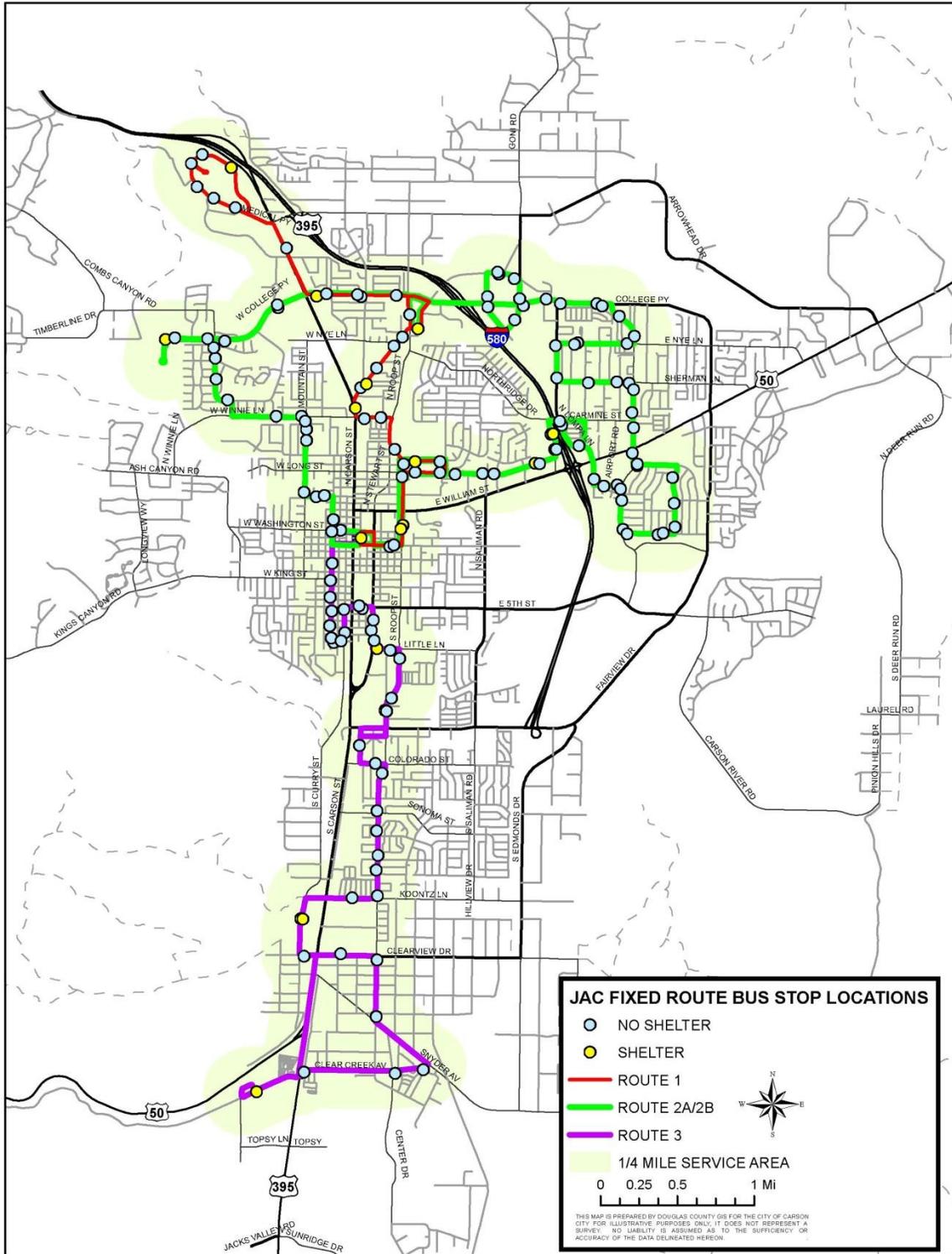
The JAC fixed route service consists of four routes with one hour headways running weekdays from 6:30 a.m. to 6:30 p.m. and Saturdays from 8:30 a.m. to 4:30 p.m. Two of the routes—Route 1 and Route 3—operate generally north and south of downtown Carson City, respectively, whereas Routes 2A and 2B run in opposite directions along an east-west loop. Many of the City’s major trip generators—with services including government and medical facilities, public and private schools, services for the elderly and disabled, social services, and major employers and shopping centers—are served by, or fall within the service area of at least one bus route (see Maps 2-4 – 2-10).

Route 1 follows a northerly route out of the transfer plaza, reaching the Carson Tahoe Regional Medical Center at its northern-most extent, and generally provides two-way service. The route includes 40 stops in between arrivals to, and departures from the transfer center. In addition to the hospital, major trip generators along the route include the Carson City Senior Citizens Center, Wal-Mart shopping area, the public library, the community center, Carson City Health and Human Services Department, and multiple senior housing complexes.

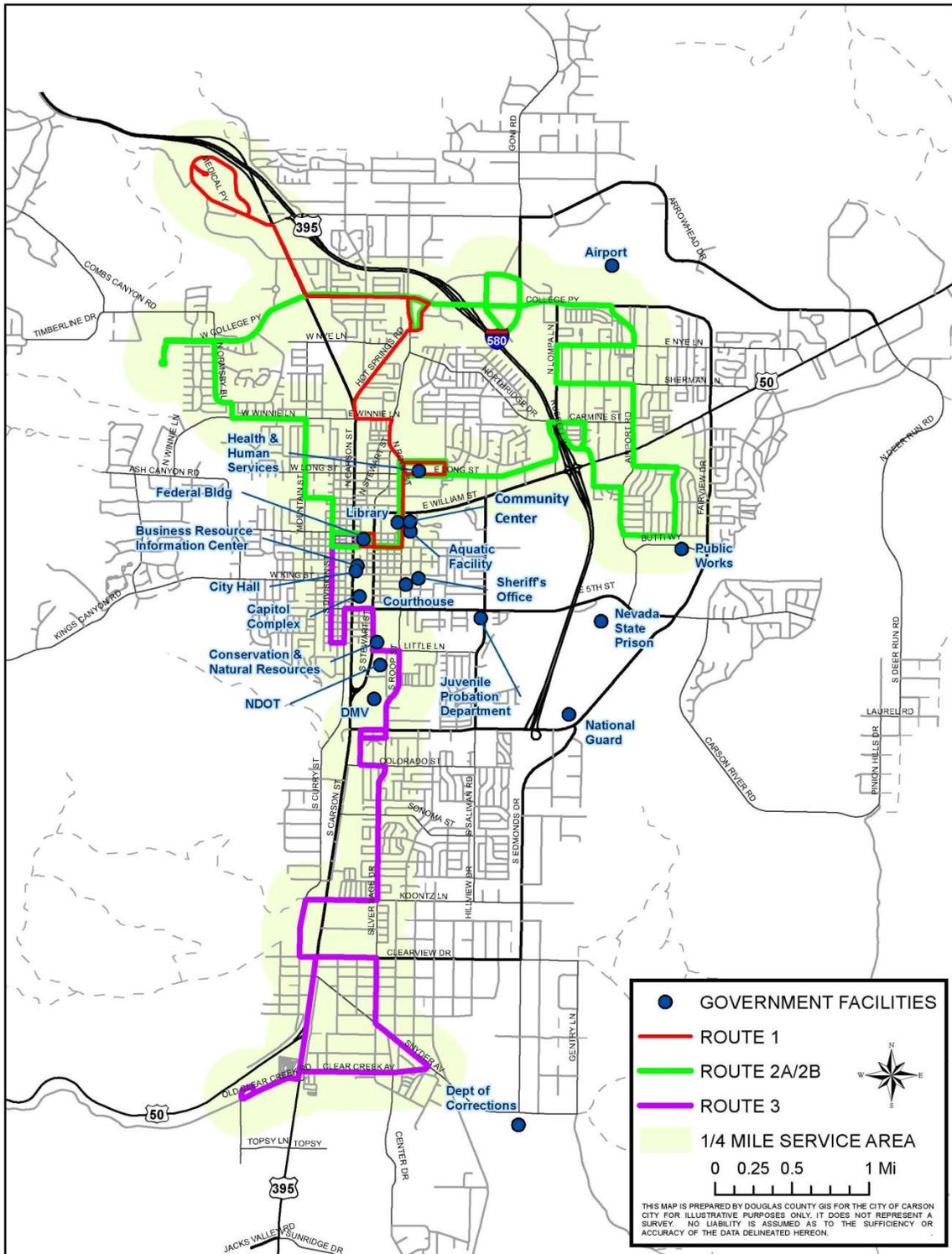
Routes 2A and 2B follow virtually identical paths with 2A traveling clockwise and 2B traveling counter-clockwise. These routes make one giant loop, as opposed to Routes 1 and 3 which provide linear, two-way service, and provide service oriented more east-west than north-south. Route 2A serves 55 stops and Route 2B serves 56 stops in between arrivals to, and departures from the transfer center. Routes 2A and 2B service many of the same major trip generators as Route 1 including the public library, the community center, Wal-Mart, the Carson City Senior Citizens Center and Health and Human Services Department. Other major trip generators served by Routes 2A and 2B include Western Nevada College, Nevada Health Centers and the Boys and Girls Club.

Route 3 follows a southerly route out of the transfer plaza, reaching Fuji Park at its southern-most extent, and generally provides two-way service. The route includes 49 stops in between arrivals to, and departures from the transfer center. In addition to Fuji Park, major trip generators along the route include Casino Fandango, Southgate Plaza, Nevada Department of Transportation and the Capitol Complex.

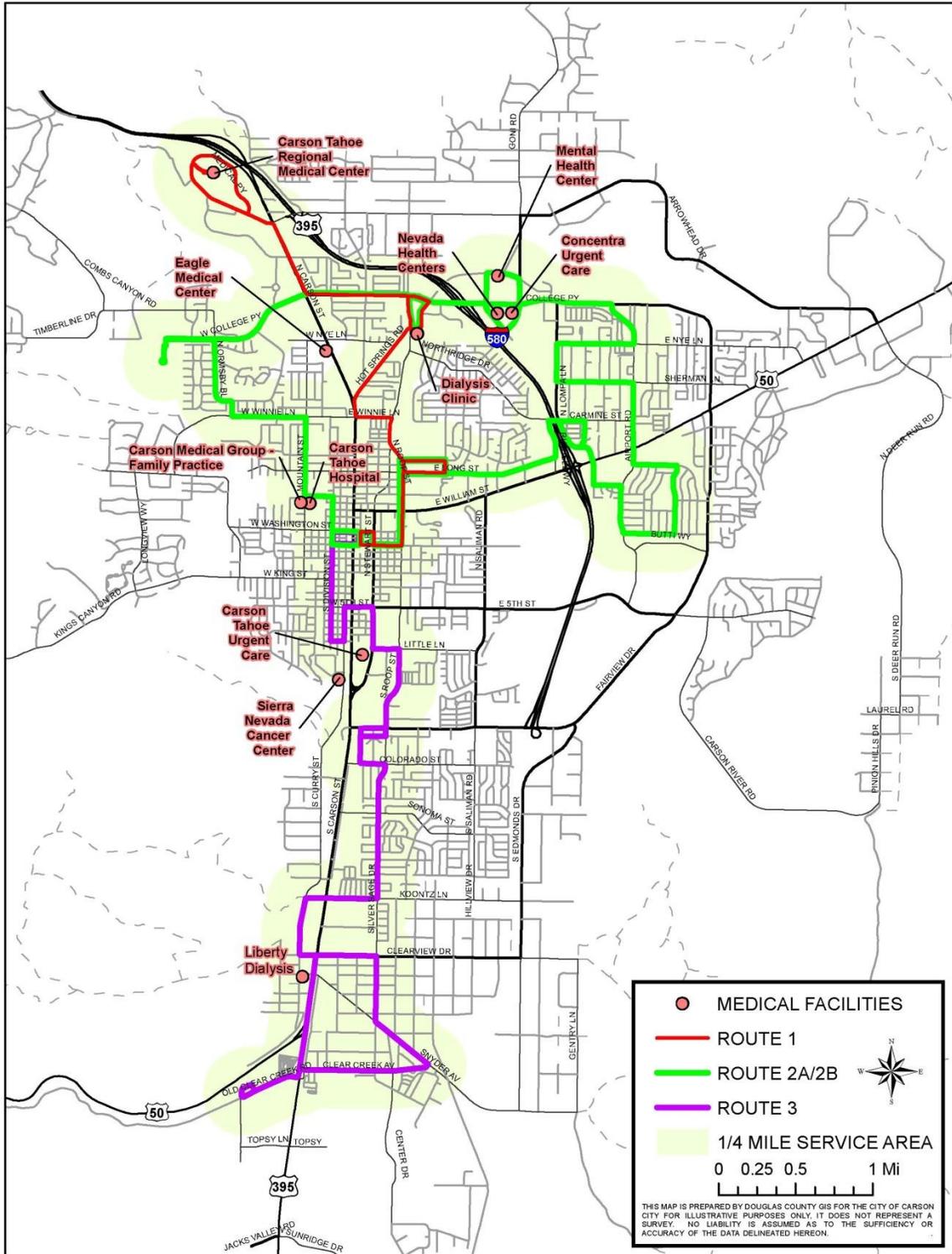
Map 2-3: JAC Bus Stops and Facilities



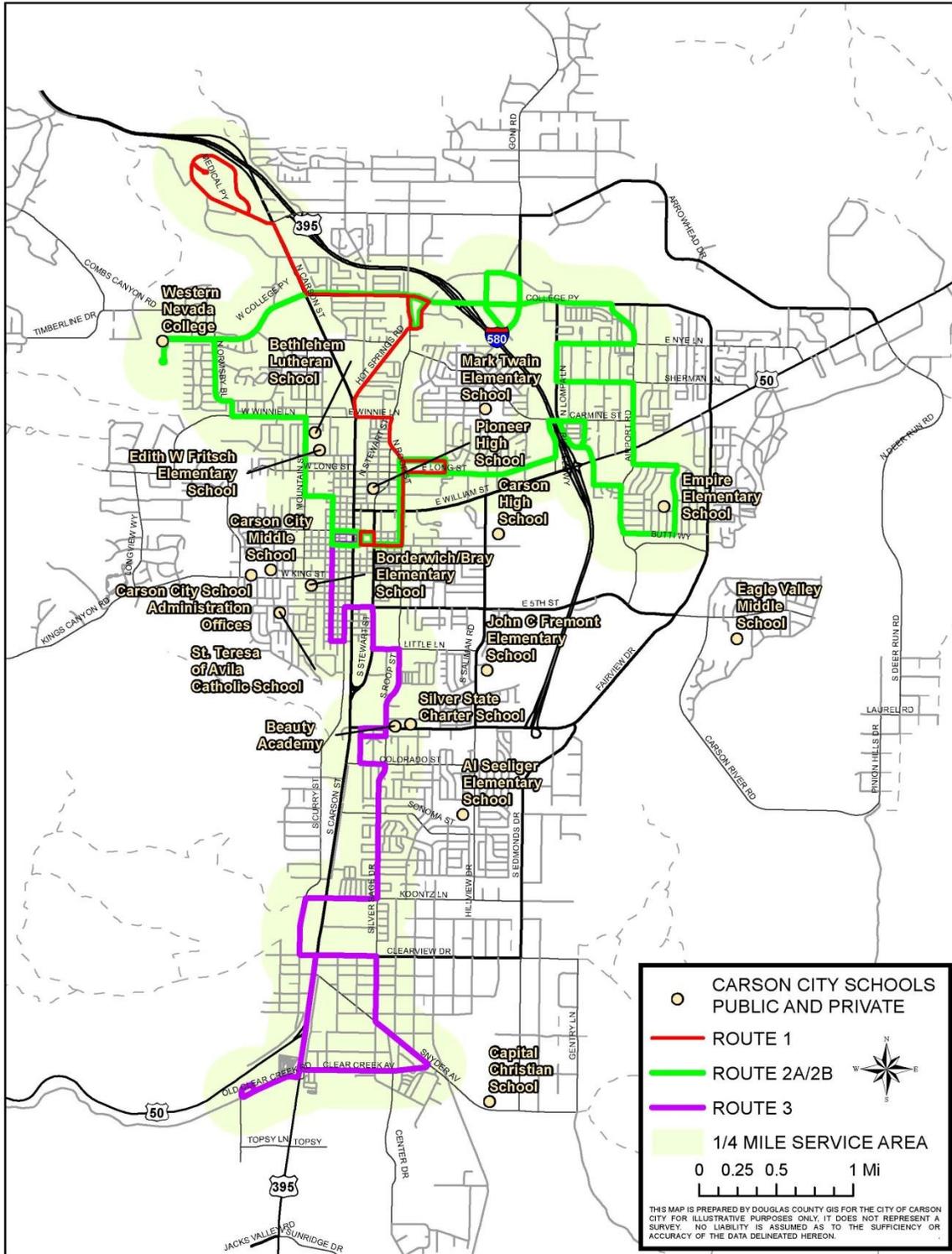
Map 2-4: Government Facilities



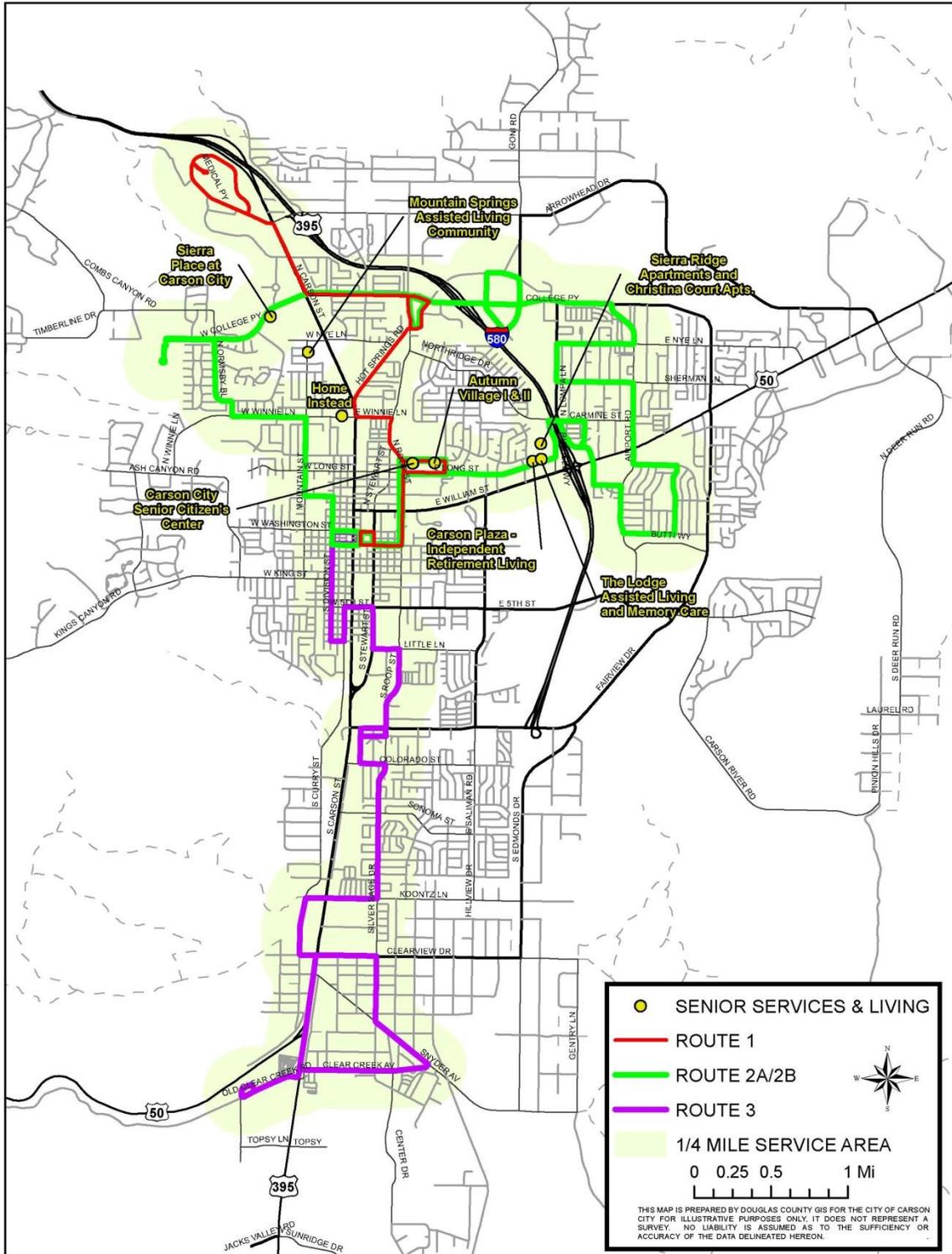
Map 2-5: Medical Facilities



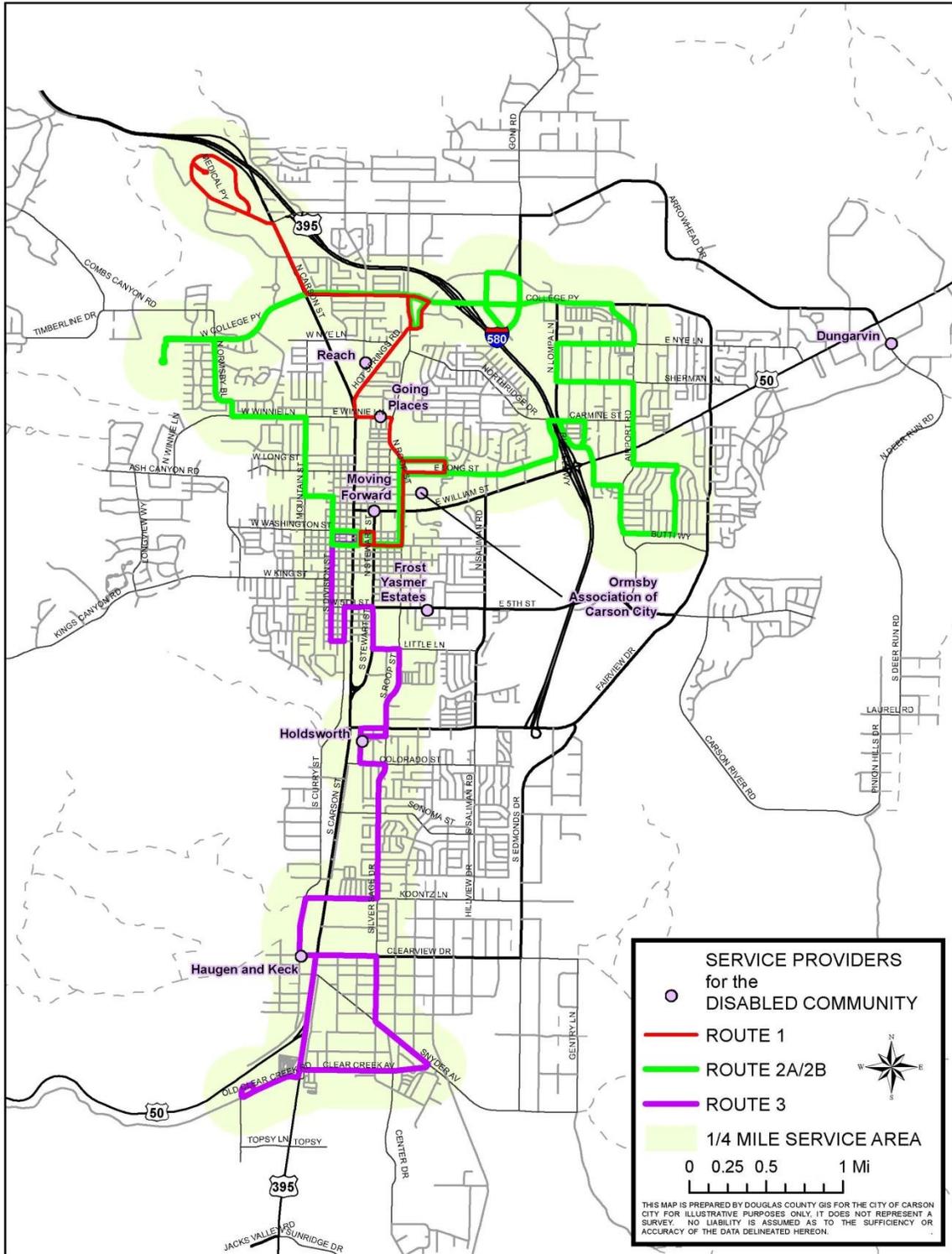
Map 2-6: Public and Private Schools



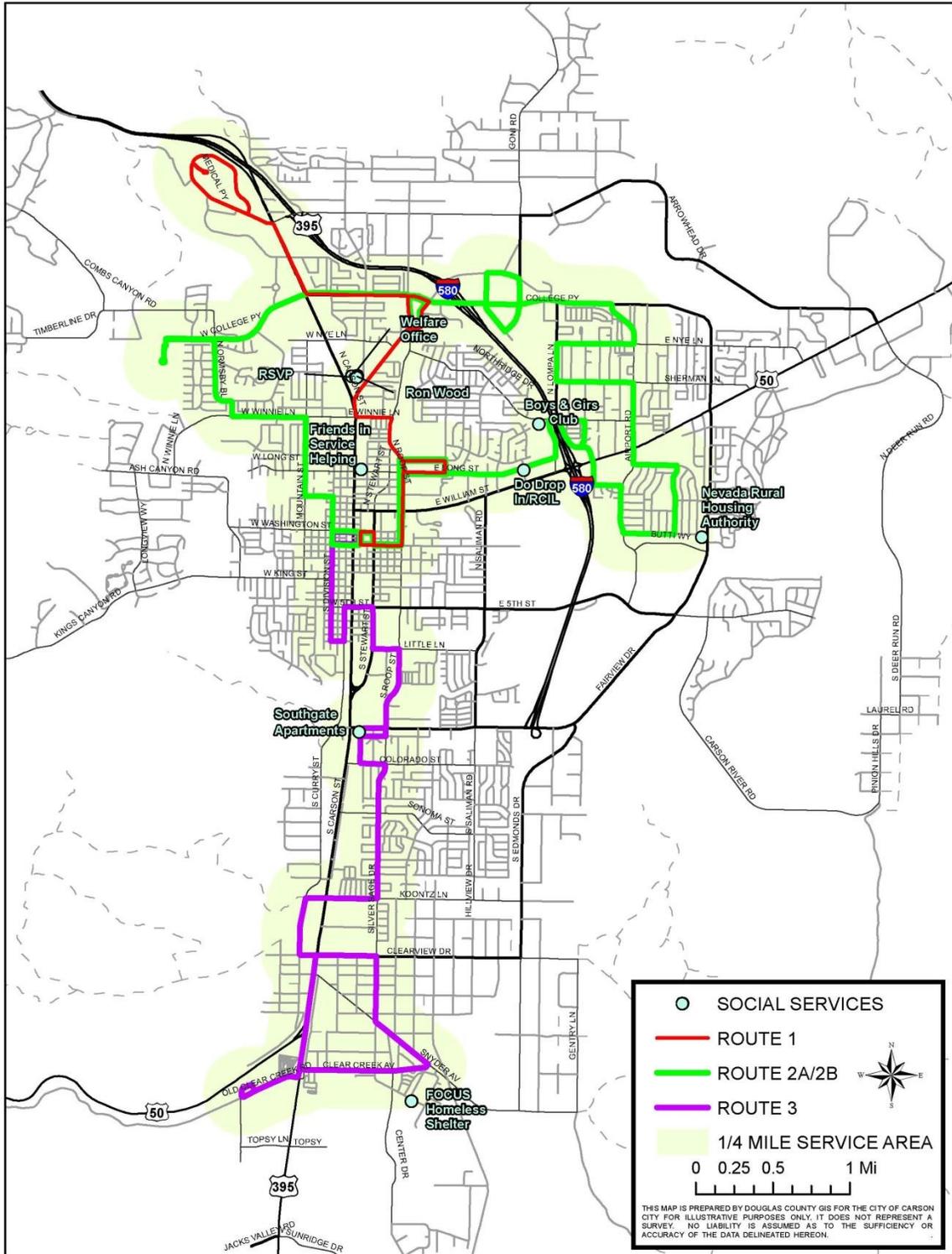
Map 2-7: Senior Services and Living



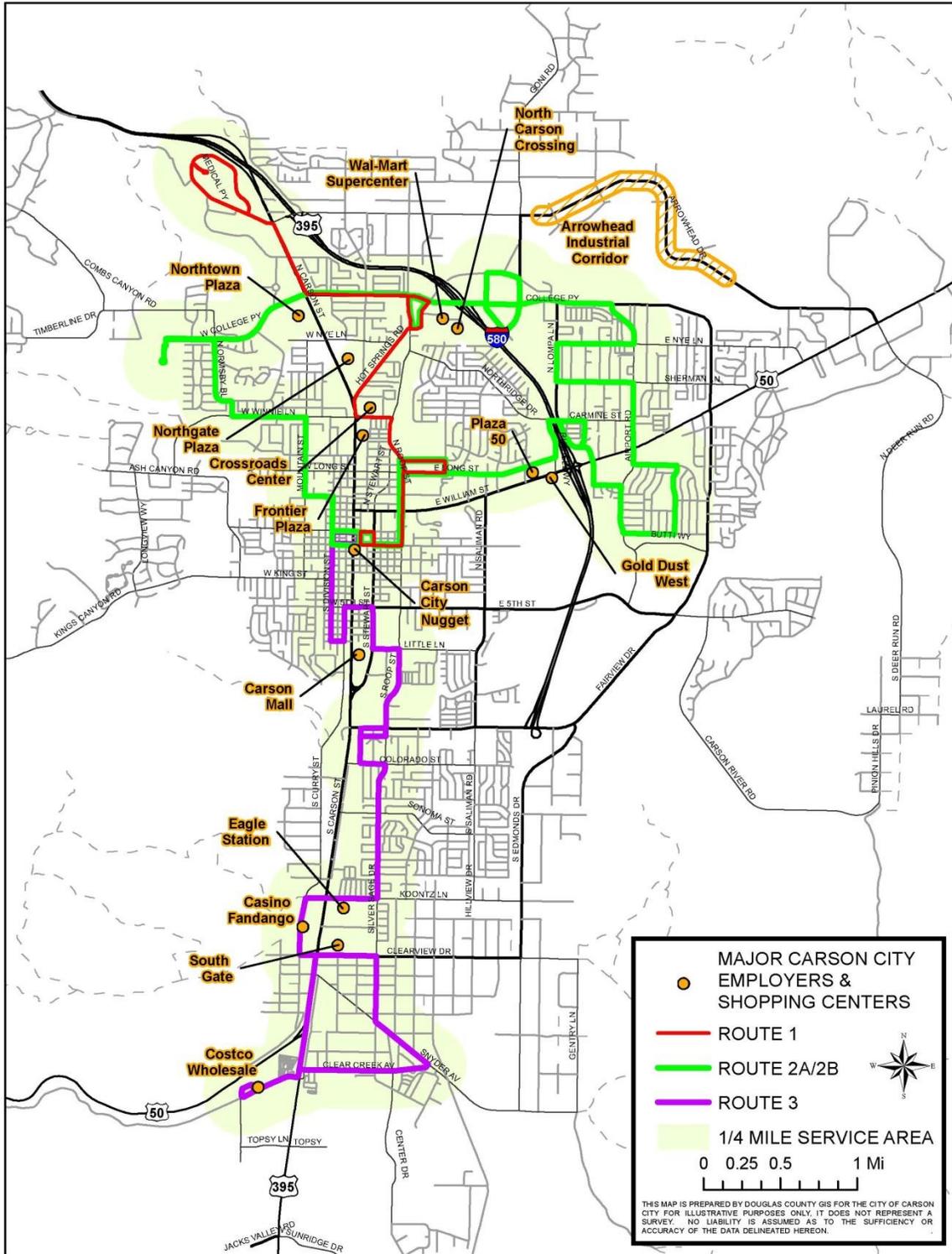
Map 2-8: Service Providers for the Disabled Community



Map 2-9: Social Services



Map 2-10: Major Employers and Shopping Centers



Service Area Demographics

Demographic information is an important component in the consideration of factors which affect, or are affected by the provision of transit service. Such information highlighted in this study includes employment and socioeconomic characteristics of the resident population. Specifically, transit dependent population characteristics are noted because certain segments of the population may be expected to have a greater dependence on, and make more extensive use of, public transit than the population as a whole because they tend to have relatively limited access to the automobile. Typically, transit dependent persons are associated with one or more of the following categories: school-age children (age 10-17), elderly individuals (age 60 and older), persons in low-income households, disabled individuals, and those without an available vehicle.

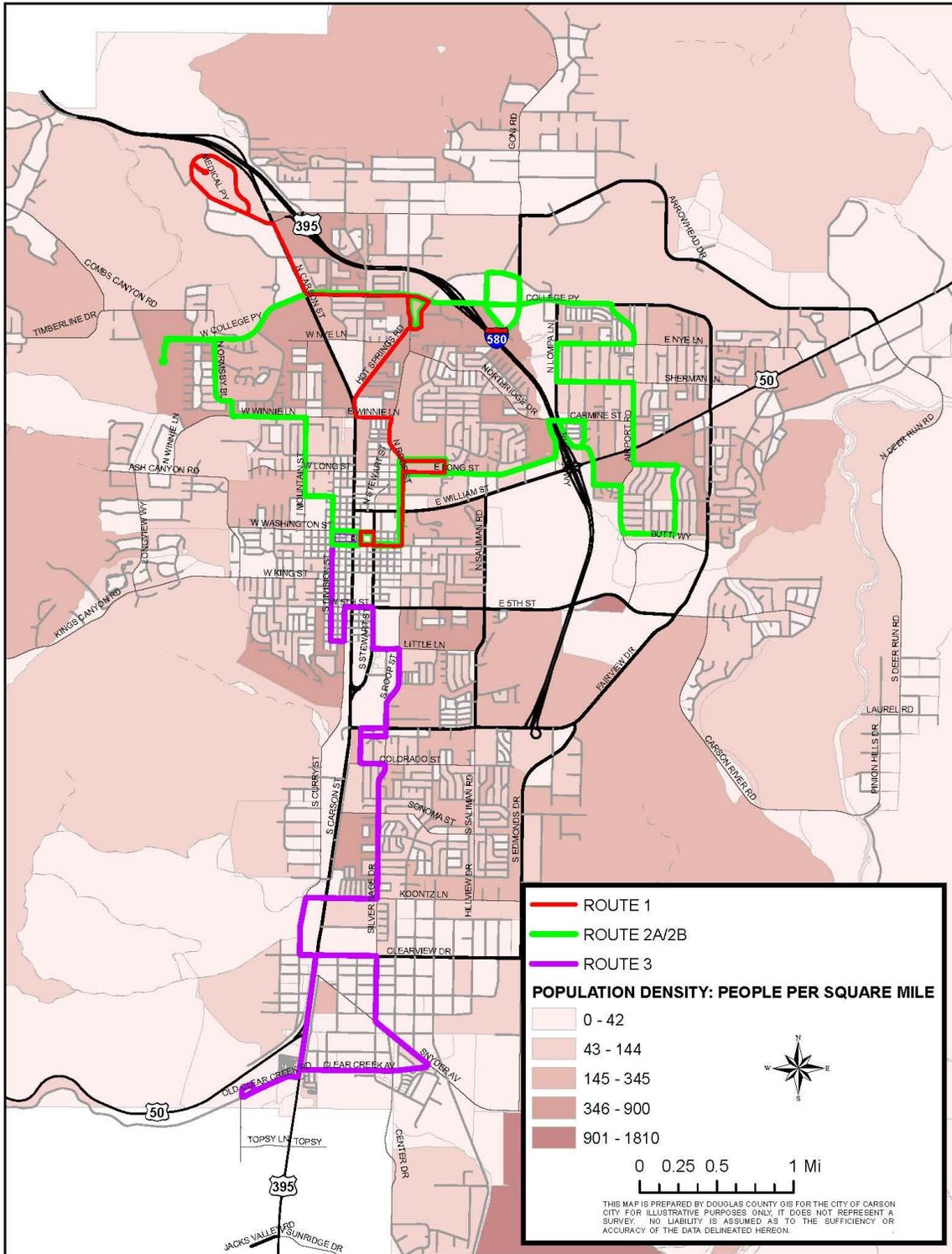
As an overview of Carson City’s population distribution, Map 2-11 displays population density at the block level, according to the 2010 Census. The greatest densities are most noticeable near multi-family developments. While Carson City continues to experience modest growth in population, the number of its residents who are employed continues to decrease. Further, the number of individuals in the labor force has also experienced declines in recent years. The unemployment rate, which reached historic highs as recently as 2010, has also been on the decline since its peak (see table 2-1). According to the U.S. Census Bureau’s OnTheMap data, of the total employed in Carson City in 2011, only 43 percent also resided in Carson City, which may be a limiting factor on the potential for work trips made via transit within Carson City.

Table 2-1: Employment Data for Carson City, 2000 – 2013

Year	Labor Force	Employment	Unemployment	Unemployment Rate
2000	26,472	25,483	989	3.7
2001	26,978	25,591	1,387	5.1
2002	27,411	25,834	1,577	5.8
2003	27,409	25,832	1,577	5.8
2004	27,224	25,872	1,352	5.0
2005	27,316	25,961	1,355	6.0
2006	27,405	26,096	1,309	5.4
2007	27,895	26,505	1,390	5.0
2008	28,449	26,317	2,132	7.5
2009	29,294	25,940	3,354	11.4
2010	29,327	25,495	3,832	13.1
2011	28,845	25,165	3,680	12.8
2012	27,968	24,854	3,114	11.1
2013	27,129	24,435	2,694	9.9

Source: Nevada Department of Employment, Training and Rehabilitation

Map 2-11: Population Density, 2010



Considering the demographics of transit dependent populations, the age, disability status, and income level distribution of a population may have a significant impact on Carson City’s transit system. A significant portion of the population falls under at least one of the transit dependent demographics, most notable is the fact that almost one-quarter of the City’s residents are seniors (Table 2-2). Figure 2-1 shows the age distribution of Carson City, according to the 2008-2012 American Community Survey 5-year estimates. Although these estimates include varying age ranges, the 45 to 54 age group represented the largest group of the total population. Despite this, the median age of 41.6 years falls under a different age range.

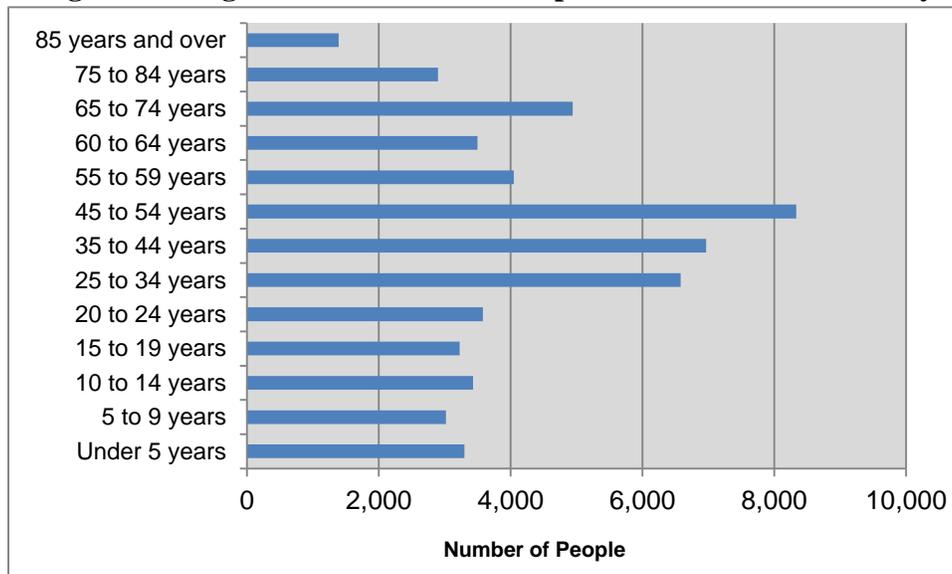
Although disabled individuals are often identified as transit dependent because their disability may limit their access to other modes, a reported disability does not necessarily preclude someone from driving or travelling by other modes. At the other end of the spectrum, having a disability may not even qualify an individual to receive paratransit service, as applications are reviewed on a case-by-case basis. According to the 2008-2012 American Community Survey 5-year estimates, almost 7,000 (or about 17 percent) of Carson City residents 18 and older claim disability status (Table 2-2).

Table 2-2: Carson City Transit Dependent Demographics

Universe	Total	Demographic	Transit Dependent	Percent
Total Population	55,184	Children (10-17)	5,518	10.0%
Total Population	55,184	Seniors (60+)	12,725	23.1%
Population 18+	41,839	Disability (18+)	6,973	16.7%
Population 18+	41,839	Below Poverty	5,481	13.1%
Workers	22,964	No Vehicle	377	1.6%

Source: U.S. Census Bureau 2008-2012 American Community Survey

Figure 2-1: Age Distribution of the Population within Carson City



Map 2-12 shows the population density of households below the median income level in 2012 by tract, according to the U.S. Census Bureau. The highest concentrations of such households extended from near the core of Carson City in an easterly direction, generally following US Highway 50 and extending to the northeast portions of the City. Additionally, over 13 percent of Carson City residents age 18 and older were living below the poverty level (Table 2-2). Many at this income level may either be living in households without an available vehicle, or choose not to drive the vehicle that is available to them due to factors such as the cost of fuel or another member of their household needing to utilize the vehicle.

Those living in households without an available vehicle would certainly be considered transit dependent. Though many residents without a vehicle may be capable of walking, riding a bicycle or finding a ride to most destinations, transit is a likely alternative for trips that are longer in distance, taken during adverse weather conditions, or when no one is available to pick them up. Less than two percent of workers age 16 and up did not have a vehicle available to them, according to the 2008-2012 American Community Survey 5-year estimates (Table 2-2).

Funding Sources

The operating and capital expenses of the Jump Around Carson system are funded through a combination of farebox revenues, and Federal, State, and local funds. The following sections identify revenue sources from Federal, State, and local resources. While JAC relies primarily on Federal Transit Administration (FTA) funding, there are other sources of funding that are reasonably expected to be available (unless otherwise noted) based upon past history.

Federal Transit Administration (FTA) Funds

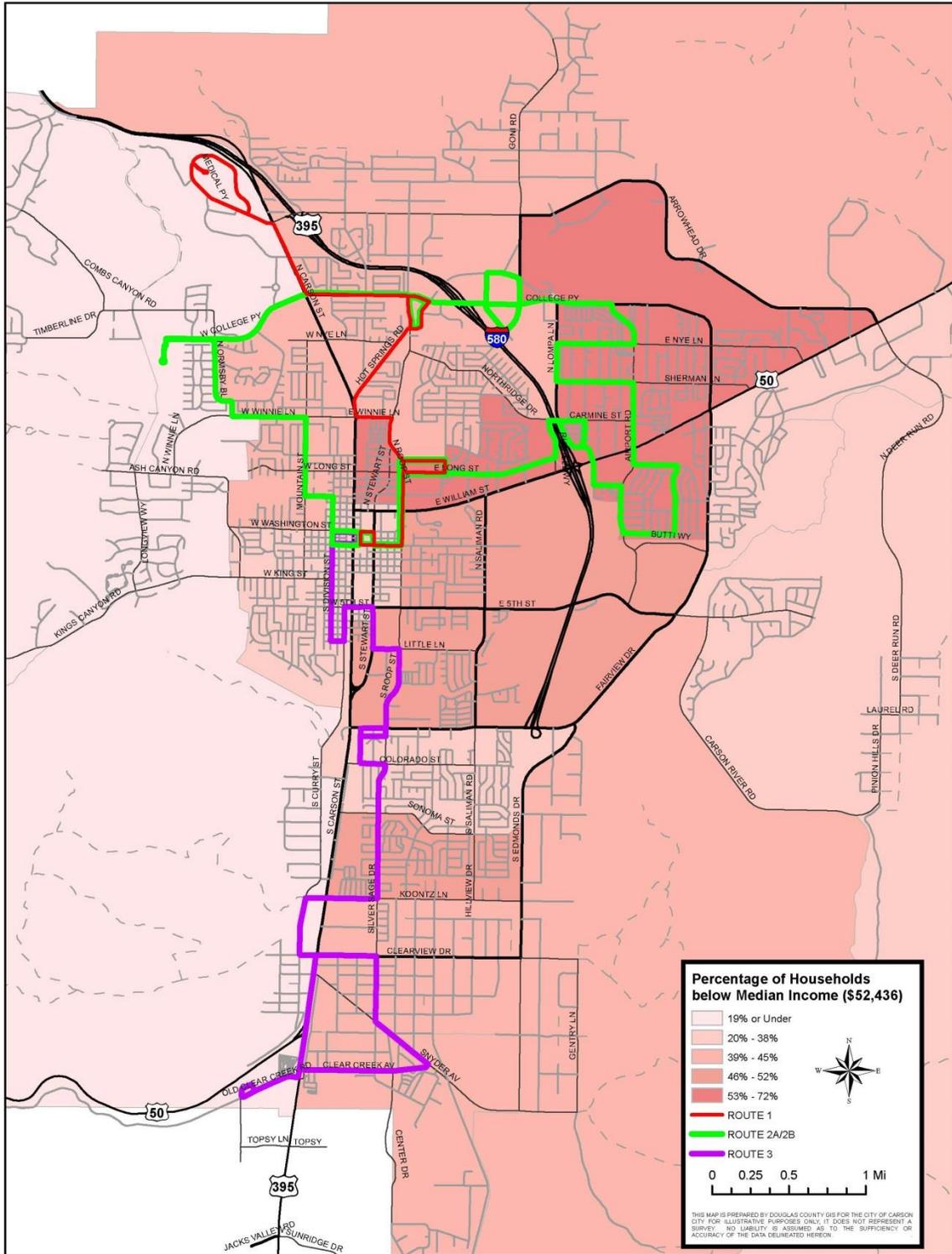
Significant funds are made available to the Carson Urbanized Area through the FTA on an annual basis. All funds are provided on a reimbursement basis, with the net Federal/non-Federal share varying by funding category as indicated below.

Section 5303 (Metropolitan & Statewide Planning) – The Carson Area Metropolitan Planning Organization (CAMPO) receives these funds to perform planning studies for the JAC system. Previous studies include rider preference surveys, bus stop amenity studies, and development of planning documents such as this one. Because these funds have been combined with Federal highway planning funds, the Federal share with these funds is 95%.

Section 5307 (Urbanized Area Formula Program) – These funds are available to urban areas with a population greater than 50,000 and can be used for transit capital, planning and operating expenses. The Federal share for these funds is typically 50% for operating and 80% for capital projects, but there are several exceptions which increase the Federal share.

Section 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities) – These are capital grants for the purchase of rolling stock and services that directly benefit transportation for the elderly and people with disabilities. The Federal share for these funds is 50% for operating and 80% for capital projects.

Map 2-12: Percentage of Households below the Median Income Level, 2012



Section 5339 (Bus and Bus Facilities Program) – Provides capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities. The Federal share of these expenses is 80 percent.

Other Federal Funds

Community Development Block Grant (CDBG) – It is allowable for CDBG funds to be used as a match to FTA funds to provide for capital improvements for certain transit system-related capital expenses. More specifically, these grants may be combined with FTA funds to construct or rehabilitate infrastructure such as sidewalk and curb ramps providing a direct connection to transit stops, ensuring that they are made ADA-compliant and accessible for all users. This is the only type of Federal funding source that is eligible to be used as a match.

State Funds

Existing and former state funding sources are listed below. It is important to note the lack of funding from the state transportation agency. A small amount of funding was provided previously for capital funding, but the state's transportation agency no longer provides state funding to transit operators in Nevada. This is unusual nationally. Recent studies have shown Nevada to be 50th among U.S. states in transit funding.

Nevada Department of Health and Human Services – Aging and Disability Services Division (ADSD) – JAC has successfully received a grant for the past several years from ADSD to help fund operations on the fixed route service. The grant is used to provide free rides on fixed route service for applicants age 60 and over.

Nevada Department of Health and Human Services – Division of Health Care Financing and Policy (DHCFP) – DHCFP provides partial reimbursement to JAC Assist paratransit operations to provide rides for disabled individuals that are dependent on Medicaid.

State Transit Capital Matching Funds – As stated in the Nevada Revised Statute (NRS) 408.271 the Nevada Department of Transportation (NDOT) may provide funding to the state's Metropolitan Planning Organizations (MPOs), when authorized by the Legislature, from the interest earned by investment of the State Highway Fund in order to conduct transportation studies or as match for capital purchases. Unfortunately, due to state budget constraints this funding is no longer being made available. However, should this funding be made available in the future, CAMPO (which provides funding for JAC) would resume as an eligible recipient. Funding was previously provided for several years in the amount of approximately \$37,500 per year.

Local Funds

Carson City Transit Fund – The transit fund is used to provide the required match to the various FTA programs from which JAC receives funding. In addition, this fund is supplemented by revenues from farebox recovery. The Transit Fund is based solely on an annual transfer from the City's General Fund. There is no dedicated local source of funding. Motor fuel tax revenues

which are deposited into the City's RTC and Streets Funds cannot be used to fund transit expenses.

Revenues from Private Sector – JAC receives a portion of the revenue that is generated through advertising contracts managed by local media outlets.

Additional Transit Services in Carson City

The Carson City RTC is the primary provider of public transportation service within Carson City. However, a number of other public transportation services are also provided to residents of the area, including intercity transit services for the general public, specialized transportation services for the elderly and disabled population, transportation services for students at local schools, and private transportation providers such as taxis. These services may be briefly described as follows:

RTC INTERCITY

The Regional Transportation Commission of Washoe County operates this express commuter bus service with limited stops between downtown Reno and downtown Carson City. The service is offered as a partnership with the Carson City RTC, which reimburses the Regional Transportation Commission of Washoe County for a portion of costs. The service operates Monday through Friday with three round trips during each of the morning and afternoon commutes. A one-way adult fare costs \$5.00, and \$2.50 for youth ages 6-18, seniors age 65 and older, and disabled riders. Reduced fares are offered with the purchase of a 10-Ride pass or a transfer. RTC INTERCITY offers transfers between JAC buses as well as RTC RIDE buses, which serve the greater Reno/Sparks area. Map 2-13 shows the RTC INTERCITY route through Carson City.

BlueGO

The Tahoe Transportation District operates a commuter bus service to Carson City and the Carson Valley known as the Lake & Valley Express. Routes 19X and 21X service Carson City. This service is operated under agreement with Carson City, which provides assistance including transit vehicle parking on City property. This service operates Monday through Friday, with route 21X operating on a reduced schedule on weekends. A one-way regional adult fare is \$4.00, and \$2.00 for youth ages 5-18, seniors age 60 and older, and persons with special needs or disabilities. Reduced fares are offered in certain cases with the purchase of 10-Ride, 20-Ride, or Monthly passes, or with a transfer. Lake & Valley Express buses offer transfers between JAC buses, Douglas Area Rural Transit (DART) buses which serve the greater Minden/Gardnerville area, or any South Shore bus. South Shore services include BlueGO fixed route service, the seasonal Nifty 50 Trolley, and seasonal ski shuttles which serve the greater South Lake Tahoe area. Map 2-13 shows the Lake & Valley routes through Carson City.

Rural Senior Volunteer Program (RSVP)

The RSVP Transportation Program provides free rides to the low income elderly for whom no other appropriate transportation is available. This service enables many seniors access to medical services, especially in the rural areas where public transit may not be an option. RSVP does not charge for rides, but does accept donations. A mobility manager service is also provided to assist with providing information and coordinating available services.

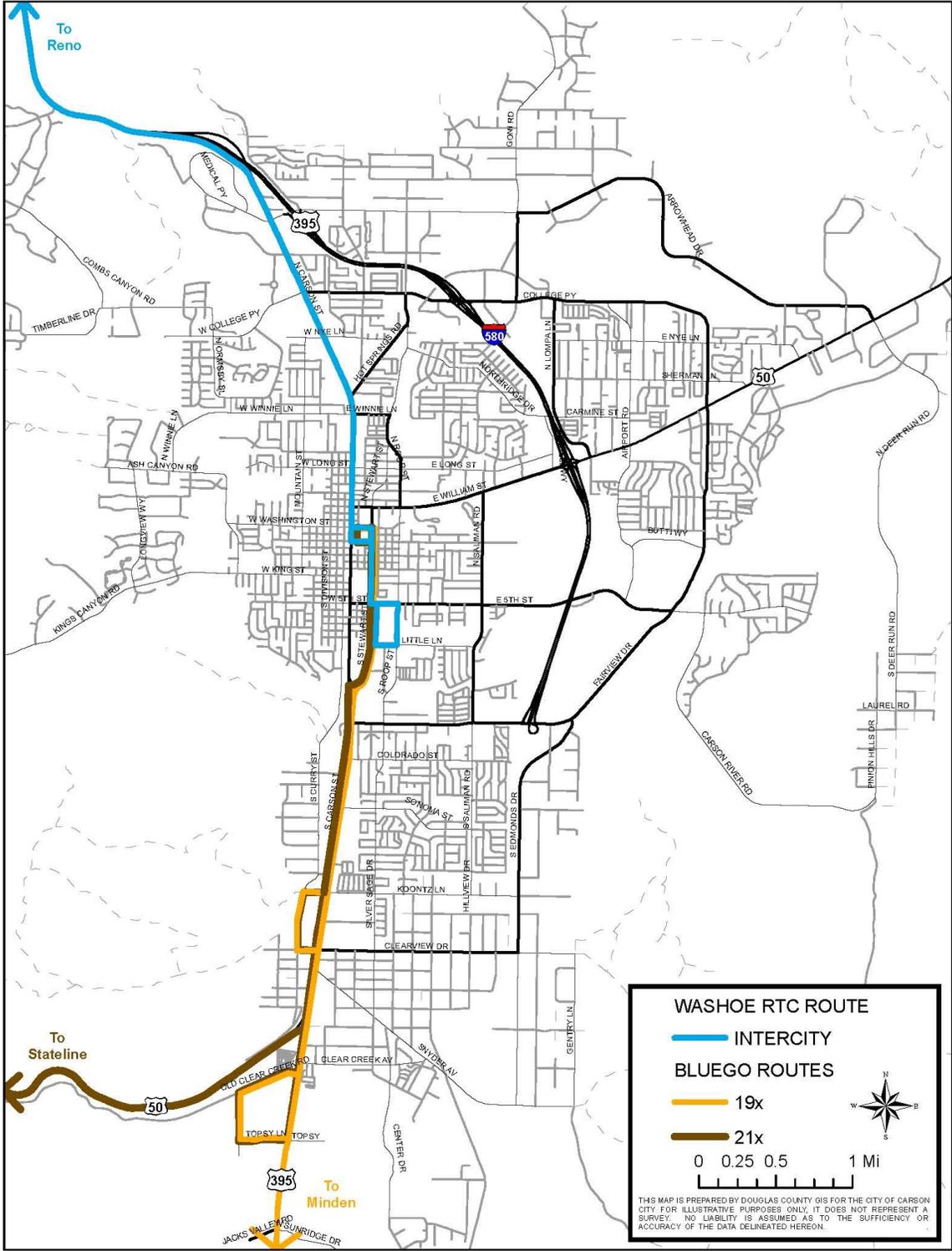
Carson City School District

The Carson City School District maintains a significant fleet of 45 school buses and transports an average of roughly 2,100 students per school day on 29 designated routes. Buses are also used for field trips and, when necessary, for emergency evacuation.

Capitol Cab Company

Capitol Cab Company operates a fleet of taxi cabs which serve all of Carson City, Douglas County, and as far as Silver Springs in Lyon County. Service is also provided to the north on I-580/US Highway 395 into Washoe County.

Map 2-13: RTC INTERCITY and BlueGO Lake & Valley Express Routes in Carson City



Chapter 3: Survey Results

CAMPO implemented a survey that was given to numerous JAC passengers from April 15-20, 2013 in order to get a better understanding of how the JAC system is performing. Surveys were distributed on fixed route buses on all four routes (Routes 1, 2A, 2B, and 3) as the vehicles were in regular passenger service. Survey times covered all of JAC's operating days of the week and all of JAC's operating hours in an attempt to obtain a wider range of results. These results, a total of 291 surveys completed, provide valuable insight as to whom JAC's customers are, how well JAC is serving its customers, and ridership trends of JAC's customers. Additionally, on/off counts were completed for all routes throughout the hours of operation for one weekday (April 18) and one Saturday (April 20) of the survey week in order to provide a more in-depth look at the fixed route system.

The JAC Transit Survey was comprised of 10 questions, some of which were multiple-part questions. Questions focused primarily on the performance of JAC and the JAC system, but also sought demographic information. Overall, the survey results revealed a successful system considering responses to questions in regards to ridership frequency, convenience, and affordability. The following discussion will demonstrate this using characteristics of riders and trips, and rider preferences, as indicated by the survey responses. While the survey had generally positive results, it should be noted that only current riders were surveyed. Potential riders who do not use the service because of limitations of geographic extent or days/hours of operation of the system were not surveyed.

Characteristics of Riders

As seen in Figure 3-1, there was an equal distribution of respondents aged 18-59 with the "Up to 17" and "60+" age groups representing significantly less and significantly more, respectively, than the age groups in between. This indicates strong ridership in elderly riders—a more transit dependent demographic. Conversely, this also suggests that younger age groups, particularly the "Up to 17" population are relatively infrequent transit users.

An overwhelming majority (90%) of respondents indicated that they did not have access to a vehicle during their surveyed ride on a JAC bus, indicating that a majority of passengers ride the bus as their primary means of transportation. As seen in Figure 3-2, the two most common occupations of respondents, "retired" and "student," are likely to fall into one of the transit dependent categories discussed in Chapter 2. These results would seem to indicate that the majority of JAC riders are transit dependent.

The ridership habits of respondents present an encouraging case for the JAC system. As shown in Figure 3-3, half of respondents have increased how often they ride the bus over the previous 12 months from the time the survey was taken. Additionally, over 50% of respondents ride the bus five or more times per week, and 80% ride at least three times per week (Figure 3-4). Fewer than six percent ride the bus less than once a week.

Figure 3-1: Age of Passengers

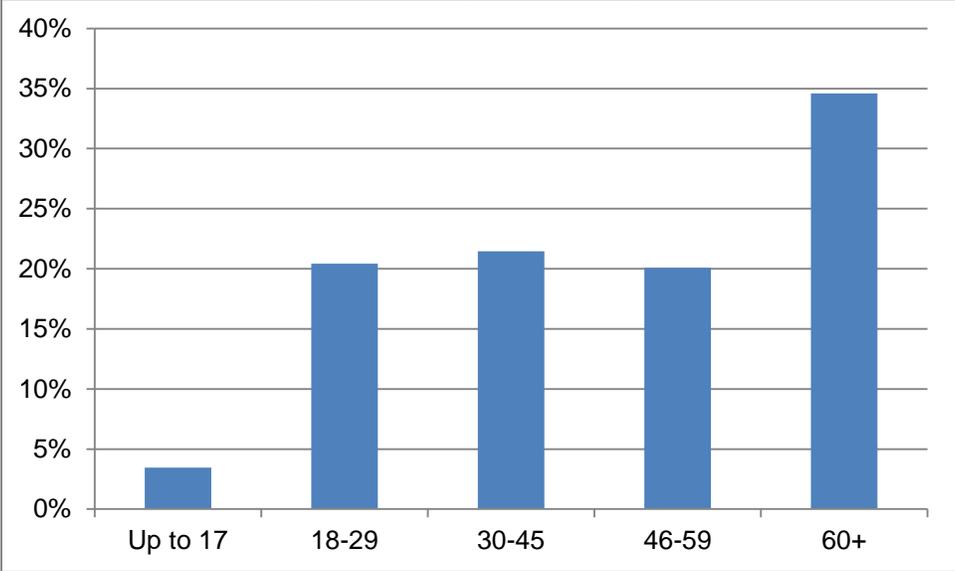


Figure 3-2: Passenger Occupations

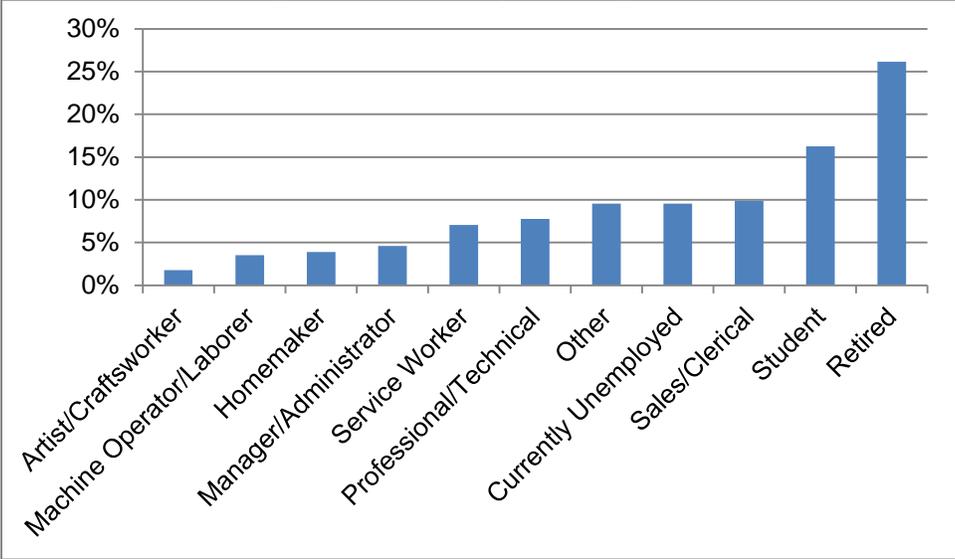


Figure 3-3: Change in Ridership Frequency over Previous Year

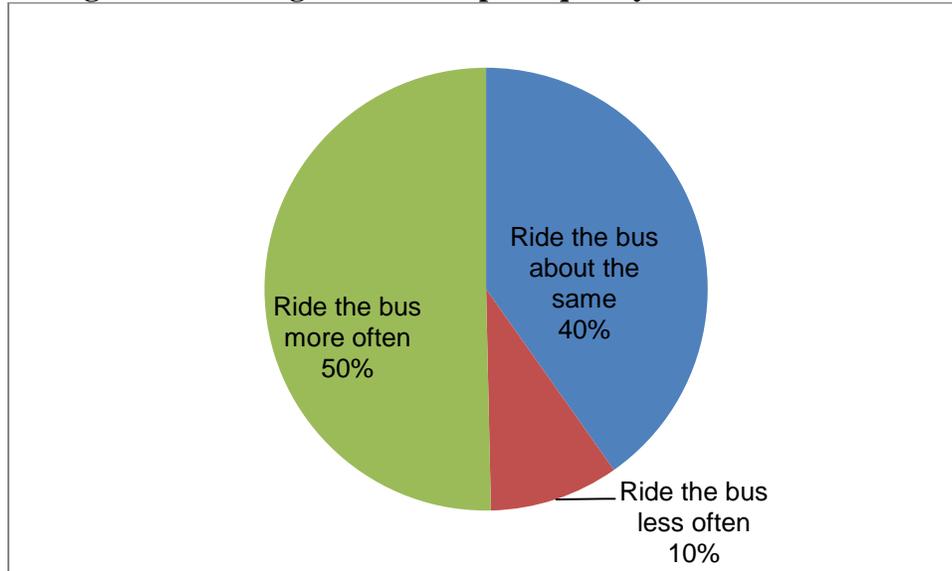
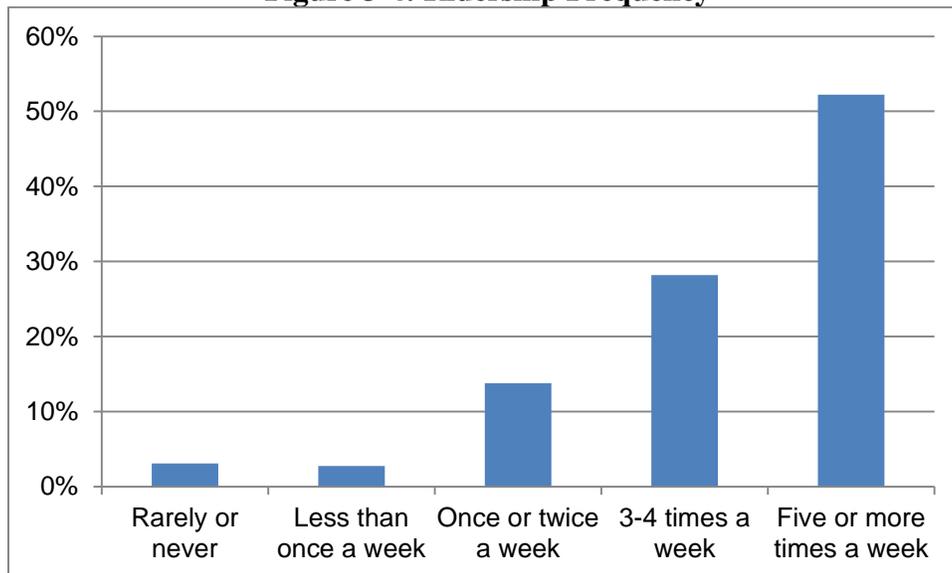


Figure 3-4: Ridership Frequency



Characteristics of Trips

As seen in Figures 3-5 and 3-6, almost 70% of passenger trips originate at home, whereas only 27% of trips are destined for home. Interestingly, the most common destination of respondents is “other,” when given the option of home, work, school, medical or other. This would seem to indicate that many trips are for shopping, recreational, or social purposes. While “home”

dominated passenger origins, “other,” “home,” and “work” all represented large portions of the passenger destinations.

Figure 3-5: Passenger Origins

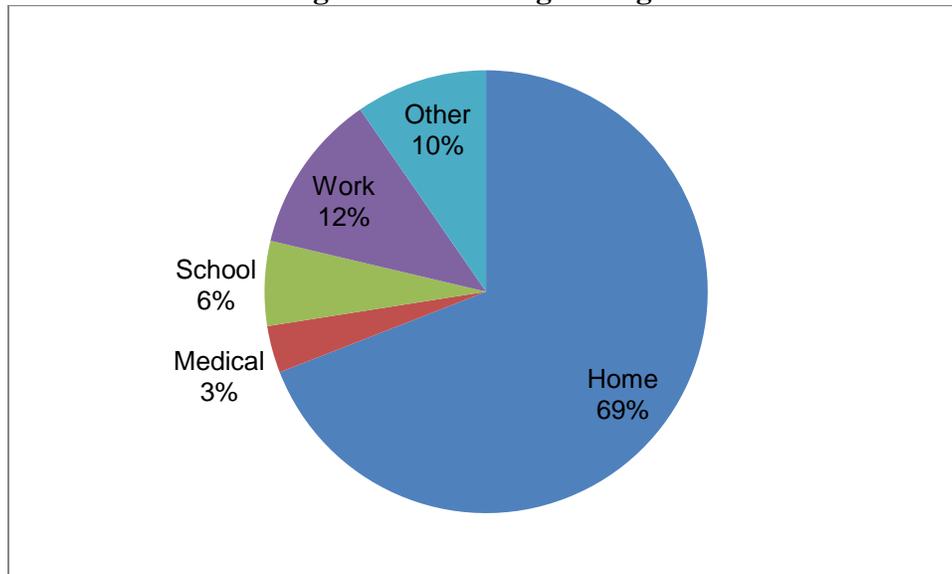
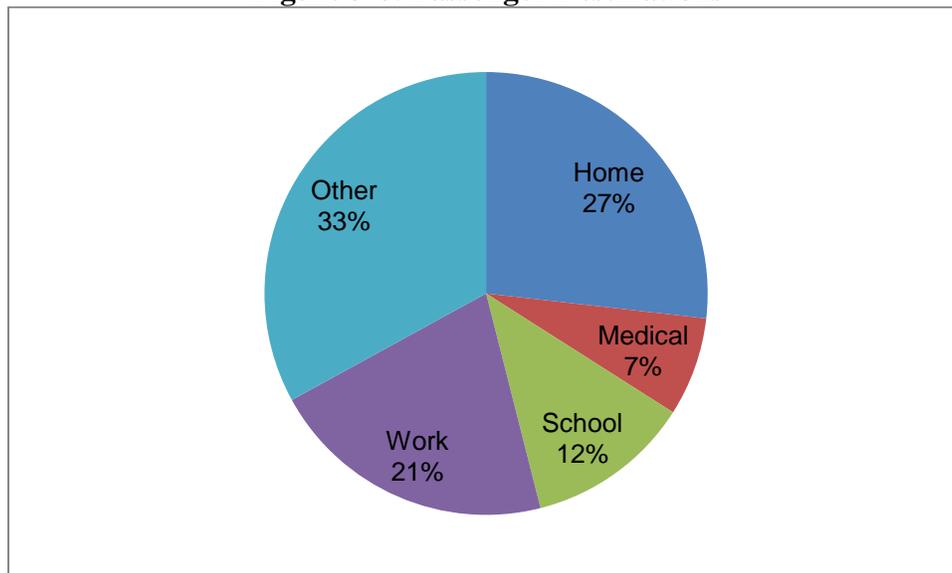


Figure 3-6: Passenger Destinations

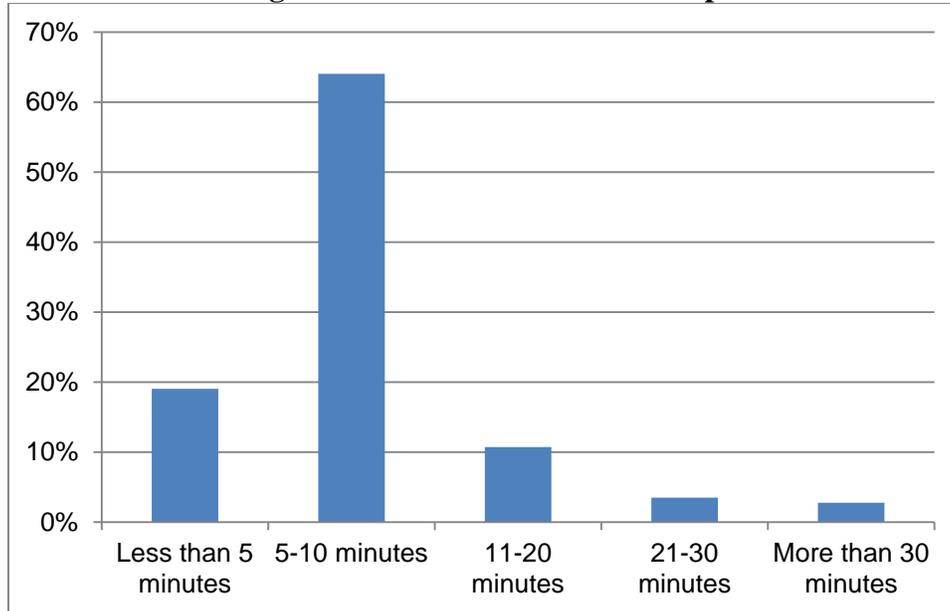


Preferences of Riders

Performance of the JAC system was also a topic of interest for the transit surveys. Figure 3-7 displays typical wait times of JAC passengers at JAC bus stops. About 83% of respondents typically wait no more than 10 minutes with about 19% waiting less than five minutes. These numbers become even more encouraging considering the fact that most transit systems (JAC

included) recommend that passengers arrive at their preferred bus stop at least five minutes before the bus is due to arrive. It also indicates riders are mindful of the published schedules, as the buses complete each route once per hour.

Figure 3-7: Wait Times at Bus Stops



Other findings include the following:

- Figure 3-8: Only 3% of respondents claimed they did not feel safe and secure while on the bus, 88% feel safe and secure on the bus, and 9% remained neutral on the issue.
- Figure 3-9: An almost equally large amount of respondents (85%) felt that the bus service was convenient for them, and only 4% felt that the service was not convenient.
- Figure 3-10: The vast majority (88%) of respondents feel that the bus fares are affordable, a fact which could reasonably be expected considering that a one-way adult ticket on JAC is only \$1.00, and that this fare has not been increased since its inception. Additionally, only 2% feel that the bus fares are not affordable (10% remained neutral on the issue).

Figure 3-8: Response to Survey Question, “I feel safe and secure on the bus”

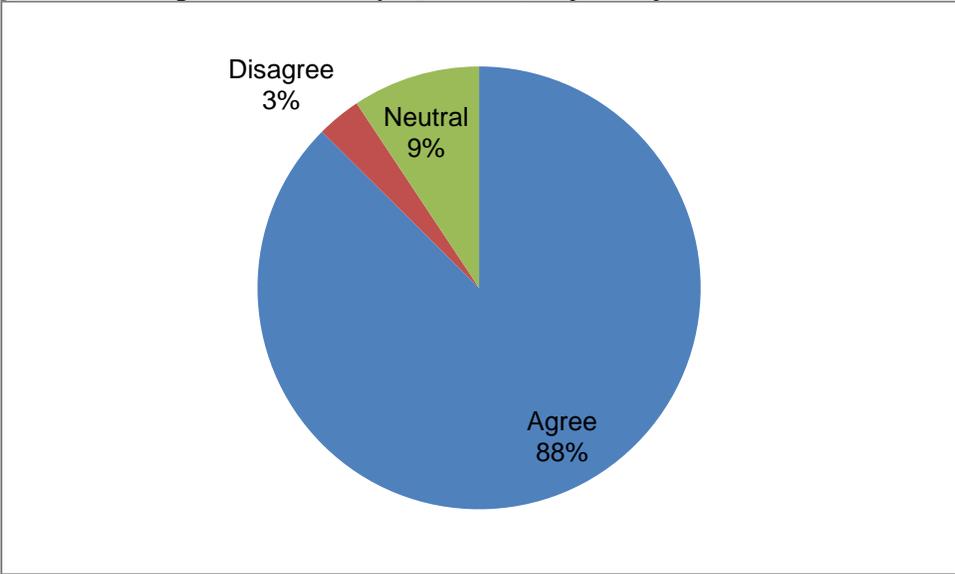


Figure 3-9: Response to Survey Question, “The bus service is convenient for me”

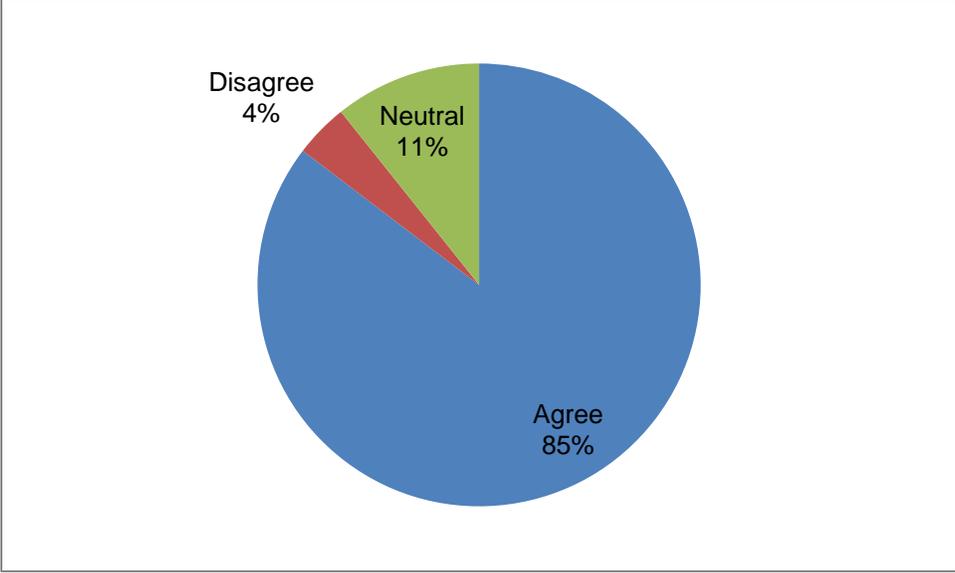
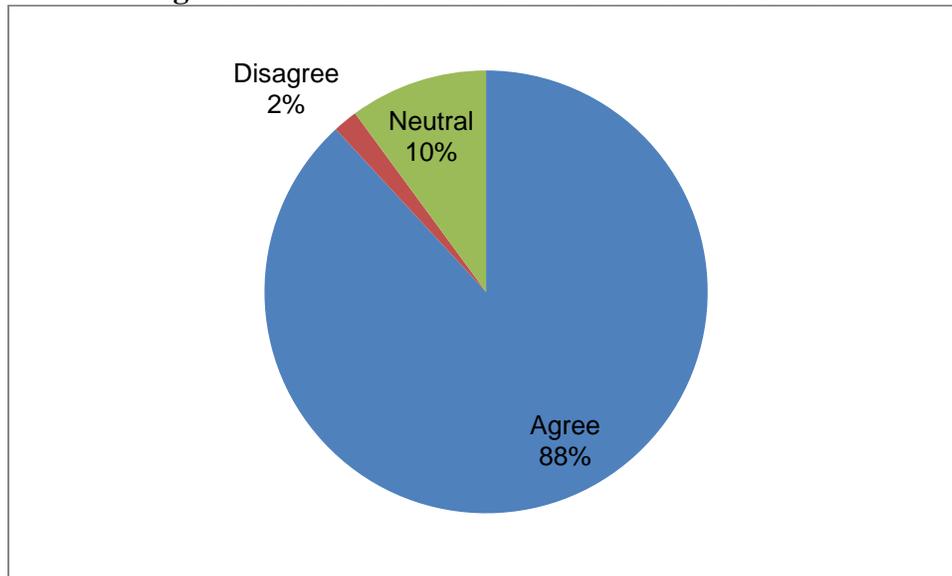
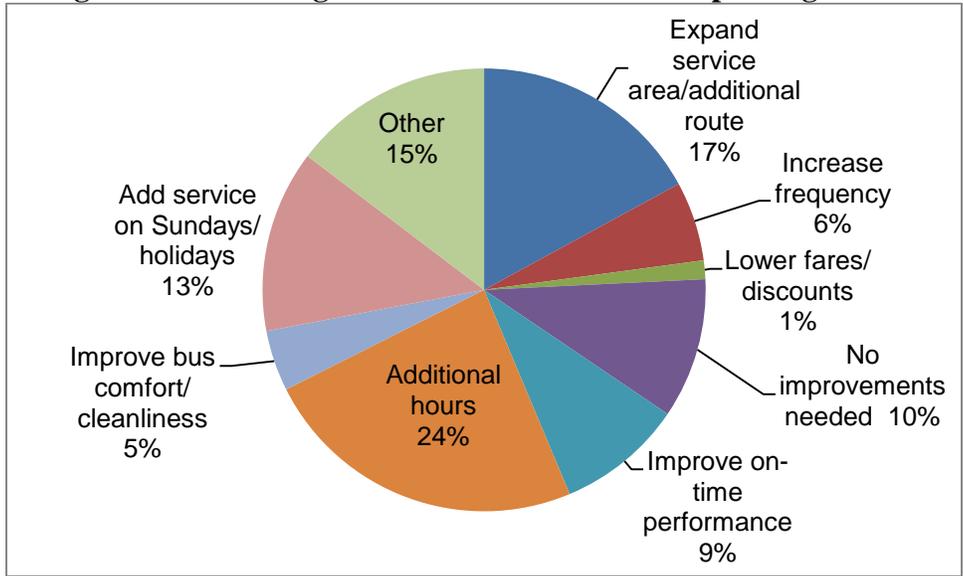


Figure 3-10: Belief That Bus Fares Are Affordable



As for respondent comments on how the system could be improved, an array of recommendations were given, which can be generally categorized and calculated as presented in Figure 3-11. It should be noted that some respondents gave multiple suggestions for improving service, and each suggestion was tallied. Almost one quarter of respondents suggested additional hours of service. This would afford those working standard hours additional time at the end of the day to complete other tasks before returning home; it would also allow those students (second most common occupation of respondents) taking night classes at the local college to take advantage of JAC's direct service to this location. With this in mind, it would seem adding hours of service would be the most logical expansion of the JAC system. Expanded service area/additional route was another common recommendation of JAC riders, however, there was not one method of doing this that dominated the survey results. Making the current service more affordable was not a common response, as only one percent of respondents desired some form of fare discount.

Figure 3-11: Passenger Recommendations for Improving Service



An examination of the on/off counts provides a “snapshot” regarding the most popular times and stops of the JAC system. As seen in Figure 3-12, route ridership peaks during the 12:30 p.m. runs. Buses that leave the transfer plaza at 12:30 p.m. see a combined 11% of the day’s total ridership during that one-hour cycle. The least productive routes of the day are the first and last of the day, each earning less than a combined 6% of the day’s total ridership. Table 3-1 displays the 20 stops with the most passenger activity. Half of the top 20 stops have existing shelters. Aside from the Downtown Transfer Plaza, the stop that stands out, with over three times as much activity as the next most popular stop, is the stop at Hot Springs Road and Retail Drive. This stop is located adjacent to a shopping center that includes Wal-Mart and is served by three of JAC’s four routes (Route 1 serves it twice per run).

Figure 3-12: Hourly Fixed Route Ridership as a Percentage of the Day’s Total Ridership

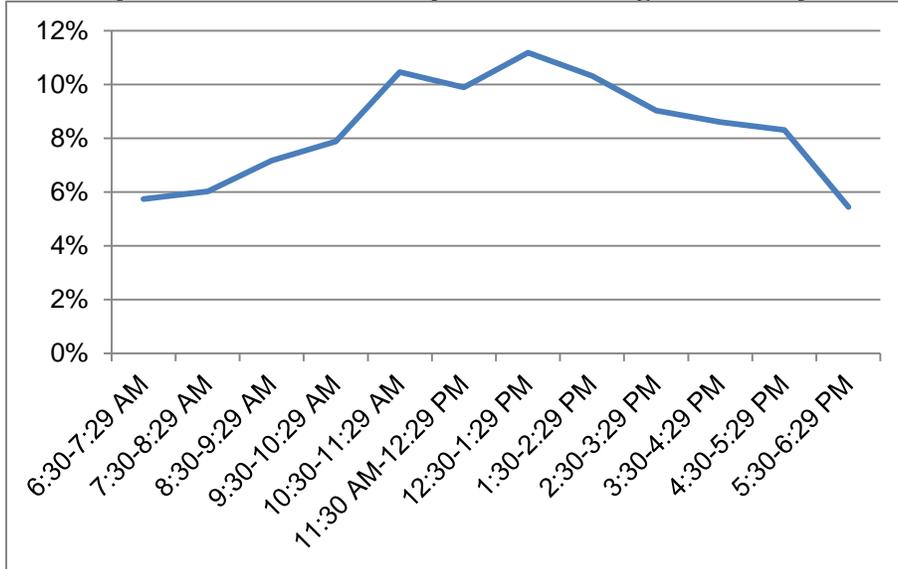


Table 3-1: Top 20 Bus Stops in Terms of Volume, April 18 and 20, 2013

Rank	Shelter	Stop Location
1	X	Downtown Transfer Plaza
2	X	Hot Springs & Retail @ Walmart
3	X	WNC
3	X	Roop & Washington @ Public Library
5		Winnie & Carson
6	X	Costco/Fuji Park
7		College & College (westbound)
8	X	College & Carson @ Burger King
9	X	Roop & Washington @ Community Center
10		Koontz & 395 @ Seven Star Mobile Park
11		College & Imperial
11		California & Industrial Park (outbound)
13	X	Carson & Hot Springs
14		Woodside & Airport
15		Winnie & Lone Mountain
15	X	Curry @ Casino Fandango (outbound)
17		Little & Roop
18	X	Beverly & Roop @ Senior Center
19		Clearview & 395
19		Beverly & Marian @ Autumn Village
X = Existing shelter at stop		

The most active Route 1 stops on weekdays and Saturdays are fairly consistent. The top three weekday stops along Route 1 in terms of volume, other than the transfer plaza, are Winnie & Carson (at Frontier Plaza), Hot Springs & Retail (at Wal-Mart, outbound), and Hot Springs & Retail (at Wal-Mart, inbound), respectively. The top three Saturday stops along Route 1 in terms of volume, other than the transfer plaza, are Hot Springs & Retail (at Wal-Mart, outbound), a tie for second between Carson & Hot Springs (at C-A-L Ranch) and Hot Springs & Retail (at Wal-Mart, inbound), and a tie for third between Winnie & Carson (at Frontier Plaza) and Roop & Washington (at the public library).

The most active Route 2A stops on weekdays and Saturdays are almost identical. The top three weekday stops along Route 2A in terms of volume, other than the transfer plaza, are Hot Springs & Retail (at Wal-Mart), College & Carson (at Burger King), and Roop & Washington (at the public library), respectively. The top three Saturday stops along Route 2A, other than the transfer plaza, are Hot Springs & Retail (at Wal-Mart), Roop & Washington (at the public library), and College & Carson (at Burger King), respectively.

With Route 2B there is some variation in terms of the stops with the highest on/off counts for weekdays and Saturdays. The top three weekday stops along Route 2B, other than the transfer plaza, are Western Nevada College (at the Bristlecone Building), Hot Springs & Retail (at Wal-Mart), and Beverly & Roop (at the Senior Citizens Center), respectively. The top three Saturday stops along Route 2B, other than the transfer plaza, are Hot Springs & Retail (at Wal-

Mart), a tie for second between Roop & Washington (at the Community Center) and College Parkway & College Drive, and Woodside & Airport (at Save Mart).

Route 3's most active stops in terms of volume matchup between weekdays and Saturdays. The top three weekday and Saturday stops along Route 3, other than the transfer plaza, are Old Clear Creek (at Costco and Fuji Park), Koontz & U.S. 395 (at Seven Star Mobile Home Park), and California & Industrial Park (at Southgate Apartments), respectively.

Chapter 4: Evaluation of Existing System

This chapter provides an evaluation of the performance of the existing JAC system. This is followed by an assessment of transit performance on a system-wide basis and includes standards such as operating and capital costs, performance measures, and service characteristics such as annual ridership and trip generator coverage, which are used to determine the extent to which the transit system currently serves the existing land use pattern, employment, and resident population of Carson City. The chapter then closes with a comparison of JAC and other similar systems in the western United States in a peer review.

Performance Measures

Table 4-1 displays key performance measures for the JAC system – fixed route and paratransit service – for the most recent complete fiscal year, fiscal year 2013. A review of the data shows that there are significant differences between the fixed route and paratransit services. These differences may be highlighted as follows:

- As would be expected, the fixed route service carries many more passengers than the paratransit service.
- The average fare collected for fixed route service is substantially lower than that which is collected for paratransit service due to the higher fare charged for paratransit service and the fact that the fixed route service includes reduced fares for disabled riders and other categories of riders, including fare-free rides for seniors who register under a grant-funded program.
- Fixed route service makes up over 63% of the total revenue hours operated, but almost 72% of the total miles driven. This information highlights the fact that most of the service provided overall is via the fixed route service, but it also can be determined that the fixed route service has higher operating speeds. The fixed route vehicles travel on predetermined routes, whereas the paratransit vehicles provide origin to destination service which is demand responsive.
- Overall, as expected, fixed route operations are much more efficient than paratransit operation. While JAC Assist is operated as efficiently as possible, the nature of the service makes it less efficient and more expensive per passenger trip. Fixed route service operates at a substantially lower cost per rider and transports many more riders per hour in service. In FY 2013, the fixed route service averaged 13.6 passengers per revenue hour, whereas the paratransit service averaged 2.1 passengers per revenue hour.
- The average operating cost per revenue hour for transit vehicles – including various costs such as contractor costs per hour, fuel, maintenance, etc. – was \$47.06 in FY 2013. This cost per hour is considered to be low based on comparisons with other operators in Nevada and other similarly-sized operators in this part of the country.

Table 4-1: Performance Measures

		FY 2011	FY 2012	FY 2013
Fixed Route	Passenger Trips	152,100	183,700	189,400
	Total Miles	189,100	189,800	188,800
	Revenue Hours	14,000	14,000	13,900
	Farebox Revenue	\$60,800	\$67,000	\$64,500
	Operating Cost	\$627,200	\$699,700	\$680,500
	Passengers/Mile	0.80	0.97	1.00
	Passengers/Revenue Hour	10.9	13.1	13.6
	Cost/Trip	\$4.12	\$3.81	\$3.59
	Cost/Mile	\$3.32	\$3.69	\$3.60
	Cost/Revenue Hour	\$44.80	\$49.98	\$48.96
	Farebox Recovery Rate	9.69%	9.58%	9.48%
Paratransit	Passenger Trips	14,100	13,800	17,100
	Total Miles	62,300	59,300	74,200
	Revenue Hours	5,900	5,900	8,000
	Farebox Revenue	\$27,100	\$29,000	\$35,000
	Operating Cost	\$248,900	\$266,900	\$350,200
	Passengers/Mile	0.23	0.23	0.23
	Passengers/Revenue Hour	2.4	2.3	2.1
	Cost/Trip	\$17.65	\$19.34	\$20.48
	Cost/Mile	\$4.00	\$4.50	\$4.72
	Cost/Revenue Hour	\$42.19	\$45.24	\$43.78
	Farebox Recovery Rate	10.89%	10.87%	9.99%
Total	Passenger Trips	166,200	197,500	206,500
	Total Miles	251,400	249,100	263,000
	Revenue Hours	19,900	19,900	21,900
	Farebox Revenue	\$87,900	\$96,000	\$99,500
	Operating Cost	\$876,100	\$966,600	\$1,030,700
	Passengers/Mile	0.66	0.79	0.79
	Passengers/Revenue Hour	8.35	9.92	9.43
	Cost/Trip	\$5.27	\$4.89	\$4.99
	Cost/Mile	\$3.48	\$3.88	\$3.92
	Cost/Revenue Hour	\$44.03	\$48.57	\$47.06
	Farebox Recovery Rate	10.03%	9.93%	9.65%

Note: Farebox Revenue does not include revenue from Aging and Disability Services Division grant which is received in lieu of fare for numerous trips made on fixed route. As a result, the Farebox Recovery Rate is significantly lower than if these grant funds were included in the Farebox Revenue total.

Ridership Performance – Systemwide and Individual Routes

The JAC transit system has encouraged increased use of the system since its inception, and substantial ridership gains have been realized. As is displayed in Figure 4-1, annual fixed route ridership increased from just over 80,000 passengers in the first full fiscal year of operations to nearly 190,000 in fiscal year 2013. This increase is remarkable considering the service has continued to operate with the same days and hours of operation and at the same levels of service since its inception. The increase in ridership can be attributed to a number of factors, including the following:

- Riders becoming accustomed to the system.
- Improvements in vehicles and fixed amenities like bus shelters.
- Minor revisions to routes to better serve the riders.
- Introduction of fare-free rides for seniors after receiving a grant to offset costs.

Regarding the JAC Assist ridership displayed in Figure 4-2, the relatively “flat” ridership is actually a positive trend considering the nature of the service, the cost of the service, and experiences of other transit services. Prior to the initiation of the JAC system, service was provided on a demand-response basis citywide and open to the public. One result of that was that passengers who were not disabled needed to transition from demand-response service to fixed route service. While that transition did occur, the service has also experienced several instances in which agencies that previously provided transportation to their clients ceased to do so with the knowledge that JAC would be required to transport those individuals, transferring the operational and financial burdens to the JAC system. This occurred with both non-profit and governmental agencies. Despite this, the system has been very successful in transporting disabled individuals in compliance with requirements of demand-response service, while encouraging the use of fixed route service by disabled individuals to the extent possible. Because the fixed route service is limited, the need to provide the less cost-efficient demand-response service is actually increased.

As is shown in Figure 4-2, ridership increases have occurred on all routes of the system. There are many reasons for ridership to fluctuate. Some can be very general like economic forces and others can be very specific, like disruptions due to weather or construction projects. The following are several observations regarding the route-by-route figures:

- Routes 1 and 3 have been the two best performing routes since the start of the system. Each route serves numerous major trip generators.
- Route 1 has the benefit of serving major trip generators for which it is the only route providing service (such as the area around the Carson Tahoe Regional Medical Center) as well as trip generators which serve multiple routes (such as the shopping center which includes Wal-Mart).
- Route 3 is the only route that serves the southern portion of the city, and while it has performed well, it was the only route to experience a slight decline in ridership—which occurred from FY 2012 to FY 2013.

- Routes 2A and 2B have had ridership increases, but they continue to carry the least amount of passengers for individual routes. These routes provide service to a large geographic area of the city, providing service in both directions on essentially the same route. As they operate on virtually identical routes, ridership differs from Routes 1 and 3 due to the varying natures of the routes.

Figure 4-1: Annual Fixed Route and Paratransit Ridership, FY 2007 – 2013

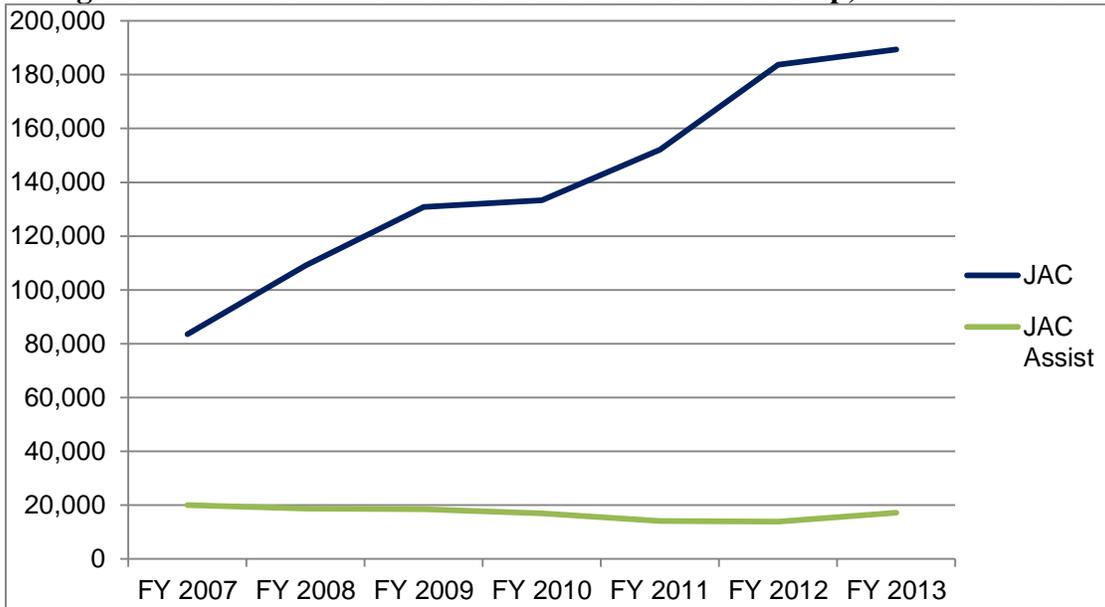
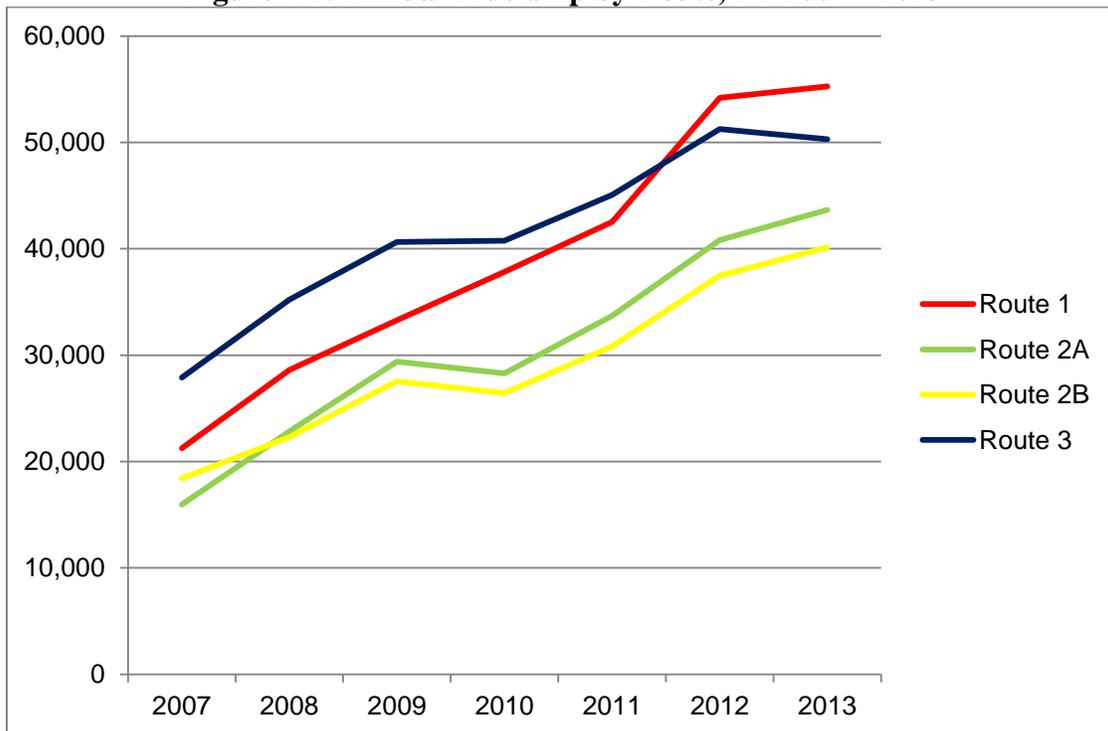


Figure 4-2: Annual Ridership by Route, FY 2007 – 2013



Service to Major Trip Generators

Chapter 2 included information about major trip generators in Carson City. Table 4-2 shows the number of trip generators which are served by the existing system. As is shown on the maps in Chapter 2 and in Table 4-2, most major trip generators are served, particularly when measured as being within ¼ mile of a fixed transit route. The design of the fixed routes has served the city well since implementation, serving many important locations. Additionally, several minor route modifications have been implemented since service began in order to serve additional locations. However, without service expansion, many locations remain unserved or underserved. The following are key locations which are not served, and have been selected based on the information provided in Chapter 2 and Table 4-2 as well as extensive public input received since the service began operations:

- Government facilities
 - There is no direct service to the Carson City courthouse and the Sheriff's Office near the intersection of Roop Street and Musser Street. While there is service within ¼ mile to the north and southwest, direct service has been requested at this location as it needs to be accessed by many residents for numerous purposes including civic activities such as voting.
 - The JAC operations office is located on Butti Way and is not directly served. While significant sidewalk improvements have been made to improve accessibility from the nearest bus stop, many passengers have requested direct service to that location to address transit-related issues.
- Medical facilities – Eagle Medical Center on N. Carson Street is a major medical destination which is not served and is frequently requested.
- Schools
 - Western Nevada College is directly served by the JAC system – Routes 2A and 2B. While service is provided during the day, a significant number of students attend classes during evening hours. Because service does not go into the evening, it has been pointed out on numerous occasions that a large portion of the demand is unmet because of the service limitations.
 - Carson Middle School is not directly served, however requests are often made for direct service to this location. Middle school students have a high potential for transit ridership, as they are old enough to use public transit services independently, but not old enough to drive. Additionally, there is limited accessibility on sidewalks for passengers to get to the school.
 - Among elementary schools, Al Seeliger Elementary on Saliman Road is the most requested, as the closest transit service is on Silver Sage Drive about ½ mile to the west.
 - While many Carson High School students have access to transportation provided by the school district, some students are travelling to the school daily using JAC. With the existing system, the closest stop is located about ¼ mile away on Long Street.
- Senior services and living – Previously identified locations are served, however, there is a senior housing complex of single-family homes – Quail Run – located at the intersection of Saliman Road and Fairview Drive which is unserved. This complex is populated only

by seniors, and the closest stop is located about ½ mile away on Roop Street just north of Fairview Drive. Residents are keen to point out that they have access to fare-free rides, but their residential area is not directly served by the system.

- Service providers for the disabled community – The Frost Yasmer Estates is occupied by numerous disabled individuals who have requested the provision of direct bus service. The nearest bus stop is over ¼ mile away, and many residents’ disabilities prevent them from being able to travel that distance. While many residents are eligible for JAC Assist, the residents have pointed out the reasons for the requested fixed route service. They indicate that JAC Assist service costs more for them and for the City and they do not have the convenience of fixed route transit – they need to plan and call ahead.
- Social services – The most-requested social service provider in the community is the FISH location off Carson Street. While there are services to the west on Mountain Street and to the east on Roop Street, many passengers request direct service due to the distance, limitations of the sidewalk network, and their disabilities.
- Major employers and shopping centers
 - The Arrowhead industrial corridor includes many significant employers in the community. The volume of positions and nature of some of the positions are supportive of transit service, and many requests have been received for service to this location, primarily from employees but also from other sources such as employment agencies.
 - The Gold Dust West is within ¼ mile of fixed route service, but there have been many requests for direct service from passengers and from the property management.
 - There is no bus service at or in close proximity to the intersection of US 50 and Fairview Drive/College Parkway. Requests are received regularly from passengers wishing to access several businesses, including Slotworld.

Table 4-2: Level of Service to Major Trip Generators

Service to Major Trip Generators		
Trip Generator Type	Directly Served (stop on same block)	Service Area (within 1/4 mile)
Government Facilities	8 of 19	14 of 19
Medical Facilities	5 of 11	10 of 11
School Facilities	4 of 17	8 of 17
Senior Services	5 of 8	7 of 8
Disabled Services	2 of 8	6 of 8
Social Services	2 of 9	9 of 9
Employers and Shopping Centers	6 of 15	14 of 15

Peer Review

An overall assessment of the JAC system was conducted through a “peer review” process, where performance measures of transit agencies with characteristics similar to JAC were compared with the same performance measures for JAC. Tables 4-3 and 4-4 list the transit agencies and associated performance measures reviewed. Data for the peer transit agencies were obtained from the National Transit Database (NTD). Agencies were selected based upon a variety of characteristics including geography, population, service area, hours of operation, and vehicles operated during maximum service.

Table 4-3 displays the characteristics of the JAC system compared with other systems. The following are of note regarding the information provided:

- The JAC system is one of the “younger” systems in the group, but there are others which have existed for less than ten years as well.
- The weekday service hours are comparable to many of the other systems, but several services operate service later into the evening.
- Saturday service hours vary more between systems, but JAC’s Saturday hours of service total to a similar amount compared to other systems.
- Only two systems operate on Sundays, so JAC’s lack of Sunday service is consistent with common practice for systems of this size.
- The number of total vehicles in service at any given time by the JAC system is low for the peer group. Only one other system – the newest system, which also served the smallest population base – ran as few vehicles in peak service.
- The base adult cash fare of \$1.00 charged on the JAC system is generally in the middle of the range of the peer group. Two systems charge less, four systems charged more, and four systems charge the same amount.

Table 4-4 presents several performance measures for the peer group. While the data are limited, several observations can be made. However, it should be noted that the way in which systems are operated can significantly impact performance. For example, systems with primarily commuter-oriented routes will operate at higher average speeds, and therefore have more miles driven compared to hours operated. Additionally, the various histories and funding mechanisms for the other systems influence the amount of service provided.

- Most of the systems have higher ridership levels than the JAC system. The ones with less ridership were primarily smaller communities. However, the majority of systems – serving both slightly smaller and larger communities – had higher ridership levels.
- All but one system – the smallest community with the newest system – operated more revenue miles of service than the JAC system. All but two systems operated more revenue vehicle hours.
- JAC ranks right in the middle in terms of passengers per revenue mile. However, JAC is near the bottom in terms of passengers per revenue hour. In both instances, systems serving larger and smaller communities ranked higher and lower than the JAC system.

Table 4-3: JAC Peer Review – Transit Agency Characteristics

Transit Agency	Urbanized Area	2010 Population	Service Area (sq mi) ¹	Years in Existence	Hours of Operation			Vehicles in Max. Service		2012 Adult Cash Fare		
					M-F	Sat	Sun	Bus ¹	D.R. ^{1,2}	Total ¹	Bus	D.R.
JAC	Carson City, NV	58,079	26	8	6:30a-6:30p	8:30a-4:30p	--	4	4	8	\$1.00	\$2.00
City of Sierra Vista (Vista Transit)	Sierra Vista, AZ	52,745	154	3	7:00a-5:30p	10:30a-5:00p ³	--	5	3	8	\$1.25	\$2.00
City of Farmington (Red Apple Transit)	Farmington, NM	53,049	40	12	7:00a-6:00p	7:00a-6:00p	--	8	1	9	\$1.00	\$2.00
Valley Transit (VT)	Walla Walla, WA-OR	55,805	25	33	6:15a-5:45p ⁴	12:15p-6:10p ⁵	--	13	7	20	\$0.50	\$0.75
City of Albany (ATS)	Albany, OR	56,997	20	N/A	6:30a-6:20p ⁶	8:00a-6:00p	--	4	8	12	\$1.00	\$2.00
Cowlitz Transit Authority (RCT)	Longview, WA-OR	63,952	31	26	6:30a-7:00p	8:00a-6:00p	--	5	14	19	\$0.60	\$0.60
City of Petaluma (Petaluma Transit)	Petaluma, CA	64,078	12	N/A	6:20a-7:15p	7:20a-5:45p	8:20a-4:45p	7	5	12	\$1.25	\$2.50
Fairbanks North Star Borough Transit (MAOS)	Fairbanks, AK	64,513	7,338	36	6:15a-8:45p ⁷	9:15a-6:40p ⁷	--	10	6	16	\$1.50	\$2.00
City of Casper (CATC)	Casper, WY	64,548	93	8	6:30a-6:30p	7:30a-3:30p	--	7	7	14	\$1.00	\$2.00
Great Falls Transit District (GFT)	Great Falls, MT	65,207	20	32	6:30a-6:30p	9:30a-5:30p	--	13	6	19	\$1.00	N/C
City of Porterville (COLT)	Porterville, CA	70,272	28	16	7:00a-10:00p	9:00a-5:00p	9:00a-5:00p	7	3	10	\$1.50	\$2.50

1. Based on National Transit Database reporting

2. D.R. = Demand Response

3. Vista Transit fixed only has one route on Saturdays

4. VT operates "flex" hours in the evenings from 5:45p-8:40p

5. VT operates "flex" hours on Saturdays, and Job Access transportation daily from 5:00a-11:30p

6. ATS operates specialty route weekdays from 6:25a-7:00p and Saturdays from 8:00a-6:00p for \$1.50

7. MAOS no two bus route schedules are alike for weekdays nor Saturdays

Table 4-4: JAC Peer Review – Performance Measures

Fixed Route Service					
Transit Agency	2012 Annual Ridership ¹	2012 Revenue Vehicle Miles ¹	Passengers/ Revenue Vehicle Mile ¹	2012 Revenue Vehicle Hours ¹	Passengers/ Revenue Vehicle Hour ¹
JAC	183,716	181,399	1.01	14,032	13.09
Rank	8	10	6	9	8
City of Sierra Vista (Vista Transit)	154,842	159,663	0.97	10,454	14.81
City of Farmington (Red Apple Transit)	138,048	252,170	0.55	19,328	7.14
Valley Transit (VT)	628,131	340,696	1.84	28,994	21.66
City of Albany (ATS)	218,427	181,742	1.20	7,725	28.28
Cowlitz Transit Authority (RCT)	381,018	223,584	1.70	17,651	21.59
City of Petaluma (Petaluma Transit)	283,293	194,275	1.46	14,069	20.14
Fairbanks North Star Borough Transit (MACS)	428,166	451,238	0.95	24,198	17.69
City of Casper (CATC)	157,711	299,507	0.53	24,555	6.42
Great Falls Transit District (GFT)	399,961	421,729	0.95	33,288	12.02
City of Porterville (COLT)	492,714	304,499	1.62	24,582	20.04
Demand Response Service					
JAC	14,430	52,154	0.28	5,867	2.46
Rank	8	10	5	8	8
City of Sierra Vista (Vista Transit)	10,417	77,405	0.13	4,669	2.23
City of Farmington (Red Apple Transit)	4,749	22,320	0.21	2,416	1.97
Valley Transit (VT)	47,579	171,507	0.28	14,532	3.27
City of Albany (ATS)	24,112	85,388	0.28	7,907	3.05
Cowlitz Transit Authority (RCT)	62,047	184,498	0.34	20,881	2.97
City of Petaluma (Petaluma Transit)	21,831	62,173	0.35	8,183	2.67
Fairbanks North Star Borough Transit (MACS)	18,976	144,662	0.13	10,878	1.74
City of Casper (CATC) ²	53,878	220,973	0.24	19,086	2.82
Great Falls Transit District (GFT)	33,018	142,143	0.23	12,356	2.67
City of Porterville (COLT) ³	13,168	59,793	0.22	3,614	3.64

1. Based on National Transit Database reporting

2. CATC demand response is available to the general public for a higher fare

3. COLT demand response is available to the general public for a higher fare

Chapter 5: Potential System Improvements

With the results of the previous chapters of this document, potential system improvements can be developed and evaluated to further meet the needs of the community. This chapter explores the following five scenarios, highlighted by Table 5-1 that summarizes financial forecasts (the detailed tables can be viewed in Appendix A), as options for implementation for the JAC system beginning in FY 2015:

1. Maintain existing service levels
2. Evening service
3. Additional route
4. Sunday service
5. More frequent service

1. Maintain Existing Service Levels

Continuing to provide the same quality service while being mindful of fiscal limitations is the premise of the maintain existing service levels option. While others seek to add improvements to the service, this scenario assumes that JAC's existing service levels are maintained. The assumptions made for this "base model" are also made for the other scenarios considered, unless otherwise noted:

- Fixed route ridership increases by 1% annually and paratransit ridership increases 5% annually;
- Increases in fixed route and paratransit ridership are met with associated increases in farebox revenue, whereas increases in paratransit ridership are also met with associated increases in revenue hours and total miles;
- Revenue per passenger mirrors that of actual levels through February of FY 2014;
- Local and external funding sources, including Federal funds, remain consistent;
- Fares remain consistent;
- Expenses increase at a rate of 3% annually, with few exceptions;
- Contract operator expenses are calculated as a function of revenue hours beginning in FY 2015, and also include a 3% rate of increase;
- Each vehicle added to the total fleet adds an additional expense to the professional services and fleet management expense categories.

Unlike the other scenarios which implement additional service in FY 2015, this scenario is the only one in which the ending reserve balance remains positive through FY 2018. However, there is a downward trend in the ending reserve balance, and should it continue, it would result in a negative ending reserve balance sooner rather than later. While there have been several instances when the Transit Fund has experienced positive financial events such as stimulus funding and additional funding for fuel, the forecast does not assume any additional similar events.

2. Evening Service

The request for evening service has been the most common one received by staff over the past several years. In response to these requests, this scenario assumes that service is provided on existing routes with expansion to 9:30 in the evening. Service expansion under this, as well as the other expansion scenarios, is assumed to be implemented in FY 2015. Additionally, all expansion scenarios were created under the following assumptions:

- Vehicle repair and maintenance is determined using past rates of repair and forecasted revenue hours for the fiscal year for which the vehicle repair and maintenance expenses are being calculated;
- Vehicle fuel/oil is determined using the previous year's fuel consumption rate and forecasted total miles for the fiscal year for which the vehicle fuel/oil expenses are being calculated;
- The rate at which vehicles in the fleet are replaced experiences an increase due to the additional miles that would accumulate as a result of running additional hours.

Assumptions specific to the evening service scenario include:

- The extension of service from 6:30 p.m. to 9:30 p.m. on weekdays only—Saturday remains the same;
- Annually, a total of 3,084 hours are added for fixed route and 1,028 hours for paratransit, with associative increases in revenue hours and total miles;
- Information from the on/off counts discussed in Chapter 3, as well as observations by staff are used to determine the additional increase in ridership on top of the base model (maintain existing service levels).

Unfortunately, the ending reserve under this scenario approaches a zero balance in FY 2016 and becomes negative in FY 2017, with the trend only continuing. However, ridership is forecasted to reach the highest level of any of the scenarios.

3. Additional Route

The expansion of service under this scenario assumes that one additional route is added to the four routes which currently comprise the JAC fixed route system. Although the path of the additional route was not determined, a reconfiguration of all routes would be likely should this scenario come to fruition. Route mileage and corresponding mileage-based expenses were determined based on the average mileage of existing routes. Additional assumptions made under this scenario are as follows:

- The number of routes, vehicles operating in peak demand, and total fleet size all increase by one upon implementation of the service expansion for fixed route;
- Vehicles operating in peak demand and total fleet size of paratransit do not increase until a year later, as they do in the base model;
- The annual revenue hours increase by 3,484 for fixed route;

- Beginning in FY 2016 and extending through FY 2018, paratransit experiences an additional increase in revenue hours, total miles and ridership (on top of the base increase) of 0.5%;
- With many of Carson City's major trip generators (as discussed in earlier chapters) already served by the existing system, fixed route ridership does not experience a proportionate increase—only a fraction of such an increase is attributed to the additional route.

The addition of a fixed route to the JAC system results in a negative ending reserve balance in FY 2016, with the trend continuing through FY 2018.

4. Sunday Service

This service is intended and assumed to operate the same as current Saturday service. Service under this scenario is provided from 8:30 a.m. to 4:30 p.m., and has lower volumes of ridership for both fixed route and paratransit. Additional assumptions made for the provision of service on Sundays are that:

- Total fleet size for fixed route is not affected by this expansion;
- Peak vehicle demand and total fleet size for paratransit increase by one in FY 2016 as they do in the base model;
- Annual revenue hours increase by 1,600 for fixed route and 600 for paratransit;
- Beginning in FY 2016 and extending through FY 2018, paratransit experiences an additional increase in revenue hours, total miles and ridership (on top of the base increase) of 0.5%;
- Annual fixed route ridership is derived from the most recent on/off counts available, with a 15% reduction due to the fact that more businesses are closed on Sundays than Saturdays;
- Ridership increases 1% on top of the base increase FY 2016 through FY 2018;
- Annual paratransit ridership is derived from the forecasted revenue hour rate of increase, but increases at a lower rate;
- Annual total miles for fixed route buses are based on the actual mileages for each route with an estimated rate of deadhead mileage (i.e. when the buses are not in regular service during trips made for refueling, training, traveling to/from transfer station before and after going into service);
- Paratransit annual total miles mirror the increase in revenue hours.

Of all the expansion scenarios, the addition of Sunday service to the JAC system results in the most favorable ending reserve balance, however, it does experience negative amounts in fiscal years 2017 and 2018.

5. More Frequent Service

Service under this scenario assumes two extra buses providing alternating service to the four fixed routes from 9:30 a.m. to 3:30 p.m. on weekdays (3,084 hours annually); Saturdays and paratransit are not affected under this scenario. Additional assumptions made for the provision of more frequent service are:

- Total fleet size for fixed route requires an additional three buses, two of which are required during peak vehicle demand—additions made to the fleet are phased in with two buses added in FY 2015 and one added in FY 2016;
- A modest increase in ridership (3%) in addition to the base increase (1%) in the initial year, with the additional increase reduced to 1% for FY 2016 – 2018;
- Annual total miles for fixed route are based on the actual mileages for each route with an estimated rate of deadhead mileage.

Not only does the addition of more frequent service result in a negative reserve balance in FY 2016, it also results in lowest ending reserve balance from implementation (FY 2015) through the end of the forecast.

**Table 5-1: JAC Financial Forecast, FY 2014 – 2018:
Maintain Existing Service Levels**

Fixed Route	2013	2014	2015	2016	2017	2018
Ridership	189,400	191,300	193,200	195,100	197,000	199,000
Revenue Hours	13,900	13,900	13,900	13,900	13,900	13,900
Total Miles	188,800	188,800	188,800	188,800	188,800	188,800
Paratransit	2013	2014	2015	2016	2017	2018
Ridership	17,100	18,000	18,900	19,800	20,800	21,900
Revenue Hours	8,000	8,200	8,600	9,000	9,400	9,900
Total Miles	74,200	72,600	76,300	80,100	84,100	88,300
Total Service	2013	2014	2015	2016	2017	2018
Ridership	206,500	209,300	212,100	214,900	217,800	220,900
Revenue Hours	21,900	22,100	22,500	22,900	23,300	23,800
Total Miles	263,000	261,400	265,100	268,900	272,900	277,100

Evening Service

Fixed Route	2013	2014	2015	2016	2017	2018
Ridership	189,400	191,300	222,500	226,900	231,500	236,100
Revenue Hours	13,900	13,900	16,900	16,900	16,900	16,900
Total Miles	188,800	188,800	228,300	228,300	228,300	228,300
Paratransit	2013	2014	2015	2016	2017	2018
Ridership	17,100	18,000	20,000	21,200	22,400	23,800
Revenue Hours	8,000	8,200	9,600	10,100	10,600	11,100
Total Miles	74,200	72,600	85,400	90,500	95,900	101,700
Total Service	2013	2014	2015	2016	2017	2018
Ridership	206,500	209,300	242,500	248,100	253,900	259,900
Revenue Hours	21,900	22,100	26,500	27,000	27,500	28,000
Total Miles	263,000	261,400	313,700	318,800	324,200	330,000

Additional Route

Fixed Route	2013	2014	2015	2016	2017	2018
Ridership	189,400	191,300	217,100	221,400	225,800	230,400
Revenue Hours	13,900	13,900	17,300	17,300	17,300	17,300
Total Miles	188,800	188,800	236,000	236,000	236,000	236,000
Paratransit	2013	2014	2015	2016	2017	2018
Ridership	17,100	18,000	18,900	19,900	21,000	22,200
Revenue Hours	8,000	8,200	8,600	9,000	9,500	10,100
Total Miles	74,200	72,600	76,300	80,500	84,900	89,600
Total Service	2013	2014	2015	2016	2017	2018
Ridership	206,500	209,300	236,000	241,300	246,800	252,600
Revenue Hours	21,900	22,100	25,900	26,300	26,800	27,400
Total Miles	263,000	261,400	312,300	316,500	320,900	325,600

Sunday Service

Fixed Route	2013	2014	2015	2016	2017	2018
Ridership	189,400	191,300	209,000	213,200	217,500	221,800
Revenue Hours	13,900	13,900	15,500	15,500	15,500	15,500
Total Miles	188,800	188,800	210,000	210,000	210,000	210,000
Paratransit	2013	2014	2015	2016	2017	2018
Ridership	17,100	18,000	19,500	20,700	21,900	23,200
Revenue Hours	8,000	8,200	9,200	9,700	10,300	10,900
Total Miles	74,200	72,600	81,400	86,200	91,400	96,900
Total Service	2013	2014	2015	2016	2017	2018
Ridership	206,500	209,300	228,500	233,900	239,400	245,000
Revenue Hours	21,900	22,100	24,700	25,200	25,800	26,400
Total Miles	263,000	261,400	291,400	296,200	301,400	306,900

More Frequent Service

Fixed Route	2013	2014	2015	2016	2017	2018
Ridership	189,400	191,300	199,000	202,900	207,000	211,100
Revenue Hours	13,900	13,900	16,900	16,900	16,900	16,900
Total Miles	188,800	188,800	229,300	229,300	229,300	229,300
Paratransit	2013	2014	2015	2016	2017	2018
Ridership	17,100	18,000	18,900	19,800	20,800	21,900
Revenue Hours	8,000	8,200	8,600	9,000	9,400	9,900
Total Miles	74,200	72,600	76,300	80,100	84,100	88,300
Total Service	2013	2014	2015	2016	2017	2018
Ridership	206,500	209,300	217,900	222,700	227,800	233,000
Revenue Hours	21,900	22,100	25,500	25,900	26,300	26,800
Total Miles	263,000	261,400	305,600	309,400	313,400	317,600

**Table 5-1: JAC Financial Forecast, FY 2014 – 2018 (continued):
Maintain Existing Service Levels**

	2013	2014	2015	2016	2017	2018
Total Income	\$1,355,600	\$1,359,900	\$1,301,600	\$1,532,100	\$1,460,500	\$1,489,600
Total Operating Expenses¹	\$1,063,800	\$1,109,400	\$1,154,500	\$1,212,300	\$1,260,400	\$1,315,600
Total Capital Expenses	\$339,000	\$220,400	\$83,100	\$373,200	\$253,300	\$253,400
Total Expenses	\$1,402,800	\$1,329,800	\$1,237,600	\$1,585,500	\$1,513,700	\$1,569,000
Ending Reserve Balance	\$126,500	\$156,600	\$220,600	\$167,300	\$114,100	\$34,700

Evening Service

	2013	2014	2015	2016	2017	2018
Total Income	\$1,355,600	\$1,359,900	\$1,390,300	\$1,626,800	\$1,756,000	\$1,597,700
Total Operating Expenses¹	\$ 1,063,800	\$ 1,109,400	\$ 1,319,400	\$ 1,387,700	\$ 1,447,300	\$ 1,514,900
Total Capital Expenses	\$339,000	\$220,400	\$83,100	\$373,200	\$493,300	\$253,400
Total Expenses	\$1,402,800	\$1,329,800	\$1,402,500	\$1,760,900	\$1,940,600	\$1,768,300
Ending Reserve Balance	\$126,500	\$156,600	\$144,400	\$10,300	(\$174,300)	(\$344,900)

Additional Route

	2013	2014	2015	2016	2017	2018
Total Income	\$1,355,600	\$1,359,900	\$1,657,600	\$1,623,700	\$1,752,000	\$1,592,800
Total Operating Expenses¹	\$ 1,063,800	\$ 1,109,400	\$ 1,307,000	\$ 1,369,700	\$ 1,427,700	\$ 1,493,800
Total Capital Expenses	\$339,000	\$220,400	\$423,100	\$383,200	\$503,300	\$263,400
Total Expenses	\$1,402,800	\$1,329,800	\$1,730,100	\$1,752,900	\$1,931,000	\$1,757,200
Ending Reserve Balance	\$126,500	\$156,600	\$84,100	(\$45,100)	(\$224,100)	(\$388,400)

Sunday Service

	2013	2014	2015	2016	2017	2018
Total Income	\$1,355,600	\$1,359,900	\$1,350,200	\$1,586,300	\$1,715,200	\$1,556,800
Total Operating Expenses¹	\$ 1,063,800	\$ 1,109,400	\$ 1,245,000	\$ 1,312,700	\$ 1,371,600	\$ 1,439,100
Total Capital Expenses	\$339,000	\$220,400	\$83,100	\$373,200	\$493,300	\$253,400
Total Expenses	\$1,402,800	\$1,329,800	\$1,328,100	\$1,685,900	\$1,864,900	\$1,692,500
Ending Reserve Balance	\$126,500	\$156,600	\$178,700	\$79,300	(\$70,300)	(\$206,000)

More Frequent Service

	2013	2014	2015	2016	2017	2018
Total Income	\$1,355,600	\$1,359,900	\$1,759,200	\$1,801,200	\$1,735,900	\$1,767,600
Total Operating Expenses¹	\$ 1,063,800	\$ 1,109,400	\$ 1,290,100	\$ 1,359,100	\$ 1,418,800	\$ 1,478,100
Total Capital Expenses	\$339,000	\$220,400	\$563,100	\$613,200	\$493,300	\$493,400
Total Expenses	\$1,402,800	\$1,329,800	\$1,853,200	\$1,972,300	\$1,912,100	\$1,971,500
Ending Reserve Balance	\$126,500	\$156,600	\$62,600	(\$108,400)	(\$284,400)	(\$488,300)

1. Includes RTC Intercity operating expenses

Discussion of Scenarios

The provision of safe, efficient, convenient and dependable transportation is the goal of any transit service. Being that such service also must be fiscally constrained, doing so can be a great challenge. There are many ways to evaluate the options available to JAC. While Table 5-2 provides a matrix outlining the pros and cons of each scenario, the following is a discussion of those available options.

Although maintaining existing service levels is the only scenario in which the ending reserve balance will not be negative by the end of FY 2018, expanding service would provide additional benefits for the community. For instance, adding evening service would not only afford people more time during the week to run errands and participate in community events, it is estimated to boost ridership by about 18% over maintaining existing service levels. Although total expenses would increase, due to the marginal cost of providing service, cost per revenue hour decreases for any scenario as compared to the base model. For comparisons made between scenarios under which expanded service is implemented, a higher level of detail is discussed below:

- Extending JAC's hours of operation later into the night not only provides the opportunity for more extensive participation in activities such as later working hours, night school and community events, it is also expected to receive the highest annual ridership. However, due to the fact that JAC's ridership by time of day peaks during the 12:30 p.m. service hour and declines every hour afterward, it is somewhat unclear whether or how rapidly ridership will decline beyond existing hours of service. Additionally, this scenario results in the highest total operating expenses, as well as a negative ending reserve balance in FY 2017 and thereafter.
- While adding an additional route is the only option which would expand the service area in Carson City, the fact remains that the current system's coverage incorporates most of the relatively densely populated area, as well as many of Carson City's major trip generators. The additional expenses necessary to provide such service may not net the desired associative ridership. In addition, this scenario results in a negative ending reserve balance in FY 2016 and thereafter, and would be more difficult to implement due to the additions to the fleet and relocation of bus stops that would be required.
- Adding Sunday service provides access to transit all week long, responds to a request of the community, and would be relatively easy to implement. However, there are more businesses overall that are closed on Sundays, which is likely to have a negative impact on ridership. Costs of adding this service are the lowest in a number of categories, but unfortunately the potential for small increases in ridership lacks justification for implementation of this service.
- More frequent service not only makes riding the bus more convenient for passengers during the busiest weekday hours of operation with shorter headways, it also helps improve overall on-time performance. While no changes are required to be made to the paratransit service, capital expenses are the highest of any scenario and a negative ending reserve balance is realized in FY 2016 and thereafter. Furthermore, ridership sees the smallest gains due to the fact that the addition will not necessarily serve new customers—it will primarily serve existing customers more efficiently.

Table 5-2: Pros and Cons of the Five Identified Scenarios

Scenario	Pros	Cons
Maintain Existing Service Levels	<ul style="list-style-type: none"> • Fund balance remains positive with level local funding • Provides for the most certainty and efficiency in terms of the budget and provision of service 	<ul style="list-style-type: none"> • Does not address unmet service needs or community desires
Evening Service	<ul style="list-style-type: none"> • Provides opportunity for participation in more activities such as later working hours, night school, community events, etc. • Expected to receive highest annual ridership rates • Relatively easy to implement 	<ul style="list-style-type: none"> • Results in the highest total operating expenses annually • Results in a negative ending reserve balance in FY 2017 and thereafter
Additional Route	<ul style="list-style-type: none"> • Only option which expands the service area in Carson City, responding to community requests 	<ul style="list-style-type: none"> • Results in a negative ending reserve balance in FY 2016 and thereafter • More difficult to implement regarding more vehicles and relocation and addition of stops
Sunday Service	<ul style="list-style-type: none"> • Allows for bus service seven days a week • Responds to community request • Relatively easy to implement 	<ul style="list-style-type: none"> • Results in a negative ending reserve balance in FY 2017 and thereafter • Less productive service with overall less activity on Sundays
More Frequent Service	<ul style="list-style-type: none"> • Makes riding the bus more convenient during the busiest times of the day • Helps to improve overall on-time performance 	<ul style="list-style-type: none"> • Forecasted to receive the smallest increase in annual ridership (other than the maintain existing service levels option) • Results in a negative ending reserve balance in FY 2016 and thereafter • Does not address more common requests for other types of improvements

CHAPTER 6: RECOMMENDATIONS AND CONCLUSIONS

The JAC system is currently functioning well and providing a vital service in the community. The system serves many major transit trip generators, and many residents have come to depend on the service to get to work, school, shopping, medical appointments, and other destinations. While service levels in terms of hours and miles operated have not increased, system enhancements such as stop improvements and vehicle improvements have contributed to substantial ridership increases since the service began.

While the system provides a key service in the community, the lack of service expansion has and will limit the use of the system. The system serves many important locations, but those locations cannot be accessed in the evenings or on Sundays. Other locations which would ideally be served are not on current routes. Additionally, the hourly frequency of service is inconvenient for users and can be detrimental to on-time service. If on-time service is affected, riders are negatively impacted by the hourly frequency. Many requests have been received regarding the issues above from riders, potential riders, employers, and other entities.

The JAC system is funded primarily with Federal Transit Administration funds, the Carson City General Fund, and farebox revenues. Other funding sources include advertising revenues and state grants for seniors and individuals served by Medicaid. The system has effectively used the available funds and currently has a positive fund balance. A contributing factor to that has been the receipt of “one-time” funds which cannot be expected to be available in the future. With assumptions regarding costs and revenue – including stable funding from the Carson City General Fund – the Transit Fund balance is expected to decline and have a modest positive fund balance at the end of the planning period.

Several alternatives to expand and improve the existing service were developed and evaluated. With the community requests for expansion of transit service and the availability of Federal funding to fund the majority of any additional service, expansion is desirable. Each of the potential services evaluated would have benefits for riders and the community as a whole and could be implemented individually or together. However, while Federal funds are available to primarily fund capital and operating costs of expansion (within the limits of funding), additional non-Federal/local funds would be required to utilize those Federal funds.

Should additional funds become available, it is recommended that the alternative to provide weekday evening service should be pursued. That option would meet community needs and rider requests. That alternative would be easier to implement, utilizing existing stops and avoiding higher capital costs due to an increase in peak vehicle requirements. It would also be flexible, allowing for future changes to evening service end times as needed.

The other alternatives would also be desirable. Providing five routes instead of four would certainly address another key concern and request, as current unserved areas could be reached. However, doing so would not address the larger request for evening service and would be significantly more difficult to implement. There would be a higher peak vehicle requirement and some stops would be abandoned while other new ones are created. Once implemented, further changes would be difficult.

In conclusion, service expansion would be desirable and beneficial. While such expansion would be primarily Federally-funded, additional local funds would also be required. The ability to implement an expansion is dependent upon securing additional local funds. While the Carson City RTC governs the JAC system under agreement with the Carson City Board of Supervisors, any additional funding from the Carson City General Fund would be determined by the Board of Supervisors. Any additional non-Federal sources which become available should be pursued as well.

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Appendix A

**Table A-1: JAC Financial Forecast, FY 2014 – 2018:
Maintain Existing Service Levels**

Fixed Route	2013	2014	2015	2016	2017	2018
Number of Routes	4	4	4	4	4	4
Peak Vehicle Demand	4	4	4	4	4	4
Total Fleet Size	6	7	7	7	7	7
Ridership	189,400	191,300	193,200	195,100	197,000	199,000
Revenue per Passenger	\$0.34	\$0.36	\$0.36	\$0.36	\$0.36	\$0.36
Farebox	\$64,500	\$68,900	\$69,500	\$70,200	\$70,900	\$71,600
Revenue Hours	13,900	13,900	13,900	13,900	13,900	13,900
Revenue Hours - % of Total Service	63.5%	62.9%	61.8%	60.7%	59.7%	58.4%
Total Miles	188,800	188,800	188,800	188,800	188,800	188,800
Total Miles - % of Total Service	71.8%	72.2%	71.2%	70.2%	69.2%	68.1%
Cost per Trip	\$3.59	\$3.71	\$3.76	\$3.84	\$3.89	\$3.94
Cost per Revenue Hour	\$48.96	\$50.99	\$52.20	\$53.92	\$55.07	\$56.45
Cost per Mile	\$3.60	\$3.75	\$3.84	\$3.97	\$4.05	\$4.16
Paratransit	2013	2014	2015	2016	2017	2018
Peak Vehicle Demand	4	4	4	5	5	5
Total Fleet Size	7	7	7	8	8	8
Ridership	17,100	18,000	18,900	19,800	20,800	21,900
Revenue per Passenger	\$2.05	\$1.80	\$1.80	\$1.80	\$1.80	\$1.80
Farebox	\$35,000	\$32,400	\$34,000	\$35,700	\$37,500	\$39,300
Revenue Hours	8,000	8,200	8,600	9,000	9,400	9,900
Revenue Hours - % of Total Service	36.5%	37.1%	38.2%	39.3%	40.3%	41.6%
Total Miles	74,200	72,600	76,300	80,100	84,100	88,300
Total Miles - % of Total Service	28.2%	27.8%	28.8%	29.8%	30.8%	31.9%
Cost per Trip	\$20.48	\$20.23	\$20.70	\$21.42	\$21.88	\$22.37
Cost per Revenue Hour	\$43.78	\$44.40	\$45.50	\$47.12	\$48.40	\$49.48
Cost per Mile	\$4.72	\$5.02	\$5.13	\$5.29	\$5.41	\$5.55
Total Service	2013	2014	2015	2016	2017	2018
Number of Routes	4	4	4	4	4	4
Peak Vehicle Demand	8	8	8	9	9	9
Total Fleet Size	13	14	14	15	15	15
Ridership	206,500	209,300	212,100	214,900	217,800	220,900
Revenue per Passenger	\$0.48	\$0.48	\$0.49	\$0.49	\$0.50	\$0.50
Farebox	\$99,500	\$101,300	\$103,500	\$105,900	\$108,400	\$110,900
Revenue Hours	21,900	22,100	22,500	22,900	23,300	23,800
Revenue Hours - % of Total Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Miles	263,000	261,400	265,100	268,900	272,900	277,100
Total Miles - % of Total Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost per Trip	\$4.99	\$5.13	\$5.27	\$5.46	\$5.60	\$5.77
Cost per Revenue Hour	\$47.06	\$48.55	\$49.64	\$51.25	\$52.38	\$53.55
Cost per Mile	\$3.92	\$4.10	\$4.21	\$4.36	\$4.47	\$4.60

**Table A-1: JAC Financial Forecast, FY 2014 – 2018:
Maintain Existing Service Levels (continued)**

Operating & Capital	2013	2014	2015	2016	2017	2018
Income						
Farebox Revenue	\$ 99,500	\$ 101,300	\$ 103,500	\$ 105,900	\$ 108,400	\$ 110,900
Division for Aging Services Grant - operating	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Interest Income	\$ 1,200	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
FTA - operating and capital	\$ 862,300	\$ 765,200	\$ 734,600	\$ 962,700	\$ 888,600	\$ 915,200
Advertising Revenue	\$ 26,900	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
DHCFP - Medicaid reimbursement	\$ -	\$ 60,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Carson City - General Fund	\$ 270,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000
State Funds	\$ 37,500	\$ -	\$ -	\$ -	\$ -	\$ -
Other Revenue	\$ 8,100	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500
Total Income	\$ 1,355,600	\$ 1,359,900	\$ 1,301,600	\$ 1,532,100	\$ 1,460,500	\$ 1,489,600
Expenses						
Wages and Benefits	\$ 84,300	\$ 65,000	\$ 67,000	\$ 69,000	\$ 71,000	\$ 73,200
Professional Services	\$ 1,400	\$ 25,000	\$ 25,000	\$ 29,300	\$ 25,000	\$ 25,000
Contracted Services - MV	\$ 580,200	\$ 590,000	\$ 616,900	\$ 647,600	\$ 680,200	\$ 714,800
Maint. Service Contracts	\$ 3,700	\$ 4,000	\$ 4,300	\$ 4,600	\$ 4,900	\$ 5,200
Vehicle Repair & Maint.	\$ 43,900	\$ 85,000	\$ 87,600	\$ 90,200	\$ 92,900	\$ 95,700
Travel	\$ 800	\$ 2,500	\$ 2,600	\$ 2,700	\$ 2,700	\$ 2,800
Office Supplies	\$ 300	\$ 1,000	\$ 1,000	\$ 1,100	\$ 1,100	\$ 1,100
Operating Supplies	\$ 12,400	\$ 20,000	\$ 20,600	\$ 21,200	\$ 21,900	\$ 22,500
Vehicle Fuel/Oil	\$ 156,600	\$ 160,000	\$ 168,000	\$ 176,400	\$ 185,200	\$ 194,500
Telephone	\$ 6,200	\$ 5,700	\$ 5,900	\$ 6,000	\$ 6,200	\$ 6,400
Power	\$ 2,700	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,300	\$ 3,400
Heating	\$ 1,300	\$ 1,500	\$ 1,500	\$ 1,600	\$ 1,600	\$ 1,700
ISC:General Fund	\$ 44,000	\$ 40,600	\$ 41,800	\$ 43,100	\$ 44,400	\$ 45,700
Fleet Management	\$ 59,100	\$ 54,600	\$ 56,200	\$ 61,900	\$ 63,700	\$ 65,700
Grant Allocation	\$ 33,700	\$ 15,000	\$ 15,500	\$ 15,900	\$ 16,400	\$ 16,900
Total Operating Expenses	\$ 1,030,600	\$ 1,072,900	\$ 1,116,900	\$ 1,173,600	\$ 1,220,500	\$ 1,274,500
Small Furnishings	\$ 2,200	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,300	\$ 3,400
Vehicle Purchase	\$ 336,800	\$ 217,400	\$ -	\$ 360,000	\$ 240,000	\$ 240,000
Other Capital Improvements			\$ 80,000	\$ 10,000	\$ 10,000	\$ 10,000
Total Capital Expenses	\$ 339,000	\$ 220,400	\$ 83,100	\$ 373,200	\$ 253,300	\$ 253,400
RTC Intercity Operating	\$ 33,200	\$ 36,500	\$ 37,600	\$ 38,700	\$ 39,900	\$ 41,100
Total Expenses	\$ 1,402,800	\$ 1,329,800	\$ 1,237,600	\$ 1,585,500	\$ 1,513,700	\$ 1,569,000
Total FTA Reimbursable	\$ 862,300	\$ 765,100	\$ 734,600	\$ 962,700	\$ 888,600	\$ 915,100
Total Local (all non FTA) Match Required	\$ 441,000	\$ 463,400	\$ 399,500	\$ 516,900	\$ 516,700	\$ 542,800
Beginning Reserve Balance	\$ 173,800	\$ 126,500	\$ 156,600	\$ 220,700	\$ 167,300	\$ 114,100
Total Revenue	\$ 1,355,600	\$ 1,359,900	\$ 1,301,600	\$ 1,532,100	\$ 1,460,500	\$ 1,489,600
Less Total Expenses	\$ 1,402,900	\$ 1,329,800	\$ 1,237,600	\$ 1,585,500	\$ 1,513,700	\$ 1,569,000
Ending Reserve Balance	\$ 126,500	\$ 156,600	\$ 220,600	\$ 167,300	\$ 114,100	\$ 34,700

**Table A-2: JAC Financial Forecast, FY 2014 – 2018:
Evening Service**

Fixed Route	2013	2014	2015	2016	2017	2018
Number of Routes	4	4	4	4	4	4
Peak Vehicle Demand	4	4	4	4	4	4
Total Fleet Size	6	7	7	7	7	7
Ridership	189,400	191,300	222,500	226,900	231,500	236,100
Revenue per Passenger	\$0.34	\$0.36	\$0.36	\$0.36	\$0.36	\$0.36
Farebox	\$64,500	\$68,900	\$80,100	\$81,700	\$83,300	\$85,000
Revenue Hours	13,900	13,900	16,900	16,900	16,900	16,900
Revenue Hours - % of Total Service	63.5%	62.9%	63.8%	62.6%	61.5%	60.4%
Total Miles	188,800	188,800	228,300	228,300	228,300	228,300
Total Miles - % of Total Service	71.8%	72.2%	72.8%	71.6%	70.4%	69.2%
Cost per Trip	\$3.59	\$3.71	\$3.85	\$3.91	\$3.92	\$3.95
Cost per Revenue Hour	\$48.96	\$50.99	\$50.67	\$52.44	\$53.74	\$55.25
Cost per Mile	\$3.60	\$3.75	\$3.75	\$3.88	\$3.98	\$4.09
Paratransit	2013	2014	2015	2016	2017	2018
Peak Vehicle Demand	4	4	4	5	5	5
Total Fleet Size	7	7	7	8	8	8
Ridership	17,100	18,000	20,000	21,200	22,400	23,800
Revenue per Passenger	\$2.05	\$1.80	\$1.80	\$1.80	\$1.80	\$1.80
Farebox	\$35,000	\$32,400	\$35,900	\$38,100	\$40,400	\$42,800
Revenue Hours	8,000	8,200	9,600	10,100	10,600	11,100
Revenue Hours - % of Total Service	36.5%	37.1%	36.2%	37.4%	38.5%	39.6%
Total Miles	74,200	72,600	85,400	90,500	95,900	101,700
Total Miles - % of Total Service	28.2%	27.8%	27.2%	28.4%	29.6%	30.8%
Cost per Trip	\$20.48	\$20.23	\$21.27	\$21.83	\$22.28	\$22.69
Cost per Revenue Hour	\$43.78	\$44.40	\$44.31	\$45.82	\$47.08	\$48.66
Cost per Mile	\$4.72	\$5.02	\$4.98	\$5.11	\$5.20	\$5.31
Total Service	2013	2014	2015	2016	2017	2018
Number of Routes	4	4	4	4	4	4
Peak Vehicle Demand	8	8	8	9	9	9
Total Fleet Size	13	14	14	15	15	15
Ridership	206,500	209,300	242,500	248,100	253,900	259,900
Revenue per Passenger	\$0.48	\$0.48	\$0.48	\$0.48	\$0.49	\$0.49
Farebox	\$99,500	\$101,300	\$116,000	\$119,800	\$123,700	\$127,800
Revenue Hours	21,900	22,100	26,500	27,000	27,500	28,000
Revenue Hours - % of Total Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Miles	263,000	261,400	313,700	318,800	324,200	330,000
Total Miles - % of Total Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost per Trip	\$4.99	\$5.13	\$5.29	\$5.44	\$5.54	\$5.67
Cost per Revenue Hour	\$47.06	\$48.55	\$48.37	\$49.96	\$51.18	\$52.64
Cost per Mile	\$3.92	\$4.10	\$4.09	\$4.23	\$4.34	\$4.47

**Table A-2: JAC Financial Forecast, FY 2014 – 2018:
Evening Service (continued)**

Operating & Capital	2013	2014	2015	2016	2017	2018
Income						
Farebox Revenue	\$ 99,600	\$ 101,200	\$ 116,000	\$ 119,800	\$ 123,700	\$ 127,800
Division for Aging Services Grant - operating	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Interest Income	\$ 1,200	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
FTA - operating and capital	\$ 862,300	\$ 765,200	\$ 810,800	\$ 1,043,500	\$ 1,168,800	\$ 1,006,400
Advertising Revenue	\$ 26,900	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
DHCFP - Medicaid reimbursement	\$ -	\$ 60,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Carson City - General Fund	\$ 270,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000
State Funds	\$ 37,500	\$ -	\$ -	\$ -	\$ -	\$ -
Other Revenue	\$ 8,100	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500
Total Income	\$ 1,355,600	\$ 1,359,900	\$ 1,390,300	\$ 1,626,800	\$ 1,756,000	\$ 1,597,700
Expenses						
Wages and Benefits	\$ 84,300	\$ 65,000	\$ 67,000	\$ 69,000	\$ 71,000	\$ 73,200
Professional Services	\$ 1,400	\$ 25,000	\$ 25,000	\$ 29,300	\$ 25,000	\$ 25,000
Contracted Services - MV	\$ 580,200	\$ 590,000	\$ 730,100	\$ 765,600	\$ 803,300	\$ 843,300
Maint. Service Contracts	\$ 3,700	\$ 4,000	\$ 4,300	\$ 4,600	\$ 4,900	\$ 5,200
Vehicle Repair & Maint.	\$ 43,900	\$ 85,000	\$ 105,500	\$ 108,700	\$ 112,000	\$ 115,300
Travel	\$ 800	\$ 2,500	\$ 2,600	\$ 2,700	\$ 2,700	\$ 2,800
Office Supplies	\$ 300	\$ 1,000	\$ 1,000	\$ 1,100	\$ 1,100	\$ 1,100
Operating Supplies	\$ 12,400	\$ 20,000	\$ 20,800	\$ 21,400	\$ 22,100	\$ 22,700
Vehicle Fuel/Oil	\$ 156,600	\$ 160,000	\$ 201,500	\$ 215,100	\$ 229,700	\$ 245,400
Telephone	\$ 6,200	\$ 5,700	\$ 5,900	\$ 6,000	\$ 6,200	\$ 6,400
Power	\$ 2,700	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,300	\$ 3,400
Heating	\$ 1,300	\$ 1,500	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,700
ISC:General Fund	\$ 44,000	\$ 40,600	\$ 41,800	\$ 43,100	\$ 44,400	\$ 45,700
Fleet Management	\$ 59,100	\$ 54,600	\$ 56,200	\$ 61,900	\$ 63,700	\$ 65,700
Grant Allocation	\$ 33,700	\$ 15,000	\$ 15,500	\$ 15,900	\$ 16,400	\$ 16,900
Total Operating Expenses	\$ 1,030,600	\$ 1,072,900	\$ 1,281,800	\$ 1,349,000	\$ 1,407,400	\$ 1,473,800
Small Furnishings	\$ 2,200	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,300	\$ 3,400
Vehicle Purchase	\$ 336,800	\$ 217,400	\$ -	\$ 360,000	\$ 480,000	\$ 240,000
Other Capital Improvements			\$ 80,000	\$ 10,000	\$ 10,000	\$ 10,000
Total Capital Expenses	\$ 339,000	\$ 220,400	\$ 83,100	\$ 373,200	\$ 493,300	\$ 253,400
RTC Intercity Operating	\$ 33,200	\$ 36,500	\$ 37,600	\$ 38,700	\$ 39,900	\$ 41,100
Total Expenses	\$ 1,402,800	\$ 1,329,800	\$ 1,402,500	\$ 1,760,900	\$ 1,940,600	\$ 1,768,300
Total FTA Reimbursable	\$ 862,300	\$ 765,100	\$ 810,800	\$ 1,043,500	\$ 1,168,800	\$ 1,006,400
Total Local (all non FTA) Match Required	\$ 441,000	\$ 463,400	\$ 475,700	\$ 597,700	\$ 648,000	\$ 634,100
Beginning Reserve Balance	\$ 173,800	\$ 126,500	\$ 156,600	\$ 144,400	\$ 10,300	\$ (174,300)
Total Revenue	\$ 1,355,600	\$ 1,359,900	\$ 1,390,300	\$ 1,626,800	\$ 1,756,000	\$ 1,597,700
Less Total Expenses	\$ 1,402,900	\$ 1,329,800	\$ 1,402,500	\$ 1,760,900	\$ 1,940,600	\$ 1,768,300
Ending Reserve Balance	\$ 126,500	\$ 156,600	\$ 144,400	\$ 10,300	\$ (174,300)	\$ (344,900)

**Table A-3: JAC Financial Forecast, FY 2014 – 2018:
Additional Route**

Fixed Route	2013	2014	2015	2016	2017	2018
Number of Routes	4	4	5	5	5	5
Peak Vehicle Demand	4	4	5	5	5	5
Total Fleet Size	6	7	8	8	8	8
Ridership	189,400	191,300	217,100	221,400	225,800	230,400
Revenue per Passenger	\$0.34	\$0.36	\$0.36	\$0.36	\$0.36	\$0.36
Farebox	\$64,500	\$68,900	\$78,100	\$79,700	\$81,300	\$82,900
Revenue Hours	13,900	13,900	17,300	17,300	17,300	17,300
Revenue Hours - % of Total Service	63.5%	62.9%	66.8%	65.8%	64.6%	63.1%
Total Miles	188,800	188,800	236,000	236,000	236,000	236,000
Total Miles - % of Total Service	71.8%	72.2%	75.6%	74.6%	73.5%	72.5%
Cost per Trip	\$3.59	\$3.71	\$4.08	\$4.13	\$4.15	\$4.19
Cost per Revenue Hour	\$48.96	\$50.99	\$51.25	\$52.89	\$54.23	\$55.77
Cost per Mile	\$3.60	\$3.75	\$3.76	\$3.88	\$3.98	\$4.09
Paratransit	2013	2014	2015	2016	2017	2018
Peak Vehicle Demand	4	4	4	5	5	5
Total Fleet Size	7	7	7	8	8	8
Ridership	17,100	18,000	18,900	19,900	21,000	22,200
Revenue per Passenger	\$2.05	\$1.80	\$1.80	\$1.80	\$1.80	\$1.80
Farebox	\$35,000	\$32,400	\$34,000	\$35,900	\$37,800	\$39,900
Revenue Hours	8,000	8,200	8,600	9,000	9,500	10,100
Revenue Hours - % of Total Service	36.5%	37.1%	33.2%	34.2%	35.4%	36.9%
Total Miles	74,200	72,600	76,300	80,500	84,900	89,600
Total Miles - % of Total Service	28.2%	27.8%	24.4%	25.4%	26.5%	27.5%
Cost per Trip	\$20.48	\$20.23	\$20.25	\$20.90	\$21.41	\$21.98
Cost per Revenue Hour	\$43.78	\$44.40	\$44.50	\$46.22	\$47.34	\$48.31
Cost per Mile	\$4.72	\$5.02	\$5.02	\$5.17	\$5.30	\$5.45
Total Service	2013	2014	2015	2016	2017	2018
Number of Routes	4	4	5	5	5	5
Peak Vehicle Demand	8	8	9	10	10	10
Total Fleet Size	13	14	15	16	16	16
Ridership	206,500	209,300	236,000	241,300	246,800	252,600
Revenue per Passenger	\$0.48	\$0.48	\$0.48	\$0.48	\$0.48	\$0.49
Farebox	\$99,500	\$101,300	\$112,100	\$115,600	\$119,100	\$122,800
Revenue Hours	21,900	22,100	25,900	26,300	26,800	27,400
Revenue Hours - % of Total Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Miles	263,000	261,400	312,300	316,500	320,900	325,600
Total Miles - % of Total Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost per Trip	\$4.99	\$5.13	\$5.38	\$5.52	\$5.62	\$5.75
Cost per Revenue Hour	\$47.06	\$48.55	\$49.01	\$50.61	\$51.78	\$53.02
Cost per Mile	\$3.92	\$4.10	\$4.06	\$4.21	\$4.32	\$4.46

**Table A-3: JAC Financial Forecast, FY 2014 – 2018:
Additional Route (continued)**

Operating & Capital	2013	2014	2015	2016	2017	2018
Income						
Farebox Revenue	\$ 99,600	\$ 101,200	\$ 112,100	\$ 115,600	\$ 119,100	\$ 122,800
Division for Aging Services Grant - operating	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Interest Income	\$ 1,200	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
FTA - operating and capital	\$ 862,300	\$ 765,200	\$ 1,081,900	\$ 1,044,700	\$ 1,169,400	\$ 1,006,400
Advertising Revenue	\$ 26,900	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
DHCFP - Medicaid reimbursement	\$ -	\$ 60,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Carson City - General Fund	\$ 270,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000
State Funds	\$ 37,500	\$ -	\$ -	\$ -	\$ -	\$ -
Other Revenue	\$ 8,100	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500
Total Income	\$ 1,355,600	\$ 1,359,900	\$ 1,657,600	\$ 1,623,700	\$ 1,752,000	\$ 1,592,800
Expenses						
Wages and Benefits	\$ 84,300	\$ 65,000	\$ 67,000	\$ 69,000	\$ 71,000	\$ 73,200
Professional Services	\$ 1,400	\$ 25,000	\$ 29,300	\$ 29,300	\$ 25,000	\$ 25,000
Contracted Services - MV	\$ 580,200	\$ 590,000	\$ 712,800	\$ 747,500	\$ 784,500	\$ 823,800
Maint. Service Contracts	\$ 3,700	\$ 4,000	\$ 4,300	\$ 4,600	\$ 4,900	\$ 5,200
Vehicle Repair & Maint.	\$ 43,900	\$ 85,000	\$ 103,000	\$ 106,100	\$ 109,300	\$ 112,600
Travel	\$ 800	\$ 2,500	\$ 2,600	\$ 2,700	\$ 2,700	\$ 2,800
Office Supplies	\$ 300	\$ 1,000	\$ 1,000	\$ 1,100	\$ 1,100	\$ 1,100
Operating Supplies	\$ 12,400	\$ 20,000	\$ 20,800	\$ 21,400	\$ 22,100	\$ 22,700
Vehicle Fuel/Oil	\$ 156,600	\$ 160,000	\$ 200,700	\$ 213,500	\$ 227,300	\$ 242,200
Telephone	\$ 6,200	\$ 5,700	\$ 5,900	\$ 6,000	\$ 6,200	\$ 6,400
Power	\$ 2,700	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,300	\$ 3,400
Heating	\$ 1,300	\$ 1,500	\$ 1,500	\$ 1,600	\$ 1,600	\$ 1,700
ISC:General Fund	\$ 44,000	\$ 40,600	\$ 41,800	\$ 43,100	\$ 44,400	\$ 45,700
Fleet Management	\$ 59,100	\$ 54,600	\$ 60,200	\$ 66,000	\$ 68,000	\$ 70,000
Grant Allocation	\$ 33,700	\$ 15,000	\$ 15,500	\$ 15,900	\$ 16,400	\$ 16,900
Total Operating Expenses	\$ 1,030,600	\$ 1,072,900	\$ 1,269,400	\$ 1,331,000	\$ 1,387,800	\$ 1,452,700
Small Furnishings	\$ 2,200	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,300	\$ 3,400
Vehicle Purchase	\$ 336,800	\$ 217,400	\$ 240,000	\$ 360,000	\$ 480,000	\$ 240,000
Other Capital Improvements			\$ 180,000	\$ 20,000	\$ 20,000	\$ 20,000
Total Capital Expenses	\$ 339,000	\$ 220,400	\$ 423,100	\$ 383,200	\$ 503,300	\$ 263,400
RTC Intercity Operating	\$ 33,200	\$ 36,500	\$ 37,600	\$ 38,700	\$ 39,900	\$ 41,100
Total Expenses	\$ 1,402,800	\$ 1,329,800	\$ 1,730,100	\$ 1,752,900	\$ 1,931,000	\$ 1,757,200
Total FTA Reimbursable	\$ 862,200	\$ 765,100	\$ 1,081,900	\$ 1,044,700	\$ 1,169,400	\$ 1,006,400
Total Local (all non FTA) Match Required	\$ 441,000	\$ 463,400	\$ 536,100	\$ 592,600	\$ 642,500	\$ 627,900
Beginning Reserve Balance	\$ 173,800	\$ 126,500	\$ 156,600	\$ 84,100	\$ (45,100)	\$ (224,000)
Total Revenue	\$ 1,355,600	\$ 1,359,900	\$ 1,657,600	\$ 1,623,700	\$ 1,752,000	\$ 1,592,800
Less Total Expenses	\$ 1,402,900	\$ 1,329,800	\$ 1,730,100	\$ 1,752,900	\$ 1,931,000	\$ 1,757,200
Ending Reserve Balance	\$ 126,500	\$ 156,600	\$ 84,100	\$ (45,100)	\$ (224,100)	\$ (388,400)

**Table A-4: JAC Financial Forecast, FY 2014 – 2018:
Sunday Service**

Fixed Route	2013	2014	2015	2016	2017	2018
Number of Routes	4	4	4	4	4	4
Peak Vehicle Demand	4	4	4	4	4	4
Total Fleet Size	6	7	7	7	7	7
Ridership	189,400	191,300	209,000	213,200	217,500	221,800
Revenue per Passenger	\$0.34	\$0.36	\$0.36	\$0.36	\$0.36	\$0.36
Farebox	\$64,500	\$68,900	\$75,200	\$76,800	\$78,300	\$79,900
Revenue Hours	13,900	13,900	15,500	15,500	15,500	15,500
Revenue Hours - % of Total Service	63.5%	62.9%	62.8%	61.5%	60.1%	58.7%
Total Miles	188,800	188,800	210,000	210,000	210,000	210,000
Total Miles - % of Total Service	71.8%	72.2%	72.1%	70.9%	69.7%	68.4%
Cost per Trip	\$3.59	\$3.71	\$3.81	\$3.86	\$3.87	\$3.90
Cost per Revenue Hour	\$48.96	\$50.99	\$51.32	\$53.09	\$54.35	\$55.83
Cost per Mile	\$3.60	\$3.75	\$3.79	\$3.92	\$4.01	\$4.12
Paratransit	2013	2014	2015	2016	2017	2018
Peak Vehicle Demand	4	4	4	5	5	5
Total Fleet Size	7	7	7	8	8	8
Ridership	17,100	18,000	19,500	20,700	21,900	23,200
Revenue per Passenger	\$2.05	\$1.80	\$1.80	\$1.80	\$1.80	\$1.80
Farebox	\$35,000	\$32,400	\$35,100	\$37,200	\$39,500	\$41,800
Revenue Hours	8,000	8,200	9,200	9,200	10,300	10,900
Revenue Hours - % of Total Service	36.5%	37.1%	37.2%	38.5%	39.9%	41.3%
Total Miles	74,200	72,600	81,400	86,200	91,400	96,900
Total Miles - % of Total Service	28.2%	27.8%	27.9%	29.1%	30.3%	31.6%
Cost per Trip	\$20.48	\$20.23	\$21.12	\$21.79	\$22.34	\$22.96
Cost per Revenue Hour	\$43.78	\$44.40	\$44.76	\$46.49	\$47.50	\$48.86
Cost per Mile	\$4.72	\$5.02	\$5.06	\$5.23	\$5.35	\$5.50
Total Service	2013	2014	2015	2016	2017	2018
Number of Routes	4	4	4	4	4	4
Peak Vehicle Demand	8	8	8	9	9	9
Total Fleet Size	13	14	14	15	15	15
Ridership	206,500	209,300	228,500	233,900	239,400	245,000
Revenue per Passenger	\$0.48	\$0.48	\$0.48	\$0.49	\$0.49	\$0.50
Farebox	\$99,500	\$101,300	\$110,300	\$114,000	\$117,800	\$121,700
Revenue Hours	21,900	22,100	24,700	25,200	25,800	26,400
Revenue Hours - % of Total Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Miles	263,000	261,400	291,400	296,200	301,400	306,900
Total Miles - % of Total Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost per Trip	\$4.99	\$5.13	\$5.28	\$5.45	\$5.56	\$5.71
Cost per Revenue Hour	\$47.06	\$48.55	\$48.88	\$50.56	\$51.62	\$52.95
Cost per Mile	\$3.92	\$4.10	\$4.14	\$4.30	\$4.42	\$4.56

**Table A-4: JAC Financial Forecast, FY 2014 – 2018:
Sunday Service (continued)**

Operating & Capital	2013	2014	2015	2016	2017	2018
Income						
Farebox Revenue	\$ 99,600	\$ 101,200	\$ 110,400	\$ 114,000	\$ 117,800	\$ 121,700
Division for Aging Services Grant - operating	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Interest Income	\$ 1,200	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
FTA - operating and capital	\$ 862,300	\$ 765,200	\$ 776,300	\$ 1,008,800	\$ 1,133,900	\$ 971,600
Advertising Revenue	\$ 26,900	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
DHCFP - Medicaid reimbursement	\$ -	\$ 60,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Carson City - General Fund	\$ 270,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000
State Funds	\$ 37,500	\$ -	\$ -	\$ -	\$ -	\$ -
Other Revenue	\$ 8,100	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500
Total Income	\$ 1,355,600	\$ 1,359,900	\$ 1,350,200	\$ 1,586,300	\$ 1,715,200	\$ 1,556,800
Expenses						
Wages and Benefits	\$ 84,300	\$ 65,000	\$ 67,000	\$ 69,000	\$ 71,000	\$ 73,200
Professional Services	\$ 1,400	\$ 25,000	\$ 25,000	\$ 29,300	\$ 25,000	\$ 25,000
Contracted Services - MV	\$ 580,200	\$ 590,000	\$ 677,500	\$ 713,400	\$ 751,800	\$ 792,900
Maint. Service Contracts	\$ 3,700	\$ 4,000	\$ 4,300	\$ 4,600	\$ 4,900	\$ 5,200
Vehicle Repair & Maint.	\$ 43,900	\$ 85,000	\$ 97,900	\$ 100,900	\$ 103,900	\$ 107,000
Travel	\$ 800	\$ 2,500	\$ 2,600	\$ 2,700	\$ 2,700	\$ 2,800
Office Supplies	\$ 300	\$ 1,000	\$ 1,000	\$ 1,100	\$ 1,100	\$ 1,100
Operating Supplies	\$ 12,400	\$ 20,000	\$ 20,800	\$ 21,400	\$ 22,100	\$ 22,700
Vehicle Fuel/Oil	\$ 156,600	\$ 160,000	\$ 187,200	\$ 199,900	\$ 213,500	\$ 228,300
Telephone	\$ 6,200	\$ 5,700	\$ 5,900	\$ 6,000	\$ 6,200	\$ 6,400
Power	\$ 2,700	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,300	\$ 3,400
Heating	\$ 1,300	\$ 1,500	\$ 1,600	\$ 1,600	\$ 1,700	\$ 1,700
ISC:General Fund	\$ 44,000	\$ 40,600	\$ 41,800	\$ 43,100	\$ 44,400	\$ 45,700
Fleet Management	\$ 59,100	\$ 54,600	\$ 56,200	\$ 61,900	\$ 63,700	\$ 65,700
Grant Allocation	\$ 33,700	\$ 15,000	\$ 15,500	\$ 15,900	\$ 16,400	\$ 16,900
Total Operating Expenses	\$ 1,030,600	\$ 1,072,900	\$ 1,207,400	\$ 1,274,000	\$ 1,331,700	\$ 1,398,000
Small Furnishings	\$ 2,200	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,300	\$ 3,400
Vehicle Purchase	\$ 336,800	\$ 217,400	\$ -	\$ 360,000	\$ 480,000	\$ 240,000
Other Capital Improvements			\$ 80,000	\$ 10,000	\$ 10,000	\$ 10,000
Total Capital Expenses	\$ 339,000	\$ 220,400	\$ 83,100	\$ 373,200	\$ 493,300	\$ 253,400
RTC Intercity Operating	\$ 33,200	\$ 36,500	\$ 37,600	\$ 38,700	\$ 39,900	\$ 41,100
Total Expenses	\$ 1,402,800	\$ 1,329,800	\$ 1,328,100	\$ 1,685,900	\$ 1,864,900	\$ 1,692,500
Total FTA Reimbursable	\$ 862,300	\$ 765,100	\$ 776,300	\$ 1,008,800	\$ 1,134,000	\$ 971,600
Total Local (all non FTA) Match Required	\$ 441,000	\$ 463,400	\$ 441,200	\$ 562,900	\$ 613,100	\$ 599,200
Beginning Reserve Balance	\$ 173,800	\$ 126,500	\$ 156,600	\$ 178,900	\$ 79,400	\$ (70,300)
Total Revenue	\$ 1,355,600	\$ 1,359,900	\$ 1,350,200	\$ 1,586,300	\$ 1,715,200	\$ 1,556,800
Less Total Expenses	\$ 1,402,900	\$ 1,329,800	\$ 1,328,100	\$ 1,685,900	\$ 1,864,900	\$ 1,692,500
Ending Reserve Balance	\$ 126,500	\$ 156,600	\$ 178,700	\$ 79,300	\$ (70,300)	\$ (206,000)

**Table A-5: JAC Financial Forecast, FY 2014 – 2018:
More Frequent Service**

Fixed Route	2013	2014	2015	2016	2017	2018
Number of Routes	4	4	4	4	4	4
Peak Vehicle Demand	4	4	6	6	6	6
Total Fleet Size	6	7	9	10	10	10
Ridership	189,400	191,300	199,000	202,900	207,000	211,100
Revenue per Passenger	\$0.34	\$0.36	\$0.36	\$0.36	\$0.36	\$0.36
Farebox	\$64,500	\$68,900	\$71,600	\$73,100	\$74,500	\$76,000
Revenue Hours	13,900	13,900	16,900	16,900	16,900	16,900
Revenue Hours - % of Total Service	63.5%	62.9%	66.3%	65.3%	64.3%	63.1%
Total Miles	188,800	188,800	229,300	229,300	229,300	229,300
Total Miles - % of Total Service	71.8%	72.2%	75.0%	74.1%	73.2%	72.2%
Cost per Trip	\$3.59	\$3.71	\$4.36	\$4.45	\$4.48	\$4.51
Cost per Revenue Hour	\$48.96	\$50.99	\$51.38	\$53.38	\$54.91	\$56.31
Cost per Mile	\$3.60	\$3.75	\$3.79	\$3.93	\$4.05	\$4.15
Paratransit	2013	2014	2015	2016	2017	2018
Peak Vehicle Demand	4	4	4	5	5	5
Total Fleet Size	7	7	7	8	8	8
Ridership	17,100	18,000	18,900	19,800	20,800	21,900
Revenue per Passenger	\$2.05	\$1.80	\$1.80	\$1.80	\$1.80	\$1.80
Farebox	\$35,000	\$32,400	\$34,000	\$35,700	\$37,500	\$39,300
Revenue Hours	8,000	8,200	8,600	9,000	9,400	9,900
Revenue Hours - % of Total Service	36.5%	37.1%	33.7%	34.7%	35.7%	36.9%
Total Miles	74,200	72,600	76,300	80,100	84,100	88,300
Total Miles - % of Total Service	28.2%	27.8%	25.0%	25.9%	26.8%	27.8%
Cost per Trip	\$20.48	\$20.23	\$20.33	\$21.12	\$21.68	\$22.16
Cost per Revenue Hour	\$43.78	\$44.40	\$44.67	\$46.46	\$47.98	\$49.03
Cost per Mile	\$4.72	\$5.02	\$5.04	\$5.22	\$5.36	\$5.50
Total Service	2013	2014	2015	2016	2017	2018
Number of Routes	4	4	4	4	4	4
Peak Vehicle Demand	8	8	10	11	11	11
Total Fleet Size	13	14	16	18	18	18
Ridership	206,500	209,300	217,900	222,700	227,800	233,000
Revenue per Passenger	\$0.48	\$0.48	\$0.48	\$0.49	\$0.49	\$0.49
Farebox	\$99,500	\$101,300	\$105,600	\$108,800	\$112,000	\$115,300
Revenue Hours	21,900	22,100	25,500	25,900	26,300	26,800
Revenue Hours - % of Total Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Miles	263,000	261,400	305,600	309,400	313,400	317,600
Total Miles - % of Total Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost per Trip	\$4.99	\$5.13	\$5.75	\$5.93	\$6.05	\$6.17
Cost per Revenue Hour	\$47.06	\$48.55	\$49.12	\$50.98	\$52.43	\$53.62
Cost per Mile	\$3.92	\$4.10	\$4.10	\$4.27	\$4.40	\$4.52

**Table A-5: JAC Financial Forecast, FY 2014 – 2018:
More Frequent Service (continued)**

Operating & Capital	2013	2014	2015	2016	2017	2018
Income						
Farebox Revenue	\$ 99,600	\$ 101,200	\$ 105,600	\$ 108,700	\$ 112,000	\$ 115,400
Division for Aging Services Grant - operating	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Interest Income	\$ 1,200	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
FTA - operating and capital	\$ 862,300	\$ 765,200	\$ 1,190,100	\$ 1,229,000	\$ 1,160,400	\$ 1,188,700
Advertising Revenue	\$ 26,900	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
DHCFP - Medicaid reimbursement	\$ -	\$ 60,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Carson City - General Fund	\$ 270,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000
State Funds	\$ 37,500	\$ -	\$ -	\$ -	\$ -	\$ -
Other Revenue	\$ 8,100	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500
Total Income	\$ 1,355,600	\$ 1,359,900	\$ 1,759,200	\$ 1,801,200	\$ 1,735,900	\$ 1,767,600
Expenses						
Wages and Benefits	\$ 84,300	\$ 65,000	\$ 67,000	\$ 69,000	\$ 71,000	\$ 73,200
Professional Services	\$ 1,400	\$ 25,000	\$ 29,300	\$ 33,600	\$ 29,300	\$ 25,000
Contracted Services - MV	\$ 580,200	\$ 590,000	\$ 701,800	\$ 735,000	\$ 770,200	\$ 807,500
Maint. Service Contracts	\$ 3,700	\$ 4,000	\$ 4,300	\$ 4,600	\$ 4,900	\$ 5,200
Vehicle Repair & Maint.	\$ 43,900	\$ 85,000	\$ 101,400	\$ 104,500	\$ 107,600	\$ 110,800
Travel	\$ 800	\$ 2,500	\$ 2,600	\$ 2,700	\$ 2,700	\$ 2,800
Office Supplies	\$ 300	\$ 1,000	\$ 1,000	\$ 1,100	\$ 1,100	\$ 1,100
Operating Supplies	\$ 12,400	\$ 20,000	\$ 20,800	\$ 21,400	\$ 22,100	\$ 22,700
Vehicle Fuel/Oil	\$ 156,600	\$ 160,000	\$ 196,300	\$ 208,700	\$ 222,000	\$ 236,200
Telephone	\$ 6,200	\$ 5,700	\$ 5,900	\$ 6,000	\$ 6,200	\$ 6,400
Power	\$ 2,700	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,300	\$ 3,400
Heating	\$ 1,300	\$ 1,500	\$ 1,500	\$ 1,600	\$ 1,600	\$ 1,700
ISC:General Fund	\$ 44,000	\$ 40,600	\$ 41,800	\$ 43,100	\$ 44,400	\$ 45,700
Fleet Management	\$ 59,100	\$ 54,600	\$ 60,200	\$ 70,000	\$ 76,100	\$ 78,400
Grant Allocation	\$ 33,700	\$ 15,000	\$ 15,500	\$ 15,900	\$ 16,400	\$ 16,900
Total Operating Expenses	\$ 1,030,600	\$ 1,072,900	\$ 1,252,500	\$ 1,320,400	\$ 1,378,900	\$ 1,437,000
Small Furnishings	\$ 2,200	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,300	\$ 3,400
Vehicle Purchase	\$ 336,800	\$ 217,400	\$ 480,000	\$ 600,000	\$ 480,000	\$ 480,000
Other Capital Improvements			\$ 80,000	\$ 10,000	\$ 10,000	\$ 10,000
Total Capital Expenses	\$ 339,000	\$ 220,400	\$ 563,100	\$ 613,200	\$ 493,300	\$ 493,400
RTC Intercity Operating	\$ 33,200	\$ 36,500	\$ 37,600	\$ 38,700	\$ 39,900	\$ 41,100
Total Expenses	\$ 1,402,800	\$ 1,329,800	\$ 1,853,200	\$ 1,972,300	\$ 1,912,100	\$ 1,971,500
Total FTA Reimbursable	\$ 862,300	\$ 765,100	\$ 1,190,100	\$ 1,229,100	\$ 1,160,400	\$ 1,188,600
Total Local (all non FTA) Match Required	\$ 441,000	\$ 463,400	\$ 557,500	\$ 634,400	\$ 639,700	\$ 667,500
Beginning Reserve Balance	\$ 173,800	\$ 126,500	\$ 156,600	\$ 62,700	\$ (108,200)	\$ (284,400)
Total Revenue	\$ 1,355,600	\$ 1,359,900	\$ 1,759,200	\$ 1,801,200	\$ 1,735,900	\$ 1,767,600
Less Total Expenses	\$ 1,402,900	\$ 1,329,800	\$ 1,853,200	\$ 1,972,300	\$ 1,912,100	\$ 1,971,500
Ending Reserve Balance	\$ 126,500	\$ 156,600	\$ 62,600	\$ (108,400)	\$ (284,400)	\$ (488,300)