

LASSEN COUNTY TRANSPORTATION COMMISSION

TRANSIT DEVELOPMENT PLAN

FINAL

JUNE 2012



Lassen County Transportation Commission Transit Development Plan

FINAL REPORT

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Prepared for the

Lassen County Transportation Commission
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1. INTRODUCTION

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CHAPTER 1 - INTRODUCTION

Project Overview

The goal of a Transit Development Plan (TDP) is to present a plan for short-term (five to ten years) operational, financial, and capital developments or investments for the County's transit system. These recommended developments reflect findings from rider and non-rider (community) input and a review of the transit system's performance. The TDP for the Lassen County Transportation Commission (LCTC) involves analysis of the Lassen Rural Bus (LRB) transit system. This TDP is an update of the prior TDP adopted in 2007.

Lassen Rural Bus is the primary public transit service offered within Lassen County. Service coverage mainly encompasses the southern, and most populated, portion of the county. As the county seat and the only incorporated city, Susanville serves as the main hub and transfer point for all LRB routes. Given the rural character of the county and limited road network, transit service is required to cover large areas of land and long distances to meet the transportation needs of the area's residents. For example, LRB commuter services originate in Susanville and travel 40 miles south to Herlong and 35 miles west to Chester. The commuter route serves a large employment center in the South County area of Lassen and maintains a higher passenger load than those serving smaller outlying rural communities.

Between the 2007 TDP and the 2012 TDP, minor program changes have occurred. The 2007 Transit Development Plan for the Lassen Rural Bus program identified several issues including the need for more efficient service, longer Saturday hours, improved coordination with social service agencies, development of a transit plaza, enhanced community awareness, coordination with City and County Planning Departments, bus facility expansion, future planned development of Dyer Mountain resort, fare structure changes, and evaluation of bus stop locations and amenities.

With respect to this study the project team reviewed and consulted other recently conducted efforts relevant to this study including:

- 2009 Triennial Performance Audit of the Lassen Transit Service Agency,
- 2008 Human Services Transportation Plan,
- 2006 Lassen County Regional Transportation Plan,
- 2000 Lassen County General Plan, and
- 1999 Lassen County Bikeway Master Plan.

Service Area Description

Lassen County is located in northern California and is bordered by four counties: Sierra County to the south, Plumas County to the southwest, Shasta County to the west, and Modoc County to the north, as well as the State of Nevada to the east. The county was established in 1864. Situated in a rural setting along the north end of the Sierra Nevada Mountain Range and the southern end of the Cascade Mountain Range, Lassen County consists of approximately 2,910,080 acres, of which over

60 percent is publicly owned land managed by federal, state or other governmental agencies. The majority of the public land is managed at the federal level by the Bureau of Land Management and the U.S. Forest Service.

Lassen County's population reached 34,895 in 2010, a modest growth of 3.2 percent over Census 2000. Of the total 2010 county population, nearly 28 percent, or 9,604 persons, were institutionalized. Between 1990 and 2000, County population grew by nearly 23 percent. However, the Census population counts incorporate the incarcerated population, which increased 112 percent during that time.

Exhibit 1.1 County Population Growth

Total Population Growth			
Year	2000	2010	2020 (est.)
Population	33,828	34,895	36,321
% change		3.2%	4.1%
net change		1,067	1,426

Note: Population numbers include institutionalized population

Source: U.S. Census Bureau

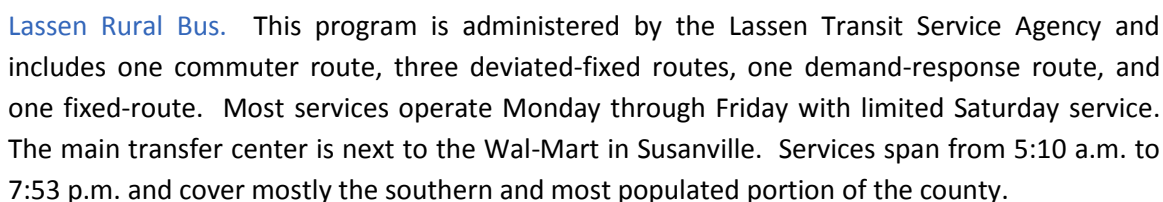
The county seat is the City of Susanville, which is the only incorporated city in the county and currently comprises approximately 50 percent of the county's population with 17,947 residents. This figure includes an institutionalized population of 7,400, representing 41.2 percent of Susanville's total population. Therefore, the true residential population of Susanville is 10,547.

The nearest urbanized areas to Susanville are Reno, which is 85 miles to the southeast, and Sacramento, which is about 185 miles south. Redding and Red Bluff, destinations to which many residents travel for healthcare and other basic needs, are each approximately 100 miles west of Susanville.. Most employment is generated by government agencies such as the Forest Service, Bureau of Land Management, California Department of Forestry (CalFire), California State Correctional Facility and High Desert State Prison, Sierra Army Depot, Lassen County, and the City of Susanville. The majority of private sector jobs are in the retail/service industry, food service, health, and education sectors.

Transit Services Overview

There are three operators who provide fixed route or commuter transit services in Lassen County: the Lassen Transit Service Agency (Lassen Rural Bus), Modoc Transportation Agency (Sage Stage), and the Susanville Indian Rancheria (Public Transit Program). The following discussion outlines public transit services which operate in or through Lassen County. Refer to Chapter 4 - Service Evaluation for a detailed route-by-route analysis and performance review of the Lassen Rural Bus system.

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Peak-hour commuter service is provided by the South County Commuter route. The South County Commuter route travels between Susanville and the Army Depot in Herlong with two one-way trips each weekday, one in the morning to Herlong and one in the evening to Susanville.

Other inter-community services are offered through three deviated fixed-routes: the West County, East County and South County to Susanville/Susanville to South County routes. The West County route operates between Susanville and Chester, stopping in Westwood, Clear Creek, and Hamilton Branch. This route offers three round trips each weekday service day and two round trips on Saturday. The East County route operates between Susanville and Herlong, traveling through the east county with stops in Johnstonville, Litchfield, Standish, and Milford. This route has two one-way trips each weekday service day, one in the morning and one in the evening. The South County to Susanville route operates between Susanville and Doyle, traveling along the US 395 corridor with stops in Herlong, Milford, and Janesville.

Lassen Rural Bus also provides an eligibly-based complementary Dial-A-Ride service within the city limits of Susanville to seniors and persons with disabilities, as well as a seasonal demand-response service open to the general public between Susanville and Eagle Lake.

Modoc Transportation Agency (Sage Stage). The Modoc Transportation Agency operates one interstate bus service through Lassen County. The route along U.S. 395 travels between Alturas in Modoc County and Reno, with a stop in Susanville. Additional stops along the U.S. 395 corridor (i.e., Madeline, Ravendale, Janesville, Milford, Doyle, etc.) may be arranged through the Modoc Sage Stage office by request. The route operates one round trip Monday, Wednesday, and Friday. In Reno the route stops at the Reno/Tahoe Airport, Amtrak and Greyhound depot. The route departs Alturas at 7:30 a.m., stops in Susanville next to Wal-Mart at 9:30 a.m., and arrives in Reno at 11:15 a.m. The return trip leaves Reno at 1:30 p.m., stopping in Susanville at 3:30 p.m. and terminating in Alturas at 5:30 p.m. Sage stage saves gas and mileage for trips heading north and will not serve Susanville when no riders from Reno request a drop-off in Susanville. Riders for Sage Stage must call ahead for a reservation to confirm their trip. Passengers can make a transfer to Lassen Rural Bus services at Wal-Mart/Big O.

Susanville Indian Rancheria. The Susanville Indian Rancheria Public Transportation Program offers free rides to the general public from Susanville to Red Bluff and Redding. Typically the SIR Tribal Transit program consists of two route schedules; one for a winter route schedule and one for a summer schedule. The 2011/2012 Winter schedule provided service from 8:00 a.m. to 6:10 a.m. Monday through Saturday to Westwood, Chester, and Susanville. The 2012 Summer schedule is provided from 7:30 a.m. to 7:00 p.m. Monday through Saturday (except for holidays). The first stop departs from the SIR Rancheria Gym located at 845 Joaquin Street, Susanville then to the Westwood Community Center, Chester Holiday Market, Red Bluff Transit Center, and finally the Redding Transit Center. Service is provided between Redding and Red Bluff three times per day before returning to Susanville. The service is provided using an eight passenger small paratransit bus that is lift equipped.

Other Transportation Services/Programs

Lassen Senior Services (LSS) Transportation Program. Designated by LCTC as the Consolidated Transportation Services Agency (CTSA), LSS provides transportation to seniors

for medical and meal/nutrition program services. As required by State law, each county must designate a CTSA to enhance coordination among social service transportation providers in order to utilize existing transportation. CTSAs in rural counties can claim up to 5 percent of the Local Transportation Fund under the Transportation Development Act (TDA) Article 4.5. It is also possible to designate the LCTC or LTSA as the CTSA.

The LSS Transportation Program is designed to provide service first to the local senior population, followed by disabled individuals and then to the general public pending available seating. Service for the senior population includes transportation to nutrition sites for lunch, medical appointments, shopping, banking and other essential trips. The service accepts donations from senior riders; however, fares are collected for other passenger types.

Mt. Lassen Motor Transit. Based out of Red Bluff, this service provides round-trip service on Tuesday, Thursday, and Saturday between Red Bluff and Susanville. One round-trip is offered per day, leaving Red Bluff at 8:30 a.m. and arriving in Susanville at 1:00 p.m., and leaving Susanville at 2:00 p.m. and arriving at Red Bluff at 4:30 p.m. This service uses a U.S. Mail delivery truck.

Far Northern Regional Center. The FNRC provides services to developmentally disabled persons. The FNRC funds transportation services for its clients in Lassen County utilizing the Lassen Rural Bus public transit service. The public transit service provides FNRC clients with unlimited rides on all LRB services for a flat monthly rate per FNRC customer however the FNRC is not charged for the consumer's usage until the consumer activates the service for the billing period by taking at least one trip on the service.

Subsidized Vehicle for Hire Program. This program is funded by the LTSA and is managed by the Lassen County Department of Transportation. The program provides subsidized transportation for seniors and persons with disabilities via Sierra Express Taxi Service and/or LRB Dial-A-Ride services. Eligible trips are for medical, shopping, banking, and other essential services as requested by passengers. Lassen Senior Services is the sales outlet for the purchase of the taxi program coupons/vouchers at the cost of \$1.75 each. Coupons are purchased for \$1.75 at the Susanville Senior Services. Coupons can be used on LRB Dial-A-Ride and the Sierra Express Taxi Service.

Lassen Community College. Through a Memorandum of Understanding with the Lassen Transit Service Agency, the College provides registered students with free rides on all LRB routes through an annual payment.

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2. GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS

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CHAPTER 2 – GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS

Goals and Objectives

An effective Performance Measurement System is composed of goals, objectives, and performance standards.

- Goals are statements that *qualify* the desired results. They are the end toward which efforts are directed. They are general and timeless, yet theoretically attainable.
- Objectives provide *quantifiable* measures of the goals. They are more precise and capable of both attainment and measurement.
- Standards set *quantifiable* targets for achieving the adopted goals.

To support the identified goals and objectives, the following core values have been identified:

- Efficiency,
- Effectiveness,
- Responsiveness,
- Inclusiveness, and
- Environmental consciousness.

Performance Measurement System

This section advances a Performance Measurement System governing the public transit programs (i.e., fixed-route, commuter, demand-response) provided by the Lassen Transit Service Agency. An organization's mission or visioning statement provides a foundation for its Performance Measurement System

Although the LTSA has not formally adopted a Performance Measurement System, a set of transit goals and objective were recommended in the 2007 Transit Development Plan (TDP). In the case of LTSA, it serves as a focal point for the TDP. Based on the prior TDP and our assessment of Lassen Rural Bus, the Agency's primary focus should continue to be to provide a safe, reliable, and efficient means of transportation for its residents and surrounding communities. By updating these goals, the Agency commits to further enhance the regional transit network through meeting the needs of its citizens and providing viable mobility options and solutions for regional connectivity.

The Performance Measurement System presented herein updates the service efficiency, effectiveness, and service quality goals presented in the 2007 TDP. The updated Performance Measurement System assesses the local fixed-route, demand-response, and commuter services using quantifiable criteria. Performance standards which do not require a specific threshold for transit funding are specifically set for Lassen Rural Bus to be achievable measures for the TDP's effective period (i.e., seven years).

The following Performance Measurement System proposes five goals:

- Goal I: Evaluate, monitor, and improve transit services on an on-going basis;
- Goal II: Undertake effective marketing, outreach, and public participation;
- Goal III: Sustainably operate an efficient and effective transit system through maximizing service and minimizing cost impacts;
- Goal IV: Provide transit service that is accessible to all persons while maintaining system productivity;
- Goal V: Provide safe, reliable, and high quality transportation.

Performance measure standards were developed based on historic system as well as individual service performance and operations management. The following tables link the adopted goal to the quantifiable measure; then compare actual performance from FY 2009/10 with recommended performance standards. Recommended performance standards are provided for the future implementation of this plan.

Exhibit 2.1 Goals, Objectives, and Performance Standards

Goal I. Evaluate, monitor, and improve transit services on an on-going basis			
Objective	Performance Measure	Actual Performance	Performance Standard
Ongoing, mandatory enhancement	Regularly programmed service evaluations	Meets Standard	Update Short Range Transit Plan at a minimum every five years.
Ongoing, mandatory reporting	Regularly programmed data collection and reporting	Meets Standard	Monthly performance reports including such information as vehicle service hours, vehicle service mileage, fare revenue, ridership, accidents, and injuries.
Ongoing reporting	Complaint resolution		Monthly reports detailing number and type of complaint as well as resolution status.
Goal II. Undertake effective marketing, outreach, and public participation.			
Objective	Performance Measure	Actual Performance	Performance Standard
Develop and implement Marketing Plan	Actual expenditures	1.40%	Not less than three percent of annual operating budget.
Encourage citizen participation	Provide various opportunities for customer feedback	Meets Standard - Improve promotion of TDA Article 8 Hearing	Conduct annual outreach prior to meetings to encourage public input on "unmet transit needs" (TDA Article 8).

Exhibit 2.1 Goals, Objectives, and Performance Standards (Continued)

Goal III. Sustainably operate an efficient and effective transit system through maximizing service and minimizing cost impacts.			
Objective	Performance Measure	Actual Performance	Performance Standard
Minimize operating cost	Farebox Recovery (System-wide) FY 2009/10	14.7%	10.0%
	Fixed-Route (Susanville City, South County to Susanville, E. County, W. County)	4.7%	15%
	Commuter Bus (South County)	37.7%	30%
	Demand Response (Dial-A-Ride and Eagle Lake Route)	1.0%	5%
	Operating Cost/Vehicle Service Hour (VSH)	\$65.95	\$80.00
	Fixed-Route (Susanville City, South County to Susanville, E. County, W. County)	-	
	Commuter Bus (South County)	-	
	Demand Response (Dial-A-Ride and Eagle Lake Route)	-	
	Operating Cost/Vehicle Service Miles (VSM)	\$3.38	\$5.00
	Fixed-Route (Susanville City, South County to Susanville, East County)	-	
	Commuter Bus (South and West County Route)	-	
	Demand Response (Dial-A-Ride and Eagle Lake Route)	-	
	Operating Cost/Passenger	\$10.00	\$10.00
	Fixed-Route (Susanville City, South County to Susanville, E. County, W. County)	-	
	Commuter Bus (South County)	-	
	Demand Response (Dial-A-Ride and Eagle Lake Route)	-	
Increase transit passengers	Passengers/Vehicle Service Hour (VSH)	6.59	8.0
	Fixed-Route (Susanville City, South County to Susanville, E. County, W. County)	4.7	8.0
	Commuter Bus (South County)	12.4	15.0
	Demand Response (Dial-A-Ride and Eagle Lake Route)	2.0	3.0
	Passengers/Vehicle Service Mile (VSM)	0.34	1.0
	Fixed-Route (Susanville City, South County to Susanville, E. County, W. County)	0.25	0.3
	Commuter Bus (South County)	0.41	0.5
	Demand Response (Dial-A-Ride and Eagle Lake Route)	0.44	0.5
	Annual growth in passengers (FY 2008/09 to FY 2009/10)	-9.5%	At least 2 percent growth
	Fixed-Route (Susanville City, South County to Susanville, East County)	-20.5%	
	Commuter Bus (South and West County Route)	-4.1%	
	Demand Response (Dial-A-Ride and Eagle Lake Route)	-6.7%	
Increase revenues	Fare/Passenger	\$2.07	\$2.00
	Fixed-Route (Susanville City, South County to Susanville, East County)	\$0.66	
	Commuter Bus (South and West County Route)	\$3.00	
	Demand Response (Dial-A-Ride and Eagle Lake Route)	\$0.63	
Goal IV. Provide transit service that is accessible to all persons while maintaining system productivity			
Objective	Performance Measure	Actual Performance	Performance Standard
Handicap accessibility	ADA goal	Meets Standard	Fully meet the requirements of the Americans with Disabilities Act.
	Wheelchair-accessible vehicles	Meets Standard	Maintain a fully wheelchair-accessible transit fleet.
Bicycle Accessibility	Bicycle amenities available	Meets Standard	Provide bicycle racks on entire vehicle fleet to accommodate at a minimum two bikes.

Exhibit 2.1 Goals, Objectives, and Performance Standards (Continued)

Goal V. Provide safe, reliable, and high quality transportation			
Objective	Performance Measure	Actual Performance	Performance Standard
Provide Safely	Ratio of passengers to available seats	Meets Standard	No more than 145 percent of available seats.
	Passenger Load Standard	Meets Standard	Vehicles should operate with standees on no more than 20 percent of the runs for any route to avoid recurring loads of more than 150 percent of the seated capacity.
	Passenger injuries	Unknown	Less than one passenger injury per 100,000 boardings (fixed-route), 10,000 (Dial-A-Ride).
	Preventable accidents	Unknown	Min. of 60,000 miles between preventable accidents.
	Offer mandatory and optional training opportunities to improve safety and professional development	Meets Standard	Provide annual driver safety and training opportunities (at minimum) including at least eight hours of driver training provided annually.
	Bus Stop Standard	Does not meet standard	Visibly identifiable with signage, route information, and stop amenities.
	Passenger Amenity Standard	Meets Standard - Bench should be considered at Burger King/Chevron stop	Shelter should be considered at bus stops serving 15 or more passenger boardings per day. Seating should be considered at bus stops serving 10 or more passenger boardings per day. Benches and shelters will not only be installed on existing State or County roads.
Reliable transit service	On-time performance		
	Fixed-Route (Susanville City, South County to Susanville, East County, and West County Route)	Does not meet standard	90 percent of all trips should be operated "on-time," defined as early and no more than five minutes late.
	Commuter Bus (South County Route)	Does not meet standard	91 percent of all trips should be operated "on-time," defined as early and no more than five minutes late.
	Demand Response (Dial-A-Ride and Eagle Lake Route)	Does not meet standard	90 percent of all monthly trips operate on-time (defined as within 15 minutes of the scheduled pick-up time).
	Missed trips		
	Demand Response (Dial-A-Ride and Eagle Lake Route)	Unknown	Less than one percent of total monthly trips (defined as no later than 15 minutes past the schedule pick-up time or missed entirely).
	Spare ratio		
	Fixed-Route (Susanville City, South County to Susanville, East County, and West County Route)	Meets Standard	20 percent
	Commuter Bus (South County Route)	Meets Standard	20 percent
	Demand Response (Dial-A-Ride and Eagle Lake Route)	Meets Standard	20 percent
	Maintenance schedule		
	Fixed-Route (Susanville City, South County to Susanville, East County, and West County Route)	Meets Standard	All regularly scheduled maintenance completed within 500 miles or five days of scheduled date/cycle.
	Commuter Bus (South County Route)	Meets Standard	All regularly scheduled maintenance completed within 500 miles or five days of scheduled date/cycle.
	Demand Response (Dial-A-Ride and Eagle Lake Route)	Meets Standard	All regularly scheduled maintenance completed within 500 miles or five days of scheduled date/cycle.
	Fleet Replacement	Meets Standard	Replaces vehicles by the FTA bus useful life timelines.

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3. DEMOGRAPHIC AND DEMAND ANALYSIS

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CHAPTER 3 – DEMOGRAPHIC AND DEMAND ANALYSIS

This chapter focuses on analysis of population, demographic, and economic data to develop a profile of Lassen County residents. The profile is utilized to illustrate current and forecast demand for transit, as well as local and regional travel patterns. The chapter is divided into several discussions including population, social, housing and economic profiles, and trip generators and land use.

Population

Located in the rural portion of Northern California, Lassen County is home to nearly 35,000 residents, of which almost 10,000 are institutionalized in area prisons. Although the county's population grew by three percent over the past decade, the city of Susanville's population grew by 33 percent. Most of this growth can be attributed to the growth in the institutionalized populations at both the High Desert State Prison and California Correctional Center, which are located just east of Susanville and comprise nearly 41 percent of Susanville's population. This population growth is attributable to the City's annexation of both the High Desert State Prison and the California Correctional Center into their "sphere of influence."

Exhibit 3.1 shows the population growth for the county and the city of Susanville, as well as 2010 Census population data for the unincorporated communities throughout the county, referred to as Census Designated Places (CDPs) by the Census Bureau. Population in the unincorporated portions of the county actually decreased by 16 percent between 2000 and 2010. Of these CDPs, Westwood and Janesville are the largest communities in the county.

Exhibit 3.1 Population

City/Community	2000	2000 Share of County	2010	2010 Share of County	Percent Change
City of Susanville	13,541	40%	17,947	51.4%	33%
Unincorporated County	20,287	60%	16,948	48.6%	-16%
<i>Bieber</i>	-	-	312	0.9%	-
<i>Clear Creek</i>	-	-	169	0.5%	-
<i>Doyle</i>	-	-	678	1.9%	-
<i>Herlong/Patton Village</i>	-	-	1,000	2.9%	-
<i>Janesville</i>	-	-	1,408	4.0%	-
<i>Johnstonville</i>	-	-	1,024	2.9%	-
<i>Litchfield</i>	-	-	195	0.6%	-
<i>Milford</i>	-	-	167	0.5%	-
<i>Spaulding</i>	-	-	178	0.5%	-
<i>Westwood</i>	-	-	1,647	4.7%	-
Lassen County Total	33,828	100%	34,895	100%	3%

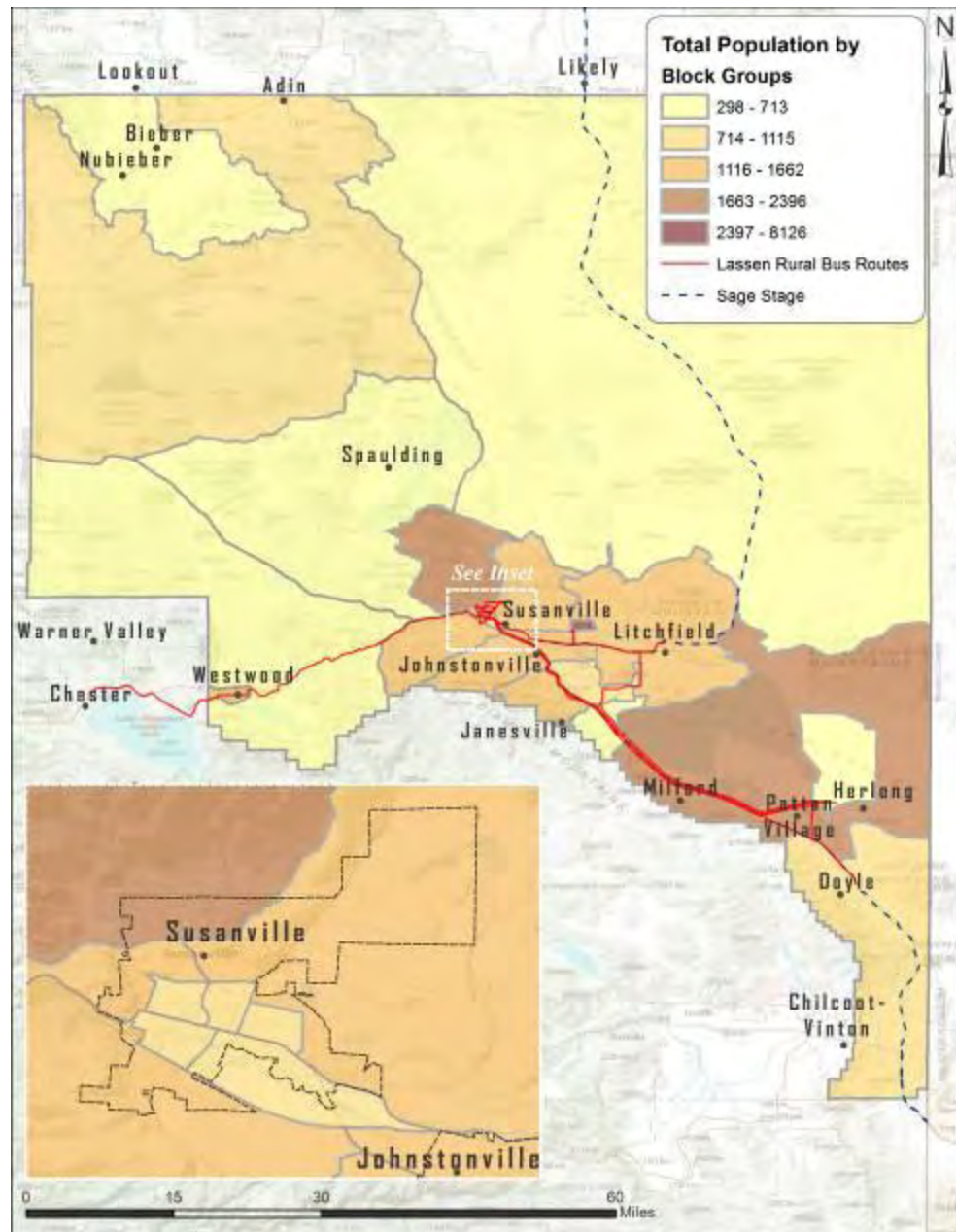
Source: 2010 Census

Exhibit 3.2 illustrates 2010 Census population by Census Block Group with an overlay of existing fixed transit route alignments, which include Lassen Rural Bus and Sage Stage. The data show there are large populations which reside outside the city of Susanville throughout the rural areas to the

east and south areas of the county. The smaller block groups, as seen in Susanville, are a result of a higher level of development as well as the streets and roads network and other physical features. Although the areas to the south (such as Milford and Herlong) have a larger population per block group, the block groups are much larger, thereby indicating the population is fairly dispersed.

The southern and eastern areas showing the highest levels of population are served by limited transit services, namely the LRB East County and South County to Susanville routes. These routes operate only two trips, or one round trip, each weekday with no Saturday service. The South County Commuter also serves this area as it is designed for employees of the Sierra Army Depot in Herlong.

Exhibit 3.2 Population by Census Block Groups



Ride-Dependent Populations

Ride-dependent populations can be defined as being made up of individuals who, for one reason or another, do not have the ability to transport themselves and therefore rely on other persons or organizations (i.e., public transportation) for basic mobility needs. Industry research defines ride-dependent groups as low-income individuals, seniors, youth, persons with disabilities, and those with no access to a personal vehicle. The following is an analysis of current and forecast ride-dependent populations in Lassen County as well as where large concentrations reside. This will be used to identify areas where there are gaps between existing service (e.g., coverage, frequency) and demand.

Exhibit 3.3 illustrates the various population groups most likely to be dependent on transit services for some portion of their mobility needs. The senior population in Lassen County has grown significantly through the past decade (nearly 74 percent) and now comprises nearly 15 percent of the total population. According to 2009 American Community Survey estimates, the population of persons with disabilities will decrease, yet will still comprise about 11 percent of the total population.

A growing elderly population translates to increased demand for effective transit services that serve origins and destinations most needed by this age group to address their basic needs. The 2005 “Graying of the Northstate” report” focused on senior residents of Northern California and their needs. The report highlighted the increasing senior population in the region, as well as the transportation difficulties associated with aging in a rural community. Many elderly residents expressed concerns regarding the loss of their ability to drive and the subsequent loss of independence. Unlike some of the other study areas included in the report, Lassen residents have the dial-a-ride service available to them. Although the LRB Dial-A-Ride service is a curb-to-curb service, it is expensive to operate on a cost-per-passenger basis and therefore should only serve individuals who are unable to utilize regular public transit services. The City Route is effective in serving the areas with the most demand for senior services; however, there is room for improved education and marketing to encourage more use of both services.

The existing City Route serves two senior apartment complexes directly as well as the senior center and several shopping centers. There have been ongoing rider complaints regarding the distance between the bus stop and Wal-Mart. The LTSA is working to identify a more convenient bus route configuration to address these concerns if at all possible.

Exhibit 3.3 Ride-Dependent Population Estimates

Population Group	2000		2010		2020 Forecast		Percent Change	
	Number	Share of Population	Number	Share of Population	Number	Share of Population	2000-2010	2010-2020
Youth (ages 6 to 17)	5710	16.88%	6293	18.03%	6356	17.5%	10.2%	1.0%
Seniors (60 and over)	3054	9.03%	5306	15.21%	5521	15.2%	73.7%	4.1%
Persons with a disability*	4625	13.67%	3935	11.28%	4141	11.4%	-14.9%	5.2%
Low-Income Individuals*	752	2.22%	592	1.70%	617	1.7%	-21.3%	4.2%
Persons with no vehicle access*	752	2.22%	559	1.60%	581	1.6%	-25.7%	3.9%
Lassen County Total	33828	100.00%	34895	100.00%	36321	100.0%	3.2%	4.1%

*2010 Census data not released; data for population reflects 2009 ACS data.

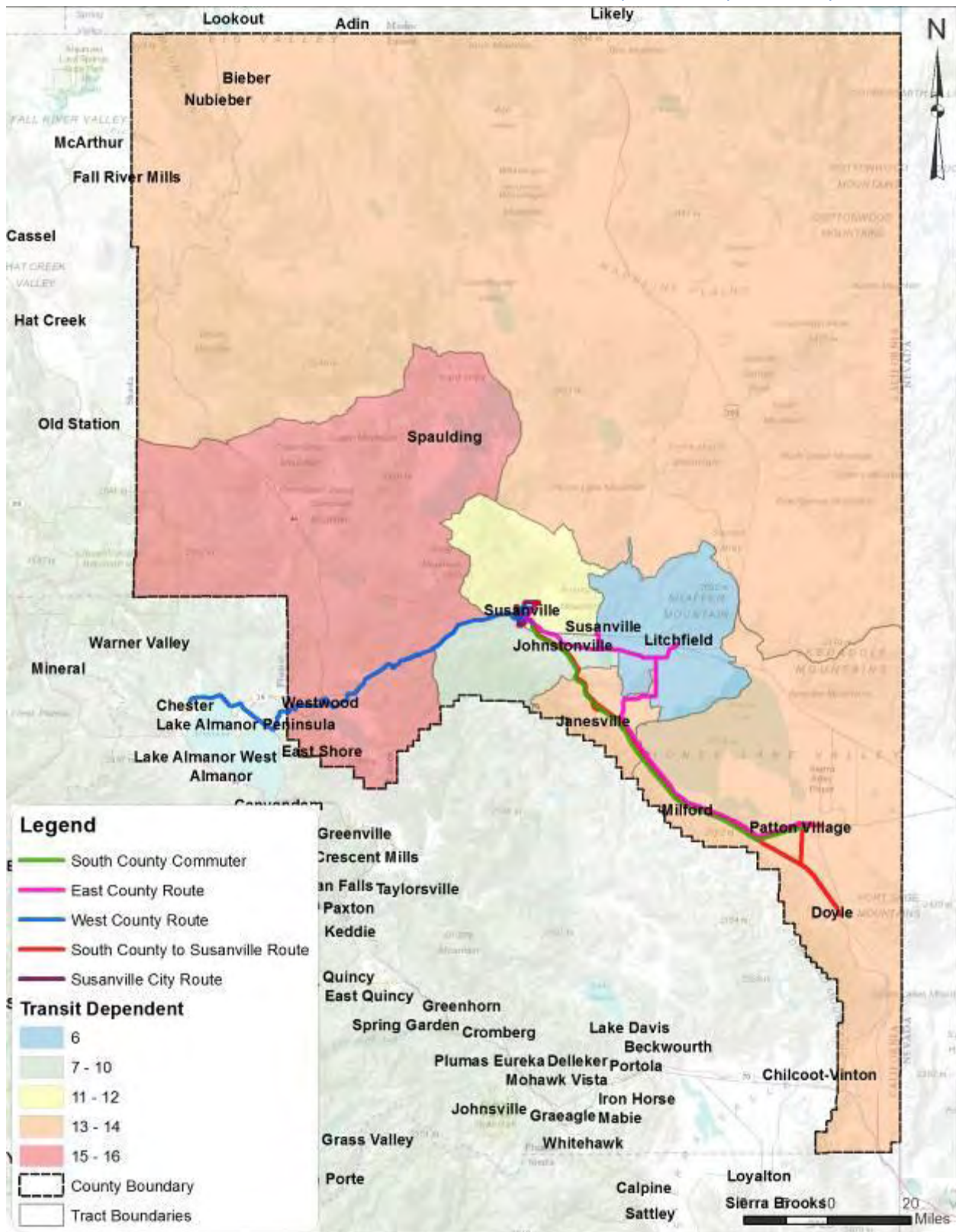
Source: U.S. Census Bureau

To illustrate the relationship between transit demand and supply, Moore & Associates used GIS to quantify aggregate demand (ride-dependent population as well as total residents) within each Census Tract within the county. Each of the tracts fully or partially located within Lassen County were ranked on a scale of one to five depending upon its relative share of the ride-dependent population (i.e., a tract was rated “5” if it was in the top 20 percent of tracts in terms of percentage share of youth, while the same tract could be rated a “1” if it was in the bottom fifth of the group with respect to seniors). After analyzing all Census Tracts using these criteria, the ratings were applied to facilitate comparison. The highest possible score was 30 (i.e., six categories rated one through five). The demand information illustrated was then contrasted with transit supply, quantified by representing each route alignment in the Lassen Rural Bus service area.

Slightly different than total population by block group (Exhibit 3.2), there are high concentrations of ride-dependent populations living in the northern and western portions of the county. These areas are also the least populated of the county. The West County Route serves the southern portion of the west county area yet is limited in service coverage and frequency. The northwest area of the county near the communities of Beiber, New Beiber, and Spaulding does not have any direct public transportation connections. Although a high proportion of those who reside in these rural areas have limited mobility and transportation options, the low population indicating demand for transit may not justify the cost of operating a service in this area.

The southeast portion of the county is also illustrated as having a high concentration of ride-dependent populations. The area is served by three routes. However, these routes interline with the South County Commuter buses, which are scheduled around the Army Depot employee shift times in the morning and evening. Because of this trip times are limited and may not reflect the travel demand of area residents. An independent service that serves these areas should be considered.

Exhibit 3.4 Ride-Dependent Populations by Census Tract



Source: ACS 2005-2009 Estimates

Rural Transit Demand Estimation

The rural demand estimation model produced estimates of transit ridership levels of ride-dependent populations in Lassen County. The rural demand estimation model reflects best practices established in Transit Cooperative Research Program (TCRP) Report B-3, *Estimation of Rural Public Transportation Demand*. Through the demand model we can determine what percentage of total trips from mobility-disadvantaged populations can be reasonably expected to occur via public transit.

The model resulted in a forecast of ridership from the select ride-dependent populations. Current estimates of ride-dependent population ridership were tabulated based on the onboard survey demographic results. Exhibit 3.5 illustrates ride-dependent populations constitute approximately 86 percent of Lassen Rural Bus riders. Of this group approximately 58 percent reside in a low-income household, while 20 percent are seniors and only about 8 percent are persons with disabilities.

Exhibit 3.5 Rural Transit Demand Estimation

Population Group	Estimated Ridership (unlinked passenger trips)			
	Current (2010)		Ten-Year Forecast (2020)	
	Number	Percent Share	Number	Percent Share
Ride-Dependent Population	63,499	85.7%	65,339	84.8%
Population age 60 and over	14,819	20.0%	15,247	19.8%
Persons with disability	5,705	7.7%	5,857	7.6%
Populations residing in families living below poverty level (\$22,350)	42,975	58.0%	44,236	57.4%
Total Ridership	74,095	100.0%	77,059	100.00%

Social profile

According to the 2009 American Community Survey, the median age in Lassen County is slightly higher than that of the state and nation as well as Susanville, meaning Lassen County has a proportionally higher population in the senior adult age. A comparison of education levels shows Lassen County is well below both the state and nation in its percentage of residents with a Bachelor's degree or higher. Susanville has an even lower percentage of residents who have graduated from postsecondary education than of the rest of the county.

Exhibit 3.6 Summary of Lassen County Demographics

	Median Age	Education		
		Percentage Over 25 without High School Diploma	Percentage High School Diploma or Higher	Percentage Bachelor's Degree or Higher
Lassen County	37.1	20.1%	79.9%	11.5%
City of Susanville	33.6	27.3%	72.7%	8.6%
California	35.2	19.5%	80.5%	29.7%
Nationally	37.2	15.5%	84.6%	27.5%

Source: ACS 2005-2009 Estimates

Housing profile

Lassen County is a more affordable place to live than the rest of the state for both owners and renters, yet slightly more expensive when compared to the national average. In Lassen County, fewer dwelling owners are spending more than 30 percent of their income on living expenses than renters. When comparing Susanville with Lassen County as whole, the city is slightly more expensive to live for renters, yet median home values are lower in Susanville than other parts of the county. The increased cost of living for renters in Lassen County might be due to the high number of low-income households who rent versus own.

Exhibit 3.7 Summary of Lassen County Housing Characteristics

	Median Rooms per Structure	Owner Occupied		Renter-Occupied	
		Median Value	Percentage of owners spending more than 30% on income on mortgage	Median Rent	Percentage of renters spending more than 30% on income on rent
Lassen County	5.2	\$225,200.00	16.1%	\$855.00	53.3%
City of Susanville	4.9	\$187,600.00	43.3%	\$878.00	63.5%
California	5.1	\$479,200.00	51.6%	\$1,116.00	54.5%
Nationally	5.4	\$185,400.00	36.9%	\$817.00	50.1%

Source: ACS 2005-2009 estimates

Economic Profile

Given the current economic climate, high unemployment rates are not unique to specific geographies. As Exhibit 3.8 shows, the average unemployment rate through the country, state, and county are between seven and eight percent. Susanville, however, had an estimated unemployment rate higher than the county at 9.5 percent.

Regarding their home-to-work commutes, Lassen County residents are slightly more reliant on driving alone than the the population of the state as a whole, including Susanville. This is expected given the rural character of the county and long travel distances between communities. Public transit use is much lower in Lassen County than in the state and nation overall, although more people do walk in both Lassen County and Susanville. About 9 percent of Susanville residents walk to/from work and home, a higher level than both the state and national averages.

Exhibit 3.8 illustrates the income level of Lassen County residents is much lower than the state and national averages for median household income, median family income, and per capita income. Compared to the county as a whole, residents of Susanville earn a slightly lower income. This could also contribute to the relatively high percentage of individuals who walk to/from work and home in Susanville.

Exhibit 3.8 Summary of Lassen County Economic Characteristics

	Percentage Unemployed	Commute			Income				
		Drive Alone	Public Transit	Walked	Median Household Income	Social Security Income	Public Assistance Income	Median Family Income	Per Capita Income
Lassen County	7.3%	75.1%	1.5%	4.6%	\$48,653.00	\$13,296.00	\$5,755.00	\$57,972.00	\$19,239.00
City of Susanville	9.5%	69.3%	2.0%	9.2%	\$41,486.00	\$11,873.00	\$5,176.00	\$49,668.00	\$13,089.00
California	7.9%	73.0%	5.1%	2.8%	\$60,392.00	\$14,722.00	\$5,455.00	\$68,909.00	\$29,020.00
Nationally	7.2%	75.9%	5.0%	2.9%	\$51,425.00	\$14,966.00	\$3,363.00	\$62,363.00	\$27,041.00

Source: ACS 2005-2009 Estimates

Major employment centers throughout Lassen County are concentrated mainly in and around Susanville, although the Sierra Army Depot in Herlong employs over 500 residents (as illustrated in Exhibit 3.9). The major employer industries are government, healthcare, and education. Of the employed labor force, the government made up approximately 64 percent of the jobs in 2010 (see Appendix for detailed data), while education and healthcare along with the trade industry (retail and wholesale) each made up slightly less than ten percent.

High Desert State Prison (HDSP) and the California State Correctional Center (CCC) employment levels are unknown; however, the inmate population is estimated between 9,000 and 10,000. Therefore, the level of employment is expected to be one of the highest in the county. The facilities are located adjacent to each other near Johnstonville, to the east of the city of Susanville (see Exhibit 3.10). Existing LRB commuter or fixed-route transit services do not directly serve these locations. A commute assessment survey was emailed to HDSP and CCC employees in February 2011 codifying work start and end times, preferred service points, and propensity to use transit. This information has been used to identify and quantify demand for a commuter service to these facilities.

Exhibit 3.9 Top Employers in Lassen County

Employer Name	Location	Industry	Number of Employees	Address
HIGH DESERT STATE PRISON	Susanville	STATE GOVERNMENT	UNKNOWN	
CALIFORNIA STATE CORRECTIONAL CENTER	Susanville	STATE GOVERNMENT	UNKNOWN	
US ARMY DEPOT	Herlong	FEDERAL GOVERNMENT-NATIONAL SECURITY	500-999	74 C ST # 150
BANNER LASSEN MEDICAL CTR	Susanville	HOSPITALS	100-249	1800 SPRING RIDGE DR
FAMILY HEALTH	Susanville	CLINICS	100-249	1850 SPRING RIDGE DR
FORESTRY & FIRE PROTECTION	Susanville	GOVERNMENT-FORESTRY SERVICES	100-249	HIGHWAY 36
HEALTH EDUCATION-NORTHEASTERN	Susanville	HEALTH EDUCATION	100-249	1850 SPRING RIDGE DR
LASSEN COMMUNITY COLLEGE	Susanville	SCHOOLS-UNIVERSITIES & COLLEGES ACADEMIC	100-249	478-200 STATE ROUTE 139
LASSEN NATIONAL FOREST	Susanville	GOVERNMENT-FORESTRY SERVICES	100-249	2550 RIVERSIDE DR
LASSEN UNION HIGH SCHOOL	Susanville	SCHOOLS	100-249	1110 MAIN ST
NORTHEASTERN RURAL HEALTH	Susanville	PHYSICIANS ASSISTANTS	100-249	1850 SPRING RIDGE DR # D
SAFEWAY	Susanville	GROCERS-RETAIL	100-249	2970 MAIN ST
SIERRA-CASCADE NURSERY	Susanville	NURSERYMEN	100-249	472-715 JOHNSTONVILLE RD
SUSANVILLE NURSING & REHAB CTR	Susanville	NURSING & CONVALESCENT HOMES	100-249	2005 RIVER ST
WALMART	Susanville	DEPARTMENT STORES	100-249	2900 MAIN ST
DIAMOND MOUNTAIN CASINO	Susanville	CASINOS	50-99	900 SKYLINE DR
EAGLE LAKE VILLAGE	Susanville	RESIDENTIAL CARE HOMES	50-99	2001 BUNYAN RD
JANESVILLE SCHOOL DIST OFFICE	Janesville	SCHOOLS	50-99	464-555 MAIN ST
LASSEN COUNTY ADULT DETENTION	Susanville	GOVERNMENT OFFICES-COUNTY	50-99	1405 SHERIFF CADDY LN
LASSEN INDIAN HEALTH CTR	Susanville	CLINICS	50-99	795 JOAQUIN ST
MC KINLEY ELEMENTARY SCHOOL	Susanville	SCHOOLS	50-99	2005 4TH ST
MONTICOLA CLUB HOUSE	Susanville	CLUBS	50-99	140 S LASSEN ST
SUSANVILLE INDIAN RANCHERIA	Susanville	RANCHES	50-99	745 JOAQUIN ST
SUSANVILLE SUPERMARKET	Susanville	GROCERS-RETAIL	50-99	50 GRAND AVE
US EAGLE LAKE RANGER DISTRICT	Susanville	GOVERNMENT OFFICES-US	50-99	477-050 EAGLE LAKE RD

Source: California Employment Development Department, 2011 Labor Market Data

Trip Generators and Land Use

More than half of the approximately 2,910,080 acres within Lassen are publicly owned lands managed by federal, state, and other governmental agencies. Most of this public land is managed by the Bureau of Land Management and U.S. Forest Service. Through the county's 1999 General Plan Land Use Element, most land not designated as a planning Area (i.e., within Susanville or rural community) falls within four main land use categories: Extensive agriculture, Intensive Agriculture, National Park, or Wilderness. The 13 planning areas represent small unincorporated communities and the Susanville vicinity. Development patterns in the planning areas consist of low-density development.

In 1999 Dyer Mountain Associates proposed the development of a four season resort near Westwood. The initial proposal called for 4,000 new homes, three golf courses, and a ski resort on 7,000 acres of undeveloped land. This proposal was faced with significant local opposition and environmental as well as legal challenges from several conservation groups. As a result of the real estate collapse, the developer filed for bankruptcy in 2008. The development plan was approved in 2007 by Lassen County; however, this is now being appealed by conservation groups.

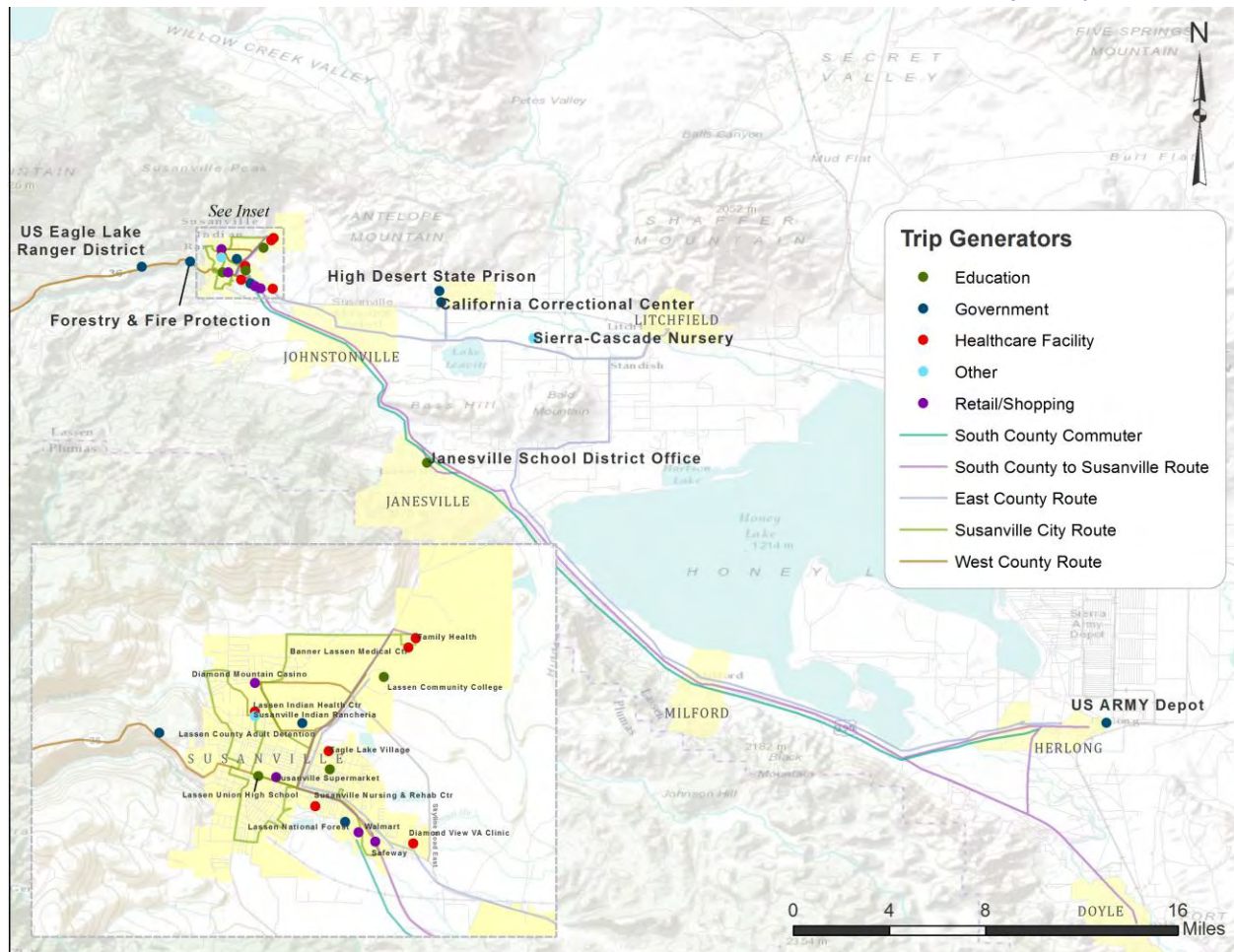
Through reports on the Dyer Mountain Resort development, it was estimated if built out as proposed, the project would increase the population of the county by as much as 116 percent. This is significant, as this population increase would be realized mostly in the Westwood area, a primarily rural, sparsely populated community. If the development of this resort were to occur in the future,

travel patterns throughout the county would change significantly, not limited to tourist traffic, but also resident travel of residents to/from Westwood and other communities.

As noted earlier, Susanville serves as the primary employment and activity center for county residents. Recreational tourism is popular throughout the county at the various national and state parks, as well as lake and mountain areas. However, tourism travel fluctuates on a seasonal basis.

Exhibit 3.10 illustrates the key trip generators in the county as well as an overlay of existing transit service coverage. Some trip generators include the top employers identified in the previous discussion, as well as popular retail/shopping centers, education and healthcare facilities, government offices, and recreation destinations. A quick assessment of the map indicates Lassen Rural Bus routes serve the majority of key trip generators, with the exception of the High Desert State Prison and California State Correctional Center in the east county area. These facilities could be served by rerouting the East County Route north to Center Road (County Highway A27) versus having the route travel along U.S. Highway 395. A review of ride check data on the East County Route reveals the current level of activity actually occurs on the portion of the route along U.S. Highway 395.

Exhibit 3.10 Major Trip Generators



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4. SERVICE EVALUATION

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CHAPTER 4 – SERVICE EVALUATION

Across the past five years, the Lassen Rural Bus program has averaged nearly 75,000 unlinked passenger trips annually. The county is home to nearly 35,000 residents (2010 Census); however, approximately 9,600 of that population are institutionalized. Transit ridership had grown steadily across the past five years before dropping almost ten percent in 2010. Few changes have occurred to the transit program, as well as to the county's population, which are usual causes of ridership fluctuations.

When the last Transit Development Plan was adopted in 2007, notable recommendations included the expansion of West County Commuter route, the City routes, purchase of five new buses, LRB facility security fencing, and the insulation of the bus washing facility. Another major change to the LRB system was the denial of access for LRB to provide passenger service through the Wal-Mart parking lot. The additional service miles and hours resulted in a corresponding increase in operating cost. For example, the West County Commuter route was extended to service the Plumas County community of Chester. As a result of unmet transportation hearings, the expansion of service to provide for a mid-day trip to Chester as well as adding Saturday route service was instituted in October of 2010. Along with the service expansion came the route designation change from a commuter route to a deviated fixed-route.

The 2007 TDP advanced several recommendations for the Susanville City route. The LTSA has already implemented city fixed-route schedule changes including the extension of weekday service to 7:00 p.m. and the shift in Saturday service from 8:00 a.m. to 4:00 p.m. In addition, the LTSA is working toward implementing the pulse-point route structure presented in the 2007 TDP. Some improvements already implemented include the elimination of "flag stops" and the installation of new bus stop signage.

Day-to-day operations have been contracted to MV Transportation since July 1, 2002. During the development of this Plan, LTSA issued a Request for Proposal for the operation and management of the LRB system. Proposals were due April 7, 2011 and the bid was awarded on May 9, 2011 to Paratransit Services, Inc. The new contractor assumed operation of LRB services on July 1, 2011.

Objectives of Evaluation

The objectives of this chapter are to evaluate areas of LRB's program operations (both internal and external) impacting day-to-day delivery of public transit service and to present recommendations leading to sustainable service enhancements.

The ultimate goals are to increase the number of trips provided as cost-effectively as possible, to maintain a high level of service quality, and to ensure the sponsoring organizations effectively leverage Lassen Rural Bus as a tool for enhancing county mobility. Our analysis includes operational, maintenance, and administrative functions.

Evaluation Approach

Throughout the course of this project, Moore & Associates met with LCTC staff to compile information regarding program priorities, retrieve program data, and discuss data collection procedures and responsibilities. To assess existing services, our project team reviewed past reports (i.e., 2006 Short Range Transit Plan and 2009 Triennial Performance Audit) as well as County-provided performance data for the period FY 2005/06 through FY 2009/10. Data compiled from field observations supplemented quantitative data as well as provided insight into day-to-day operations.

Lassen Rural Bus Program Overview

Lassen County established the Lassen Rural Bus program in 1981. The program began with two wheelchair-accessible vehicles which were used to operate a fixed-route and Dial-A-Ride service. The Lassen Rural Bus program was operated by the County and governed by the Lassen County Board of Supervisors until 2001, when a Joint Powers Agreement (JPA) was entered into between the County and the City of Susanville. The JPA created the Lassen Transit Service Agency (LTSA), the entity responsible for administration and operation of the LRB program. The LTSA is governed by the Lassen County Transportation Commission (LCTC) which allocates and distributes Transportation Development Act (TDA) funding.

The Lassen Rural Bus program now includes one commuter route, three deviated-fixed routes, a demand-response route, one fixed route, and an eligibility-based Dial-A-Ride service. Collectively on an annual basis, the LRB system provides more than 200,000 Vehicle Service Miles and more than 11,000 Vehicle Service Hours.

Fixed-route service is limited to the city limits of Susanville through the [Susanville City route](#). The route originates at Wal-Mart in Susanville and makes a loop throughout the city, serving the College, casino, and downtown area; and terminating at the Safeway Shopping Center adjacent to the Wal-Mart store. The service operates Monday through Friday 7:00 a.m. to 7:00 p.m., and on Saturday from 8:00 a.m. to 4:00 p.m. The route does not operate on Sunday or specified holidays. The service operates on one-hour headways with 52-minute running times on both weekdays and Saturday.

The [West County Route](#) is a deviated fixed-route providing service to the communities of Westwood and Clear Creek in Lassen County and Hamilton Branch and Chester in Plumas County. Route service begins in Susanville and terminates in Chester. The route then returns, beginning in Chester and traveling through Hamilton Branch, Clear Creek, and Westwood before terminating at the Riverside bus stop adjacent to the Susanville Wal-Mart. The extension of LRB service to Chester in October 2010 satisfies a recommendation from the previous TDP adopted in 2007. The route offers three trips Mondays through Fridays and two trips on Saturdays. The first weekday trip in the morning originates in Susanville at 5:10 a.m. and terminates in Susanville at 7:50 a.m., the second, or midday trip leaves Susanville at 12:30 p.m. and returns at 3:15 p.m., and the third evening trip departs Susanville at 5:15 p.m. and returns at 7:50 p.m. Saturday service includes two trips: one morning

and one evening trip. The Saturday morning trip leaves Susanville at 8:20 a.m. and returns to Susanville at 10:45 a.m. The evening trip departs at 4:05 p.m. and returns at 6:30 p.m. Each trip's running time during the weekday is 160 minutes, while Saturday trips are 145 minutes.

Commuter service is offered between Susanville and the Sierra Army Depot in Herlong through the [South County Commuter Route](#). The route includes two one-way trips Monday through Friday: a morning trip originating in Susanville at 5:13 a.m. and terminating at the Herlong Army Depot at 6:00 a.m., and an evening trip originating at Herlong Army Depot at 5:00 p.m. and terminating at the Susanville Wal-Mart at 6:15 p.m. Each one-way trip requires two buses. One bus operates as South County Bus 1 and interlines with the South County to Susanville Route to make a round trip. The South County Bus 2 interlines with the East County Route to make one round trip to/from Susanville. No weekend service is offered. The South County Commuter Route schedule is designed specifically to transport the employees of the Herlong Army Depot. As an incentive for riding transit services or carpooling, Depot employees are provided with a Federally funded monthly stipend equal to the cost of the monthly pass.

As noted above, the [South County to Susanville Route](#) interlines with the South County Commuter Route, originating in Herlong in the morning and in Susanville in the evening. The South County to Susanville Route operates as a deviated fixed-route, offering two one-way trips on weekdays and no weekend service. The morning trip originates at 6:30 a.m. in Herlong at the Family Resource Center and travels south to Doyle before traveling back toward Susanville with a stop in Janesville (allowing "flag stops" along the way) and terminating at Wal-Mart at 8:04 a.m. The return trip in the evening originates at Wal-Mart at 3:00 p.m. and travels to Doyle before terminating in Herlong at 4:40 p.m. (where it becomes the South County Commuter Route).

The [East County Route](#) operates as a deviated fixed-route, deviating up to three-quarters of a mile off its fixed-route alignment. Similar to the South County to Susanville Route, this route allows flag stops along the way, interlines with South County Commuter route (Bus 2), and offers two one-way trips on weekdays (with no weekend service). In the morning, the East County Route travels from Herlong north along U.S. 395, then east to Litchfield and west to Susanville. In the evening, the route retraces the same alignment, originating in Susanville and traveling to Litchfield, then south to Herlong. The morning trip originates at Herlong Market at 6:40 a.m. and terminates at 8:00 a.m. at Lassen College, while the evening trip starts at 3:15 p.m. at Lassen College and terminates at Herlong Market at 4:40 p.m. On Fridays the East County Route service is modified to provide for a later morning start time departing Susanville at 8:20 a.m. and returning at 10:50 a.m. and in the afternoon departing Susanville at 1:01 p.m. and returning at 3:31 p.m.

The [Eagle Lake Route](#) is a demand-response service between Susanville and Eagle Lake. The service began in 2005 yet was discontinued in 2006 due to low ridership. When the LTSA re-evaluated the service offering during the 2008 TDA Article 8 Public Hearing it was determined the cost of the service was too high given the level of ridership. Therefore, the LTSA deemed the need as not "reasonable to meet." Despite this finding, the Eagle Lake Route was reinstated in August 2008 as a

result of numerous resident testimonies in the Eagle Lake service area. The service is limited to the first and third Thursday of the month on an “as requested” basis. Due to winter road conditions on the Eagle Lake Road (County Road A-1), the route operates on a seasonal basis, starting service the first Thursday in June and ending upon the annual closing of Eagle Lake Road.

Exhibit 4.1 shows the service span for each route for a typical weekday service day and Saturday service day (as applicable). Every route except the City Route has fewer than three trips per weekday service day. In addition, only two routes operate on Saturday.

Exhibit 4.1 Service Hours by Route

Route	Service Day			Weekday Peak Hour Headway
	Monday through Friday	Number of Trips in one Weekday	Saturday	
West County Route	5:10 a.m. to 7:50 p.m.	3	8:20 a.m. to 6:30 p.m.	One AM, Midday, and PM trip
South County Commuter Route	5:13 a.m. to 6:15 p.m.	2		One AM and PM trip
South County to Susanville Route	6:30 a.m. to 4:40 p.m.	2		One AM and PM trip
East County Deviated Fixed Route*	6:40 a.m. to 4:40 p.m.	2		One AM and PM trip
Susanville City Fixed Route	7:00 a.m. to 6:52 p.m.	12	8:00 a.m. to 3:52 p.m.	60 Minutes
Eagle Lake Route	8:15 a.m. to 6:15 p.m.	2		

*East County Route hours on Fridays are 8:20 a.m. to 10:50 a.m. and 1:01 p.m. to 3:31 p.m.

Fare Structure

Actual fare varies by service and fare “Zone.” However, each service offers similar fare media, such as daily and monthly passes, as well as the “Kool Kid” and Lassen Community College passes. Given the commuter services provide transportation across a larger service area, the cost/passenger is higher than the Susanville City fixed-route service.

For the Susanville City fixed-route, the adult base (cash) fare for one trip is one dollar, while seniors (60 years and older), students, and persons with disabilities receive a discounted fare of fifty cents. Trips originating or terminating at the Veterans Affairs Diamond View Clinic are offered free of charge provided the passenger informs the driver of his/her intended trip. Daily and monthly passes limited to the Susanville City fixed-route service are available (see Exhibit 4.2). These are not transferable to the LRB commuter or Dial-A-Ride services. However, daily and monthly system-wide passes valid for the expanded service area are also valid on the Susanville City service.

Through a Memorandum of Understanding (MOU) between the LTSA and Lassen Community College, enrolled students may ride the LRB for free. In 2010, the MOU was renewed, including an annual fee the College pays into the LTSA’s “special funds” account. Lassen Rural Bus provides approximately 18,000 trips per year for college students, making this agreement beneficial for both the College and LTSA. To ride for free under the Lassen College student bus pass program, students must register for the semester and obtain a Lassen College Student Identification Card from the Administration Building. The Kool Kid and College passes can be used on all LRB services, with the exception of the Dial-A-Ride service. Current students can inquire about passes at their school’s Registrars Office.

The fare for the Eagle Lake Route varies between one and three dollars depending on individual customer origin and destination points.

Exhibit 4.2 Susanville City Fixed-Route Fare Structure

Pass/Fare Media	General Public	Seniors (60 and Older) and Disabled	College Students	Children (6 years or Younger)	Youth/ Students (ages 6 to 17)	Benefit
Base Cash Fare	\$1.00	\$0.50		Free	\$0.50	
Daily Pass	\$3.00	\$1.50				Unlimited rides in a given day (on City route only).
Monthly Pass	\$40.00	\$20.00				Unlimited rides in a given calendar month.
Lassen Community College Bus Pass			Free			Unlimited rides while a registered student at Lassen Community College (for all LRB routes).
Kool Kid Pass					\$15.00	Provides unlimited rides on all routes except DAR.

For routes that travel outside the City Fixed-Route service area the general public base (cash) fare varies depending on the boarding and alighting locations.

For the South County Commuter route, the daily fare is provided by purchasing a “One-Day Base Access pass for \$5.50 which, when purchased upon boarding, allows the return trip from the depot to be free, otherwise the “one-way fare” ranges from \$2.00 to \$4.00 depending on the boarding and departure locations. However, there are no reduced fares available for the commuter service due to special services provided to those commuting. For the South County to Susanville and East County routes, fares range from \$2.00 to \$4.00 depending on passenger destination, with reduced fares available to those who qualify.

Exhibit 4.3 Commuter Service Fare Structure

Pass/Fare Media	Commuter	Seniors (60 and Older) and Disabled	College Students	Children (6 years or Younger)	Youth (ages 6 to 17)	Benefit
Base Cash Fare	\$2.00 - \$4.00	\$1.50 - \$2.00		Free		
Daily Pass ¹	\$5.00	\$2.50				Unlimited rides on any LRB route in a given day
Monthly Pass ²	\$90.00	\$45.00				Unlimited rides on any LRB route in a given calendar month
Lassen Community College Bus Pass			Free			Unlimited rides while a registered student at Lassen Community College
Kool Kid Pass					\$15.00	Provides youth with unlimited rides on all routes except DAR

¹Plus \$0.50 base access free for South County Commuter.

²Plus additional \$15.00 fee for boarding & alighting on base for South County Commuter.

Fares for West County, East County, South County to Susanville/Susanville to South County, and Eagle Lake routes are based on zones. Upon boarding, passengers inform the driver of their destination, and are subsequently charged based on the zone in which that destination is located. Fare range from \$1.00 to \$4.00 depending on boarding and alighting locations for general passenger types and from \$0.50 to \$2.00 for reduced fare passenger types. Monthly and daily passes on these routes allow for travel between all zones for the same rate.

Operations

Actual operation of Lassen Rural Bus is through a contract with a private firm. During the development of this TDP, LRB operations were contracted to MV Transportation while transitioning to a new operator. The operations contractor is responsible for the day-to-day operation of all LRB services, as well as maintenance and staffing of operations.

Staffing

The Lassen Transit Service Agency consists of an Executive Director and two staff members who are responsible for the planning and administration duties of the LRB program: a Transportation Project Manager and a Transportation Planner. In addition, an account technician handles the daily farebox, deposits, and accounts payable and receivable; this individual's time is split among several divisions of the Lassen County Public Works Department. Day-to-day operation of the Lassen Rural Bus public transit service is provided by a third party contractor, Paratransit Services of Bremerton, Washington, whose staffing consists of the following:

- One full-time general manager,
- One full-time dispatcher,
- Two full-time mechanics,
- Four full-time drivers, and
- Seven part-time drivers.

Training

Human resource responsibilities lie with the contractor. LTSA follows state and Federal guidelines to establish its employee training levels, which are provided on an ongoing basis. Training – which includes National Safety Council Defensive Driving course, sensitivity/empathy training, emergency and accident procedures, and wheelchair loading and securement procedures – is conducted by the contractor at the transit facility. Employees are required to attend two-hour safety meetings every two months wherein different training programs are presented each time.

Dispatch Procedures

Dispatch operations for the Dial-A-Ride service are handled by dispatch staff or the general manager at the transit office/call center. With the new transit system contractor dispatch software is now used to make reservations. All DAR trips are scheduled utilizing Rides Unlimited scheduling software. To schedule a ride, the passenger must be registered as eligible for the service, proving they have indeed submitted the required application. The passenger's information is documented and maintained in the Rides Unlimited software, thereby allowing the operator to confirm a customer's eligibility immediately.

ADA Compliance

The entire LRB fleet is ADA-complaint and wheelchair accessible. In addition to the general dial-a-ride service which is open to senior and disabled passengers, LRB also operates an eligibility-

based ADA paratransit service for persons with disabilities. As stipulated by federal regulations, ADA passengers take priority over non-ADA trips. The ADA paratransit service operates as a deviated or demand-response route within a three-quarter mile-radius of existing fixed-route service. Prospective passengers are required to complete an application to determine eligibility to use the service. These applications are reviewed and then kept on file. The recertification process is the same as the initial application.

Data Collection and Reporting

Daily performance data are recorded by hand on the daily driver time and fare sheets. This data is entered into a statistical report created by Agency staff, which is provided to LTSA on a monthly basis. LTSA assesses and reviews the data, which is compiled into a comprehensive monthly report. Indicators including ridership, vehicle service hours, miles, and fare revenue collected are reported. The information is reviewed regularly to assess system performance and determine required action.

Performance Indicators

System ridership fluctuated significantly in recent years. Ridership totals in FY 2008/09 and FY 2010/11 appear extraordinary and therefore raise questions regarding why there was an increase and why it has not been sustained. One possible explanation is the fluctuation in gas prices, which spiked at the beginning of FY 2008/09 and then again toward the end of FY 2010/11. This price spike may have precipitated use of transit as a cost-saving measure (versus private automobile use).

Exhibit 4.4 System Performance Measures

Performance Measure	FY 2005/06	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11
Operating Cost	\$819,338	\$791,720	\$973,389	\$812,928	\$741,032	\$739,281
<i>percent change</i>		-3.4%	22.9%	-16.5%	-8.8%	-0.2%
Fare Revenue	\$138,154	\$178,700	\$190,293	\$175,354	\$168,668	\$176,527
<i>percent change</i>		29.3%	6.5%	-7.9%	-3.8%	4.7%
Vehicle Service Hours	11,663	10,977	10,607	11,334	11,237	11,961
<i>percent change</i>		-5.9%	-3.4%	6.9%	-0.9%	6.4%
Vehicle Service Miles	223,444	215,995	218,717	219,944	219,279	236,337
<i>percent change</i>		-3.3%	1.3%	0.6%	-0.3%	7.8%
Passengers	71,180	73,735	74,198	81,869	74,095	82,303
<i>percent change</i>		3.6%	0.6%	10.3%	-9.5%	11.1%
Performance Indicator						
Operating Cost/VSH	\$70.25	\$72.13	\$91.77	\$71.72	\$65.95	\$61.81
<i>percent change</i>		2.7%	27.2%	-21.8%	-8.1%	-6.3%
Operating Cost/VSM	\$3.67	\$3.67	\$4.45	\$3.70	\$3.38	\$3.13
<i>percent change</i>		0.0%	21.4%	-17.0%	-8.6%	-7.4%
Operating Cost/Passenger	\$11.51	\$10.74	\$13.12	\$9.93	\$10.00	\$8.98
<i>percent change</i>		-6.7%	22.2%	-24.3%	0.7%	-10.2%
Passengers/VSH	6.10	6.72	7.00	7.22	6.59	6.88
<i>percent change</i>		10.1%	4.1%	3.3%	-8.7%	4.4%
Passengers/VSM	0.32	0.34	0.34	0.37	0.34	0.35
<i>percent change</i>		7.2%	-0.6%	9.7%	-9.2%	3.1%
Farebox Recovery	16.9%	22.6%	19.5%	21.6%	22.8%	23.9%
<i>percent change</i>		33.9%	-13.4%	10.3%	5.5%	4.9%
Fare/Passenger	\$1.94	\$2.42	\$2.56	\$2.14	\$2.28	\$2.14
<i>percent change</i>		24.9%	5.8%	-16.5%	6.3%	-5.8%

Comparing system performance measures with the individual routes will provide insight into reasons for system performance, as well as each individual service's contribution to overall system performance. The following exhibits (Exhibits 4.5 through 4.8) illustrate and compare the ridership metrics for each route making up the LRB system. These performance indicators are shown for the system in the previous Exhibit 4.4.

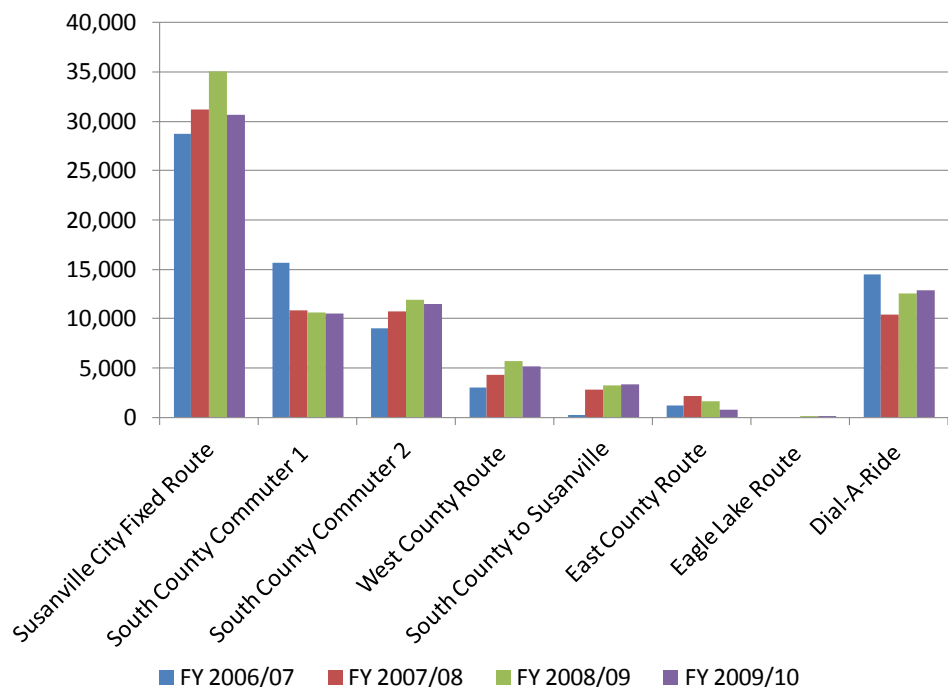
Ridership

System ridership peaked in FY 2008/09 before declining the following year to FY 2007/08 levels, and again peaking in FY 2010/11. Exhibit 4.5 illustrates ridership statistics for each LRB route for the last four fiscal years. A snapshot of Exhibit 4.5 indicates the Susanville City Route contributes the largest share of the system's ridership, with a peak in FY 2008/09 of around 35,000 unlinked passenger trips. The City route, South County Commuter, and West County route ridership trends mirror the system trend, which is expected given their high contribution to system ridership. The Eagle Lake, East County, and South County to Susanville routes

contribute the least to the system's ridership. Please refer to Chapter 5 for an analysis of the ride check data, illustrating the most productive route segments and times of day.

The dramatic increases in system-wide ridership during fiscal years 2008/09 and again in 2010/11 is neither explained nor caused by an increase in or enhancements to services (service miles or service hours) during that year. For example, in 2008, the Eagle Lake Route was reinstated; however, the route contributed only 31 unlinked passenger trips for the year. Given no major changes to the LRB system occurred this year, the 10 percent system-wide increase (7,671 passengers) suggests the dramatic change in ridership was most likely due to external factors such as the decline in regional economy and rising gas prices.

Exhibit 4.5 Ridership by Route



Passengers/Vehicle Service Hour

Passengers/VSH is one of the most commonly used metrics for measuring public transit service performance. This indicator quantifies the average number of passengers onboard the bus during each vehicle service, or revenue, hour.

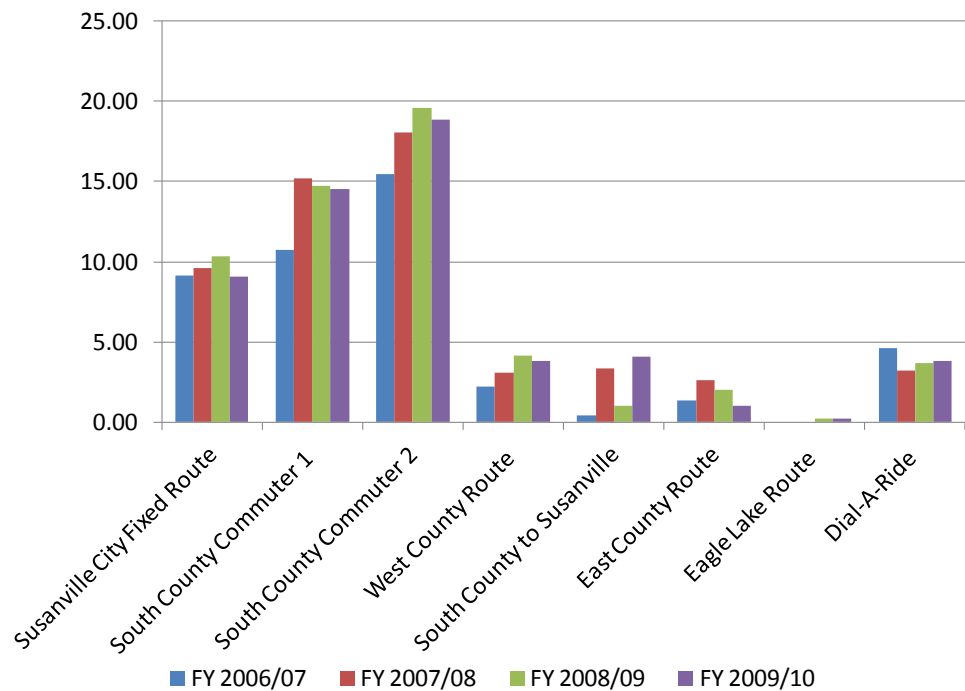
Exhibit 4.6 shows Passengers/VSH followed a similar trend as ridership for each route, where increases in ridership enhanced system productivity and vice versa. In addition, during FY 2008/09, system ridership grew 10.3 percent while vehicle service hours increased nearly 7 percent. During Fiscal Years 2006/07 and 2007/08, system-wide vehicle service hours fell by 9.3 percent and ridership increased 4.2 percent, explaining the increasing performance through FY

2008/09. However, in FY 2009/10 ridership fell by nearly 10 percent and vehicle service miles remained at the prior year's level.

Exhibit 4.6 reveals South County Commuter 2 is the most productive route in the system, with an average of nearly 20 Passengers/VSH in FY 2008/09. The South County Commuter 1 operated with over 15 Passengers/VSH in FY 2007/08. This suggests the South County Commuter buses, on average, operate at least half full every hour. By contrast, the West County route carries fewer than five Passengers/VSH. We believe this can be attributed to the fact the West County route provides more service hours than the South County Commuter and significantly lower ridership levels.

Although the Susanville City Route has the highest ridership in the LRB system, it operates with the largest service span (12-hour weekday service), while the balance of the other routes offer two to three trips per weekday spanning two to three hours of weekday service. This may explain its low relative performance (Passengers/VSH) versus the commuter route.

Exhibit 4.6 Passengers per VSH by Route



Passengers/Vehicle Service Mile

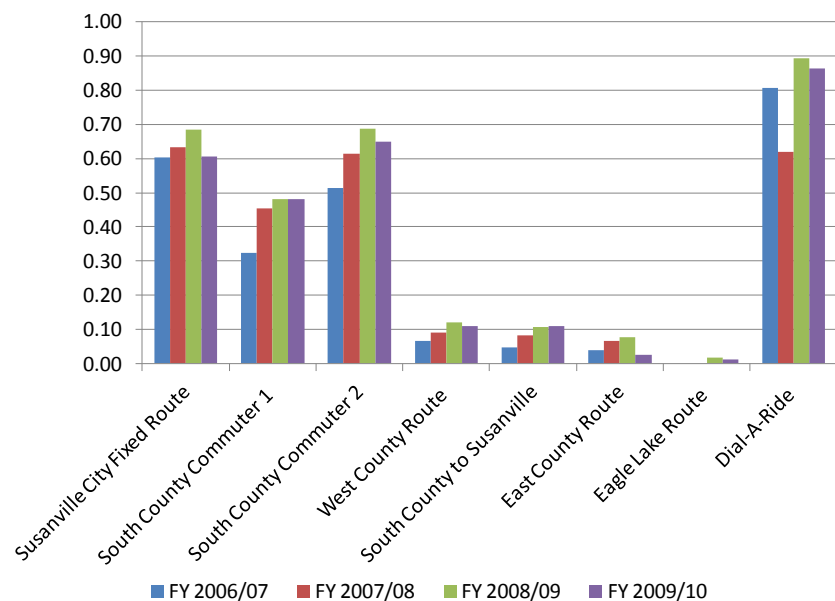
Another commonly employed metric for measuring service performance is Passengers/VSM. This measure assesses the average number of passengers onboard the bus for every mile a vehicle is in service.

Again, this trend followed that of the previous two measures, ridership and Passengers/VSH. This metric experienced similar dramatic inclines and declines as ridership levels for the past four years.

Given the great variance in service miles amongst the various LRB services, this metric differs greatly from the Passengers/VSH for each route. In contrast to the route-by-route Passengers/VSH measure shown in Exhibit 4.6, Exhibit 4.7 shows the Dial-A-Ride service was the most productive through the past four years, with the exception of FY 2007/08. This can be explained by the restricted service area of the Dial-A-Ride within the city limits of Susanville (i.e., limiting the service mileage), as well as the relatively low annual ridership (i.e., limiting the number of trips made, also limiting service mileage).

The Susanville City Route and South County Commuter 2 were found to have similar performance using this metric, both reaching nearly .70 Passengers/VSM in FY 2008/09.

Exhibit 4.7 Passengers per VSM by Route



Operating Cost/Vehicle Service Mile

Operating cost indicators show similar trends for the past five fiscal years, with a drop in performance during FY 2007/08 (see Exhibit 4.4). System vehicle service hours and miles changed slightly during FY 2007/08 while operating cost increased by over 20 percent during the same year. This was more than likely attributable to the execution of a new operations agreement with the operations contractor. Given there were no changes in service offerings, the increase in cost of operating the same level of service during that year must be a result of external factors. These costs could be fuel cost, salary/wages, vehicle maintenance, etc. The dip in Operating Cost/Passenger in FY 2008/09 can be explained by the dramatic increase in ridership during that year and decrease in operating cost.

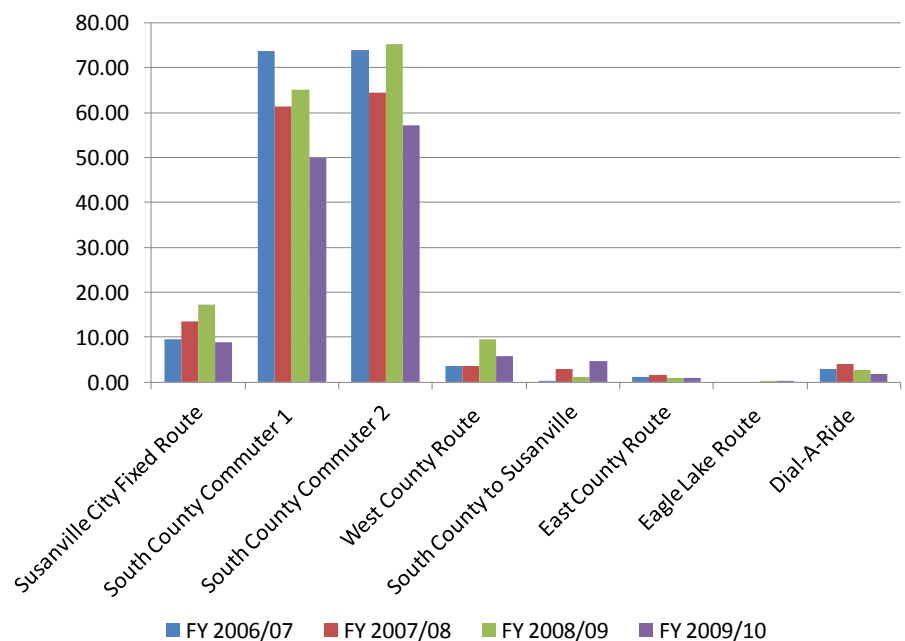
Farebox Recovery

Simply stated, farebox recovery is the ratio of fare revenue to operating cost. The farebox recovery ratio is not only the quickest way of assessing transit service performance and sustainability, but also the main criterion for receiving federal operating and capital funds. As a rural transit operator, Lassen Rural Bus is required to achieve a system farebox recovery ratio of at least 10 percent.

The system farebox recovery ratio has fluctuated across the past six fiscal years; however, with the exception of FY 2007/08, LRB has sustained a farebox recovery of at least 20 percent. After a dip in FY 2007/08 to 19.5 percent, farebox recovery has steadily increased to its current level of 23.9 percent.

Exhibit 4.8 illustrates farebox recovery ratio by route, showing the South County Commuter (and in some years the Susanville City Route) are the only routes above the 10 percent farebox threshold. This indicates the South County Commuter is the most cost-effective route, making up for inefficiencies in the other routes. The farebox recovery ratio only reflects the fares collected onboard the buses; therefore, the Susanville City and West County routes (which typically have the highest college student ridership) do not reflect the revenue they generate through the agreement with Lassen College (\$20,000 annually), which subsidizes the college student bus fares. Given a large share of Susanville City and West County route riders are college students who get unlimited rides for a flat annual fee, revenue generated on this route is higher than the fare revenue collected through cash or other media types. Calculating the college annual fee into the farebox revenue would generate a much higher recovery ratio than illustrated herein.

Exhibit 4.8 Farebox Recovery Ratio by Route



Fare/Passenger

This metric measures profitability per passenger for the LRB system. System Fare/Passenger reached a high of \$2.56 in FY 2007/08 and a low in the following year of FY 2008/09 of \$2.14. The Fare/Passenger trend for each route mirrors that of the farebox recovery ratios, in that the South County Commuter buses operated with an average Fare/Passenger of \$4.00 while the remaining routes operated with a Fare/Passenger between \$0.14 and \$1.12 during the past fiscal year. Therefore, the high system Fare/Passenger ratio is most likely the result of the South County Commuter performance.

Through analysis of the various performance measures, it is apparent some routes are significantly more efficient than others, most notably the South County Commuter and Susanville City routes. The two most inefficient routes are the Eagle Lake Route and East County Route, both garnering low levels of ridership. This is also true, to a lesser degree, for the South County to Susanville and West County Route. However, the West County Route ridership is showing steady improvements.

Inherent challenges of providing transit service in a largely rural environment are the balance between effectively serving unmet needs and maintaining cost-effectiveness and system efficiency. Most existing LRB routes serving these rural communities cannot be eliminated, as they are serving ride-dependent individuals who are isolated in these rural areas and need transportation for basic human needs. Innovative approaches to providing these services more efficiently may reduce costs; however, the most cost-efficient approach to increase ridership is marketing and public promotion/education of services.

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5. RIDE CHECK
ANALYSIS

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CHAPTER 5 – RIDE CHECK ANALYSIS

This chapter presents an analysis of Lassen Rural Bus system performance based on the data collected and findings from ride checks and field observations. This chapter quantifies on-time performance and boarding and alighting activity for each LRB route, analyzing the data by time of day and at the individual trip level.

Ride checks were conducted between April 27 and April 30, 2011, and represent a typical weekday and Saturday (where applicable) for each service. The sample included 35 trips, which translates to 100 percent of all trips operated during one full weekday service day and one full Saturday service day on Lassen Rural Bus services. The sample of trips surveyed is a snapshot in time and can only truly reflect the service during that month and year. As is often the case with smaller rural operations, there are significant fluctuations in ridership by day of week and month. As such, the term “observation period” will be used henceforth in this document to describe the dates in April 2011 during which ride checks took place.

This chapter is divided into two sections: the first features analysis of on-time performance and a look at both system-wide and individual routes; the second (boarding and alighting activity) analyzes the activity occurring at each bus stop in the system and by route, and when and where the activity is occurring.

On-Time Performance

This section reviews on-time performance by day-part and route to assess adherence to the published schedule. On-time performance is not only important to maintaining customer satisfaction among existing riders, but it is also important in attracting additional or “choice riders” (persons with multiple mobility options). The data were collected via ride checks onboard all LRB routes operating during the survey period.

On-time performance was evaluated for Lassen Rural Bus using the following criteria:

- **On-time** – Defined as trip departure occurring up to five minutes after the published schedule time.
- **Early** – defined as any departure from an established time-point occurring in advance of the published schedule time.
- **Late** – Defined as any departure from an established time-point occurring five or more minutes after the published schedule time.

Given the dramatic differences in LRB service offerings, on-time performance will be reviewed as a whole and then by route. On-time performance was segregated by day-part in the following time blocks:

- 5:00 a.m. to 10:00 a.m. (morning),
- 10:01 a.m. to 3:00 p.m. (mid-day), and

- 3:01 p.m. to 7:30 p.m. (afternoon/evening).

The following exhibit illustrates on-time performance for the entire LRB system by day-part (listed above). The information displays data collected from the ride checks on all routes for a typical service weekday and Saturday. Industry standards suggest the on-time performance should be at least 90 percent with no *early* departures. On average, the data show the LRB system is on-time approximately 76 percent of the time, wherein the morning period on-time performance reaches nearly 81 percent while the mid-day period has the poorest at less than 70 percent. The data suggest on-time performance declines in the middle of the day and recovers during the afternoon/evening period.

Early departures remain relatively steady throughout the day (between seven and nine percent), while the highest number of early departures were observed to be in the afternoon/evening. This suggests there is less activity in the afternoon/evening period, where fewer delays cause buses to run ahead of schedule.

Early departures (i.e., running “hot”) are not acceptable. It can result in the transit system being perceived as unreliable for its inability to meet the published time. As a result of *early* departures, patrons who arrive at a stop on time can miss their bus if the driver leaves before the published time. By eliminating *early* departures, the LTSA can reach around an 85 percent on-time performance.

It should be noted that during the observation period the operator was restructuring its dial-a-ride procedures. As part of these efforts, dispatchers were asked to more closely adhere to the 24-hour advance notice requirement when customers schedule a trip. As a result more dial-a-ride customers, many of whom required the use of the wheelchair lift, began using the fixed-route services. The increase in lift deployments had a negative impact in on-time performance.

The Susanville City route and West County route operate on Saturday. When analyzing Saturday versus weekday operations, both routes remain on-time throughout the day at least 85 percent of the time. The Susanville City Route Saturday on-time performance was at almost 100 percent across the entire service day.

Exhibit 5.1 System On-Time Performance by Day-Part

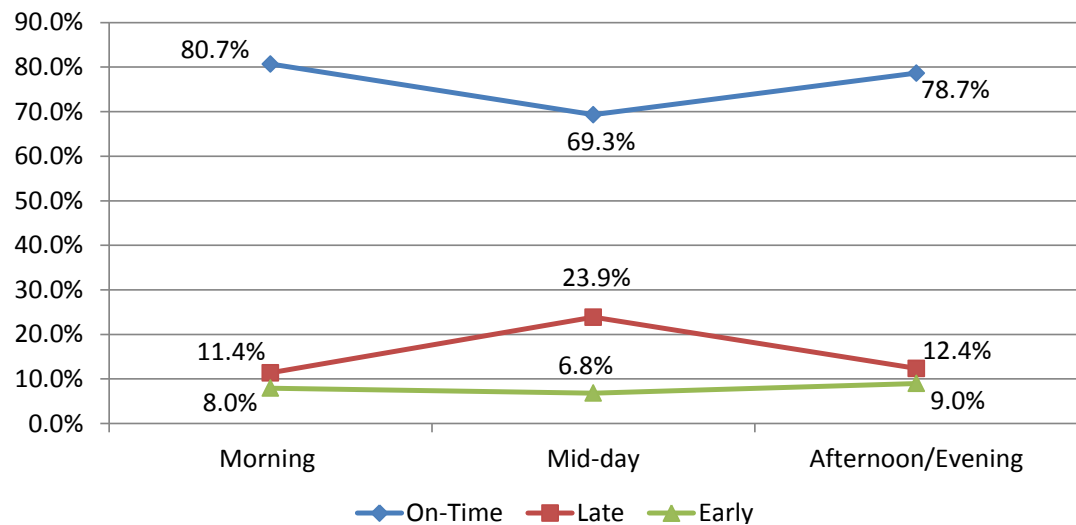


Exhibit 5.2 indicates the Susanville City and West County routes adhere to the times listed in the published route schedules most closely. The Susanville City Route was rarely early to time-points, while in contrast the East County Route was early or late to about 40 percent of the published time-points.

Given the low ridership on some routes such as South County to Susanville and East County, poor on-time performance may be a result of repeat passenger pick-ups at “flag stops” or “call ins” as a daily routine along the route. This may cause some drivers to focus on picking up customers at their usual points and not on the published times at stops where drivers know few to no passengers are usually picked up. This is also an indication of the long-time patronage of riders on these routes.

Exhibit 5.2 illustrates on-time performance by route by day-part. Only three routes offer trips during the middle of the day between 10:00 a.m. and 3:00 p.m. As noted in Exhibits 5.1 and 5.2, most early departures occur during the afternoon/evening trips.

The Susanville City Route was rarely early, yet arrived late to 30 percent of the time-points during the mid-day period. This could be a result of loading time, given the middle of the day experienced the highest level of ridership. During the observed morning and afternoon/evening periods, the Susanville City Route operated on-time more than 90 percent of the time.

Exhibit 5.2 On-Time Performance by Route by Day-Part

Route	Day Part								
	Morning			Mid-Day			Afternoon/Evening		
	On-time	Late	Early	On-time	Late	Early	On-time	Late	Early
Susanville City Fixed Route	94.3%	0.0%	5.7%	68.6%	30.0%	1.4%	97.1%	2.9%	0.0%
South County Commuter 1	100.0%	0.0%	0.0%	-	-	-	50.0%	16.7%	33.3%
South County Commuter 2	60.0%	40.0%	0.0%	-	-	-	66.7%	16.7%	16.7%
South County to Susanville	62.5%	37.5%	0.0%	-	-	-	71.4%	0.0%	28.6%
West County Route	78.6%	17.9%	3.6%	68.8%	0.0%	31.3%	78.6%	17.9%	3.6%
East County Route	50.0%	0.0%	50.0%	100.0%	0.0%	0.0%	28.6%	42.9%	28.6%
Average	74.2%	15.9%	9.9%	79.1%	10.0%	10.9%	65.4%	16.2%	18.5%

Performing below on-time performance standard

Close to meeting on-time performance standard

Performing at or above on-time performance standard

During field observations it was noted the bus used for the Susanville City Route had two digital clocks that were several minutes apart, one on the radio and one above the driver's seat for public viewing. Most drivers would use the radio digital clock to check timing at the published time points. The radio clock was a minute or two off from satellite time, which is the time on cellular devices. One driver mentioned even when the clock gets reset to the correct time it ends up slower than satellite time. To enhance on-time performance and reliability, it is recommended a digital clock with satellite time be installed on the City Route, and bus drivers be instructed to use that clock when evaluating schedule adherence. Note: to ensure accuracy of data collection, times surveyed at time points were based off the clock the driver was adhering to.

Boarding and Alighting Activity

This section focuses on boarding and alighting counts for each bus stop for a 100-percent sample of a weekday and Saturday service. Our field survey personnel collected boarding and alighting data concurrent with, and using the same trip sheets as, the on-time performance data. Boarding and alighting data was segregated by route, stop, and day-part. These counts allowed our project team to develop a clear picture of exactly where and when ridership activity is occurring. As a rural system, ridership- and as a result on-time performance - tends to fluctuate based on school schedules, employment trends and other factors. Therefore, it is important to note that the findings in this section are limited to the observation period.

Boarding by Day-Part

Evaluating a system by day-part is critical to assessing existing ridership trends not apparent through use of traditional performance measures. This snapshot of productivity (i.e., boardings and alightings) provides valuable insight for potential service changes and recommendations (i.e., elimination of trip segments, addition of route segments, or elimination/addition of stops).

As defined in the previous section (On-time Performance), route analysis will be divided into three separate day-parts (*morning, mid-day, and afternoon/evening*). To more accurately assess productivity by time of day, boarding averages were derived from total boardings and number of trips offered during the specified day-part. This approach shows the average number of boardings per trip per day-part, versus total boardings which are skewed by the number of trips offered.

Exhibit 5.3 illustrates average boardings per trip by day-part for each route during the observation period. Given most of the routes only operate one trip per day-part, most averages reflect the level of boardings per observed trip. The exhibit indicates the LRB system is most productive during the morning period, between 5:00 a.m. and 10:00 a.m., at nearly 14 passengers per trip.

Although the system-wide boarding average was highest during the morning period, the Susanville City Route experienced its highest level of boarding activity during the mid-day period, between 10:01 a.m. and 3:00 p.m.

The data show the South County Commuter and West County routes are the most productive with the highest level of average passenger boardings per trip at 27.5 and 14.7, respectively. The East County Route had the lowest average of 2.5 boardings per trip.

Exhibit 5.3 System Weekday Average Boardings by Day-Part

Route	Boarding Averages by Day Part			Route Average
	Morning	Midday	Afternoon/Evening	
	5:00 a.m. to 10:00 a.m.	10:01 a.m. to 3:00 p.m.	3:01 p.m. to 7:30 p.m.	
Susanville City Fixed-Route	9.3	14.2	5.3	9.6
S. County Commuter Route	27.5	-	27.5	27.5
S. County to Susanville Route	9.0	-	10.0	9.5
W. County Route	20.0	9.0	15.0	14.7
E. County Route	3.0	-	2.0	2.5
System Day-Part Average	13.8	11.6	12.0	12.8

Alighting by Day-Part

System alighting reveals a similar level of activity as boardings, where the most alightings occur during the morning period and the least during the mid-day period.

Exhibit 5.4 System Weekday Average Alightings by Day-Part

Route	Alighting Averages by Day Part			Route Average
	Morning	Midday	Afternoon/Evening	
	5:00 a.m. to 10:00 a.m.	10:01 a.m. to 3:00 p.m.	3:01 p.m. to 7:30 p.m.	
Susanville City Fixed-Route	8.3	10.4	5.8	8.2
S. County Commuter Route	27.5	-	27.5	27.5
S. County to Susanville Route	9.0	-	9.0	9.0
W. County Route	20.0	9.0	15.0	14.7
E. County Route	2.0	-	2.0	2.0
System Day-Part Average	13.4	9.7	11.9	12.3

Route by Route Analysis

Boarding and alighting data were analyzed at the route level so as to identify key bus stops and points of significant activity. The data collected at each bus stop were geocoded using ESRI ArcView Geographic Information System (GIS) software, after which maps were generated to illustrate respective boarding and alighting densities.

The maps also illustrate the segments of each route with the highest level of boarding and alighting activity. Detailed boarding and alighting counts by route and by stop can be found in Appendix A.

Susanville City Route

Exhibit 5.5 illustrates the top boarding and alighting stops separated by weekday and Saturday. During the observation period there were 120 unlinked passenger trips representing one full weekday service day (12 round trips) and 37 unlinked passenger trips representing one full Saturday service day (eight round trips).

The Lassen College stop is the most popular location for both boardings and alightings during the weekday; however, on Saturday very few passengers boarded from the College. The location with the second-highest number of boardings during the weekday was Wal-Mart, which was the first most boarded location on Saturday.

Although Wal-Mart is not a published stop at the end of the route, many riders stayed on after Safeway when the bus was “deadheading” back to the beginning of the route to get off at Wal-Mart. Given this demand, we suggest the route be revised to make a complete round trip, starting and ending at Wal-Mart.

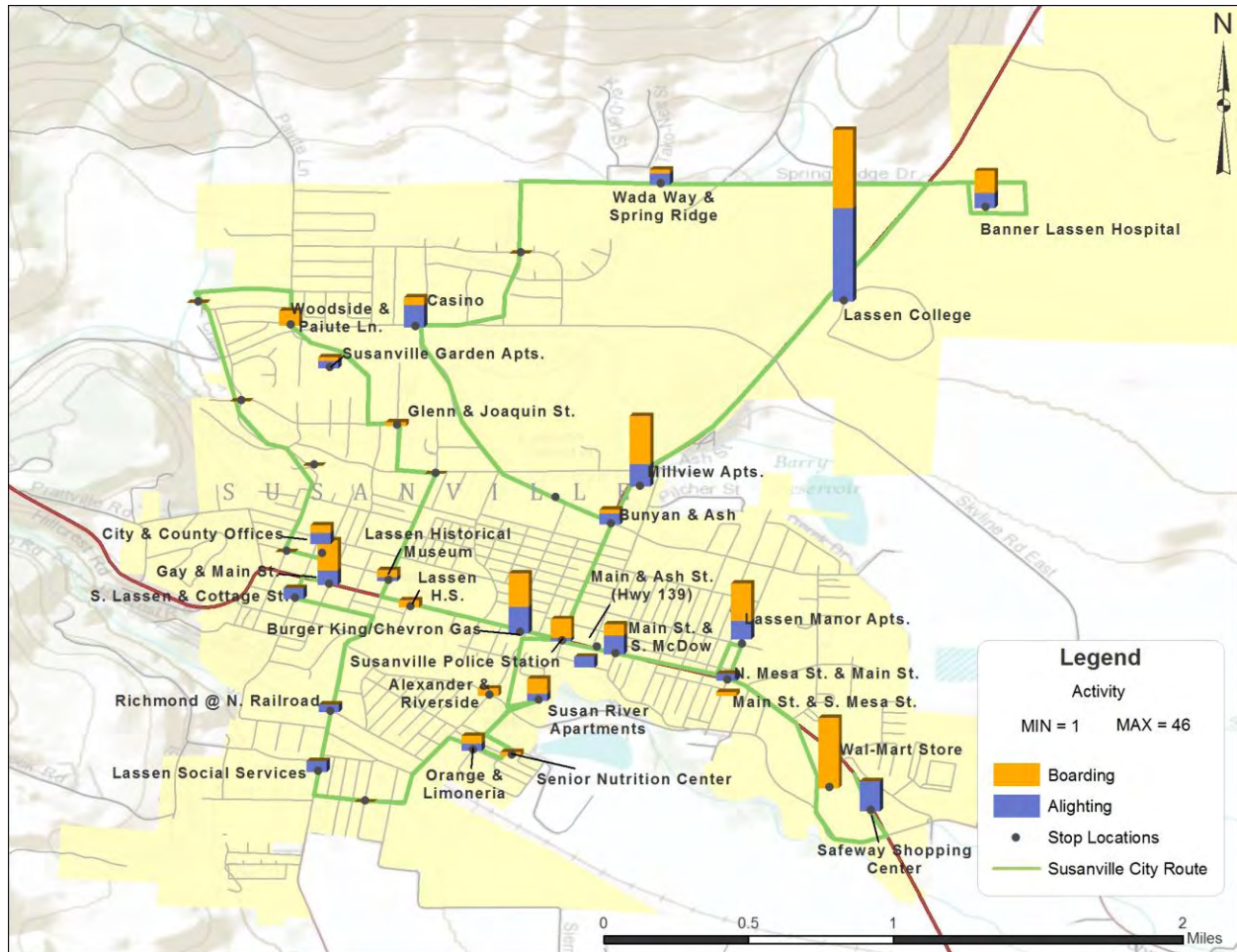
Exhibit 5.5 Susanville City Route Top Boarding and Alighting Activity Stops

Rank	Stop	Boardings
Weekdays		
1	Lassen College	21
2	Wal-Mart	19
3	Millview Apts.	13
4	Lassen Manor Apts.	10
5	Burger King/Chevron Gas	9
Saturdays		
1	Wal-Mart	5
2	Lassen Manor Apts.	3
3	Susanville Police Station	3
4	Alexander & Riverside	3
5	Main & Ash St	3
6	Casino	3

Rank	Stop
Weekdays	
1	Lassen College
2	Safeway Shopping Center
3	Burger King/Chevron Gas
4	Millview Apts.
5	Casino
Saturdays	
1	Burger King/Chevron Gas
2	Susan River Apts.
3	Lassen College
4	Casino
5	Safeway Shopping Center

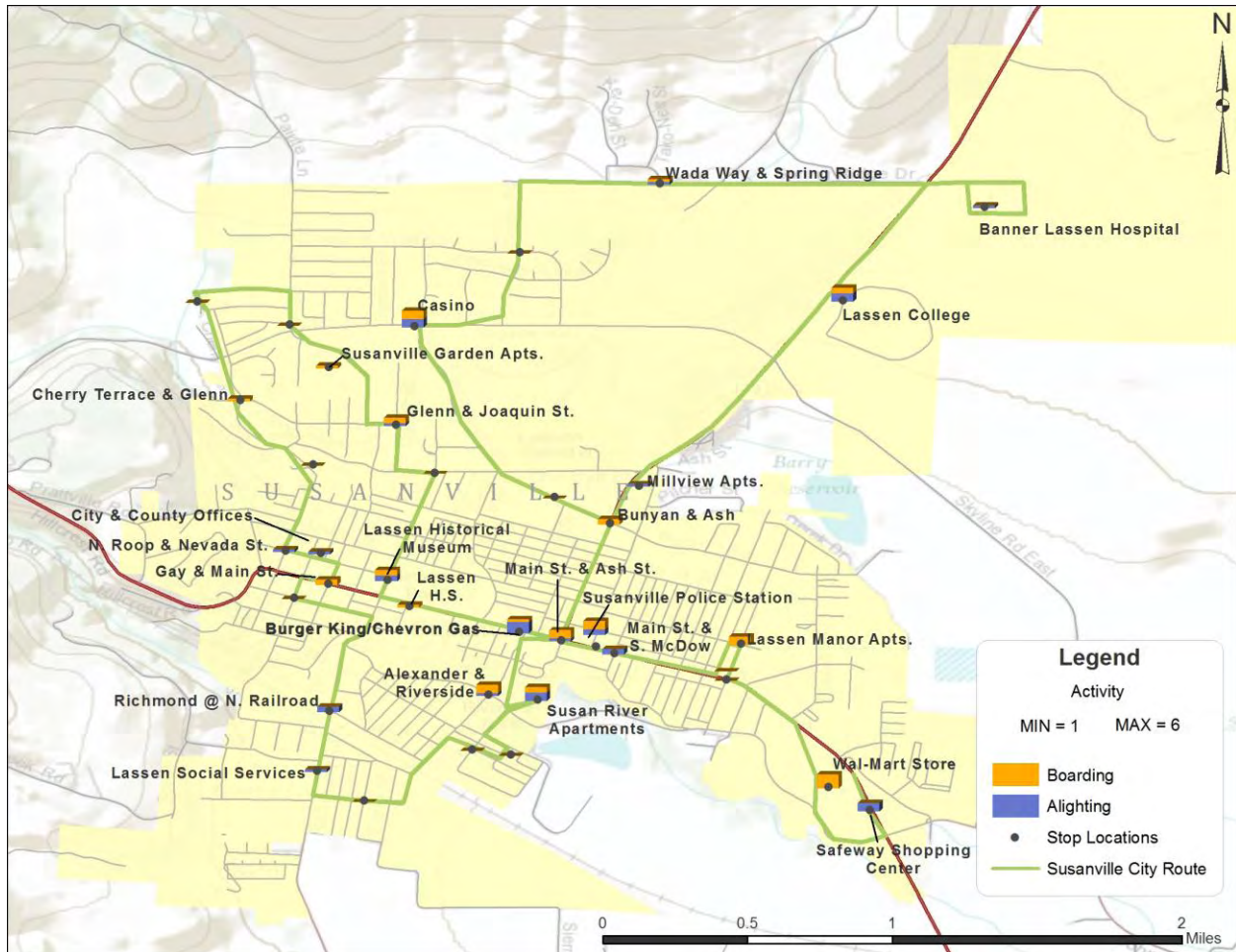
Exhibits 5.6 and 5.7 illustrate the boarding and alighting activity along the Susanville City Route for a typical service weekday and Saturday. The map further displays the top activity stops, showing Lassen Community College to be ranked first.

Exhibit 5.6 Susanville City Route Boarding and Alighting by Stop (weekday)



When comparing weekday passenger activity with Saturday, the exhibits reveal boardings and alightings occur more around the Central Business District and shopping areas on Saturday.

Exhibit 5.7 Susanville City Route Boarding and Alighting by Stop (Saturday)



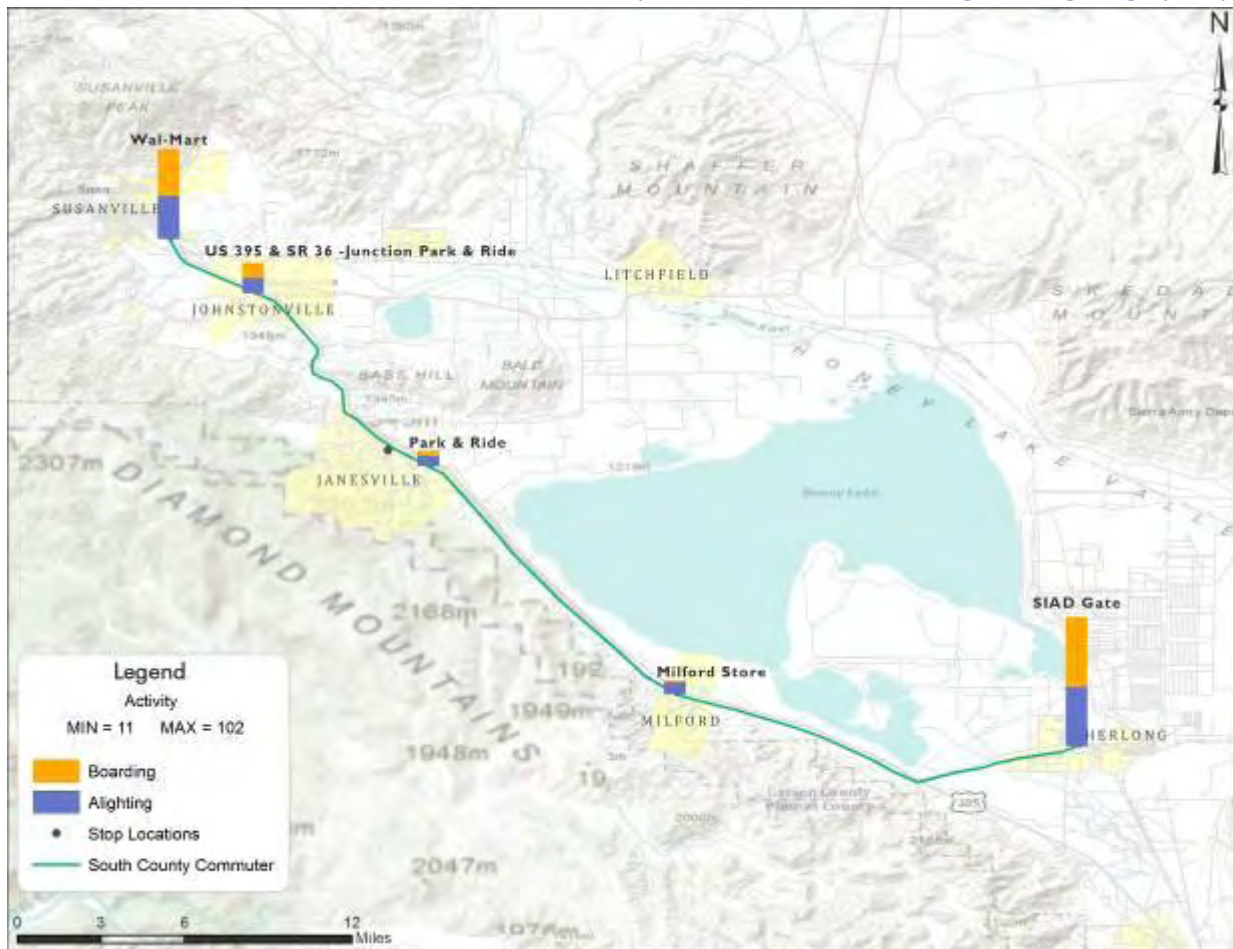
South County Commuter Route

The South County Commuter Route was observed to have significantly different ridership patterns than the Susanville City Route. During the observation period for this route (April 27 and 28), which represented all trips offered during one weekday service day, there were 110 unlinked passenger trips. As expected for a commuter route, the most boardings and alightings were observed at the first and last stops on the route schedule. Therefore, the majority of customers of this route are boarding in Susanville and alighting at the Herlong Army Depot (SIAD Gate) in the morning for work, and vice versa in the evening to return.

Several passengers boarded at the U.S. 395 and SR 36 Junction Park and Ride, and few at the Janesville Park and Ride and Milford Store. It was also observed the majority of passengers on this route drive to the bus stop and ride the bus the remainder of the way to the Army Depot in Herlong.

The Junction Park and Ride bus stop no longer has adequate room for a bus to turn around. In the past the vehicles were able to pull through the parking lot and back onto the highway. However, the California Department of Transportation (Caltrans) recently installed barricades preventing the vehicles from making this maneuver. The LTSA has temporarily addressed this by sending the buses into a cul-de-sac some distance from the stop. This has caused some discontent with the commuter passengers when returning from work due to the time it takes for the drivers to navigate to and around the cul-de-sac prior to arriving at the drop-off location. Given the high level of activity at this location, the LTSA is searching for grant opportunities to conduct a park and ride study that may improve this situation.

Exhibit 5.8 South County Commuter Route Boarding and Alighting by Stop



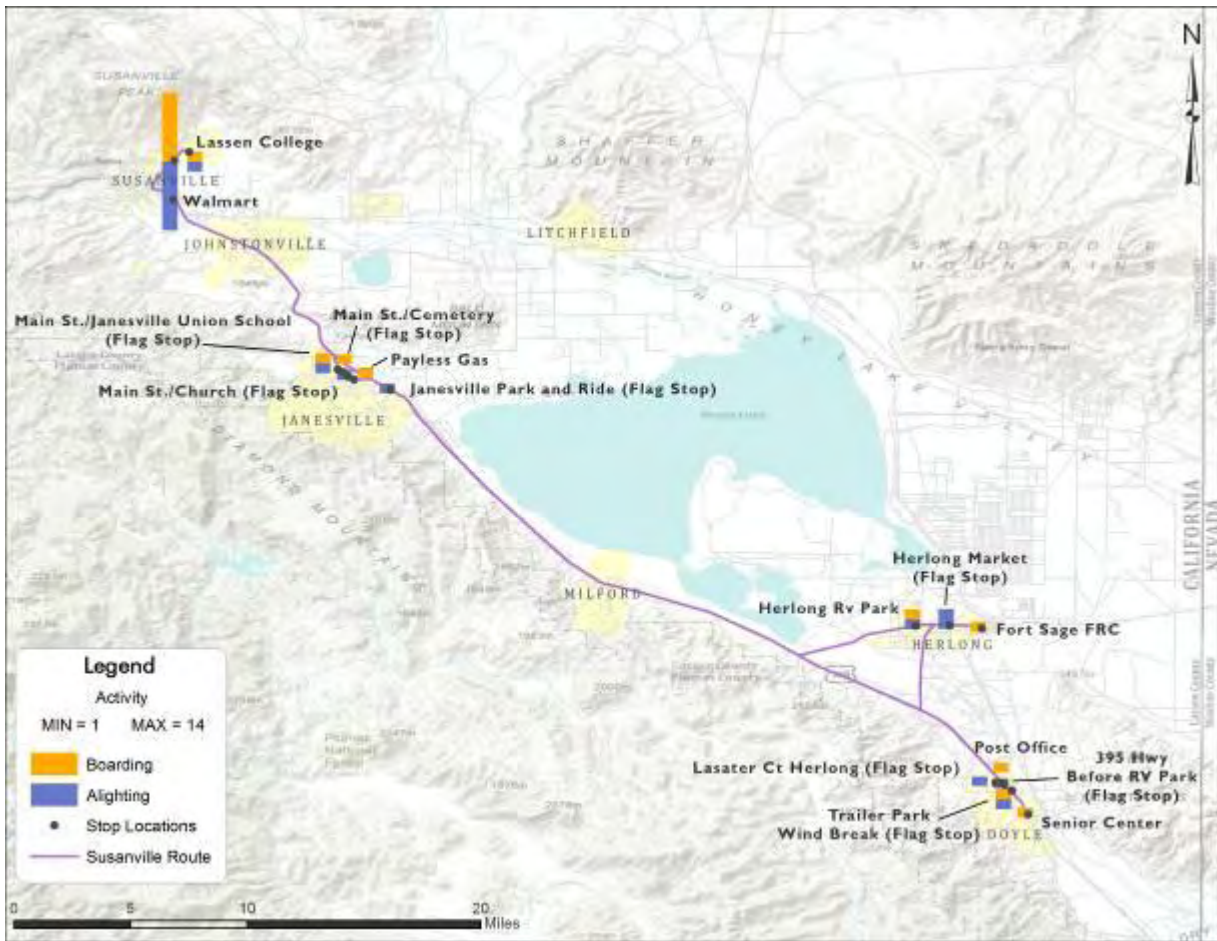
South County to Susanville Route

Exhibit 5.9 illustrates the boarding and alighting activity by stop for a typical weekday service day for the South County to Susanville Route. In total, there were 19 unlinked passenger trips surveyed. We believe the low level of ridership can be attributed to the fact there are only two trips offered for each weekday service day. The South County to Susanville route, along with the East County route, are provided mainly as an alternative to deadheading to/from Susanville on the return trip in the morning and the outgoing trip in the evening for the South County Commuter route buses.

Only one published bus stop (Wal-Mart), which is also a time-point, was noted to generate a significant level of boarding and alighting activity. Most other activity was spread out amongst other published stops or flag stop locations in Doyle and Janesville.

Most riders on this route were clients of the Far Northern Regional Center (FNRC). The FNRC and LTSA have an agreement wherein FNRC pays LTSA \$60.00 per month for each client using the bus service, no matter how many times said client rides the bus that month. The fee is a flat monthly rate per FNRC rider. The distribution of bus stop activity may be a result of the fact many of the FNRC riders arrange to be picked up at their homes, or at nearby locations to their homes, as they have limited mobility options for traveling to a central bus stop location.

Exhibit 5.9 South County to Susanville Route Boarding and Alighting by Stop

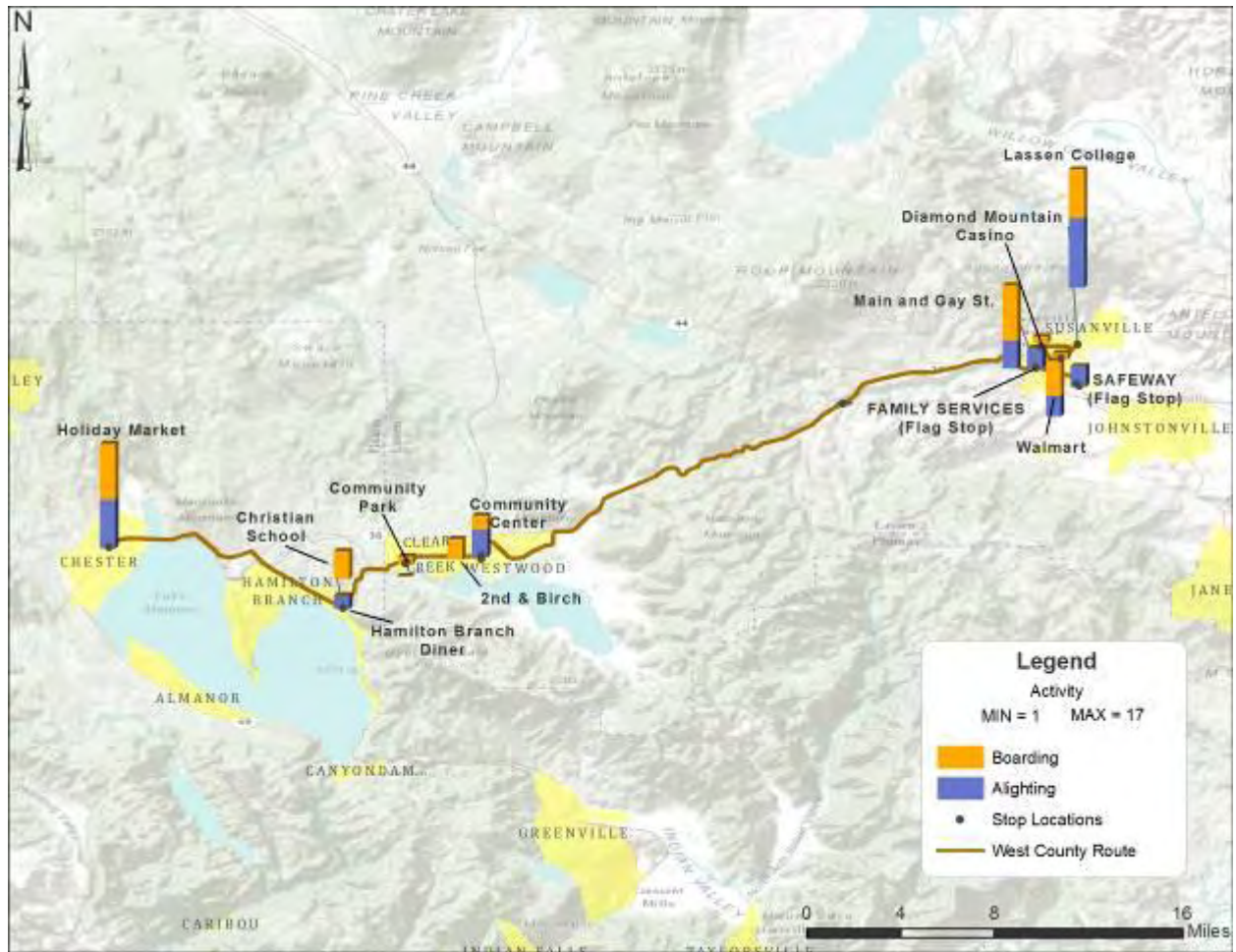


West County Route

Exhibit 5.10 illustrates boarding and alighting activity by stop for a typical weekday service day (three round trips) along the West County Route, while Exhibit 5.11 illustrates a typical Saturday service day (two round trips). In total, 44 weekday unlinked passenger trips and six Saturday unlinked passenger trips were surveyed. On both weekdays and Saturday the route begins and ends at Wal-Mart in Susanville, traveling west through Westwood, Clear Creek, Hamilton Branch, and then Chester.

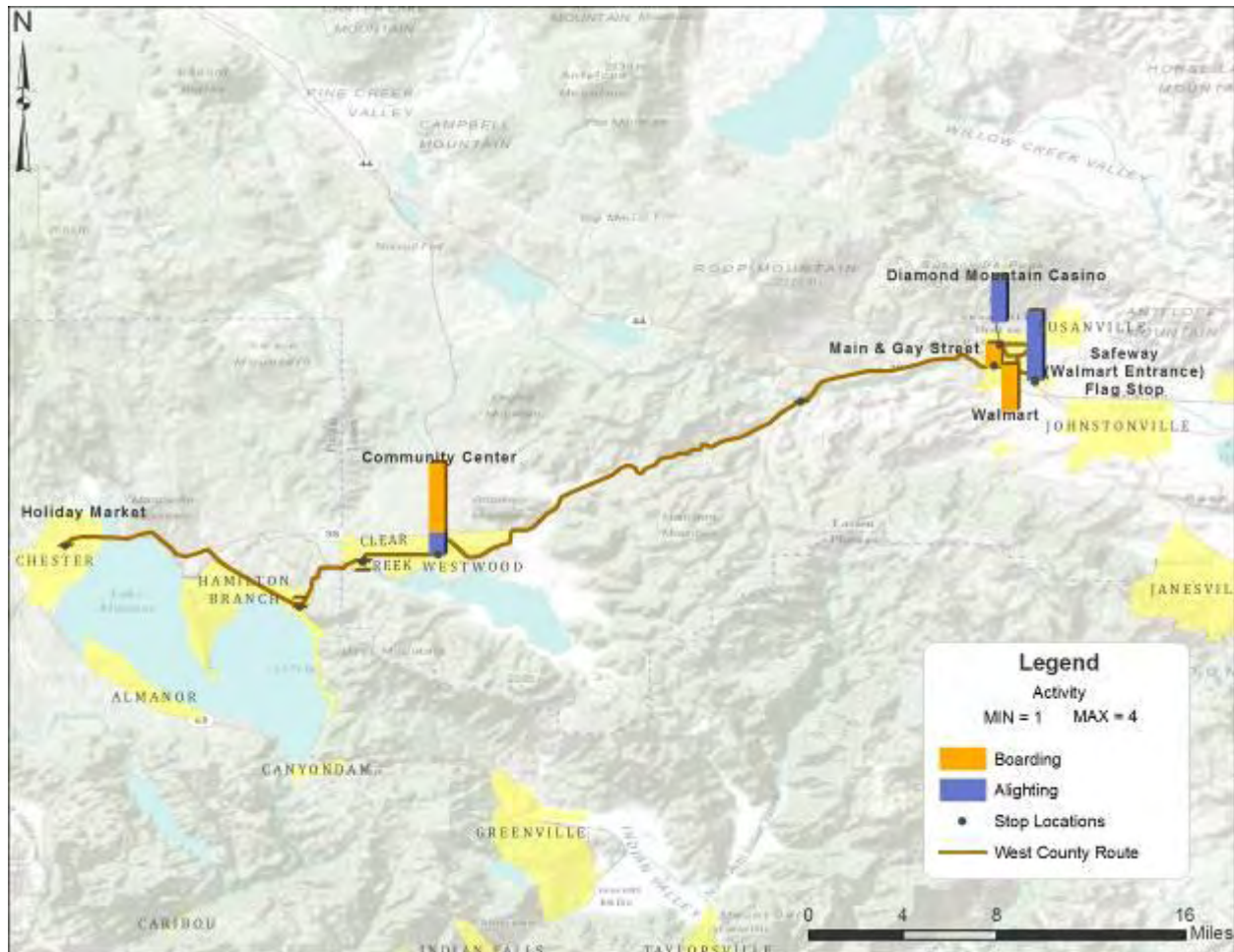
In Susanville, ridership activity was the highest at Lassen College, Main and Gay Street, and Wal-Mart. In the western portion of the route the most activity occurred at the Chester Holiday Market, the Hamilton Branch Christian School, and the Westwood Community Center. The data indicate the recent extension of the route to serve Chester has resulted in additional ridership.

Exhibit 5.10 West County Route Boarding and Alighting Activity by Stop (Weekday)



When comparing weekday bus stop activity with Saturday, it becomes clear Saturday service is not utilized heavily by riders going to or coming from the Chester and Clear Creek areas. These data may suggest there is very limited demand for service between Chester and Susanville on Saturday, or a lack of service awareness.

Exhibit 5.11 West County Route Boarding and Alighting Activity by Stop (Saturday)



East County Route

Exhibit 5.12 illustrates boarding and alighting activity for a typical weekday service day for the East County Route, combining the morning and evening trips. These data also incorporate the Friday-only schedule, totaling four one-way trips surveyed. Ten unlinked passenger trips were surveyed.

The most popular destination for this route was Lassen Community College. Origins varied, but were mainly at or near the patron's home at a published or flag stop

location. Besides the College, there was not one other location that either picked up or dropped off more than one rider during the observation period.

This cause of the low ridership could be due to the fact there is little demand for the service, there is lack of awareness, or the service does not meet the needs of the service area (e.g., not the right trip times, not enough trips offered, etc.). As mentioned previously, the East County Route is operated mainly as an alternative to deadheading the return trip in the morning and outgoing trip in the evening for the South County Commuter route. Therefore, the route schedule is based off the needs of the Herlong Army Depot employees shift start and end times, which may not accommodate the travel demand of residents in the east or south county areas.

Exhibit 5.12 East County Route Boarding and Alighting Activity by Stop



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6. COMMUNITY
OUTREACH

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CHAPTER 6 – COMMUNITY OUTREACH

A key component in development of the TDP, community input was solicited through several outreach activities. Outreach was targeted not only to those persons who currently ride transit, but also to the general public. In addition, more intensive efforts were made to garner input from individuals who are dependent on public transit services for the majority of their mobility needs. Outreach efforts included a customer survey onboard Lassen Rural Bus fixed and commuter routes, a survey of Dial-A-Ride patrons, a community-wide survey targeting Lassen County residents, stakeholder interviews, and focus group meetings.

This chapter discusses the methodology used and outcome of all the community input efforts conducted for the TDP. There are four sections to this chapter, each reflecting a different outreach effort and the findings from that effort. These sections are:

1. Onboard Customer Survey Analysis,
2. Community Survey Analysis,
3. Dial-A-Ride Survey Analysis, and
4. Stakeholder Interviews and Focus Groups.

It should be noted that survey participation was voluntary. Therefore responses may not reflect actual population or ridership characteristics. Additionally, as described in Chapter 5, rural communities tend to experience population shifts based on school sessions, agriculture, and employment patterns. Outreach took place during an isolated period; as such findings provide a snapshot of that particular period in time.

6.1 Onboard Customer Survey Analysis

Methodology

This section is an analysis of the results of the onboard customer survey conducted during the period April 27 through April 30, 2011. The surveys were collected concurrent with ride checks onboard the Susanville City Route, West County Route, East County Route, South County Commuter Route, and the South County to Susanville Route. In total, 93 valid responses were collected.

The survey was administered across representative service days (i.e., weekdays and Saturday) and throughout all service day-parts. Surveyors positioned themselves near the front of the bus to collect boarding and alighting counts as well as facilitate survey distribution and collection. Surveyors provided each boarding passenger over the age of 16 with the survey, a clipboard, and a pen or pencil. Passengers were also offered a postage-paid envelope to return the survey at a later date, if they so desired/chose. In addition, when the passenger load was low, our surveyors offered to complete the survey form for (i.e., interview) bus riders who were unable to fill out the survey on their own.

Moore & Associates' staff validated all surveys once data collection was completed. Our project team began its analysis by entering the data into the Statistical Package for the Social Sciences (SPSS) software. Following data cleaning, we generated simple frequencies and initial cross-tabulations. Finally, we exported the processed data into Microsoft Excel to generate charts and graphs for data analysis.

Findings

The following summarizes the results of the onboard customer survey. The detailed data are provided in Appendix B.

Respondent Profile. The survey included voluntary questions regarding respondent demographic, economic, and household characteristics. These characteristics make up the profile of typical LRB bus riders.

- 30 percent of survey respondents were in the age group *26-44 years*. Age groups *17-25 years*, *45-59 years*, and *60 years or older* each made up around 20 percent of survey respondents.
- 34.5 percent of respondents were *employed full-time* and 31 percent were *full-time students*, while nearly 28 percent were either *unemployed* or *retired*.
- *Adult* and *student* were the fare categories stated most often, followed by *senior* and *person with disability*.
- Nearly 78 percent of respondents lived in a low-income household earning less than \$34,000 annually, and of that group 75 percent were below the federal poverty level earning less than \$20,000 annually.

Exhibit 6.1.1 illustrates the level of ride-dependency of the surveyed Lassen Rural Bus riders. For the purpose of this report “ride-dependent” is defined as persons who lack the ability to transport themselves and therefore must rely primarily on other people or services (i.e., public transit) for their mobility needs. Industry research has found ride-dependent populations historically include persons with disabilities, seniors, youth, low-income individuals, and those lacking access to a personal vehicle.

To analyze the ride-dependency of current bus riders, respondent information was compiled from several questions on the survey instrument. The findings show nearly 78 percent of survey respondents reside in a low-income household (i.e., earning less than \$34,000 annually), while 13.8 percent were *unemployed*. In addition, around 60 percent of respondents stated they do not have access to a personal vehicle and nearly 42 percent do not have a driver license.

Exhibit 6.1.1 Transit-Dependency Matrix

Category	Percent of Respondents
Low-income	77.9%
No access to a personal vehicle	60.4%
No driver license	41.6%
Lack of other travel options	37.0%
Students	31.0%
Seniors	20.0%
Unemployed	13.8%
Persons with disabilities	7.7%
Youth	1.1%

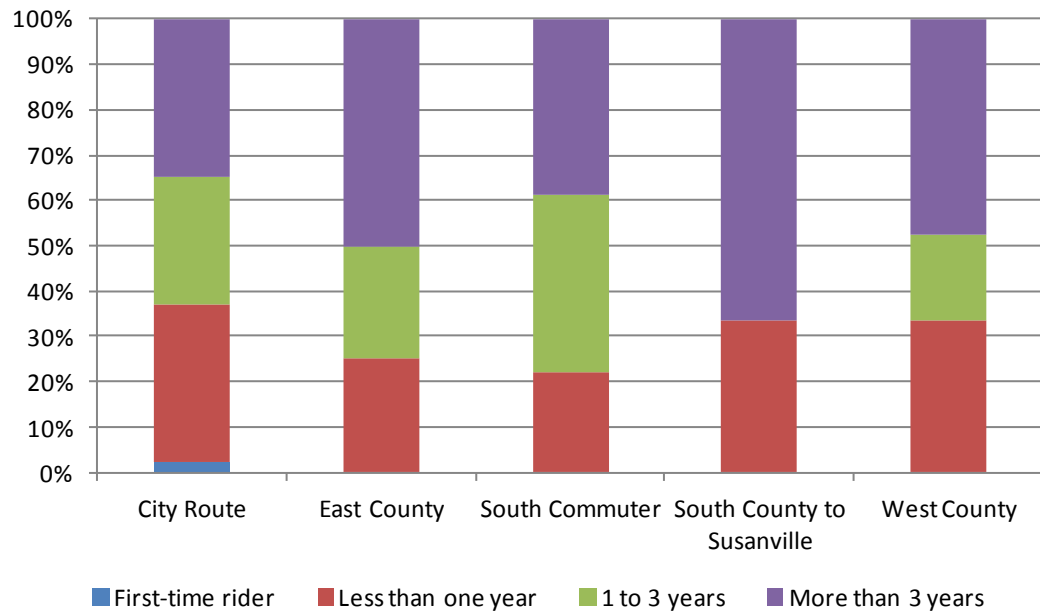
Use of Transit Services. The survey questionnaire included a set of questions regarding the respondent’s length of time using LRB services, frequency of use, reason for riding or choosing the bus, and alternative mobility options if bus was not available.

- Most respondents stated they have been using LRB services for at least one year (67.8 percent), and only one percent were first time riders. About 41 percent of respondents have been using LRB services for more than three years.
- Nearly 78 percent of respondents ride the bus more than three times per week.
- Most respondents chose to ride the bus because of *lack of other travel options* (37 percent) or the *cost of service* (30.4 percent).
- If the bus were not available, 21 percent of respondents stated they would *drive themselves* to complete the surveyed trip, while about 60 percent of respondents would either *walk or bicycle*, or get a ride from *friend or family*.

Together, these findings paint a picture of a relatively ride-dependent ridership base as most respondents ride often; do so because they either don’t have or can’t afford other options; and would walk, bicycle, or get a ride in the event they couldn’t use the bus for a given trip.

Exhibit 6.1.2 illustrates survey respondent length of patronage by route. The exhibit suggests there is a pretty even distribution of longtime riders across all routes. The majority of riders using the South County to Susanville route have been customers for more than three years. The Susanville City Route serves the most new or inexperienced riders.

Exhibit 6.1.2 Length of Patronage by Route



Trip characteristics. Questions pertaining to the surveyed trip included fare media used, mode of travel to/from bus stop, and trip purpose (i.e., school, work, social, recreational, etc.). This data will illustrate how the surveyed rider group makes its typical trip on LRB buses.

- 40.2 percent of respondents paid for their trip using the *College bus pass*, while 31 percent used *cash fare* and 23 percent the *monthly pass*.
- Over half (61 percent) of respondents used a non-motorized mode of transportation (i.e., walk or bike) to get to the bus stop for the surveyed trip, while the remainder (30 percent) traveled by car (either drove self or dropped off).
- Similar to the mode of travel to the bus stop, most respondents cited a non-motorized form of transport (73.6 percent) to get to their final destination after alighting from the bus.
- The most common trip purpose was *work* (38.5 percent), followed by *school* (23 percent) and then *shopping* (22 percent).

Exhibit 6.1.3 illustrates respondent's trip purpose by the route they were riding for the surveyed trip. Respondents riding the Susanville City Route used the service for a variety of different reasons, the most cited being *shopping*. The South County Commuter Route patrons, as expected, mostly used the service for work. The East County and South County to Susanville were divided with riders using the service for *school* and *work*. The West County and East County to Susanville were divided with riders using the service for *school* and *work*.

Exhibit 6.1.3 Trip Purpose by Route

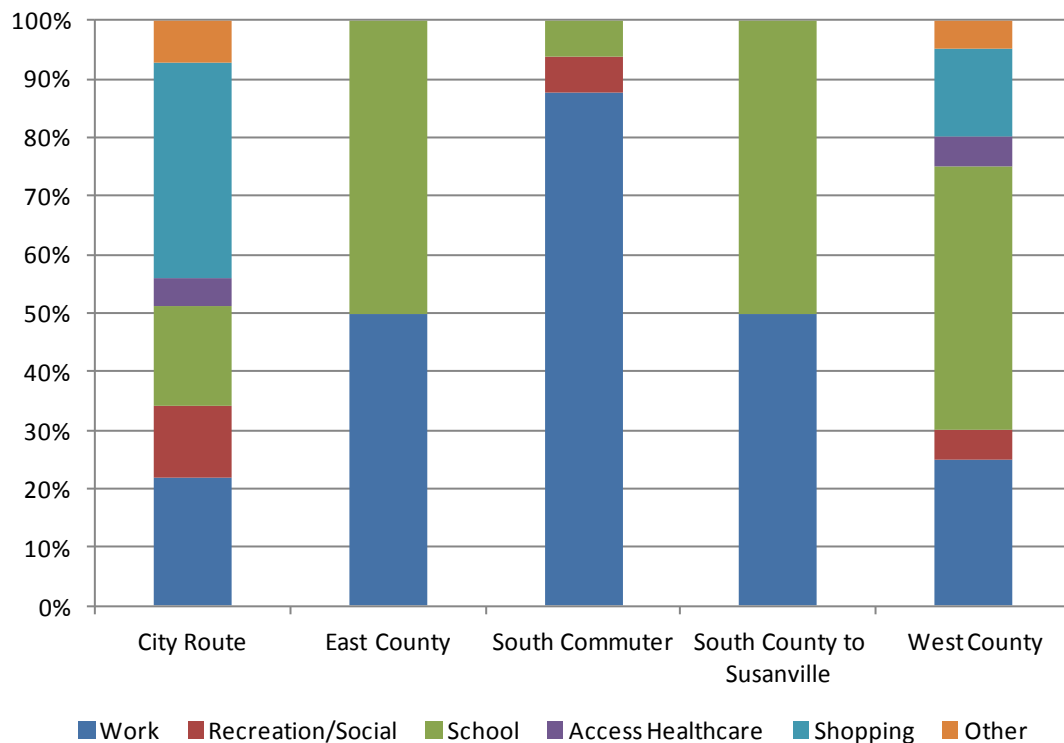
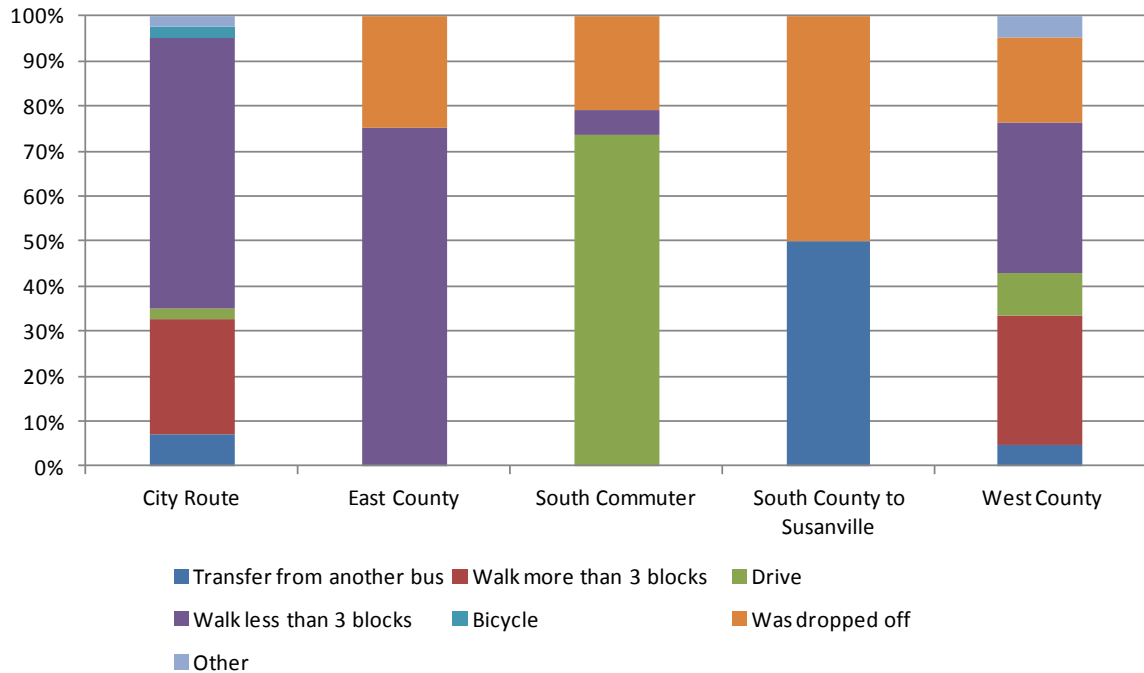


Exhibit 6.1.4 illustrates respondent mode of travel to bus stop versus bus route. Over 90 percent of respondents riding the South County Commuter Route got to the bus either by driving themselves or getting dropped off by someone. All other routes varied in patron travel modes to the bus stop.

Exhibit 6.1.4 Mode of Travel to Bus Stop by Route

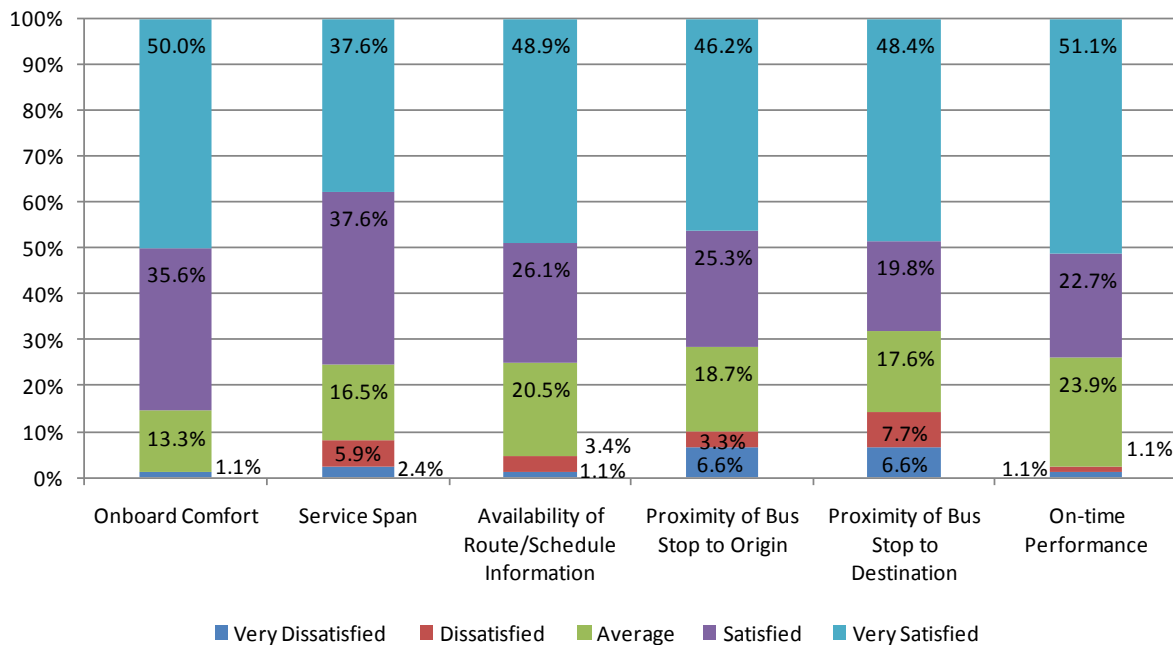


Customer Satisfaction. Respondents were asked to rank (using a scale of 1 to 5) several service attributes from *very satisfied* to *very dissatisfied*. Respondents were then asked to select a transit service improvement and whether they would support a fare increase to implement that improvement.

- For service enhancements, 39 percent of respondents stated they would most like to see *more bus stop locations*, followed by 22.1 percent who stated *additional Saturday service* and 20.8 percent who stated *more peak-hour service*. The locations for more bus stops stated most often were Main Street and reintroducing flag stops (on the City Route).
- To implement the enhancement selected, many respondents (46.4 percent) stated they would support a *25-cent* fare increase, while a large number (33.3 percent) would support a *50-cent* increase. This means nearly 80 percent of riders would support a fare increase of some sort to fund their desired service enhancements.
- The three primary information sources respondents use to get information about transit services is through *calling Lassen Rural Bus* (44.6 percent), from *the bus stop* (27.7 percent), and from *the driver* (14.5). Few respondents obtained information from the *LCTC* or *County websites* or any other method.

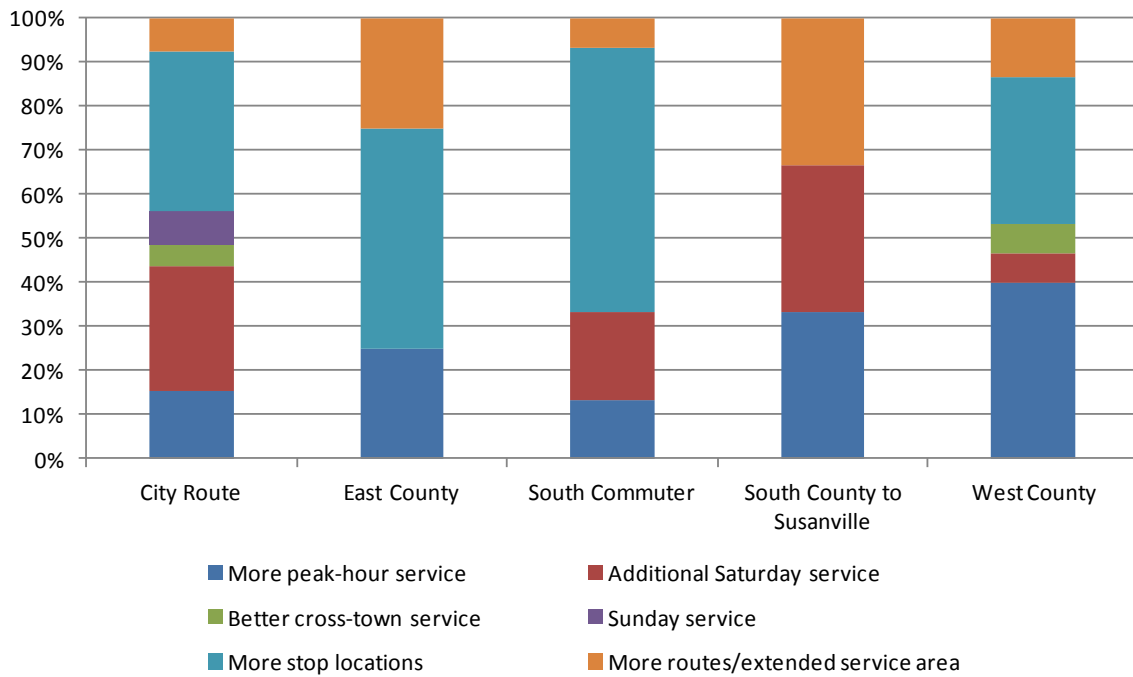
Exhibit 6.1.5 summarizes the results from the customer satisfaction rating. The exhibit suggests customers are mostly satisfied with all service aspects of Lassen Rural Bus services with very little indication of dissatisfaction. The highest level of satisfaction was with *onboard comfort*. The highest level of dissatisfaction was with *proximity of bus stop to destination*.

Exhibit 6.1.5 Customer Satisfaction



The following exhibit identifies the preferred service enhancements versus route. *More stop locations* was requested on most routes except the South County to Susanville Route. *Additional Saturday service* was mostly requested on the Susanville City and South County to Susanville routes. The most requests for the East County Route were *more stop locations*, *more peak-hour service*, and *extended service area*.

Exhibit 6.1.6 Service Enhancement by Route



Analysis of Key Findings

The majority of customers of the LRB fixed-route and commuter services are in the adult age range, low-income, and employed full-time or students. An assessment of ride-dependent demographics suggests a large percentage of LRB riders either do not have other mobility options or rely on transit services due to personal financial conditions. This could result in increasing or decreasing ridership levels depending on the current economic climate and outside factors such as cost of fuel.

The College bus pass is the most frequently used fare media, which suggests the free pass and agreement with the College has resulted in a significant generation of student trips. Given the high number of long-time customers and their frequent use of LRB services, there is a much higher level of cash fare being used than would be expected. Increasing awareness of and education about the various fare media may reduce the number of cash fare transactions onboard the bus, therefore reducing the time required for customer boardings (aka stop dwell time). It should be noted a majority of patrons on the South County Commuter Route purchase monthly passes at the beginning of the month as a government subsidy. Therefore, the high use of cash fares excludes this route.

For most routes, the majority of respondents either walked or biked to reach the bus stop for the beginning of their trip, as well as to get from the bus stop to their final destination. To enhance access to bus stops, LTSA should ensure all bus stops and surrounding environments are safe and accessible for pedestrians and bicyclists. However, on the South County Commuter Route, almost all respondents stated they drove themselves or were dropped off to get to the bus stop. Currently, the South County Commuter Route customers who start in Susanville drive to and park their

vehicles at Wal-Mart next to the bus stop, while most other patrons were picked up at the two park and ride lots along the route. Therefore, many patrons are apt to not ride the service if it is perceived as inconvenient. Therefore, maintaining and enhancing existing park and ride lots so they are conveniently located and easy to access should be a priority to support transit ridership for the commuter routes. Recognizing this demand, and in support of this effort, the County is considering a feasibility study of park and ride lots.

Customers are mostly satisfied with all service aspects of Lassen Rural Bus services with very little indication of dissatisfaction. Survey respondents were most interested in expanding bus services to more areas with more stops (i.e., service coverage). Given many respondents were willing to pay at least an additional 25 cents for service enhancements, there is opportunity to consider a fare increase associated with service changes, although expanding LRB services to more areas throughout the county is extremely costly given the distance between population centers in Lassen County.

6.2 Community Survey Analysis

Methodology

To garner feedback from the general public, our project team distributed community surveys to a sampling of Lassen County residents, whether transit users or not. It is important to survey the general community to develop service recommendations which may enhance transit's position as a mobility option among "choice riders." Community surveys were distributed from April 15 through May 20, 2011 via direct mail to a representative sampling of Lassen County residents, as well as at several community locations and online. The community survey effort, with the direct mail and online techniques combined, yielded 392 valid responses. The community survey was designed with the following objectives:

- Assess community awareness of Lassen Rural Bus services,
- Codify travel behavior of Lassen County residents,
- Identify and prioritize potential transit service enhancements, and
- Identify the most popular marketing channels (i.e., direct mail, County website, newspaper, etc.).

A stratified-sampling methodology was utilized to generate a database of residential addresses throughout the Lassen Rural Bus service area. Surveys, along with pre-paid envelopes (Business Reply Mail), were mailed to 2,250 households. As a participation incentive the surveys returned by the stipulated date were entered into a random drawing for four \$25 VISA gift cards.

To supplement the direct-mail surveys, an online survey was made available during the same time period. The online survey was designed using Survey Monkey, an online survey platform which the project team has used successfully on many prior occasions to organize survey responses and produce summary tables and graphs.

Findings

The following summarizes the results from the community surveys. The detailed data is illustrated in Appendix C.

Respondent Demographic and Household Profile. The survey included voluntary questions regarding respondent demographic, economic, and household characteristics. The community survey asked more detailed questions about respondent households than did the onboard survey, including such questions as *how many persons aged 16 and older reside in the home*, and *does anyone within your household have a health or physical condition which impairs their personal mobility*. These characteristics make up the typical profile of Lassen County resident survey respondents.

- 50 percent of survey respondents are currently employed. About five percent *work from home* and nearly 40 percent work outside the home *at a location within Lassen County*.

- 76.3 percent of respondents stated they reside in a household with more than one driving-age adult (aged 16 and older).
- Nearly 16 percent of survey respondents stated they live with someone who has a health or physical condition impacting their personal mobility, in which the most frequently cited mode of transportation is *riding with family member or friend* (92 percent). Very few (5.4 percent) stated *public transit* as the primary mode of transport for those who are mobility-disadvantaged.

The following matrix (Exhibit 6.2.1) illustrates typical characteristics that define ride-dependency, which historically includes persons with disabilities, seniors, youth, low-income individuals, and persons without access to a personal vehicle. For the purpose of this report, “ride-dependent” is defined as persons who must rely primarily on other people or services (i.e., public transit) for the majority of their mobility needs. To analyze the ride-dependency of the community at-large, respondent information was compiled from several questions on the survey instrument.

Mobility limitations of the residents surveyed were found to be mainly associated with economic characteristics (i.e., financial hardships) which could inhibit their personal mobility. Although half of the respondents are unemployed and 13 percent live in a low-income household (less than \$35,000), the majority have a valid driver license and have access to a personal vehicle. A significant number of survey respondents were seniors (age 65 and older). Only 5.4 percent of respondents were students and 4.3 percent youth (17 years of age or younger).

Exhibit 6.2.1 Transit Dependency Matrix

Category	Percent of Respondents
Currently unemployed	50.0%
Senior (65+)	40.8%
Household income < \$35,000	13.0%
Full-time student	5.4%
Youth (17 or younger)	4.3%
Lack valid driver license/access to a personal vehicle	3.4%
Speak a language other than English at home	2.0%

Exhibit 6.2.2 illustrates the community where respondents reside. More than 50 percent of the respondents were from the Susanville area, while another significant portion was from the south county area and southwest county area (Westwood, Chester).

Exhibit 6.2.2 Respondent Home Community

Home Community	Respondents	Percent of Respondents
Clear Creek	6	1.5%
Westwood	6	1.5%
Lake Almanor	25	6.4%
Hamilton Branch	10	2.6%
Southwest County Total	47	12.0%
Litchfield	3	0.8%
Standish	11	2.8%
Wendel	3	0.8%
East County Total	17	4.3%
Doyle	1	0.3%
Milford	4	1.0%
Janesville	88	22.4%
South County Total	93	23.7%
Susanville	204	52.0%
Johnstonville	11	2.8%
Lake Forest	4	1.0%
Susanville Area Total	219	55.9%
Ravendale	1	0.3%
Termo	2	0.5%
Eagle Lake	3	0.8%
Bailey Creek	1	0.3%
Spaulding	6	1.5%
Central County Total	13	3.3%
Unknown	3	0.8%
TOTAL RESPONDENTS	392	100.0%

Community Awareness of Transit Services. Through a series of questions the community survey assessed each respondent's awareness, use, and opinion of transit services offered in Lassen County.

- Nearly 97 percent of survey respondents stated they are aware that public transit (bus) services are available in Lassen County. However, only 10 percent of those respondents have actually ridden transit within the past 90 days.
- The primary reason most respondents stated they do not use public transit services is they *have their own car* (86.4 percent). The next most frequently cited responses were transit services are *not convenient* and *they do not go where I need to travel*.
- 38 percent of respondents stated there is no improvement to transit services that would encourage them to use the services for at least a portion of their typical travel.
- Of the 62 percent who cited an improvement, *better connections outside of Lassen County*, *more information* (aka more marketing), and *expanded service* were the most commonly cited improvements.

- Nearly 60 percent of respondents stated they would be willing to pay *50 cents* more, and another 21 percent would be willing to pay *25 cents* to implement the service improvement they selected.

Community Use of Transit Services (riders). The survey facilitated feedback from respondents who have ridden transit services recently (within last 90 days) regarding use and satisfaction with aspects of the services they have used.

- Over 50 percent of the respondents who have ridden transit services recently rode Lassen Rural Bus, followed by the Susanville Taxi, Lassen Senior Service, and Lassen Dial-A-Ride.
- The most frequently cited travel purposes were *shopping, work, and recreation/social*. *Access healthcare* and *school/education* made up a combined 19 percent.
- Overall, 66.2 percent of transit service aspects were rated at least *good*, while 20 percent were rated *below average* or *poor*, and 14 percent *average*. Similar to the onboard survey results, *driver courtesy* and *safety* were perceived very positively, where less than 10 percent of respondent riders ranked those attributes as below average or poor.

Transportation Challenges. An open-ended question (not multiple choice) was posed asking about the biggest transportation challenge facing residents within Lassen County. Exhibit 6.2.3 illustrates the most-frequently identified issues.

Exhibit 6.2.3 Top Transportation Issues in Lassen County

Respondent Answer	Respondents
Gas prices	46
Travel distance	38
Transit service coverage	22
Weather	18
Frequency of transit services	16
Lack of information for available transit services	11

Analysis of Key Findings

There is relative high general awareness of transit services amongst Lassen County residents but low use of the available services. This is chiefly due to the fact most respondents own a personal vehicle and/or do not know where and when services operate. Expanded service and more information are improvements respondents stated would encourage them to ride transit for at least a portion of their typical travel. It appears many residents view the cost of transit services (aka fare) to either be reasonable or low, wherein most would support a fare increase if the services were improved.

Community perception of transit services is significantly lower than that of transit customers surveyed onboard LRB routes. Of those who *have* ridden public transit services recently, it appears there is a mixed review of satisfaction with services. Service aspects dealing with operations (i.e., *convenience* and *time required to complete trip*) were not highly ranked, yet customer service

aspects such as *safety* and *driver courtesy* were. This suggests non-riders view LRB as inconvenient and inefficient.

Many community survey respondents had a valid driver license and access to a personal vehicle, showing a significantly lower level of ride-dependency than many transit riders (onboard customer survey). Although there were few ride-dependent respondents, many respondents indicated a certain level of economic or financial hardships, such as unemployment and/or living in a low-income household. This again suggests fluctuations in the economic climate and fuel prices would likely result in increases in transit ridership as people are looking to save money.

Given the size of Lassen County and distance between communities, a reoccurring issue appears to be distance of travel and transit service coverage. In rural locations, providing efficient transit service that is also effective and meets the needs of its residents is extremely challenging as it is virtually impossible to serve everyone. Focusing on serving the highest concentrations of ride-dependent populations can be most effective in service areas similar to Lassen Rural Bus. Additionally, the most cost-effective means of increasing ridership is dedicated/targeted marketing (i.e., converting awareness to patronage). Historically, LRB marketing efforts have been limited in scope and not particularly sophisticated (i.e., reaching beyond the transit-dependent core audience).

6.3 Dial-A-Ride Customer Survey Analysis

Methodology

This section features analysis of the Dial-A-Ride (DAR) customer survey conducted concurrent with the community surveys (April 15 through May 20, 2011). The surveys were distributed via direct mail (USPS) to the DAR registrant database. The list included 140 total registrants. Twenty valid responses were received. This is not a statistically valid sample for the target population, therefore may not reflect the typical DAR customer. However, while the response is not statistically valid, it is likely to reflect the needs of many DAR riders as it represents slightly more than 14 percent of the DAR customer base.

Findings

The following summarizes the results from the Dial-A-Ride customer surveys. The detailed data are illustrated in Appendix D.

Rider Profile. The survey included optional questions regarding respondent demographic, economic, and household characteristics, as well as home community.

- 78 percent of riders are *retired* and/or have a *physical condition which impairs their personal mobility* (70 percent).
- Few respondents have a *valid driver license* (36.8 percent) or *access to a personal vehicle* (30 percent).
- All respondents lived in or in close proximity to Susanville.

Use of DAR Service and Trip Characteristics. The survey incorporated questions to assess customer use of service such as type of trips and destinations, reasons for riding, frequency of use, length of patronage, and alternative mobility options.

- Top reasons for choosing Lassen DAR service included *lack of other travel options* (38.9 percent), *convenience* (27.8 percent), and *cost of service* (16.7 percent).
- Most cited typical travel destinations included the *doctor* and *going to Susanville*.
- Most common trip purposes cited were *access healthcare* (36.8 percent), *shopping* (36.8 percent), and *recreation/social* (15.8 percent).
- Fifty percent of survey respondents stated they ride DAR *one to four times per month*.
- Nearly 90 percent have ridden DAR for at least one year, while half of these patrons have *ridden more than three years*.
- If Lassen DAR were not available, most respondents stated they would either get a ride from *friend or family* or take the *taxi*. Few stated they *would not make trip or walk or bicycle*.
- Many DAR patrons use other transportation services, specifically the Susanville Taxi service and the LRB fixed-route service.

Customer Experiences and Reservation Procedures. Several survey questions were included to solicit feedback as to the customer's experience from making a trip reservation to arriving at their final destination.

- The majority (72.2 percent) of respondents stated they typically make their ride reservation on the same day as their requested trip.
- 81.3 percent of respondents typically are able to schedule their ride at the desired time. However, nearly 19 percent stated they usually have to accept an earlier or later trip time than requested.
- Customers would most like Lassen Dial-A-Ride to *add Sunday service* (35.3 percent) or *expand Saturday service* (29.4 percent) as an improvement.
- To implement the desired service improvement some respondents were willing to pay 25 cents more per trip (43.8 percent of respondents), while 31.3 percent stated they *wouldn't support a fare increase*.
- Most respondents (50 percent) get information about the DAR service by calling the LRB transit office/call center.

Analysis of Key Findings

As expected, the majority of respondents depend on transit services to meet some or all of their mobility needs and have limited travel options. The service is used by customers for a variety of trips such as healthcare, shopping, and recreation/social purposes. Given the low frequency of use of the service by patrons and the fact many use other transit services, many DAR patrons may not be completely dependent on the service and therefore are able to use other available transportation options.

Most survey respondents rated the various service aspects from average to great, indicating many patrons are happy with the service. Due to respondent reliance on the service, many would like to see additional Saturday and added Sunday service. Respondents expressed apprehension regarding the fare/cost of the service. This dissatisfaction was somewhat reflected in respondents' unwillingness to pay at least an additional 25 cents to implement service enhancements.

There appears to be a variation in trip requests, as some patrons request the morning of their trip and others request one to three days before their trip. Patrons having to accept a trip time different than the one they requested is acceptable to a certain level. To eliminate this problem, the LTSA now enforces the policy which requires a 24-hour advance reservation. Due to the fact previous operators have allowed the practice of immediate service request, users will now have to adapt to the 24-hour advance reservation policy.

6.4 Stakeholder Interview and Focus Groups

To further solicit public input regarding transit services and mobility needs in Lassen County, stakeholder, or targeted, outreach was conducted in Susanville at various social and human service agency organizations. These outreach efforts were conducted following the completion of the ride checks and onboard surveys, but concurrent with the community surveys. Through stakeholder interviews and focus groups, our project team was able to garner input from ride-dependent populations such as low-income individuals, seniors, persons with disabilities, and youth.

Exhibit 6.4.1 summarizes the stakeholders for this project and their involvement. The type of activities conducted varied depending on the target population the stakeholder represented, as well as the availability of the stakeholder. Some efforts included stakeholder interviews, focus groups, or simply gathering information about the agency and its clientele (i.e., clients, customers, participants, etc.).

Exhibit 6.4.1 Summary of Stakeholder Outreach

Stakeholders	Contact	Activity	Population Group						
			Seniors	Disabled	Low-Income	Youth	Students	Tribe	Commuters
Agencies met with									
Lassen Life Skills	Darlene Goforth	Stakeholder Interview		x					
Susanville Indian Rancheria	Wanda Brown	Stakeholder Interview						x	
	James Mackay	Stakeholder Interview							
Lassen High School	Kevin Cooper	Focus Group				x			
Lassen County Career Network	Connie Harnist	Focus Group			x	x			
Lassen Senior Services	Tawnee Amos	Site visit - surveys	X						
Agencies Contacted - Data/Information Collected									
HDSP	Gunther Hoffman	Received employee commute data							x
CCC	James Day								x
Lassen Community College	Dean Cary Templeton	Contacted					x		
Lassen County Veterans Services	Mike Schneider	Contacted for information	X						
North Valley Services	Tonya Huff	Contacted for information		x					
Far Northern Regional Center	Michael Harding	Contacted for information		x					

Stakeholder Interviews

The goal of the stakeholder interviews was to solicit candid input regarding transportation services provided by the stakeholder organization, as well as mobility needs of their constituents and use of Lassen County transit services. Interviews were conducted with the Lassen Life Skills and Susanville Indian Rancheria on May 9 and May 10, 2011. While a number of organizations agreed to participate, several ultimately proved unavailable.

The interviews generated a number of impressions specific to Lassen Rural Bus operations and services:

- There is desire for enhanced coordination between LRB and Susanville Indian Rancheria transportation services, which provides general public service between Susanville, Redding, and Red Bluff.

- Possibly more coordination for bus wash, maintenance, driver recruitment and training, and driver staffing.
- Lack of information and minimal interest expressed by riders for Plumas County connections.
- Desire for a service between Susanville and Reno.
- Several comments made regarding difficulty of scheduling DAR trips and confusion regarding trip request procedures.

Focus Groups

The goals of the focus groups were to gather feedback regarding need, perceptions, opinions, and attitudes toward transit services in Lassen County, mainly by ride-dependent demographics. Questions were asked in an interactive group setting where participants were free to talk with other group members. Each participant had an opportunity to talk and was also provided with a survey to fill out in order to provide feedback anonymously.

Two focus groups were held: one featuring Lassen High School Associated Student Body (ASB) students and one with the Lassen County Career Network employees and program participants. The focus groups were conducted on May 9 and 10, 2011. There were 20 student attendees at the Lassen High School focus group and nine attendees at the County focus group. Input received from group members relevant to Lassen Rural Bus operations and services is summarized below.

- Participant expressed satisfaction with recent bus improvements and maintenance of buses.
- College student unable to use bus due to evening class ending at 10:00 p.m. and no transit service running that late.
- Some clients of Lassen County Health and Social Services typically walk or get rides from friend/family in order to make appointments at certain times. The bus is not convenient for them because of the required scheduling.
- Participant who lives between Milford and Janesville would like to ride bus to get to College, but there is an absence of service to that area.
- Many SSI clients ride the bus from Westwood.
 - Many seasonal workers in the West County work for BLM and the Forest Service and have jobs in the summer but do not work in the winter. Therefore, there is a demand for transit service mostly in the winter by seasonal workers due to gas prices and the condition of their own personal vehicle.
- Many people, clients and employees alike, who live in Chester drive themselves to town.
- Lassen County Health and Social Services sometimes will assist clients with purchase of bus passes. However, it was clear there is lack of understanding of LRB services and how to purchase a bus pass among Health and Social Services employees.
 - Opportunity for coordination with County to provide discount bus pass program to clients seeking employment.

- Not one high school student had ridden LRB services, despite most admitting seeing the bus around town. Most students did not know where or how to find information about the service.

Key finding: Absence of effective ongoing marketing of LRB services to social and human service agency clients as well as agency employees, and in general to all residents throughout Lassen county. Stakeholder findings are consistent with the community survey findings. Many people know LRB exists, but lack understanding of service specifics. There is an immediate and ongoing need for LRB marketing.

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7. SERVICE ALTERNATIVES

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CHAPTER 7 – SERVICE ALTERNATIVES

The goal of this chapter is to present recommendations for enhancing Lassen County’s public transit system based on findings identified throughout the planning process (i.e., demographic analysis, surveys, ride checks, performance evaluation, and peer review). This chapter provides a menu of service enhancements/improvements with varying degrees of resource intensity.

In crafting the following service scenarios, Moore & Associates drew upon the Lassen County Transportation Commission’s (LCTC) prior Transit Development Plan (2007), stakeholder and community outreach, on-site service evaluation, ride checks, and discussions with LCTC staff. We sought to identify temporal and spatial service gaps as well as “less productive” route segments and day-parts. In summary, our goal was to identify strategies intended to optimize existing LTSA resources as well as present practical recommendations for sustainable service development.

Each of the three service scenarios represents a “blueprint” for improving and enhancing Lassen Rural Bus’ performance and the quality of the service for the end-user. These scenarios include proposed administrative, operational, and capital elements. Alternative A reflects the status quo scenario with low-cost, short-term administrative and marketing strategies; Alternative B represents a more cost-intensive option introducing operational recommendations; while Alternative C encompasses the highest level of capital expenditures and long-term investments.

- **Alternative A – Status Quo:** In this scenario, the current Lassen Rural Bus service delivery approach remains largely unchanged. Instead, we propose several low-cost operational, administrative, and policy enhancements.
- **Alternative B:** This alternative includes all recommendations from Alternative A as well as schedule and capital improvements.
- **Alternative C:** Includes all improvements and strategies presented under Alternatives A and B, along with more growth-oriented and long-term operational enhancements and capital purchases.

The relative merits of each service alternative are discussed. Any alignment and schedule changes are accompanied by revised schedules and maps illustrating the proposed changes.

Alternative A Recommendations

This scenario represents the status quo, wherein we recommend no changes to the Lassen Rural Bus route network. Rather, we propose administrative and policy changes to enhance community awareness and perception of LRB services, thereby increasing ridership. In addition, this scenario includes low-cost service and administrative changes such as adding published stops along the Susanville City Route and establishing trip request policies for the existing Dial-A-Ride program. These strategies do not increase current operating costs, such as vehicle service miles. The following is a description of each recommended improvement under Alternative A.

Administrative and Policy

Develop a 12- to 18-month marketing plan

Marketing of a transit service is critical to sustaining as well as increasing ridership. An investment in marketing is an investment in a community's transit service. Marketing could increase the program's penetration into the community beyond the historically isolated customer base. Transit marketing is an often-overlooked method for increasing ridership without increasing operating cost (i.e., Vehicle Service Hours and Miles). It is not unrealistic for an operator's marketing budget to comprise as much as three percent of total operating budget. Currently, marketing accounts for just 1.4 percent of LRB's operating budget.

To increase awareness and customer education as to LRB service offerings throughout Lassen County, we recommend LTSA develop a marketing plan reflective of three core goals: 1) Increase annual ridership, 2) Increase annual fare revenue, and 3) Broaden LRB's customer base. The Marketing Plan should include recommendations spanning a 12- to 18-month horizon. We believe the associated cost will be recouped through increased ridership and fare revenue.

The Marketing Plan should do the following:

- Identify target markets inclusive of traditionally ride-dependent populations as well as potential choice riders, geographic locations, and demographic groups.
- Conduct a situational (SWOT) analysis of LTSA to assess internal strengths and weaknesses as well as external opportunities and threats.
- Reinforce the mission and objectives of LTSA.
- Set forth marketing recommendations to raise awareness of the service and access to service information by current customers, target markets, and the general public.
- Develop an advertising plan reflective of a variety of media options, potentially including print, broadcast, and outdoor media; direct mail; and social media/online formats.
- Prepare a public communications plan to address the dissemination of information geared toward the general public, including community outreach, community partnerships, feature articles, media releases, and special event participation.
- Set forth a timeline for implementation.
- Provide a mechanism for evaluating the success of marketing activities.

Redesign the LRB Service Brochure

The transit brochure is a primary channel for riders and non-riders to obtain information regarding operating schedule and service routing. During the development of this TDP, the LRB service brochure was updated to include schedule changes for the West County Route. The updated brochure, effective May 2011, now features a winter (snow) route alignment for the Susanville City Route and the West County Route. However, at first glance, the brochure can be confusing for a person unfamiliar with the service. Therefore, we recommend redesign of the brochure to mitigate these concerns. An effectively designed service brochure would provide clear guidance and instill confidence in current and future riders.

We recommend the redesigned service brochure include service maps that are both directional and to “scale” along with clearly identified bus stops and transfer points. The updated brochure should also include:

- Community landmarks for location identification.
- Easy-to-read fare information contained in a single location.
- Contact information regarding connecting/nearby transit services, including the Susanville Indian Rancheria public transit service.
- Transfer locations for connecting with other services.
- Sequentially numbered stops on the route map.
- Separate schedule and stop information for the South County Commuter and South County to Susanville routes.
- Information regarding the seasonal Eagle Lake Route.

We recommend the brochure redesign be completed by the end of Fiscal Year 2012/13. The resulting brochure should be updated on an as-needed basis as routes, schedules, or other key information change.

In addition, through stakeholder interviews it was revealed many social and human service organizations either do not have transit information to distribute to clients/customers, or were out of stock. We also recommend the LTSA establish/maintain a transit brochure distribution policy/procedure at various locations, ensuring each location remains stocked at all times.

Create a More Direct Link to Transit Webpage

Improved access to transit information can result in quantifiable benefits for the County’s transit service. The current transit page is not easily accessible from the County homepage. Starting at the homepage there are too many links which must be navigated in order to access transit information. An effectively designed homepage and transit page would provide all available information in an easily accessible location.

We recommend the LTSA coordinate with the County to place a direct link to the transit page on the County homepage. The current location of online LRB service information is within the Lassen County Transportation Commission website. Although LRB information is posted on the

front page of the LCTC website, it may be confusing for the average visitor to understand the relationship between LRB, LCTC, and LTSA. A specific link off the County's website homepage to LRB will increase the visibility of LRB services to visitors either searching for specific information or simply browsing the web.

Customers doing a general search on Google for "Lassen Rural Bus" will find the site easily enough (it appears as the first item on the search results page); however, the URL (<http://www.lassentransportation.org/a/Lassen-Rural-Bus-LRB.php>) is unwieldy and difficult to remember. It requires customers and potential customers to search for the site each time (or bookmark the site) in order to access transit information. We recommend procurement of a stand-alone domain name such as www.lassenruralbus.com that is easy to remember and can redirect to the LRB page located on the www.lassentransportation.org website.

Investigate Revenue Advertising Opportunities

Selling advertising space on transit vehicles and/or amenities offers another source of revenue. LTSA should investigate opportunities for development of an advertising sales program, which would potentially govern ads in locations including the following:

- Exterior advertising on rolling stock,
- Interior advertising (car cards) inside rolling stock,
- Posters at bus stops/shelters, and
- Web ads on LRB or LTSA website.

Raise the Profile of LRB within the Community

To counteract a lack of information about how to use LRB's services, LTSA should consider increasing its "grassroots" outreach. Rather than waiting for a potential customer to call and ask questions regarding schedules, bus passes, etc., take the information to the community. Information booths can be hosted at key locations to reach out to target markets, especially on routes with lower ridership. While community outreach can be difficult when personnel resources are limited, it is also a vital component of marketing as it puts a personal face on transit. Volunteers may be able to play a role in such outreach, which would free up transit staff for other duties. Setting aside just a few hours each month for outreach can make an appreciable impact on raising the perception of LRB in the eyes of the community.

Outreach events can be staffed by a single individual with a folding table, appropriately sized tablecloth (branded with the agency's logo if possible), and informational materials. The booth staffer should be fully knowledgeable regarding all LRB routes and services, as well as fare media and service policies.

We recommend conducting outreach events at the following locations across a one-year period:

- Lassen High School
- Credence High School

- Lassen County Veterans Memorial Building
- Banner Lassen Hospital
- Employment Development Department
- Lassen Community College
- Lassen Senior Services
- Lassen County Fair

Operational

Susanville City Fixed-Route

Adjust route schedule to start and end at Wal-Mart - Convert route into round-trip, starting and ending at Wal-Mart. During ride checks we observed patrons who either boarded the bus at Safeway (last stop on published schedule) or who remained on the bus from the last trip after the bus arrived at Wal-Mart (first stop on published schedule), yet stayed on the bus to travel to another destination. When the bus is traveling between Safeway and Wal-Mart, it is not in revenue service, but rather is deadheading from the end of the route to the beginning of the route, as shown in the schedule brochure.

Add 30 minutes to each trip – As evidenced in Exhibit 5.2 30 percent of trips were considered late during the mid-day time period. This demonstrates the current route structure's inability to meet demand during the day-part with the highest boarding and alighting activity. In order to better accommodate demand, while maintaining a standard schedule throughout the day, it is recommended that service operate on an 80-minute headway. The increased time will ensure buses can better adhere to the published schedule, which creates a more reliable transit system for riders. The increased time is distributed throughout the trip, with additional time allotted at the college given the increased activity experienced at this location.

Exhibit 7.1 Susanville City Fixed-Route Alternative A Proposed Schedule Changes

Susanville City Route

Stop #	Stop	Minutes After the Hour
1	Wal-Mart Store	0:00
2	<i>Social Security Office</i>	
3	Lassen Manor Apts.	
4	Susanville Police Station	
5	<i>IGA Market (Thunder Joes)</i>	
6	Lassen Historical Museum	0:11
7	Weatherlow & Chestnut	
8	Glenn & Joaquin St.	
9	Susanville Garden Apts.	
10	Woodside & Paiute Ln.	
11	Susanville Ranch Park	
12	Cherry Terrace & Glenn	
13	Meadowbrook Apts	
14	N. Roop & Nevada St.	
15	City & County Offices	0:24
16	Gay & Main St.	
17	S. Lassen & Cottage St.	
18	Credence High School	
19	Richmond @ N. Railroad	
20	Lassen Social Services	
21	Modoc St. & Shasta St.	
22	<i>Alexander & Orange</i>	
23	Orange & Limoneria	
24	Senior Nutrition Center	
25	Susan River Apartments	
26	Alexander & Riverside	
27	Burger King/Chevron Gas	0:42
28	Main & Ash St. (Hwy 139)	
29	Millview Apts.	
30	Lassen College	0:59
31	Banner Lassen Hospital	
32	Wada Way & Spring Ridge	
33	Numa & Cameron	
34	Casino	1:07
35	<i>Lassen Career Network</i>	
36	Bunyan & Ash	
37	<i>1st & Ash</i>	
38	Main St. & S. McDow	
39	Main St. & S. Mesa St.	
40	Safeway Shopping Center	
41	Wal-Mart Store	1:20

**Service span to remain between 7:00 a.m. and 7:00 p.m. Monday through Friday; and from 8:00 a.m. to 4:00 p.m. on Saturday service days. Trips depart every 90 minutes from Wal-Mart.*

Capital

Bus stop infrastructure improvements

Install bus stop signage at every published stop on route schedules. To enhance customer usability and reliability of the system, it is essential passengers are not only able to identify bus stop locations, but are provided a safe waiting location visible to the bus driver. This includes the purchase of additional or replacement signs as warranted based on the agency's implementation of any recommendations found herein.

Given the recent elimination of "flag stops" along the City Route, during field observations, many passengers seemed confused as to where to wait and board the bus at bus stops with no signage. Bus drivers appeared unsure of stop locations as well, as each driver picked up/dropped off passengers in different locations at unmarked stops. This caused frustration among passengers who were told varying information by each driver, and in some situations caused the passenger to miss the bus.

Summary of Alternative A Recommendations

- Develop marketing plan.
- Redesign transit brochures and develop/maintain distribution plan.
- Investigate revenue advertising opportunities.
- Raise the profile of LRB within the community
- Convert Susanville City Route into round-trip.
- Add 30 minutes to total Susanville City Route trip time.

Alternative A Advantages

- Increased community awareness of Lassen Rural Bus program.
- High probability of ridership growth.
- Low cost relative to other service scenarios.
- Increased customer satisfaction (dependability, increased information, usability of services).
- Elimination of customer and driver confusion regarding bus stop locations.
- Improvement of on-time performance.
- Potential additional source of revenue from advertisements.

Alternative A Disadvantages

- Increased marketing cost.
- Increased short-term and long-term administrative costs.
- Reduced number of trips per day.

Alternative B Recommendations

Administrative and Policy

Closer collaboration with Susanville Indian Rancheria inter-city service

The Susanville Indian Rancheria provides a free public transportation service to/from Redding, Red Bluff, and Susanville. The service offering is limited, but provides a mobility option to those needing to access essential medical and social/human service destinations. Given this is the only public transit service traveling to this area, we recommend the LTSA collaborate more closely with SIR to not only coordinate services, but to maximize existing resources such as vehicle wash and maintenance, and drivers and training as these issues were raised in stakeholder interviews discussed in Chapter 6. Additionally, LTSA has noted that it is currently seeking funding to expand its maintenance facility in Susanville. By strengthening collaboration with the SIR, the Agency can enhance vehicle maintenance and general upkeep until funding for the aforementioned project is realized.

Improve marketing of non-cash fare media.

Providing non-cash fare media has specific advantages for transit riders and transit operators alike. Non-cash fare media eliminates the need to carry exact change and traditionally includes a monetary savings over the cost of individual transit trips. Transit providers benefit from non-fare media through reduction in time spent processing cash, reduced dwell time (i.e., faster boarding times), free transfers, and predictable income for the duration of the pass. By promoting non-cash fare media, the attractiveness of Lassen Rural Bus as a mobility alternative is enhanced.

Through customer feedback, we found besides the college student pass and the monthly pass purchased by Herlong Army Depot employees, most riders used cash to pay for their surveyed trip. This suggests an absence of information regarding the daily and monthly pass types and where and how to purchase fare media. We recommend LTSA increase marketing of LRB daily and monthly passes throughout the county. Low-cost marketing solutions could include posting simple advertisements onboard LRB buses and on the County and LCTC's websites. Promotion of these fare media types should include education about potential cost savings and convenience versus paying cash per ride.

We also recommend LTSA consider the creation of a multiple-ride ticket book. These can be more profitable for LTSA as the customer pays for each ride taken, versus unlimited rides in a given month.

Operational

Susanville City Fixed-Route

Increase Trip Frequency Through Addition of Service Vehicle – An alternative option to that presented in Alternative A to improve on-time performance would be the addition of a second vehicle. As seen in Exhibit 5.2 the City Route has difficulty meeting printed-schedule

times during the mid-day period. However, throughout the remainder of the day on-time performance is not an issue. This increased demand mid-day could best be explained by the number of students going both to and from Lassen College as shown by boarding and alighting data presented in Exhibit 5.6. Adding a second vehicle will help meet demand during the busy mid-day period, while improving performance and therefore reliability of the system. Furthermore, the additional vehicle will improve service throughout the day by providing more trips as frequency can be increased to every 30 minutes.

Establish Route Deviation to serve Lassen College and Veterans Affairs Diamond View Clinic – This recommendation is based on LTSA Staff requests to serve the Veterans Affairs Clinic regularly. The Clinic is located off Johnstonville Road in Susanville, on the north side of the street. In order to implement this recommendation, adequate clearance would be needed to allow vehicles to turn around on the Diamond View Clinic access road. A bulb or pull-out would be necessary and should be created in accordance with the adopted Transit Design Manual standards and ADA guidelines. Service to the Diamond View Clinic could be achieved using the second vehicle from the previous recommendation and therefore the stop would be served every other trip after the bus departs from Lassen College. Student riders would not be affected by the new alignment, however stops along Ash and Main Street will not be served by the express route. Under this arrangement, the Diamond View Clinic stop would be located in the route schedule as the last stop prior to returning to Wal-Mart, using Skyline Drive as the express route alignment as shown in Exhibit 7.3. This particular route alignment and stop order were selected in order to avoid making an unprotected left-hand turn into the Diamond View Clinic.

Extend service hours in evening – Based on customer feedback, later service hours was among the requested service enhancements for the Susanville City Fixed Route. Given the ride checks showed very few riders in the evening period, we recommend only extending the route one more service hour; where the last trip would start at 7:00 p.m. and end at 8:00 p.m. during weekday service days and 4:00 p.m. to 5:00 p.m. on Saturday service days. Doing so would increase vehicle service hours by six hours per week.

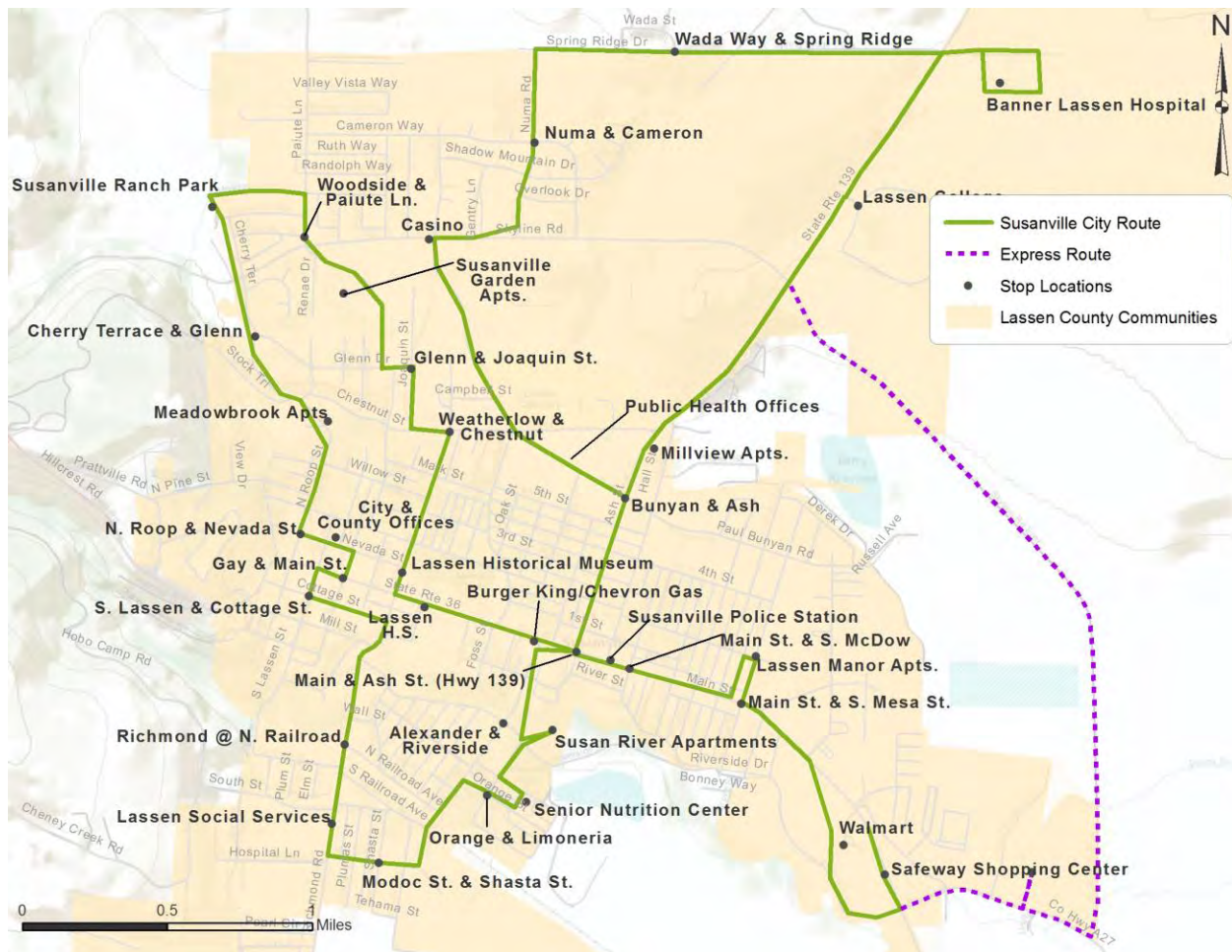
Exhibit 7.2 Susanville City Fixed Route Alternative B Proposed Schedule

Stop #	Stop	Minutes After the Hour Susanville City Route	Express Route
1	Wal-Mart Store	0:00	0:30
2	<i>Social Security Office</i>		
3	Lassen Manor Apts.		
4	Susanville Police Station		
5	<i>IGA Market (Thunder Joes)</i>		
6	Lassen Historical Museum	0:09	0:39
7	Weatherlow & Chestnut		
8	Glenn & Joaquin St.		
9	Susanville Garden Apts.		
10	Woodside & Paiute Ln.		
11	Susanville Ranch Park		
12	Cherry Terrace & Glenn		
13	Meadowbrook Apts		
14	N. Roop & Nevada St.		
15	City & County Offices	0:19	0:49
16	Gay & Main St.		
17	S. Lassen & Cottage St.		
18	Credence High School		
19	Richmond @ N. Railroad		
20	Lassen Social Services		
21	Modoc St. & Shasta St.		
22	<i>Alexander & Orange</i>		
23	Orange & Limoneria		
24	Senior Nutrition Center		
25	Susan River Apartments		
26	Alexander & Riverside		
27	Burger King/Chevron Gas	0:31	1:01
28	Main & Ash St. (Hwy 139)		
29	Millview Apts.		
30	Lassen College	0:37	1:07
31	Banner Lassen Hospital		
32	Wada Way & Spring Ridge		
33	Numa & Cameron		
34	Casino	0:45	
35	<i>Lassen Career Network</i>		
36	Bunyan & Ash		
37	<i>1st & Ash</i>		
38*	<i>Veterans Affairs Clinic</i>		1:20
39	Main St. & S. McDow		
40	Safeway Shopping Center		
41	Wal-Mart Store	0:55	1:25

**Veterans Affairs Clinic Served every other trip*

***Service span to remain between 7:00 a.m. and 7:00 p.m. Monday through Friday;
and from 8:00 a.m. to 4:00 p.m. on Saturday service days. Trips depart every 30
minutes from Wal-Mart.*

Exhibit 7.3 Susanville City Fixed Route Alternative B Proposed Route With Express Clinic Alignment



West County Route

Extend route to Banner Lassen Medical Center – After Lassen College in Susanville, route would continue to Lassen Medical Center and introduce the stop in the schedule. Given the distance between the College and Hospital is less than a mile apart, this would only add a couple of minutes to the schedule and additional miles to operations. Currently, patrons wishing to access the Hospital have to transfer to the Susanville City bus from the College. In addition, there is no pedestrian access between the College and Hospital.

Commuter/Vanpool Program

Implement HDSP/CCC vanpool program – We recommend LCTC consider implementing a vanpool program for HDSP and CCC employees. The informal email survey to HDSP/CCC employees resulted in 82 employees indicating interest in some form of bus service to travel to these facilities from various home locations. Many of the survey respondents live in locations in the West and South county areas, and their shift start and end times vary throughout the day. However, there appears to be demand for several vanpools from the home-end locations including:

- Janesville,
- Susanville (Casino area and Wal-Mart), and
- Westwood/Chester.

There are several options available for LTSA in terms of a vanpool program. LTSA could lease vehicles from third-party vendors, namely VPSI or Enterprise Rideshare. With this, LTSA could subsidize the vanpool program through a short-term incentive program or a long-term program implementing user fees. A vanpool program would increase administrative and marketing costs, as well as costs for leasing vehicles. Such a program may be federally funded or funded through private resources, the state of California does not currently offer an employee stipend program.

In reviewing various rural vanpool programs, there are a number of operating methods and funding sources available. Ben Franklin Transit in Washington State for example provides 295 round trips per day from rural areas into the urban core. The program is funded by riders, who pay monthly dues for the service. Federal employees receive benefits through the Qualified Transportation Fringe Benefit Program; while some of the larger private employers contribute directly to the vanpool on behalf of their employees. Other agencies such as JobJet out of Carroll, Idaho utilize state Air Quality Improvement funds to cover initial capital costs for a vanpool program, while fuel, maintenance and other recurring incidentals are paid for by user fees.

Capital

Bus stop info-post project

Activate project to install bus stop info-posts at high activity transit stops as well as at published time-points. The installation of the info-posts should be prioritized, wherein high activity stops should be top priority. To distribute the cost through various fiscal years, we recommend the LTSA establish a three- to-five year phasing plan. This would require the phased purchase and installation of 28 info-posts. We recommend LTSA purchase and install info-posts at all Susanville City Route time-points first.

Summary of Alternative B Recommendations

Alternative B includes all recommendations under Alternative A plus the following:

- Closer collaboration with Susanville Indian Rancheria inter-city service;
 - Construct additional service bay at LRB maintenance facility.
- Increase marketing of non-cash fare media;
- Susanville City Fixed-Route:
 - Extend service hours in evening,
 - Purchase additional vehicle,
 - Increase trip frequency to every 30 minutes, and
 - Establish Veterans Clinic Route.
- West County Route:
 - Extend route to Banner Lassen Medical Center, and
- Commuter/Vanpool Program:
 - Implement HDSP/CCC vanpool program.

Alternative B Advantages

- Increased community awareness of Lassen Rural Bus.
- High probability of ridership growth.
- Medium-cost relative to the other service scenarios.
- Increased customer satisfaction (i.e., dependability, increased information, usability of services).
- More service coverage and miles.

Alternative B Disadvantages

- Increased marketing cost.
- Increased short-term and long-term administrative costs.
- Increased costs through addition of vehicle service hours and vehicle service miles.

Alternative C Recommendations

In this scenario, we present potential enhancement opportunities for Lassen County's transit program across the next five years, evaluating the concept of coverage versus productivity. Historically, demand for public transit has long been assumed relative to population growth. However, this is not always the case. Absence of a transit service does not always translate into transit demand.

The focus of transit is largely its return on investment. It is realized that for every dollar spent in public transportation, economic returns are almost four times as high, if not higher. In addition, investments in transit have found to stimulate the job market and generate revenue through state, Federal, and local tax revenues. If LCTC chooses to invest in more robust, frequent service in more densely populated communities, it stands to increase ridership and revenue as well as offer returns regionally. The question remains; should transit providers focus on service coverage or productivity when it comes to transit planning?

The narrative which follows provides details as to route or program recommendations across the next five years. The recommendations represent the next logical step regarding productivity-driven service improvements with an understanding that any would require an expenditure of transit funding. Implementation of recommendations would be postponed until supporting funding is identified. Given the uncertainty of the current economic and funding climate, implementation of the proposed recommendations would depend in large part on the availability of funding. Potential strategies for funding proposed recommendations could include reallocation of Vehicle Service Hours as well as consolidation of routes.

In discussing potential enhancements to the LRB program, it is important to discuss the effects (i.e., transit equity) that transportation services or lack of services have on the affected communities.

"Equity (also called justice and fairness) refers to the distribution of impacts (benefits and costs) and whether that distribution is considered appropriate" in meeting the level of need or demand expressed by a specific social class, income level, and/or group.¹ We believe it is important for public entities to consider transit equity (i.e., Title VI) whenever planning decisions are made; keeping in mind the impact of transit on quality of life, opportunities, land value and development, employment, and economic development.

With respect to Lassen County, the discussion of transit equity is particularly relevant when assessing the need to invest in future transit enhancements and improving accessibility to communities not currently served or with historic low levels of transit service.

¹ Todd Litman (2002), "Evaluating Transportation Equity," *World Transport Policy & Practice* (http://ecoplan.org/wtpp/wt_index.htm), Volume 8, No. 2, Summer, pp. 50-65.

Administrative

Mobility Management Center

To enhance customer information and promotion of available transit services, the LTSA is conducting a feasibility study for a mobility management center to be located in Susanville. The feasibility study will look at short and long-term costs to the agency, as well as benefits. The mobility management center would act as a “one-stop shop” and call center for all information regarding public transportation throughout the county. In addition, if the LTSA implements a downtown transit center, the mobility management center could be co-located there.

Operational

Susanville City Fixed-Route

Increase route to 30-minute frequency – This alternative addresses growth and increased demand through marketing efforts and service enhancements. Similar to the 2007 TDP pulse-point recommendation, we recommend bifurcating the alignment into two loops with timed-transfers at Grand Avenue between 1st Street and Main Street or River Street between the existing Caltrans property and the Paul Bunyan Lumber Company property (two possible locations for future transit center). Loop 1 would serve Wal-Mart, the Community College, Casino and Diamond View VA Clinic; while Loop 2 would serve the west and south areas of Susanville such as the senior apartments, city and county offices, senior center, and downtown area. It is our professional opinion that this system incorporates benefits of the quadrant system as proposed in the 2007 TDP. In doing so, the system proposed in Exhibit 7.5 reduces seat-to-seat transfers for passengers while still operating out of the same proposed location.

This recommendation can be a phased approach, first introducing 30-minute frequency (via the introduction of a second vehicle for fixed route service) during those day-parts with the most ridership activity. The ride check revealed the mid-day day-part (between 10:00 a.m. and 3:00 p.m.) as the most productive. Therefore, we recommend the LTSA revise this route to have 30-minute frequency from 10:00 a.m. and 3:00 p.m., with 60-minute frequency in the morning from 7:00 a.m. and 10:00 a.m. and in the evening from 3:00 p.m. to 7:00 p.m. as a trial service. Saturday service shall remain at 60-minute frequency. If after six months ridership remains high, the LTSA may choose to implement 30-minute frequency throughout all day-parts during the week.

Similar to Alternative B, It is recommended LTSA incorporate the VA Clinic alignment shown in Exhibit 7.4 for every other trip. This would require replacing the existing stop at the casino with two separate stops, one serving Loop 1 alignment at Skyline Road and Gentry Way or the far side entrance to the casino on Bunyan Road and the other at Skyline Road and Barbara Street serving the VA Clinic alignment. Both stops are to follow the adopted Transit Design Manual standards as well as ADA requirements. This may include the installation of a pull-out lane or bulb as warranted, as well as cement pads, shelters, benches and necessary signage. Moving the existing casino stop would address the recent

City request to vacate the current bus stop location next to the Diamond Mountain Mini-Mart on Bunyan Road as well as provide for proper routing of the bus to better serve the Diamond View VA Clinic on Johnstonville Road via Skyline Drive and Skyline Drive. In order to implement this recommendation, adequate clearance would be needed to prevent buses stopping the flow of traffic along Johnstonville Road. It is recommended that a near side pull-out be constructed at Johnstonville Road and Bella Way following the adopted LTSA Transit Design Manual recommendations and ADA guidelines. Proposed routing of all alignments is shown in Exhibit 7.4.

Exhibit 7.4 Susanville City Route Alternative C Recommended Alignment

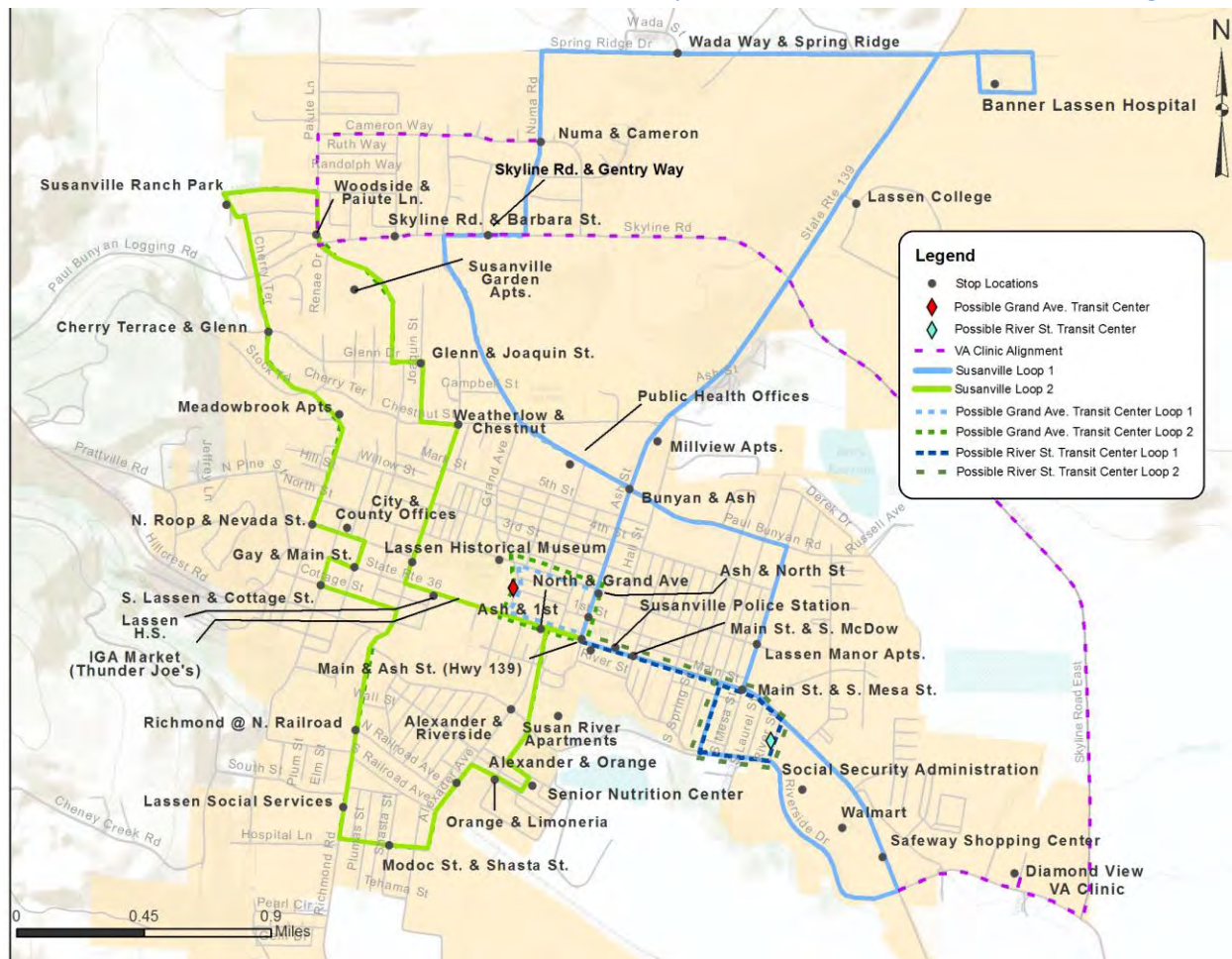


Exhibit 7.5 Susanville City Fixed Route Alternative C Proposed Schedule, Loop 1

Loop 1			
Stop #	Stop	Minutes After the Hour	Minutes After the Hour
1	Wal-Mart Store	0:00	0:30
2	<i>Social Security Office</i>		
3	Susanville Police Station		
4	North St. & Grand Avenue	0:06	0:36
5	<i>Ash & North Street</i>		
6	Millview Apts.		
7	Lassen College	0:10	0:40
8	Banner Lassen Hospital		
9	Wada Way & Spring Ridge		
10	Numa & Cameron		
11	Casino	0:17	0:47
12	<i>Lassen Career Network</i>		-
13	Ash & Bunyan		-
14	<i>Ash & 1st</i>		-
15	Lassen Manor Apartments	0:23	-
16	<i>Public Health Offices</i>		-
18	Safeway Shopping Center		-
19*	Diamond View VA Clinic		0:55
20	Wal-Mart Store	0:29	0:59

* Diamond View VA Clinic to be served every other route via proposed Skyline Drive East route. During these trips, stops 12 through 18 will be skipped.

Exhibit 7.6 Susanville City Fixed Route Alternative C Proposed Schedule, Loop 2

Loop 2			
Stop #	Stop	Minutes After the Hour	After the Hour
1	North St. & Grand Ave.	0:06	0:36
2	IGA Market (Thunder Joes)		
3	Lassen Historical Museum		
4	Weatherlow & Chestnut		
5	Glenn & Joaquin St.		
6	Susanville Garden Apts.	0:12	0:42
7	Woodside & Paiute Ln.		
8	Susanville Ranch Park		
9	Cherry Terrace & Glenn		
10	Meadowbrook Apts		
11	N. Roop & Nevada St.		
12	City & County Offices	0:18	0:48
13	Gay & Main St.		
14	S. Lassen & Cottage St.		
15	Credence High School		
16	Richmond @ N. Railroad		
17	Lassen Social Services		
18	Modoc St. & Shasta St.		
19	<i>Alexander & Orange</i>		
20	Orange & Limoneria		
21	Senior Nutrition Center	0:25	0:55
22	Susan River Apartments		
23	Alexander & Riverside		
24	Burger King/Chevron Gas		
25	North St. & Grand Ave.	0:30	0:00

Improve stop at Wal-Mart – The current stop at Wal-Mart serves as the transfer point for all LRB routes as well as connections with Sage Stage (Modoc County) serving the location. The stop is located on Riverside Drive to the southeast of the Wal-Mart entrance almost directly in front of Big O Tires. This stop location has resulted in complaints from customers with mobility limitations who have difficulty accessing Wal-Mart. In addition, in the winter, the sidewalk adjacent to Wal-Mart is icy and can be dangerous to traverse.

The LTSA recognizes this and has proposed several alternative stop locations and has been working with Wal-Mart to secure a closer stop. The LTSA recently completed an engineering assessment regarding the feasibility of alternative stop locations which revealed the preferred location to be Riverside Drive adjacent to the Wal-Mart garden center.

Relocate stop at Safeway – We recommend the Safeway stop be relocated to travel and stop along Riverside Drive. Doing so would also eliminate conflicts in the parking lot, especially during holiday seasons or weekends when shopping center vehicle activity is at its busiest.

Relocate access point for Riverside Apartments –To provide direct access (e.g., curb-to-curb service) to the Susan River Apartments (senior adult apartment complex) the bus must travel down/up a steep grade. This grade may be extremely dangerous to travel when snowy or icy. During the ride check we noted a fire access road located directly off Riverside Drive approximately 100 feet from the entrance to the apartment complex. This access road avoids the steep grade and could be used as an alternate route. We recommend LTSA work with the property owner and the City to arrange an alternate access point (at the least during the winter snowy months).

Relocate stop at Lassen Manor Apartments – At the time of the TDP, the County was in the planning and design stages of a park located adjacent to the Lassen Manor Apartments. The bus currently travels through the apartment complex and stops in front of the community center. The proposed park has subsequently not received funding however, should funding become available in the future for the park project we recommend LTSA relocate the Lassen Manor Apartment stop to the park.

West County Route

Enhance connectivity with Plumas Transit - As a request through public outreach, we recommend LTSA coordinate with Plumas Transit to schedule more timely connections in Chester. The connection point at Holiday Market in Chester should be illustrated in the LRB brochure/guide. Given both LRB and Plumas Transit provide three trips a day, providing timed-transfers for each trip is not practical. However, scheduling a timed transfer for the first trip of the day is feasible, and ensures riders have a reliable means of transportation to work. Currently the LRB West County Route arrives/departs Holiday Market in Chester at 6:23 a.m.; while Plumas Transit's Chester to Quincy route departs at 6:17 a.m. We recommend the LTSA consider altering the West County Route schedule so as to arrive at Chester Holiday Market prior to 6:17 a.m., or the LTSA request Plumas Transit adjust its operating schedule accordingly.

South County to Susanville/Susanville to South County

Add mid-day and evening weekday trips in South County area – The Lassen County Transportation Commission has received public comments regarding lack of service to the South County area. However, our ride check revealed that FNRC clients are the primary customers who utilize this route and most were picked up at flag/requested stop locations. This may be a result of the fact the South County to Susanville Route's schedule is based around the South County Commuter Route. There may be demand for service later in the morning and after 5:00 p.m. We recommend the LTSA introduce two new round trips: one in the middle of the day starting at Wal-Mart in Susanville at 10:05 a.m. and arriving in Doyle at 11:00 a.m.; and one in the evening starting at 6:05 p.m. in Susanville and arriving in Doyle at 7:00 p.m. We recommend these two trips replace the Herlong Fort Sage FRC stop; the bus would stop in Herlong at the RV Park and Sage Brush Flats area.

The proposed service extension should be addressed as a 12-month pilot program. As such it would need to be heavily promoted in the communities of the South County so as achieved the ridership agreed upon and farebox goals. In addition, the service should remain a deviated fixed-route; this will allow the LTSA to reevaluate most-frequented boarding and alighting points to assess where the true demand is located.

As an alternative to the proposed pilot program, the LTSA could design each trip to serve the HDSP/CCC facilities to pick up/drop off employees who reside in the South County area.

Exhibit 7.7

South County to Susanville Route Alternative C Proposed Schedule

Stop	Mid-day Trip	Evening Trip
Wal-Mart	10:05 AM	6:05 PM
Janesville - Payless Gas	10:25 AM	6:25 PM
Milford - Milford Store	10:40 AM	6:40 PM
Doyle - Post Office	11:00 AM	7:00 PM
Doyle - Senior Center	11:10 AM	7:10 PM
Herlong - Sage Brush Flats	11:30 AM	7:30 PM
Herlong - RV Park	11:35 AM	7:35 PM
Janesville - Payless Gas	12:10 PM	8:10 PM
Wal-Mart	12:28 PM	8:28 PM

Note: Deviations allowed within 3/4 mile of the route alignment.

East County Route

Modify route to serve HDSP/CCC facility – Given the relative low productivity of the East County Route, we recommend the LTSA consider modifying the route alignment to serve persons residing in the South County and the workers of the High Desert State Prison and California Correctional Center facilities. The employee survey (see Appendix E) suggests there is demand for home-to-work travel from Janesville to these two facilities in the morning and evening day-parts.

We recommend the route be crafted to include a stop at the Janesville park-and-ride lot off U.S. 395, bypassing the turn on Lakecrest. Following the Janesville stop, the bus would turn right onto Sears Road and continue along its existing route. To reduce commuter travel time, we also recommend eliminating the Litchfield stop. To access the HDSP/CCC facility, the bus would turn right on Leavitt Lane traveling north until it intersects with Center Road and the two adjacent facilities.

We estimate the run-time would remain the same (i.e., 80 minutes).

Commuter/Vanpool Program

Demo/Pilot express employee shuttle – Given the potential demand for transit service to and from Susanville and the High Desert State Prison and California Correctional Center facilities, we recommend the LTSA implement a demo/pilot express bus from Susanville directly to the two facilities during the morning and evening commute hours. The proposed service could pick up employees living in the Susanville area, as well as employees traveling from the West County area at Wal-Mart and potentially the Casino. We recommend the service initially operate on 30-minute headways, with the first morning trip departing Susanville at 5:15 a.m. and last trip at 7:15 a.m.; while the first evening trip would leave the HDSP/CCC facilities at 2:15 p.m. and the last trip at 5:15 p.m. Given the substantial initial costs of such a service, we recommend the service initially operate Tuesday through Thursday. After 90 days we recommend the service be reevaluated. If demand warrants, Monday and Friday service could be added.

Exhibit 7.9 Demo HDSP/CCC Susanville Employee Shuttle Proposed Alignment



Capital

Develop transit center in downtown Susanville

One follow-up recommendation from the 2007 TDP being considered by LTSA as a long-term goal is a transit center located in downtown Susanville. This center would be the primary starting, ending, and transfer point for all LRB routes. This would require the redesign or rerouting of each LRB route from Wal-Mart to include this location. The 2007 TDP recommended amenities such as bus loading bays for up to four buses at one time, outdoor and indoor passenger waiting areas, driver restrooms, secure storage, public information kiosk, parking spaces for transit staff, and pedestrian and cyclist facilities.

As a phased approach to developing this facility, we recommend an interim central location be established with installation of at least two large transit shelters including benches, one info-post, and two to three bus parking spaces. Two possible locations might be at Grand Avenue between 1st Street and Main Street or on River Street between the existing Caltrans property and the Paul Bunyan Lumber Company property.

Summary of Alternative C Recommendations

Alternative C recommendations include all Alternative A and B recommendations plus the following:

- Susanville City Fixed-Route:
 - Reschedule route to more directly serve College,
 - Relocate Susan River Apartments stop to Riverside Drive,
 - Relocate Lassen Manor Apartment stop (pending park project approval),
 - Improve Wal-Mart stop, and
 - Relocate Safeway stop;
- West County Route:
 - Add bus stops, and
 - Enhance connectivity with Plumas County Transit;
- South County to Susanville Route:
 - Extend serve in South County area;
- East County Route:
 - Convert into HDSP/CCC commuter route;
- Implement demo/pilot express bus for HDSP/CCC employees; and
- Develop transit center in downtown Susanville.

Alternative C Advantages

- Increased community awareness of Lassen Rural Bus.
- High probability of ridership growth.
- Increased customer satisfaction (e.g., dependability, increased information, usability of services).
- Reduced customer confusion among routes.
- Increased service coverage and miles.

- Increased fare revenue.

Alternative C Disadvantages

- Increased marketing cost.
- Increased short-term and long-term administrative costs.
- Increased costs through addition of Vehicle Service Hours and Vehicle Service Miles.
- One-time capital expenditure (grant plus local match).
- Higher long-term administrative cost, attributable chiefly to rideshare program.

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8. CAPITAL AND FINANCIAL PLANS

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CHAPTER 8 – CAPITAL AND FINANCIAL PLANS

This chapter presents capital requirements and five-year operating budget projections required to support the recommendations presented herein and within the Service Plan chapter (Chapter 7). Three distinct scenarios were developed: Alternatives A, B, and C.

This chapter is composed of four sections – the Capital Improvement Program presenting recommendations for improvement of transit infrastructure and expansion, a Capital Plan forecasting capital costs associated with implementing the recommendations, a Financial Plan estimating the cost of implementing each scenario outlined in Service Plan chapter, and a matrix of potential capital and operating funding sources.

8.1 Capital Improvement Program

The Capital Improvement Program (CIP) presents a framework for the ongoing development of the infrastructure necessary for the efficient provision of public transit service throughout Lassen County. This element includes an inventory of all vehicles, amenities, and facilities currently in use, as well as a strategy for the development of additional capital resources across the next five years to support transit service enhancements and ultimately increase Lassen Rural Bus's share of those trips made within Lassen County.

The CIP is divided into three elements: fleet, bus stops, and facilities. Each plays a critical role in the efficient provision of public transit services within the county. Within each element we outline existing conditions followed by discussion of the steps needed to support recommended service changes as well as respond to community input arising throughout the Transit Development Plan process.

Revenue Fleet

Fleet development is crucial to the continued success of Lassen Rural Bus. The cleanliness and reliability of rolling stock plays a vital role in retaining and attracting "choice riders." While ride-dependent customers may exhibit a greater tolerance for an outdated fleet, "choice riders" expect newer vehicles with more amenities. Given LTSA owns and provides the buses, maintenance and proper timing of vehicle replacement is critical in resource management and sustainability of the transit program. The following is a discussion of each transit service's operational vehicle fleet, which includes LRB fixed-route, commuter, demand-response, and Dial-A-Ride services.

Exhibit 8.1.1 includes detailed information for each vehicle in Lassen Rural Bus fleet. The LRB fleet is composed of nine revenue fleet vehicles ranging in size from 40-foot to 24-foot buses. The majority of the fleet is diesel powered while two vehicles are gasoline powered. Every transit vehicle is wheelchair-accessible and equipped with two onboard wheelchair tie-downs.

Vehicles are not assigned to a specific route. However, the 39- and 41-passenger buses are used mainly on the South County Commuter route.

Six vehicles are necessary to operate LRB's one commuter, one fixed-route, three deviated fixed-route, one demand-response, and Dial-A-Ride services during peak hours. Under FTA's Section 15 for funding and reporting the basic spare ratio calculation is:

$$\text{Spare Ratio} = \frac{\text{Total active fleet} - \text{Peak vehicle requirement}}{\text{Peak vehicle requirement}}$$

Although standardized, spare ratio calculations vary depending on transit operator conditions. Utilizing the formula above, with nine active vehicles designated for LRB services and six vehicles required for peak-hour service, LRB would have a spare ratio of .5 (spare per operating vehicle). The number of spares available is currently sufficient to meet the LRB's needs except for the lack of a vehicle large enough to provide back-up for one of the 40-foot commuter buses. When this occurs, a smaller capacity vehicle is deployed.

When analyzing commuter and fixed-route transit services (i.e., Susanville City Fixed-Route, South County Commuter, West County Route, South County to Susanville, East County Route), there are nine active vehicles to support these services. This excludes bus numbers 7 and 50 from the fleet list. To operate these routes during peak-hour service requires four vehicles. The spare ratio for these services is 1.25. Although this is a relatively high spare ratio when compared to the 25 percent American Public Transportation Association (APTA) guidelines, industry research has found spare ratios will vary greatly depending upon size of transit operation as well as other variables such as operating environment, age of fleet, urban versus rural or suburban service, etc. In addition, the FTA spare ratio rules apply chiefly to operations with more than 50 buses, and therefore allow smaller transit agencies to determine the appropriate spare ratio based on local prevailing conditions.

Operating conditions in Lassen County can be challenging and subject to various environmental conditions such as mountainous terrain, and poorly maintained and icy winter rural roads. These conditions not only impact the wear and tear on the fleet but also increase the chances of breakdowns or accidents while buses are in service, thereby requiring a higher level of peak-hour spare vehicles.

It should also be noted the South County Commuter route requires two buses during peak-hour service, each with the capacity to carry a load of at least 25 passengers. With that said, bus numbers 1 and 2 from the fleet list (Exhibit 8.1.1) would not be sufficient replacement vehicles for this route, reducing the number of replacement vehicles available.

Exhibit 8.1.1 Lassen Rural Bus Fleet List

Bus Number	Bus Type			Seating Capacity		Mileage (as of 04/01/11)	Fuel Type	Primary Service
	Make	Model	Model Year	Passengers	Wheelchairs			
1	Ford E350	Collins	1992	12	2 tie downs	196,477	Gasoline	Revenue
2	Ford E350	StarTrans	1994	12	2 tie downs	92,936	Gasoline	Revenue
5	Bluebird	QBRE	2000	41	2 tie downs	454,576	Diesel	Revenue
7	GMC	Jimmy	1992	5	None	119,104	Gasoline	Non-Revenue
14	El Dorado	Aero Elite 320	2006	30	2 tie downs	146,362	Diesel	Revenue
15	GMC 5500	Glaval Titan	2007	28	2 tie downs	105,536	Diesel	Revenue
16	GMC 5500	Glaval Titan	2007	28	2 tie downs	101,784	Diesel	Revenue
17	GMC 5500	Glaval Titan	2009	28	2 tie downs	18,357	Diesel	Revenue
18	GMC 5500	Glaval Titan	2009	28	2 tie downs	15,940	Diesel	Revenue
50	Ford	Explorer	2010	5	None	1,297	Gasoline	Non-Revenue
101	Gillig	Low-Floor	2010	39	2 tie downs	20,321	Diesel	Revenue

Source: Lassen Transit Service Agency

Fleet Replacement Strategy

The fleet replacement strategy is based mainly on FTA-stipulated “useful life” standards adopted for specific vehicle types. These standards must be followed by transit organizations purchasing buses and vans using federal capital funds. Vehicles must be in service for a minimum period of time (years) and/or number of miles prior to that vehicle’s retirement to ensure effective use of federally funded assets. There are five different service-life categories which vary depending on bus and van size and other characteristics (as specified in FTA Circular 9030.1B). Compliance with FTA regulations ensures the LTSA not only minimizes maintenance costs but also remains eligible for Federal funding for vehicle replacement. Other factors contributing to vehicle expansion or replacement include adjustments in spare ratios, as well as expansions or reductions in service levels.

The scenarios proposed in the Service Plan (Chapter 7.0) require varying levels of investment in revenue fleet. The table below (Exhibit 8.1.2) contrasts each scenario by the number of vehicles required based on peak-hour operations.

Exhibit 8.1.2 Number of Peak-Hour Buses by Scenario

	Current (Status Quo)	Alternative A	Alternative B	Alternative C
Fixed-Route Services				
Susanville City Fixed-Route	1	1	1	2
East County Route*	0	0	0	0
South County to Susanville Route*	0	0	0	1
West County Route	1	1	1	1
Commuter Services				
South County Commuter	2	2	2	2
Pilot Express HDSP/CCC Susanville Employee Shuttle	0	0	0	2
Demand-Response Services				
Eagle Lake Route	1	1	1	1
Dial-A-Ride	1	1	1	1
Spare	5	5	5	6
Total	11	11	11	16

*Route interlines with South County Commuter.



Federal Transit Administration (FTA) regulations stipulate large, heavy-duty vehicles—such as those in Lassen Rural Bus commuter fleet—must be operated in revenue service at least 12 years (or 500,000 miles, whichever comes first) to be eligible for replacement funding. Replacing vehicles on the 12-year cycle would ultimately reduce maintenance costs as the average age of the fleet would be

reduced versus waiting longer to replace individual vehicles. This replacement schedule is presented in Exhibit 8.1.3.

FTA regulations also stipulate medium-size, medium-duty transit buses, including truck chassis cutaways and minibuses—such as the County’s fleet used primarily for fixed-route services — be kept in service at least seven years (or 200,000 miles, whichever comes first) to be eligible for replacement funding.



The replacement strategy in Exhibit 8.1.3 spreads vehicle purchases in different years, wherein most years LTSA would only need to purchase one vehicle. However, in FY 2011/12 we recommend LTSA



replace vehicles 1, 2, and 7 which are past due by at least 12 years based on their programmed useful life. Given the type, size, and model year of these vehicles, they have a useful life of four and five years, or 100,000 to 150,000 miles (whichever comes first).

The following schedule does not reflect procurements for fleet expansion. Details regarding fleet expansion are presented in the Capital Plan.

Exhibit 8.1.3 Fleet Replacement Strategy

Vehicle	Model Year	Type	Primary Mode	Replacement Year*	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
1	1992	Ford E350 - Collins	DAR/Fixed Route/Misc.	1997											
2	1994	Ford E350 - StarTrans	DAR/Fixed Route/Misc.	1999											
7	1992	GMC Jimmy	Misc./Admin.	1996											
50	2010	Ford Explorer	Administration	2014											
14	2006	El Dorado - Aero Elite 320	Fixed Route	2013											
15	2007	GMC 5500 - Glaval Titan	Fixed Route	2014											
16	2007	GMC 5500 - Glaval Titan	Fixed Route	2014											
18	2009	GMC 5500 - Glaval Titan	Fixed Route	2016											
5	2000	Bluebird - QBRE	Commuter Service	2012											
17	2009	GMC 5500 - Glaval Titan	Commuter Service	2016											
101	2010	Gillig Low-Floor	Commuter Service	2022											

*Replacement year reflects FTA-stipulated "useful life" standards and varies by vehicle type.

Exhibit 8.1.4 Transit Vehicle Useful Life Standards

Vehicle	FTA Category	FTA Minimum Useful Life		Price Range (2009 prices)
		Years	Miles	
1	D	5 years	150,000	45,000-75,000 (+5,500 for diesel)
2	D	5 years	150,000	45,000-75,000 (+5,500 for diesel)
5	A	12 years	500,000	200,000 - 400,000 (diesel standard)
7	E	4 years	100,000	18,000 - 25,000
14	C	7 years	200,000	70,000 - 200,000 (+6,000 for diesel)
15	C	7 years	200,000	70,000 - 200,000 (+6,000 for diesel)
16	C	7 years	200,000	70,000 - 200,000 (+6,000 for diesel)
17	C	7 years	200,000	70,000 - 200,000 (+6,000 for diesel)
18	C	7 years	200,000	70,000 - 200,000 (+6,000 for diesel)
50	E	4 years	100,000	18,000 - 25,000
101	A	12 years	500,000	200,000 - 400,000+ (diesel standard)

Source: Useful Life of Transit Buses and Vans, FTA Report No. FTA VA-26-7229-07.

Bus Stop Element

This portion of the Capital Improvement Program includes an inventory of current bus stop amenities as well as a strategy for their enhancement.

The LTSA currently has three different types of bus stops:

1. Stops with sign poles,
2. Stops with benches, and
3. Stops with shelters.

Bus shelters can play a critical role in the success of a public transit program. Shelters build awareness of the service and can generate advertising revenue. Yet first and foremost they contribute toward transit rider safety and comfort. Industry research has confirmed bus shelters can also play a vital role in attracting additional ridership. The absence of adequate amenities at bus stops can deter both potential and existing patrons from using transit given the relative comfort and convenience inherent in a personal vehicle.

To determine which stops lack adequate amenities (i.e., benches, bus stop signs, info-posts, shelters, and trash receptacles) or aesthetically desired improvement, we assessed all Lassen Rural Bus commuter and fixed-route bus stops, paying particular attention to high activity stops and published time-points.

Observation of existing bus stops and amenities realized the need to provide additional service information through info-posts and route identifiers on bus stop signs, as well as sitting facilities or bus benches to accommodate customers during wait times. No bus stops, including the main transfer point (Wal-Mart) for all LRB services, were equipped with info-posts (i.e., route schedules and maps) or included any contact information (i.e., phone number/URL). Subsequent to the prior Transit Development Plan (2007), the County purchased a set of new bus stop signs for the Susanville City Route. The signs will replace old ones and be posted at all stops published in the route schedule. Installation of these bus stop signs is extremely critical given the recent (March 2011) elimination of “flag stops” along the Susanville City route.



A recurring concern voiced by bus riders nation-wide is the lack of sufficient lighting at transit stops. Insufficient lighting often creates a security issue as patrons must wait in the dark where they cannot be seen by passing motorists as well as making them more susceptible to crime. Poor lighting also increases the likelihood buses will fail to see waiting customers and pass them by. Although LRB services do not operate past 8:00 p.m., during the winter months it gets darker earlier than other times of the year. This problem can be solved either through the installation of improved street lighting, or the use of new, solar-powered, lighted sign posts. These units include service information and a user-activated strobe light to alert buses to the presence of waiting patrons. The units are solar-powered and do not require extensive trenching for their installation, making them

ideal for addressing these concerns in less-developed portions of a service area, as well as improving transit brand visibility.

The table below illustrates new stops necessary to support each of the proposed operating scenarios. The financial plan also budgets for additional shelters each year on an as-needed basis.

Exhibit 8.1.5 New Stops by Service Scenario

Route	Alternative		
	A	B	C
Susanville City Fixed Route	Napa Auto or Thunder Joes for IGA Market	V A Diamond View Clinic	
	Alexander Avenue & Orange Street		
	1 st & Ash (After Bunyan & Ash stop)		
	Social Security Office (after Wal-Mart)		
	Lassen County Career Network		
	1616 Chestnut Street		
West County Route		Banner Lassen Medical Center	
East County Route			HDSP/CCC Facility
South County to Susanville Route		Sage Brush Flats	

Facilities Element

Existing Facilities

All buses utilized for the Lassen Rural Bus fixed-route, commuter, and demand-response programs are stored and maintained at the LRB facility on Johnstonville Road. This location includes bus storage, a maintenance yard, and a bus washing facility.

Lassen Rural Bus utilizes two transit/transfer stations in Susanville: Wal-Mart and Lassen Community College. The following is a brief discussion of each location's amenities and current capacity.

Wal-Mart. This stop is located along the side street (Riverside Drive) adjacent to Wal-Mart. The stop is the main transfer station and hub for all LRB services and routes, as well as a stop for Modoc County's Sage Stage Route from Alturas to Reno.



Customer amenities at this stop include a bench, shelter, trash receptacle, parking, and signage (for LRB and Modoc County Sage Stage). There is no designated park and ride parking; however, many riders of the South County Commuter Route use the Wal-Mart parking lot. Directly in front of the passenger bus shelter is a bus cut-out with space for two small and/or mid-sized transit vehicles. The larger vehicles used for the South County Commuter Route park on the street adjacent to the shelter.

Safety concerns associated with this location include the visibility of the passenger waiting areas from any main road or activity center. The bus stop is currently located off any main road facing

vacant land and an office building, wherein waiting passengers in the evening may be vulnerable to crime when no one is around. Assuring appropriate lighting is maintained at this location should be a high priority to enhance passenger safety.

College Station. This transit station is located at the front entrance of Lassen Community College. The station is served by four of the five LRB fixed and commuter routes, including the Susanville City Route, South County to Susanville Route, East County Route, and West County Route. This station is equipped with a bench, shelter, bus stop sign, and trash receptacle. The current shelter is in need of replacement as it is currently off of the foundation and has been worn by weather. In addition to a new shelter, it is recommended that bike racks be installed. Both the shelter and racks should follow the current LRB Transit Design Manual.



It is critical these two locations include info-posts displaying route information (schedule and map), as well as fare and contact information. At the very least, the bus stop signs should include a phone number (252-RIDE).

New Facilities and Capital Improvements

Alternatives A, B, and C under the Service Plan (Chapter 7) recommend the expansion of existing services coupled with the introduction of new services. As a result, implementation of the recommendations would require the improvement and installation of new bus stops (see Exhibit 8.1.1). The Agency has already begun taking steps to undertake such efforts and is seeking PTMISEA funding to install additional bus shelters, improve existing stops, and expand its maintenance facility in Susanville. Similarly, funding using sources such as STA 5311 will be used for the procurement of necessary property to implement capital improvements such as the Mobility Management Center and other projects noted in this report.

8.2 CAPITAL PLAN

The Capital Plan identifies cost figures for recommendations included within the Capital Improvement Program as well as costs associated with implementing the recommendations provided in Alternative C. To support the operational recommendations presented in the Capital Improvement Program, we developed a comprehensive fleet replacement strategy which increases LRB's fleet size to 17 vehicles with a 70-percent spare ratio.

The five-year Capital Plan presented herein reflects the capital purchases needed to implement each alternative. The Plan includes additional funds for the growth or expansion of LTSA's transit system, highlighting purchases of new vehicles for fixed-route service and bus stop amenities corresponding with implementation of new stops. It also provides cost estimates for facility improvements such as those to the LRB maintenance bay, the Downtown Susanville facility as well as the associated land purchases required.

As presented in Exhibit 8.1.2 – Number of Peak-Hour Buses by Scenario, Alternative C will require the expansion of the current fleet by two vehicles to supplement the increase in frequencies on the Susanville City Fixed-Route and the introduction of mid-day and evening trips for the South County to Susanville route. As proposed in the Financial Plan to follow, the implementation of the service recommendations and introduction of improvements would be phased in across the five-year planning period.

LASSEN COUNTY TRANSPORTATION COMMISSION - 2011 TRANSIT DEVELOPMENT PLAN

Exhibit 8.2.1 Capital Plan

			FY 2011/12		FY 2012/13		FY 2013/14		2014/15		2015/16			FY 2016/17		
			Number	Total Cost	Number	Total Cost	Number	Cost/Unit	Total Cost	Number	Total Cost	Number	Cost/Unit	Total Cost	Number	Cost/Unit
Fleet																
	12 Pass-Cutaway-Gasoline (replacement)	2	\$110,000		\$0		\$58,350	\$0	1	\$60,100	3	\$61,903	\$185,709		\$63,760	\$0
	41 Pass-Coach-Diesel (replacement)		\$0	1	\$386,250		\$397,838	\$0		\$0		\$422,066	\$0		\$434,728	\$0
	5 Pass-Van-Gasoline (replacement)	1	\$22,000		\$0		\$23,340	\$0		\$0	1	\$24,761	\$24,761		\$25,504	\$0
	28 to 30 Pass-Transit Bus-Diesel (replacement & expansion)		\$0	1	\$133,900	2	\$137,917	\$275,834	2	\$284,109		\$146,316	\$0	2	\$150,706	\$301,411
	Subtotal	3	\$132,000	2	\$520,150	2	617444	\$275,834	3	\$344,209	4	655046	\$210,470	2	674698	\$301,411
Bus Stops																
	Standard Sign Posts		\$0	9	\$1,854	6	\$212	\$1,273	6	\$1,311	10	\$225	\$2,251		\$232	\$0
	Info-posts		\$0	7	\$1,803	6	\$265	\$1,591	6	\$1,639	6	\$281	\$1,688	3	\$290	\$869
	Benches		\$0	1	\$1,545		\$1,591	\$0		\$0		\$1,688	\$0		\$1,739	\$0
	Subtotal	0	\$0.00	17	\$5,201.50	12	3130	\$2,864.43	12	\$2,950.36	16	3320	\$3,939.28	3	3420	\$869.46
Facilities																
	Downtown Transit Center		\$0		\$0		\$11,872	\$11,872		\$6,114		\$12,595	\$6,297		\$12,973	\$6,486
	LRB Maintenance Facility Expansion						\$170,000	\$170,000								
	Land Procurement						\$150,000	\$150,000								
	Subtotal		\$0.00		\$0.00		331872	\$331,871.78		\$6,113.97		12595	\$6,297.39		12973	\$6,486.31
Total			\$132,000		\$525,352		\$952,445	\$610,570		\$353,273		\$670,961	\$220,707		\$691,090	\$308,767

Exhibit 8.2.2 Capital Purchases Timeline

Recommendation	Capital Purchases	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
Alternative A							
Bus stop infrastructure improvements	31 LRB bus stop signs	\$0	\$1,854	\$1,273	\$1,311	\$2,251	\$0
Alternative B							
N/A							
Alternative C							
Susanville City Route - Increase to 30-minute headways	Purchase one 28-passenger vehicle		\$150,706				
South County to Susanville Route - Introduce mid-day and evening trips	Purchase one 12-passenger vehicles			\$58,350			
Introduce demo/pilot HDSP/CCC Susanville employee shuttle	Purchase two 12-passenger vehicles					\$123,805.97	
Spare vehicle purchase	Purchase one 28-passenger vehicle for spare			\$137,917.00			
Total		\$0.00	\$152,560.00	\$197,539.58	\$1,311.27	\$126,056.99	\$0.00

8.3 Financial Plan

The Financial Plan forecasts those expenditures needed to implement the recommendations included within Chapter 7 Service Alternatives. Such changes vary in scope from schedule amendments (Alternative A) to an introduction of new and expanded services (Alternative C). Therefore, they vary in cost dramatically. The Plan also includes anticipated changes in passenger fare revenue as well as estimated funding from grant programs supporting the implementation of each proposed service alternative.

Alternative A Financial Plan

Five-year operating expenses have been developed using the following assumptions:

1. All recommendations outlined in Alternative A (Chapter 7) would begin implementation in FY 2012/13.
2. Capital purchases, such as bus stop signs, would occur during the fiscal year identified in the Capital Plan.
3. Operational costs are based on LTSA-provided data (i.e., Operating Budget and 2009 Triennial Performance Audit).
4. The rate of inflation is forecast at no greater than three percent per annum.
5. Fixed-route ridership and fare revenue are projected to increase five percent/annum.
6. Vehicle Replacement costs are projected to increase three percent/annum.
7. Any operating expenses not covered through farebox recovery or grants (i.e., FTA Section 5311) would be covered through local subsidy.
8. Additional capital expenses would be covered through grant funds.

The table below summarizes the effect implementing Alternative A would have on the fixed-route, commuter, and demand-response services. Given Alternative A recommends modest changes to operations and does not increase Vehicle Service Hours, there are no changes realized to the operating cost (see Exhibit 8.3.1). Under this alternative, and as described in more detail in Chapter 7, recommendations include the following operational changes:

- Adjust Susanville City Route schedule to start and end at Wal-Mart, and
- Increase headway for each trip.

Exhibit 8.3.1 Summary of Alternative A Impact and Cost

Route	Current Service Hours		Alternative A Scenario Service Hours		Difference		Cost/VSH	Annual Operating Cost		
	Weekly	Annually	Weekly	Annually	Weekly	Annual		Current	Alternative A	Difference
Susanville City	66	3,389	66	3,389	0	0	\$65.95	\$223,479	\$223,479	\$0
South County Commuter	26	1,336	26	1,336	0	0		\$88,091	\$88,091	\$0
West County Commuter	27	1,363	27	1,363	0	0		\$89,911	\$89,911	\$0
South County to Susanville	16	815	16	815	0	0		\$53,740	\$53,740	\$0
East County	16	799	16	799	0	0		\$52,679	\$52,679	\$0
Eagle Lake	1	69	1	69	0	0		\$4,551	\$4,551	\$0
Subtotal	152	7,770	152	7,770	0	0		\$512,451	\$512,451	\$0
Dial-A-Ride	66	3,389	66	3,389	0	0		\$223,479	\$223,479	\$0
Total	219	11,159	218	11,159	0	0		735,930	735,930	\$0

As presented below, we recommend service changes to occur during the first planning year, while capital improvements would be spread across the five planning years. Again, given the operating recommendations under this scenario do not increase vehicle service hours, no additional operating costs are realized.

Exhibit 8.3.2 Alternative A Operating Cost/Year of Implementation

Alternative A	Year of Implementation				
Recommendations	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
Convert City Route into round trip	X	-	-	-	-
City Route - Increase headway per trip	X				
Introduce new stops to City Route	X	-	-	-	-
Total Additional Operating Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Exhibit 8.3.3 shows the impact on Farebox Recovery for the fixed-route and commuter services. Given the minor operational changes implemented in Alternative A, we forecast steady increases to ridership and fare revenue across the planning horizon.

Exhibit 8.3.3 Alternative A Impact on Farebox Recovery

	Cost	Passengers	Fare Revenue	Farebox Recovery
FY 2009/10*	\$512,451	51,245	\$116,839	22.8%
FY 2010/11*	\$502,202	55,924	\$119,678	23.8%
FY 2011/12	\$517,268	57,602	\$123,269	23.8%
FY 2012/13	\$532,786	60,482	\$129,432	24.3%
FY 2013/14	\$548,770	63,506	\$135,904	24.8%
FY 2014/15	\$565,233	66,682	\$142,699	25.2%
FY 2015/16	\$582,190	70,016	\$149,834	25.7%
FY 2016/17	\$599,655	73,517	\$157,326	26.2%

*Data reflects existing conditions; provided by LTSA for FY 2009/10 and FY 2010/11

All revenues are listed at the top of Exhibit 8.3.4. Revenue sources include customer fares, federal operating grants (FTA Section 5311), federal capital grants, Special Funds, and local subsidy among other revenue resources. The Special Funds item is a defined annual amount based on vehicle service hours, vehicle service miles, fuel costs, administrative costs, and maintenance costs associated with the LTSA providing local transit services.

As presented in Exhibit 8.3.4, in the event forecast revenue exceeds cost in a given year, the difference is included within the "Carryover" line item for the following year. All expenses are listed at the bottom of Exhibit 8.3.4. Expenses include operations and capital outlay (i.e., vehicles, bus stop amenities, facilities). Capital expenses include the purchase of replacement vehicles throughout the LRB system.

Exhibit 8.3.4 Alternative A Financial Plan

	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
Revenue							
User Fees							
Farebox Revenue (collected on bus)	\$101,136	\$104,170	\$108,337	\$112,670	\$117,177	\$121,864	\$126,739
Other Revenue (collected in office)	\$75,391	\$77,653	\$80,759	\$83,989	\$87,349	\$90,843	\$94,476
FTA 5311	\$138,997	\$143,167	\$147,462	\$151,886	\$156,442	\$161,136	\$165,970
Local Transportation Fund Sales Tax	\$458,663	\$472,423	\$486,595	\$501,193	\$516,229	\$531,716	\$547,667
State Transportation Assistance	\$140,000	\$140,000	\$144,200	\$148,526	\$152,982	\$157,571	\$162,298
Special Funds	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Interest on Investment	\$2,650	\$2,676	\$2,703	\$2,730	\$2,757	\$2,785	\$2,813
Carryover	-	\$204,451	\$278,182	\$103,146	\$184,653	\$127,863	\$337,730
Total Revenue	\$936,836	\$1,164,539	\$1,268,238	\$1,124,141	\$1,237,589	\$1,213,777	\$1,457,693
Expenditures							
Operations	\$732,385	\$754,357	\$776,988	\$800,297	\$824,306	\$849,035	\$874,506
Capital Plan							
Vehicles	\$0	\$132,000	\$386,250	\$137,917	\$284,109	\$24,761	\$301,411
Bus Stops	\$0	\$0	\$1,854	\$1,273	\$1,311	\$2,251	\$0
Facilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$132,000	\$388,104	\$139,190	\$285,420	\$27,012	\$301,411
Total Expenditures	\$732,385	\$886,357	\$1,165,092	\$939,487	\$1,109,726	\$876,048	\$1,175,918
Surplus or Deficit	\$204,451	\$278,182	\$103,146	\$184,653	\$127,863	\$337,730	\$281,775

**Estimate based on historic STA funding*

Alternative B Financial Plan

Five-year operating expenses have been developed using the following assumptions:

1. Recommendations outlined in Alternative B (Chapter 7) would begin implementation FY 2012/13.
2. Purchases of replacement vehicles would occur during the fiscal year identified in the Capital Plan.
3. Other capital purchases would occur during the fiscal year identified in the Capital Plan.
4. Operational costs are based on LTSA-provided data (i.e., Operating Budget and 2009 Triennial Performance Audit).
5. The rate of inflation is forecast at no greater than three percent per annum.
6. Fixed-route and commuter ridership and fare revenue are projected to increase six percent/annum.
7. Vehicle Replacement costs are projected to increase three percent/annum.
8. Any operating expenses not covered through farebox recovery or grants (i.e., FTA Section 5311) would be covered through local subsidy.
9. Additional capital expenses would be covered through grant funds.

The table below summarizes the effects which implementing Alternative B would have on annual vehicle service hours and operating cost. This scenario represents the implementation of all proposed recommendations provided in Chapter 7 – Service Alternatives. We recommend the LTSA adopt a phased approach to implementing the proposed recommendations to avoid dramatic gains in operating costs during any single year. This phased approach is presented in Exhibit 8.3.6 and spans a five-year planning period. Operating recommendations under this alternative include all recommendations under Alternative A plus the addition of the following:

- Add additional fleet vehicle to increase number of trips per day,
- Reroute Susanville City Route to V A Clinic on Johnstonville Road,
- Implement express service along Susanville City Route every other trip,
- Extend Susanville City Route service hours in the evening by one hour,
- Extend West County Commuter Route to Banner Lassen Medical Center,
- Eliminate Susanville stops (except Wal-Mart) along the South County to Susanville Route, and
- Implement weekday HDSP/CCC Vanpool Program.
- Expand current LRB facility to include additional maintenance bay, etc.

Exhibit 8.3.5 Summary of Alternative B Changes and Costs

Alternative B	Current Service Hours		Alternative B Scenario Service Hours		Difference		Cost/VSH	Annual Operating Cost		
	Weekly	Annually	Weekly	Annually	Weekly	Annual		Current	Alternative B	Difference
Susanville City	66	3,389	77	3,924	11	536	\$65.95	\$223,479	\$258,795	\$35,316
South County Commuter	26	1,336	26	1,336	0	0		\$88,091	\$88,091	\$0
West County Route	27	1,363	28	1,450	2	87		\$89,911	\$95,629	\$5,718
South County to Susanville	16	815	15	755	-1	-60		\$53,740	\$49,805	-\$3,935
East County	16	799	15.2	773	-1	-26		\$52,679	\$50,997	-\$1,682
Eagle Lake	1	69	1	69	0	0		\$4,551	\$4,551	\$0
Subtotal	152	7,770	163	8,307	11	537		\$512,451	\$547,868	\$35,417
Dial-A-Ride	66	3,389	66	3,389	0	0	\$38.00	\$223,479	\$223,479	\$0
Vanpool Program (new svc)*	0	0	89	4,539	89	4,539		\$0	\$172,482	\$172,482
Total	219	11,159	318	16,235	99	5,076		\$735,930	\$943,829	\$207,899

*Operating cost associated with leasing the vehicles.

The following table illustrates the phased approach to implementing both administrative and operational system changes in this scenario. As presented below, we recommend the proposed changes to be phased across a five-year period.

Exhibit 8.3.6 Alternative B Operating Cost/Year of Implementation

Alternative B Recommendations	Year of Implementation				
	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
City Route - Convert into round trip	X	-	-	-	-
City Route - Increase headway per trip	X				
City Route - Add Express Service		X			
City Route - Extend Evening service by one hour	-	\$20,180.00	-	-	-
City Route - Add V A Clinic (Johnstonville Rd.)	\$15,135.00	-	-	-	-
West County Route - Add Banner Lassen Medical Center stop	\$5,718.00	-	-	-	-
South County to Susanville stop additions and eliminations	-\$3,935.00	-	-	-	-
East County Route - Eliminate route segment	-\$1,682.00	-	-	-	-
Introduce HDSP/CCC Vanpool Program	-	-	\$172,482.00		
Total Additional Operating Cost	\$15,236.00	\$20,180.00	\$172,482.00	\$0.00	\$0.00

As presented in Exhibit 8.3.7, although ridership and fare revenue are forecast to increase, there will most likely be temporary declines in farebox recovery during years of implementation due to the increase in operating cost.

Exhibit 8.3.7 Impact on System Farebox Recovery

	Cost	Passengers	Fare Revenue	Farebox Recovery
FY 2009/10*	\$512,451	51,245	\$116,839	22.8%
FY 2010/11*	\$502,202	55,924	\$119,678	23.8%
FY 2011/12	\$517,268	57,602	\$123,269	23.8%
FY 2012/13	\$527,687	61,058	\$130,665	24.8%
FY 2013/14	\$532,631	64,722	\$138,505	26.0%
FY 2014/15	\$548,610	68,605	\$146,815	26.8%
FY 2015/16	\$565,068	72,721	\$155,624	27.5%
FY 2016/17	\$582,020	77,085	\$164,961	28.3%

*Data reflects existing conditions; provided by LTSA for FY 2009/10 and FY 2010/11

All revenues are listed at the top of Exhibit 8.3.8. Revenue sources include user fees, federal operating grants (FTA Section 5311), federal capital grants, federal capital grants, Special Funds, local subsidy among other listed revenue resources, and Local Transportation Funds. "Carryover" represents the difference between total operating expenses and operating revenues. All expenses are listed at the bottom of Exhibit 8.3.8. Expenses include operations and capital outlay (i.e., vehicles and bus stop amenities). Factors contributing to increased operating cost include the development of new services/routes segments and associated costs in sustaining these expansions. Capital expenses are associated with the implementation of new stops (i.e., bus stop signage, benches, and info-posts).

The "Needed Discretionary Funds" (or local subsidy) represents the difference between total operating expenses and operating revenues (such as FTA Section 5311 and user fees). In the event forecast revenue exceeds cost in a given year, the difference is included within the "Carryover" line item for the following year.

Exhibit 8.3.8 Alternative B Financial Plan

	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
Revenue							
User Fees							
Fare Box Revenue (collected on bus)	\$101,136	\$104,170	\$109,379	\$114,848	\$120,590	\$126,619	\$132,950
Other Revenue (collected in office)	\$75,391	\$77,653	\$81,535	\$85,612	\$89,893	\$94,387	\$99,107
FTA 5311	\$138,997	\$147,000	\$151,410	\$155,952	\$160,631	\$165,450	\$170,413
Local Transportation Fund Sales Tax	\$458,663	\$472,423	\$486,595	\$501,193	\$516,229	\$531,716	\$547,667
State Transportation Assistance	\$140,000	\$140,000	\$144,200	\$148,526	\$152,982	\$157,571	\$162,298
Lassen Community College Agreement	\$20,000	\$20,000	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510
Interest on Investment	\$2,650	\$6,800	\$6,900	\$7,000	\$7,100	\$7,200	\$7,300
Needed Discretionary Funds (Local Subsidy)	-	-	\$28,941	\$381,539	\$201,541	\$64,136	\$75,414
Carryover		\$211,155	\$299,749	\$0	\$0	\$0	\$127,616
Total Revenue	\$936,836	\$1,179,201	\$1,328,709	\$1,415,270	\$1,270,183	\$1,168,934	\$1,345,276
Expenditures							
Operations	\$725,681	\$747,451	\$937,258	\$954,489	\$983,124	\$1,012,617	\$1,042,996
Capital Plan							
Vehicles	\$0	\$132,000	\$386,250	\$137,917	\$284,109	\$24,761	\$301,411
Bus Stops	\$0	\$0	\$5,202	\$2,864	\$2,950	\$3,939	\$869
Facilities	\$0	\$0	\$0	\$320,000	\$0	\$0	\$0
Subtotal	\$0	\$132,000	\$391,452	\$460,781	\$287,059	\$28,700	\$302,281
Total Expenditures	\$725,681	\$879,451	\$1,328,709	\$1,415,270	\$1,270,183	\$1,041,318	\$1,345,277
Surplus or Deficit	\$211,155	\$299,749	\$0	\$0	\$0	\$127,616	\$0

*Estimate based on historic STA funding

Alternative C Financial Plan

Five-year operating expenses have been developed using the following assumptions:

1. Recommendations outlined in Alternative C (Chapter 7) would begin implementation in FY 2012/13.
2. Purchases of replacement vehicles would occur during the fiscal year identified in the Capital Plan.
3. Other capital purchases would occur during the fiscal year identified in the Capital Plan.
4. Operational costs are based on LTSA-provided data (i.e., Operating Budget and 2009 Triennial Performance Audit).
5. The rate of inflation is forecast at no greater than three percent per annum.
6. Fixed-route and commuter ridership and fare revenue are projected to increase ten percent/annum.
7. Vanpool ridership and fare revenue are projected to increase four percent/annum after program initiation.
8. Vehicle Replacement costs are projected to increase three percent/annum.
9. Any operating expenses not covered through farebox recovery or grants (i.e., FTA Section 5311) would be covered through local subsidy.
10. Additional capital expenses would be covered through grant funds.

The table below summarizes the effects which implementing Alternative C would have on annual vehicle service hours and operating cost. This scenario represents the implementation of all proposed recommendations provided in Chapter 7 – Service Alternatives. We recommend the LTSA adopt a phased approach to implementing the proposed recommendations to avoid dramatic gains in operating costs during any single year. This phased approach is presented in Exhibit 8.3.10 and spans a five-year planning period. The following financial estimates and forecast include all of the recommendations in Alternatives A and B, with the addition of the following operational strategies:

- Increase Susanville City Route to 30-minute frequency,
- Relocate stops at Safeway and Wal-Mart,
- Relocate access point for Riverside Apartments for the Susanville City Route,
- Add mid-day and evening weekday trips to the South County to Susanville Route,
- Modify East County Route to serve HDSP/CCC facilities, and
- Introduce weekday peak-hour demo/pilot express HDSP/CCC employee shuttle from Susanville.

Exhibit 8.3.9 Summary of Alternative C Changes and Costs

Alternative C	Current Service Hours		Alternative C Scenario Service Hours		Difference		Cost/VSH	Annual Operating Cost		
	Weekly	Annually	Weekly	Annually	Weekly	Annual		Current	Alternative C	Difference
Susanville City	66	3,389	111	5,658	45	2,270	\$65.95	\$223,479	\$373,152	\$149,674
South County Commuter	26	1,336	26	1,336	0	0		\$88,091	\$88,091	\$0
West County	27	1,363	28	1,450	2	87		\$89,911	\$95,629	\$5,718
South County to Susanville	16	815	40	2,030	24	1,215		\$53,740	\$133,891	\$80,151
East County	16	799	15	773	-1	-26		\$52,679	\$50,997	-\$1,682
Eagle Lake	1	69	1	69	0	0		\$4,551	\$4,551	\$0
HDSP/CCC Employee Shuttle Pilot	0	0	30	1,530	30	1,530		\$0	\$100,904	\$100,904
Subtotal	152	7,770	252	12,846	100	5,076		\$512,451	\$847,215	\$334,764
Dial-A-Ride	66	3,389	72	3,695	6	306		\$223,479	\$243,660	\$20,181
Vanpool Program (new svc)*	0	0	89	4,539	89	4,539	\$38.00	\$0	\$172,482	\$172,482
Total	219	11,159	413	21,080	195	9,921		\$735,930	\$1,263,357	\$527,427

The following table illustrates the phased approach to implementing both administrative and operational system changes in this scenario. As presented below, we recommend the service changes be phased in across the five-year period.

Exhibit 8.3.10 Alternative C Operating Cost/Year of Implementation

Alternative B Recommendations	Year of Implementation				
	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
City Route - Convert into round trip	X	-	-	-	-
City Route - Introduce new stops	\$206.00	-	-	-	-
City Route - Extend Evening service by one hour	-	\$20,180.00	-	-	-
City Route - Add VA Clinic (Johnstonville Rd.)	\$15,135.00	-	-	-	-
West County Route - Add Banner Lassen Medical Center stop	\$5,718.00	-	-	-	-
South County to Susanville stop additions and eliminations	-\$3,935.00	-	-	-	-
East County Route - Eliminate route segment	-\$1,682.00	-	-	-	-
Introduce HDSP/CCC Vanpool Program	-	-	\$172,482.00	-	-
City Route - Increase to 30-minute headway	-	-	-	-	\$84,086.00
South County to Susanville - Introduce Mid-day and Evening Trips	-	\$84,086.00	-	-	-
Pilot Express HDSP/CCC Employee Shuttle from Susanville	-	-	-	\$100,904.00	-
Total Additional Operating Cost	\$15,442.00	\$104,266.00	\$172,482.00	\$100,904.00	\$84,086.00

As presented in Exhibit 8.3.11, although ridership and fare revenue are forecast to increase, there will most likely be a temporary decline in farebox recovery during implementing years due to an increase in operating cost.

Exhibit 8.3.11 Impact on System Farebox Recovery

	Cost	Passengers	Fare Revenue	Farebox Recovery
FY 2009/10*	\$512,451	51,245	\$116,839	22.8%
FY 2010/11*	\$502,202	55,924	\$119,678	23.8%
FY 2011/12	\$517,268	57,602	\$123,269	23.8%
FY 2012/13	\$527,893	63,362	\$135,596	25.7%
FY 2013/14	\$647,996	69,699	\$149,155	23.0%
FY 2014/15	\$667,436	76,669	\$164,071	24.6%
FY 2015/16	\$788,363	84,335	\$180,478	22.9%
FY 2016/17	\$896,100	92,769	\$198,526	22.2%

*Data reflects existing conditions; provided by LTSA for FY 2009/10 and FY 2010/11

All revenues are listed at the top of Exhibit 8.3.12. Revenue sources include rider fares, federal operating grants (FTA Section 5311), federal capital grants, federal capital grants, Special Funds, local subsidy among other listed revenue resources, and Local Transportation Funds. "Carryover" represents the difference between total operating expenses and operating revenues. All expenses are listed at the bottom of Exhibit 8.3.12. Expenses include operations and capital outlay (i.e., vehicles and bus stop amenities). Factors contributing to increased operating cost include the development of new services/routes segments and associated costs in sustaining these expansions. Capital expenses are associated with the implementation of new stops (i.e., bus stop signage, benches, and info-posts).

The "Needed Discretionary Funds" (local subsidy) represents the difference between total operating expenses and operating revenues (such as FTA Section 5311 and user fees). In the event forecast revenue exceeds cost in a given year, the difference is included within the "Carryover" line item for the following year.

Exhibit 8.3.12 Alternative C Financial Plan

	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
Revenue							
User Fees							
Fare Box Revenue (collected on bus)	\$101,136	\$104,170	\$110,941	\$118,707	\$128,204	\$138,460	\$149,537
Other Revenue (collected in office)	\$75,391	\$77,653	\$82,700	\$88,076	\$93,801	\$99,898	\$106,391
FTA 5311	\$138,997	\$147,000	\$151,410	\$155,952	\$160,631	\$165,450	\$170,413
Local Transportation Fund Sales Tax	\$458,663	\$472,423	\$486,595	\$501,193	\$516,229	\$531,716	\$547,667
State Transportation Assistance	\$140,000	\$140,000	\$144,200	\$148,526	\$152,982	\$157,571	\$162,298
Lassen Community College Agreement	\$40,000	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020	\$46,371
Interest on Investment	\$2,650	\$6,800	\$6,900	\$7,000	\$7,100	\$7,200	\$7,300
Needed Discretionary Funds (Local Subsidy)	-	-	\$119,301	\$625,302	\$359,539	\$318,485	\$483,260
Carryover	-	\$224,451	\$326,139	\$0	\$0	\$0	\$0
Total Revenue	\$956,836	\$1,212,496	\$1,469,387	\$1,687,192	\$1,462,194	\$1,463,799	\$1,673,238
Expenditures							
Operations	\$732,385	\$754,357	\$944,035	\$1,076,622	\$1,108,921	\$1,243,092	\$1,364,471
Capital Plan							
Vehicles	\$0	\$132,000	\$520,150	\$275,834	\$344,209	\$210,470	\$301,411
Bus Stops	\$0	\$0	\$5,202	\$2,864	\$2,950	\$3,939	\$869
Facilities	\$0	\$0	\$0	\$331,872	\$6,114	\$6,297	\$6,486
Subtotal	\$0	\$132,000	\$525,352	\$610,570	\$353,273	\$220,707	\$308,767
Total Expenditures	\$732,385	\$886,357	\$1,469,386	\$1,687,192	\$1,462,194	\$1,463,799	\$1,673,238
Surplus or Deficit	\$224,451	\$326,139	\$0	\$0	\$0	\$0	\$0

*Estimate based on historic STA funding

Funding Sources

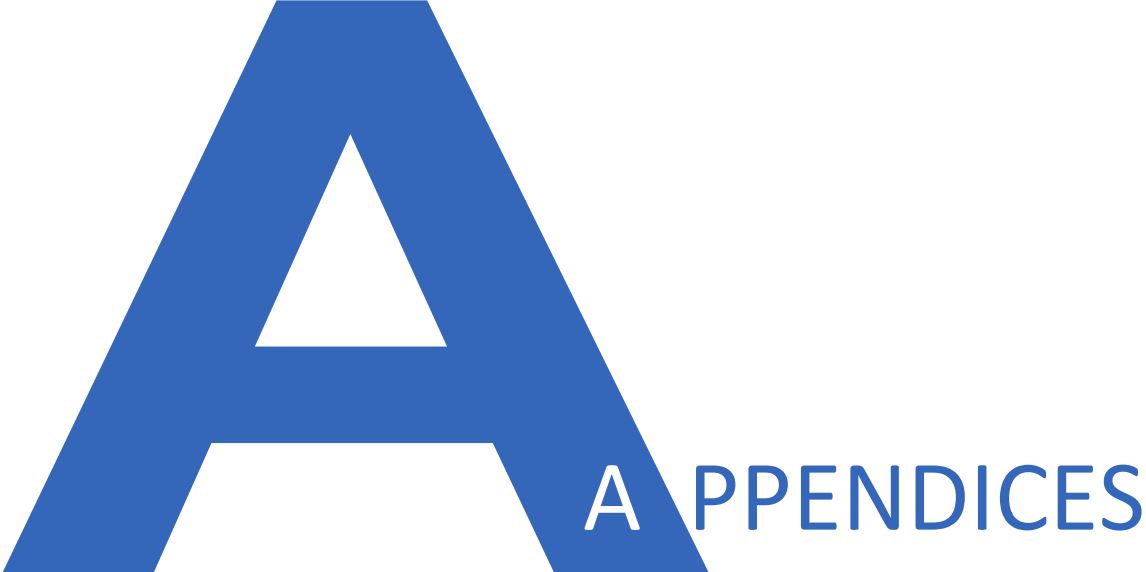
To fund the listed alternatives, including the introduction of the new services and route modifications we identified the following funding sources to assist with implementing the proposed recommendations (see Chapter 7). The following matrix highlights the specified operating grant and capital grant opportunities for service and fleet expansions. Funding sources listed in the exhibits to follow are primarily short-term sources for funding Lassen Transit Service Agency services. These funding sources provide opportunities for implementing enhancements or improvements recommended in the Preferred Alternatives (Chapter 7).

Exhibit 8.3.13 Operating Funding Source Matrix

Program Name	Description	Eligibility	Recipient	Grant Type
5311 Rural and Small Urban Areas	Provides operating funding to states for the purpose of supporting public transportation in areas of less than 50,000 residents. Enhances mobility of local residents and assists in the maintenance, development, improvement, and use of public transportation.	Funds may be used for capital, operating, and administrative assistance to state agencies, local public bodies, Indian tribes, and nonprofit organizations, and operators of public transportation services. Projects to meet the requirements of the Americans with Disabilities Act.	State	Formula Based
5316 Job Access/Reverse Commute	Provides financial assistance for transportation services planned, designed, and carried out to meet the transportation needs of eligible low-income individuals, and of reverse commuters regardless of user income.	Projects must be included in a locally-developed Cordinated Human Service Transportation Plan.	State	Formula Based
5317 New Freedom	Reduces barriers to transportation services and expands mobility options available to persons with disabilities beyond the requirements of the ADA.	Same as above.	State	Formula Based

Exhibit 8.3.14 Capital Funding Source Matrix

Program Name	Description	Eligibility	Recipient	Grant Type
5309 Bus and Bus Facilities Program	Provides capital assistance for new and replacement buses and related equipment and facilities.	All capital projects.	State	Discretionary
5310 Transportation for Elderly Persons and Persons with Disabilities	Assists private non-profit groups in meeting the transportation needs of the elderly and persons with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs.	Local private non-profit agencies and certain public bodies.	State	Formula Based
5311 Rural and Small Urban Areas	Provides operating funding to states for the purpose of supporting public transportation in areas of less than 50,000 residents. Enhances mobility of local residents and assists in the maintenance, development, improvement, and use of public transportatio	Funds may be used for capital, operating, and administrative assistance to state agencies, local public bodies, Indian tribes, and non-profit organizations, and operators of public transportation services. Projects to meet the requirements of the American	State	Formula Based
5316 Job Access/Reverse Commute	Provides financial assistance for transportation services planned, designed, and carried out to meet the transportation needs of eligible low-income individuals, and of reverse commuters regardless of income.	Projects must be included in a locally-developed, Coordinated Human Services Transportation Plan.	State	Formula Based
5317 New Freedom	Reduces barriers to transportation services and expands mobility options available to persons with disabilities beyond the requirements of the ADA.	Same as above.	State	Formula Based



A APPENDICES

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APPENDIX A – RIDE CHECK DATA

The following is an illustration of the boarding and alighting data collected onboard Lassen Rural Bus routes during the period of April 27 through April 30, 2011. Each table reflects one full weekday service day and Saturday service day (if offered) for each route.

Susanville City Fixed Route – Boarding and Alighting and On-Time Performance Data

Susanville City Route Boarding and Alighting Activity by Stop

	Weekday Service Day		Saturday Service Day		Total Combined	
	Boarding	Alighting	Boarding	Alighting	Boarding	Alighting
Wal-Mart Store	19	8	5	4	24	12
N. Mesa St. & Main St.	1	0	0	0	1	0
Lassen Manor Apts.	10	5	3	0	13	5
Susanville Police Station	0	3	3	2	3	5
Lassen Historical Museum	2	1	2	2	4	3
Weatherlow & Chestnut	0	0	0	0	0	0
Glenn & Joaquin St.	1	0	2	1	3	1
Susanville Garden Apts.	1	2	1	0	2	2
Woodside & Paiute Ln.	4	0	0	0	4	0
Susanville Ranch Park	0	0	0	0	0	0
Cherry Terrace & Glenn	0	0	1	0	1	0
Meadowbrook Apts	0	0	0	0	0	0
N. Roop & Nevada St.	0	0	0	1	0	1
City & County Offices	2	3	0	1	2	4
Gay & Main St.	8	4	2	0	10	4
S. Lassen & Cottage St.	0	3	0	0	0	3
Credence High School	2	0	1	0	3	0
Richmond @ N. Railroad	0	2	0	2	0	4
Lassen Social Services	0	3	0	1	0	4
Modoc St. & Shasta St.	0	0	0	0	0	0
Orange & Limoneria	2	2	0	0	2	2
Senior Nutrition Center	1	0	0	0	1	0
Susan River Apartments	4	2	2	3	6	5
Alexander & Riverside	2	0	3	1	5	1
Burger King/Chevron Gas	9	7	1	4	10	11
Main & Ash St. (Hwy 139)	5	1	3	1	8	2
Millview Apts.	13	6	0	1	13	7
Lassen College	21	25	2	3	23	28
Banner Lassen Hospital	6	4	0	1	6	5
Wada Way & Spring Ridge	1	3	1	1	2	4
Numa & Cameron	0	0	0	0	0	0
Casino	2	6	3	3	5	9
Public Health Offices	0	0	0	0	0	0
Bunyan & Ash	1	3	2	0	3	3
Main St. & S. McDow	3	5	0	2	3	7
Main St. & S. Mesa St.	0	2	0	0	0	2
Safeway Shopping Center	0	8	0	3	0	11
TOTAL	120	108	37	37	157	145

Top boarding and alighting activity stops

Susanville City Route Boarding and Alighting Activity by Day Part – Weekday Service Day

Susanville City Fixed-Route	Boarding	Alighting	Avg Boarding	Avg Alighting	Trips
5:00 a.m. to 10:00 a.m.	28	25	9.3	8.3	3
10:01 a.m. to 3:00 p.m.	71	54	14.2	10.8	5
3:01 p.m. to 7:30 p.m.	21	29	5.3	7.3	4
Total	120	108	28.8	26.4	12

Susanville City Route Boarding and Alighting Activity by Day Part – Saturday Service Day

Susanville City Fixed-Route	Boarding	Alighting	Avg Boarding	Avg Alighting	Trips
5:00 a.m. to 10:00 a.m.	6	6	3.0	3.0	2
10:01 a.m. to 3:00 p.m.	27	23	5.4	4.6	5
3:01 p.m. to 7:30 p.m.	4	8	4.0	8.0	1
Total	37	37	12.4	15.6	8

Susanville City Route On-Time Performance

Day-Part	On-Time	Late	Early
Morning	94%	0%	6%
Mid-day	69%	30%	1%
Afternoon/Evening	97%	3%	0%

South County Commuter Route – Boarding and Alighting and On-Time Performance Data

South County Commuter Boarding and Alighting Total Activity by Stop – Weekday Service Day

Stop	Boarding	Alighting
Wal-Mart	37	34
US 395 & SR 36-Junction Park & Ride	12	12
Janesville Payless Gas	0	0
Janesville Park & Ride	4	8
Milford-Milford Store	2	9
Herlong-SIAD	55	47
TOTAL	110	110

South County Commuter Boarding and Alighting Activity by Day Part – Weekday

South County Commuter Route	Boarding	Alighting	Avg Boardi	Avg Alighti	Trips
5:00 a.m. to 10:00 a.m.	55	55	27.5	27.5	2
10:01 a.m. to 3:00 p.m.	-	-	-	-	-
3:01 p.m. to 7:30 p.m.	55	55	27.5	27.5	2
Total	110	110	27.5	27.5	4

South County Commuter Bus 1 On-Time Performance

Day-Part	On-Time	Late	Early
Morning	100%	0%	0%
Afternoon/Evening	50%	17%	33%

South County Commuter Bus 2 On-Time Performance

Day-Part	On-Time	Late	Early
Morning	60%	40%	0%
Afternoon/Evening	67%	17%	17%

South County to Susanville Route – Boarding and Alighting and On-Time Performance Data

South County to Susanville Route Total Boarding and Alighting Activity – Weekday Service Day

	Boarding	Alighting
Herlong-Fort Sage FRC	1	0
Herlong Rv Park	1	1
Doyle-Post Office	1	0
Doyle-Senior Center	1	0
Janesville-Payless Gas	1	0
Walmart	7	7
Susanville-Lassen College	1	1
Susanville-Northeastern Rural Health Clinic	0	0
Flag stops	6	9
TOTAL	19	18

South County to Susanville Boarding and Alighting Activity by Day Part – Weekday Service Day

S. County to Susanville Route	Boarding	Alighting	Avg Boardi	Avg Alighti	Trips
5:00 a.m. to 10:00 a.m.	9	9	9.0	9.0	1
10:01 a.m. to 3:00 p.m.	-	-	-	-	-
3:01 p.m. to 7:30 p.m.	10	9	10.0	9.0	1
Total	19	18	9.5	9.0	2

South County to Susanville On-Time Performance

Day-Part	On-Time	Late	Early
Morning	63%	38%	0%
Afternoon/Evening	71%	0%	29%

West County Commuter Route – Boarding and Alighting and On-Time Performance Data

West County Commuter Route Boarding and Alighting Activity by Stop

Stop	Weekday		Saturday		Total	
	Boarding	Alighting	Boarding	Alighting	Boarding	Alighting
Walmart	5	3	2	0	7	3
Lassen Community College	7	10	0	2	7	12
Diamond Mountain Casino	1	0	0	0	1	0
Main & Gay Street - Susanville	8	4	1	0	9	4
Devil's Corral	0	0	0	0	0	0
Westwood - Community Center	2	4	3	1	5	5
Westwood - 2nd & Birch	3	0	0	0	3	0
Clear Creek - Fire Dept.	0	0	0	0	0	0
Hamilton Branch - Hwy 147 & A-13 Fishing Access Parking lot (Plumas Transit transfer point)			0	0	0	0
Chester - Holiday Market	8	7	0	0	8	7
Hamilton Branch - Diner	0	2	0	0	0	2
Hamilton Branch - Christian School	4	0	0	0	4	0
Clear Creek - Old Daddy's Diner	1	0	0	0	1	0
Clear Creek - Community Park	0	0	0	0	0	0
Flag Stops	5	14	0	3	5	17
TOTAL	44	44	6	6	50	50

Top boarding and alighting activity stops

West County Commuter Boarding and Alighting Activity by Day Part – Weekday

West County Commuter Route	Boarding	Alighting	Avg Boarding	Avg Alighting	Trips
5:00 a.m. to 10:00 a.m.	20	20	20	20	1
10:01 a.m. to 3:00 p.m.	9	9	9.0	9.0	1
3:01 p.m. to 7:30 p.m.	15	15	15.0	15.0	1
Total	44	44	14.7	14.7	3

West County Commuter Boarding and Alighting Activity by Day Part – Saturday

West County Commuter Route	Boarding	Alighting	Avg Boarding	Avg Alighting	Trips
5:00 a.m. to 10:00 a.m.	4	4	2	2	2
10:01 a.m. to 3:00 p.m.	-	-	-	-	-
3:01 p.m. to 7:30 p.m.	2	2	2.0	2.0	1
Total	6	6	2.0	2.0	3

West County Commuter Route On-Time Performance (Weekday)

Day-Part	On-Time	Late	Early
Morning	71%	21%	7%
Mid-day	69%	0%	31%
Afternoon/Evening	73%	27%	0%

West County Commuter Route On-Time Performance (Saturday)

Day-Part	On-Time	Late	Early
Morning	86%	14%	0%
Afternoon/Evening	85%	8%	8%

East County Route – Boarding and Alighting and On-Time Performance Data

East County Route Boarding and Alighting Activity by Stop

Stops	Boarding	Alighting
Herlong Market	1	0
Herlong Mobile Home Park	0	0
US 395 at The Mark	0	0
Old Milford Store	0	0
Lakecrest Drive at CR A-3	0	0
CR A-3 at Sears Road	0	0
CR A-3 at Cook Road	0	0
CR A-3 at Regina Road	0	0
Standish - CR A-3 at US 395	0	2
Litchfield - Heard's Market	1	1
Standish - Days Inn RV Park	0	2
Center Road at Rice Canyon	0	0
Leavitt Lake Store	0	0
Johnstonville Store	0	0
Susanville Mobil Home Park	0	0
Walmart	3	0
Lassen College	1	3
Flag Stops	4	2
TOTAL	10	10

Top boarding and alighting activity stops

East County Boarding and Alighting Activity by Day Part – Weekday

East County Route	Boarding	Alighting	Avg Boarding	Avg Alighting	Trips
5:00 a.m. to 10:00 a.m.	6	6	3.0	3.0	2
10:01 a.m. to 3:00 p.m.	-	-	-	-	-
3:01 p.m. to 7:30 p.m.	4	4	2.0	2.0	2
Total	10	10	2.5	2.5	4

East County Route On-Time Performance (Saturday)

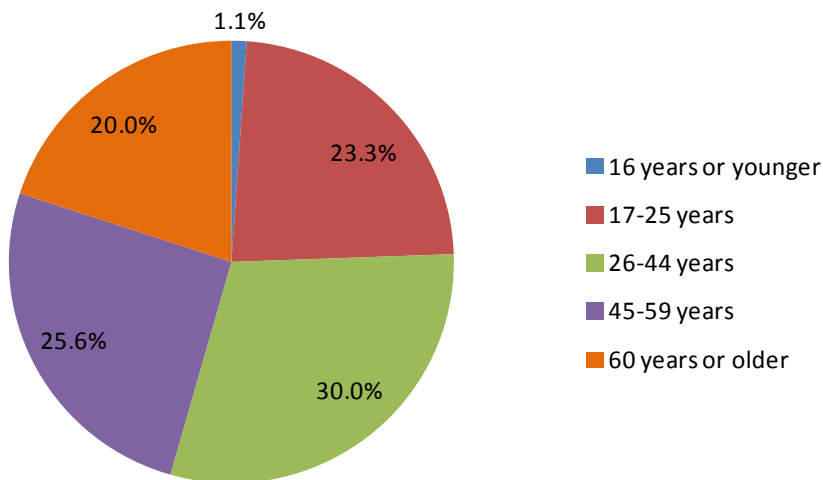
Day-Part	On-Time	Late	Early
Morning	50%	0%	50%
Mid-day	100%	0%	0%
Afternoon/Evening	29%	43%	29%

APPENDIX B – ONBOARD CUSTOMER SURVEY RESULTS

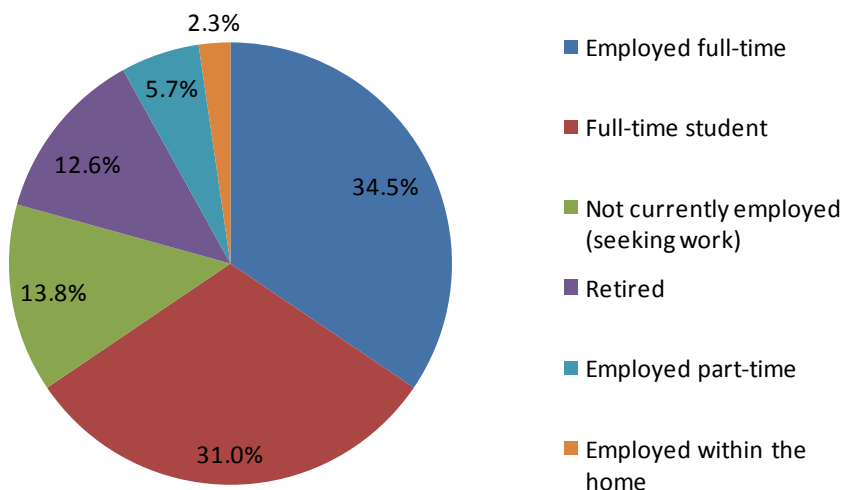
Appendix D contains the results of the fixed-route customer survey collected during the period of April 27 through April 30, 2011. The surveys were collected onboard the Susanville City Route, Westwood Commuter Route, East County Route, South County Commuter Route, and the South County to Susanville Route.

Rider Profile

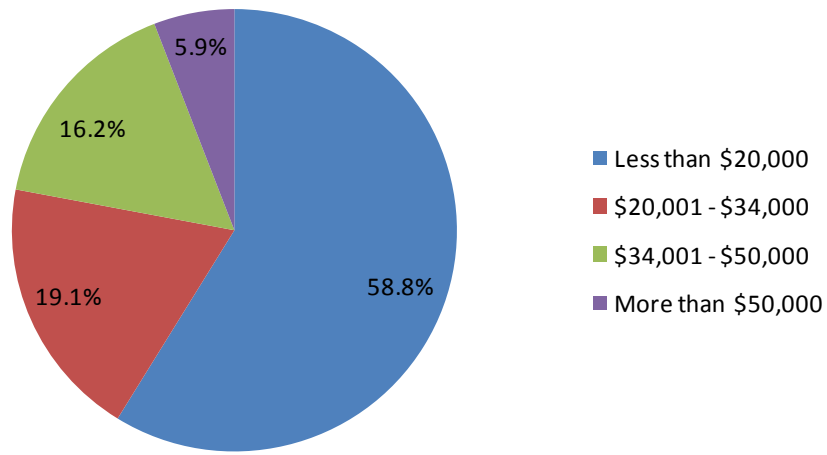
Question 18. What is your age?



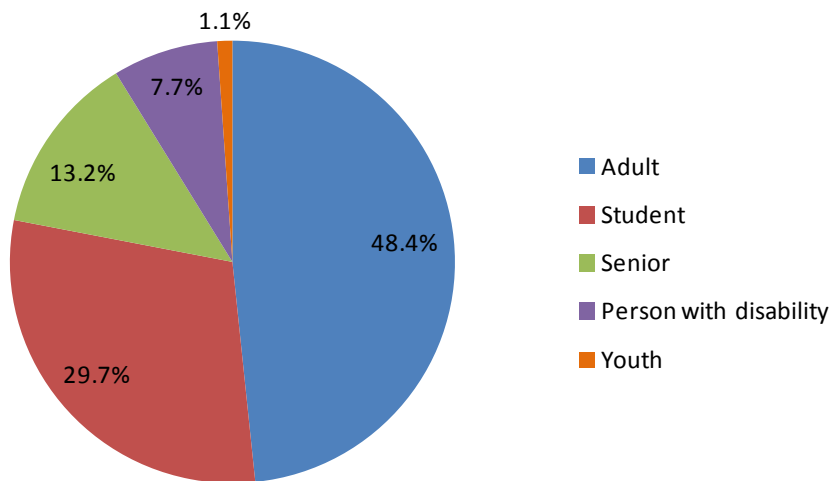
Question 19. Which of the following best describes you?



Question 20. What is your annual household income?

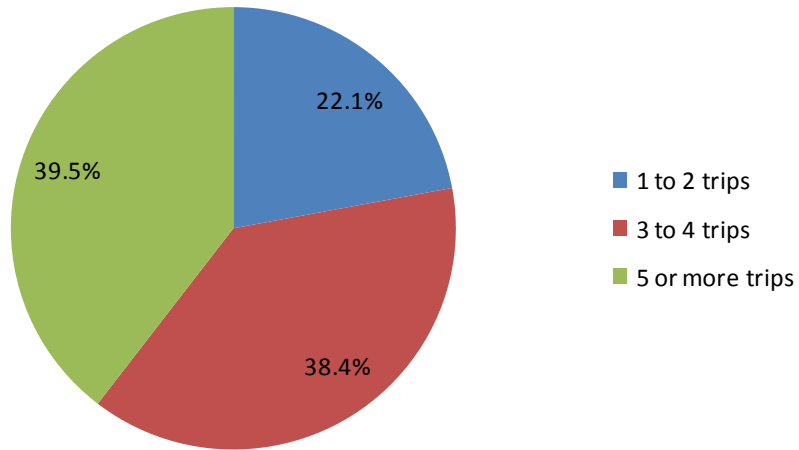


Question 13. What fare category applies to you?

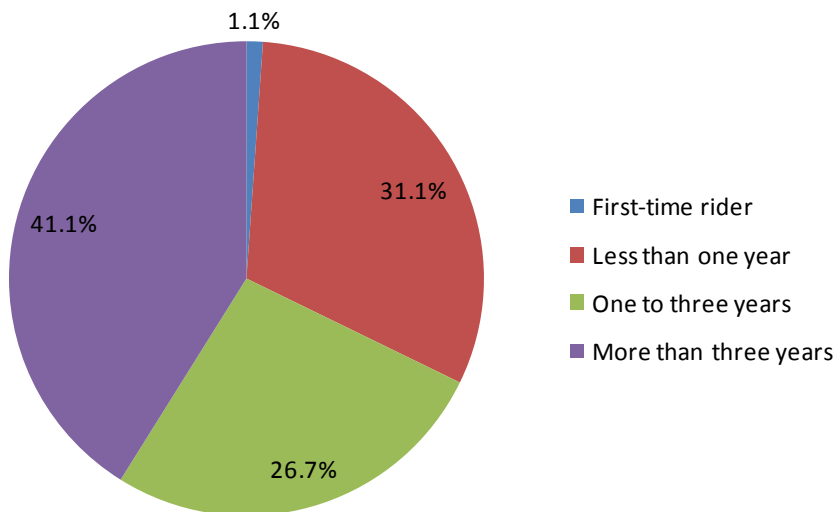


Transit Usage

Question 15. How many one-way trips do you make via bus in a typical week?



Question 16. How long have you been riding the bus in Lassen County?

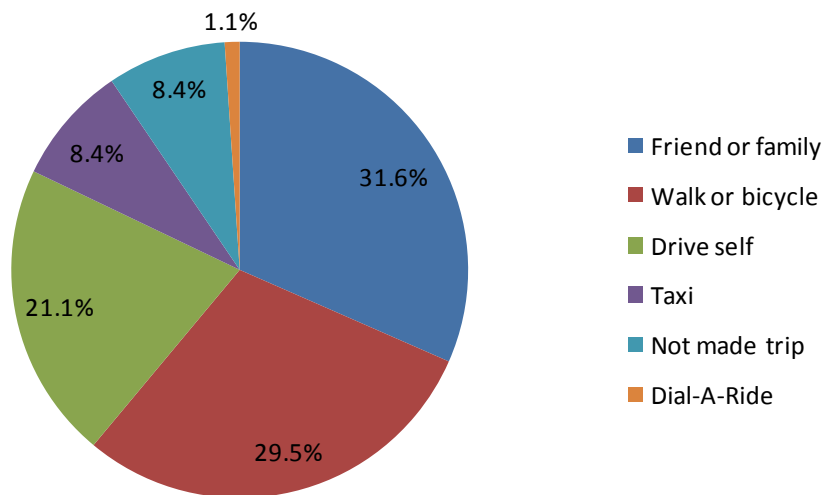


Ride Dependency

The following illustrates a matrix of respondent characteristics which typically cause an individual to depend on other people or transportation service (i.e., public transit) for their mobility needs.

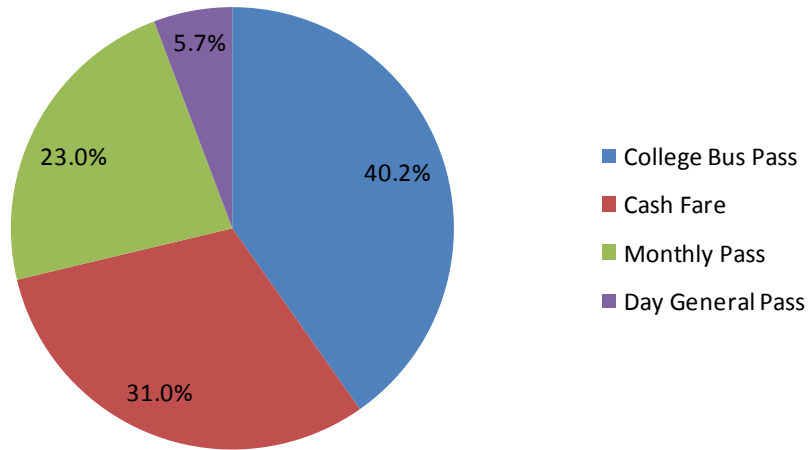
Category	Percent of Respondents
Low-income	77.9%
No Access to a Personal Vehicle	60.4%
No Driver License	41.6%
Lack of other travel options	37.0%
Unemployed	31.0%
Seniors	20.0%
Students	13.8%
Persons with Disabilities	7.7%
Youth	1.1%

Question 8. How would you make this trip if the bus had not been available?

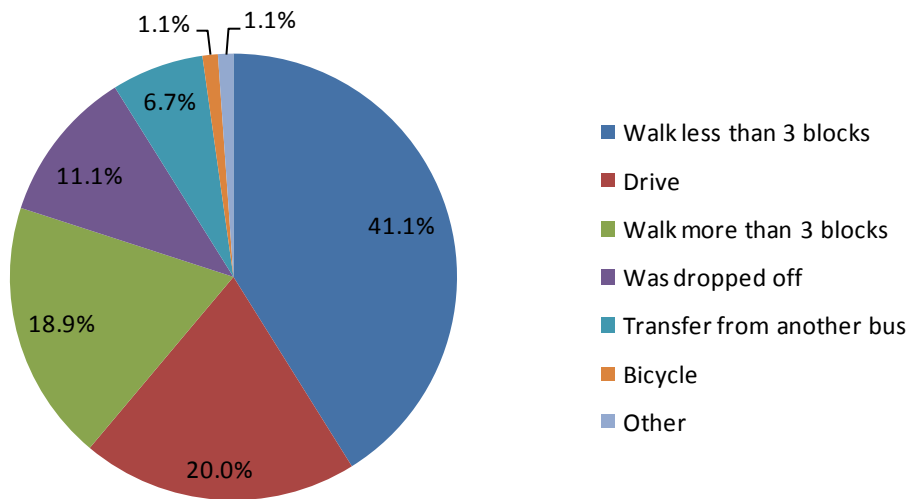


Trip Characteristics

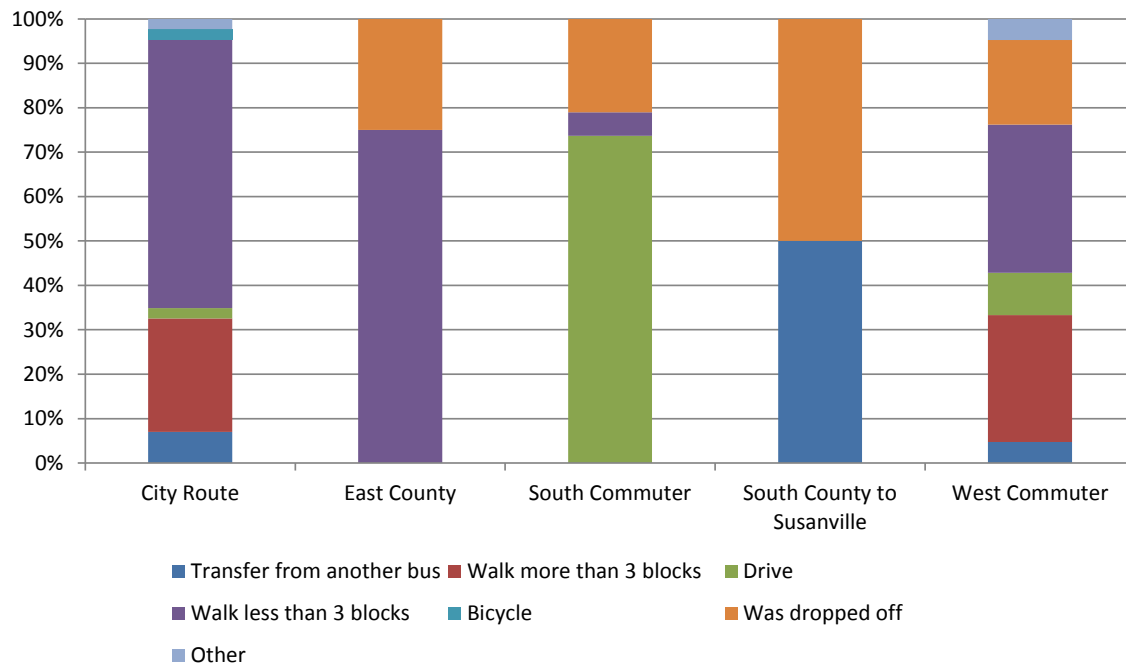
Question 14. How did you pay for this trip?



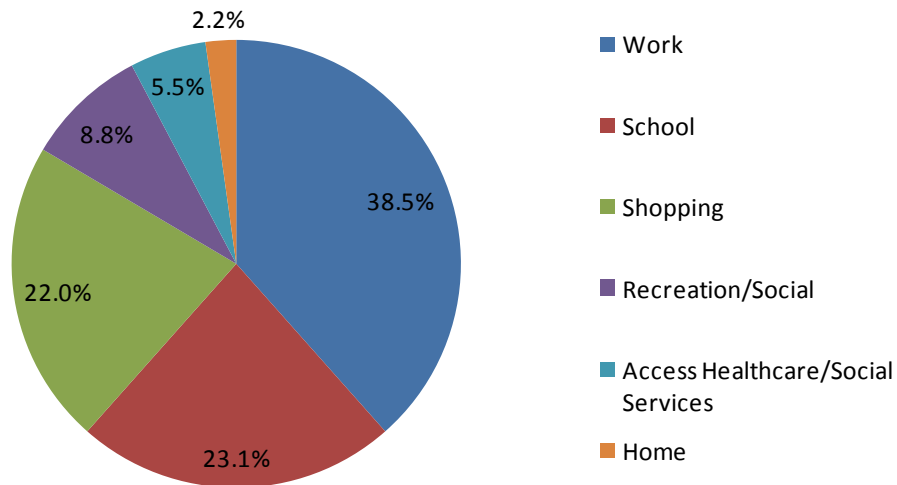
Question 3. How did you travel to the bus stop today?



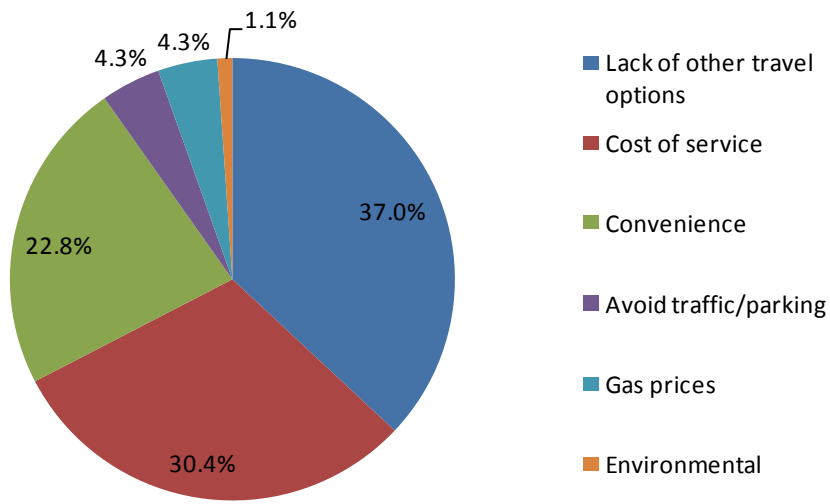
The following exhibit illustrates how patrons got to the bus stop to begin their trip and by route.



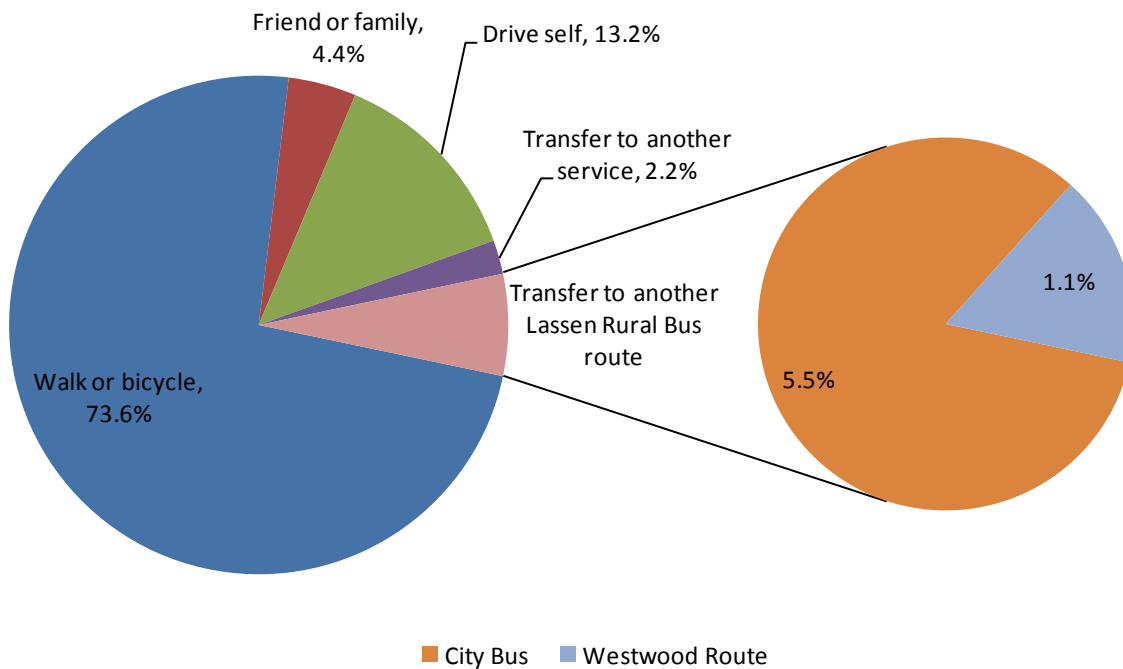
Question 4. What is the primary purpose of your trip today?



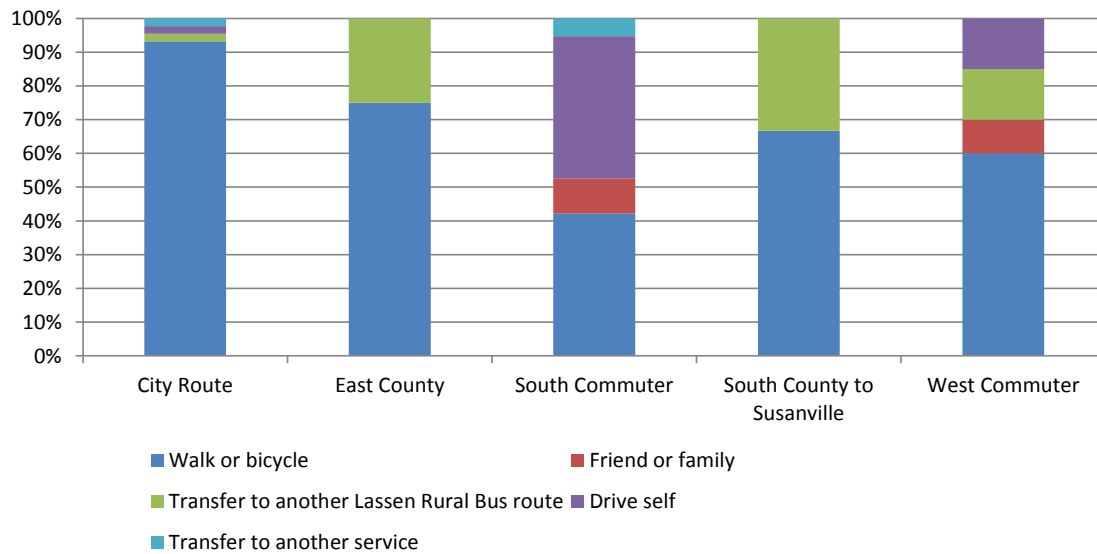
Question 5. Why did you choose the bus for this trip?



Question 6. How will you get to your final destination once you leave this bus?

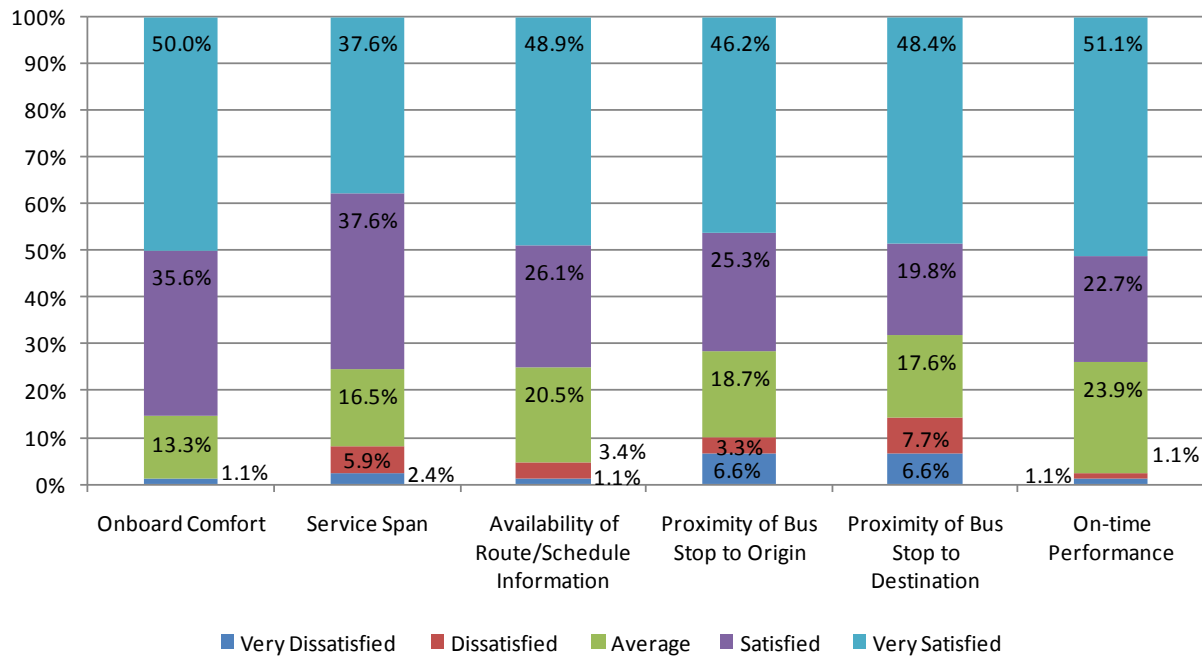


The following exhibit illustrates how patrons got to their final destination by route.

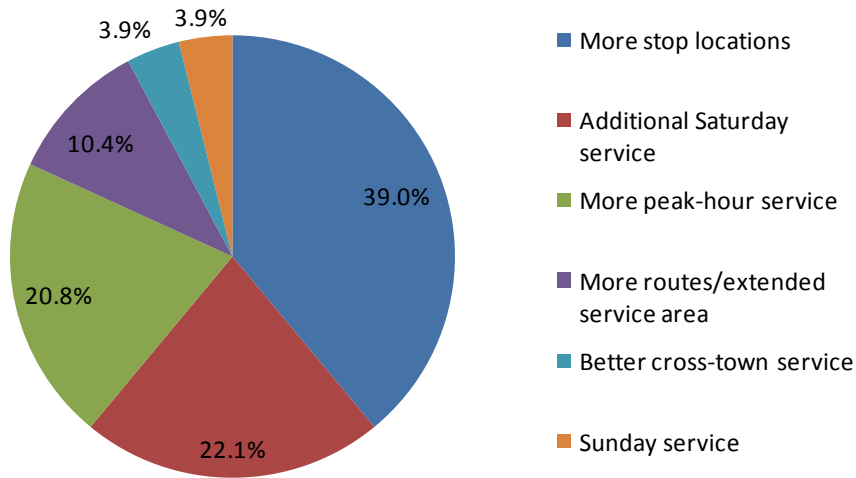


Service Evaluation

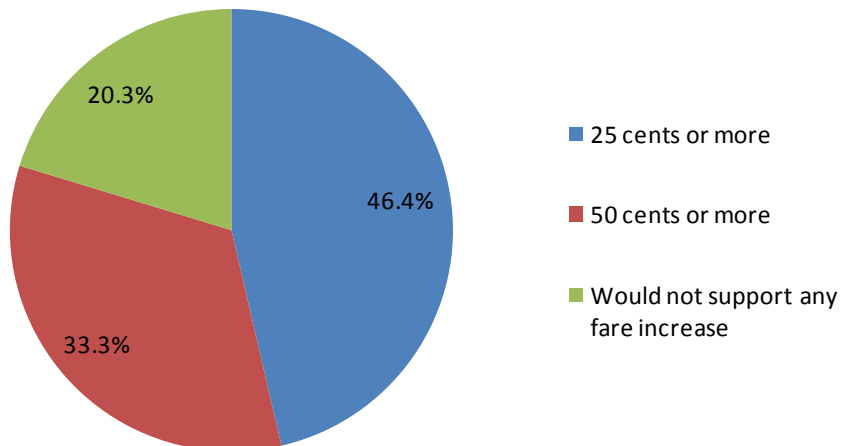
Question 9. On a scale of 1 to 5 (1=Very dissatisfied, 5= Very satisfied) please indicate your satisfaction with the following service attributes.



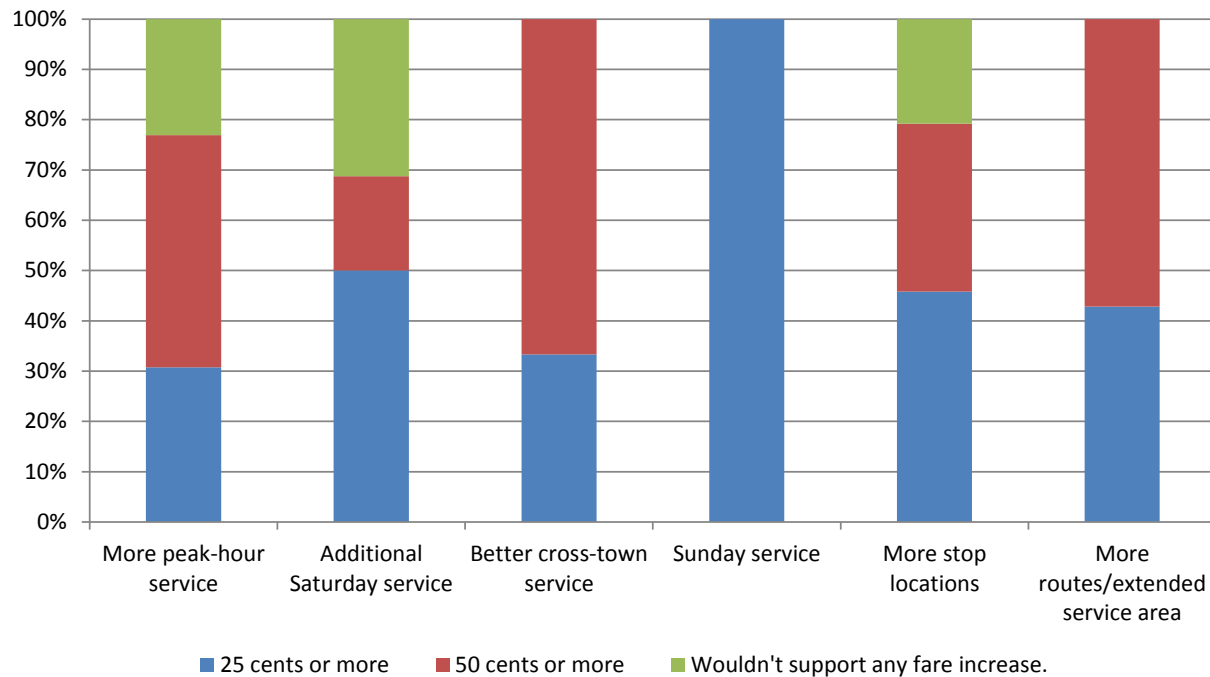
Question 11. What service improvement would you most like to see made regarding transit service in Lassen County?



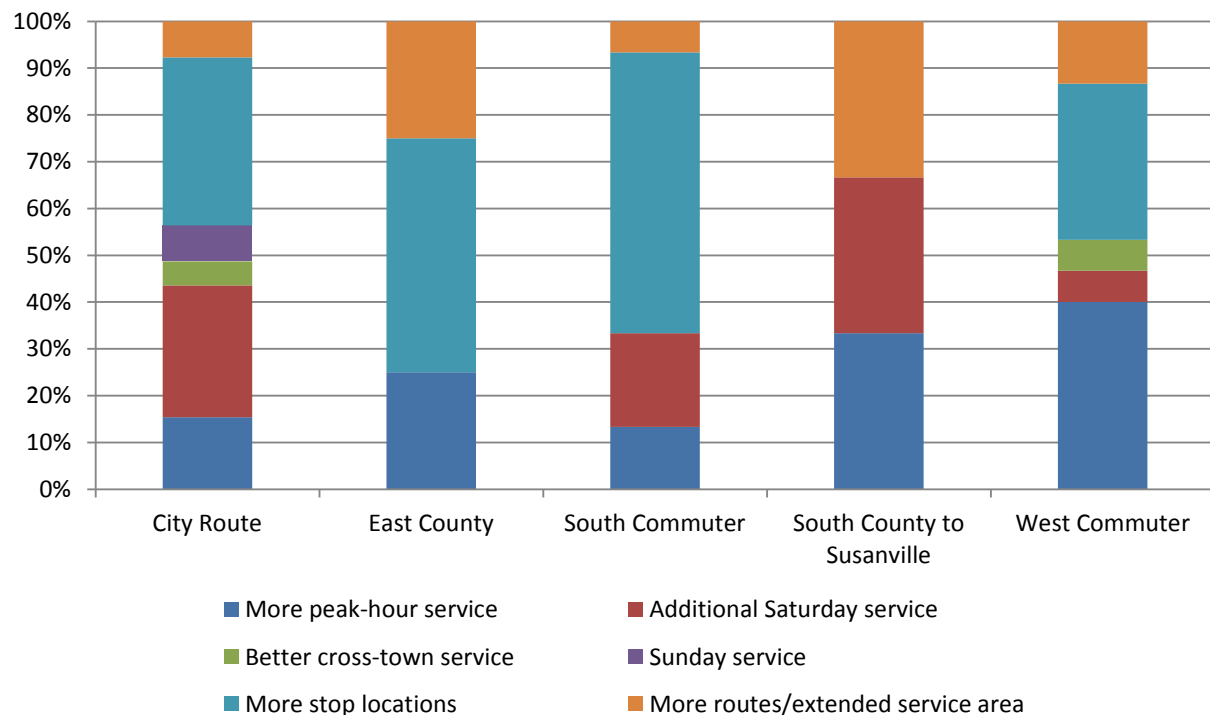
Question 12. If it became necessary to increase the bus fare in order to introduce the change you identified in Question 11, would you be willing to pay.



Service Improvement Versus Fare Increase (how much a patrons are willing to pay for each selected improvement).

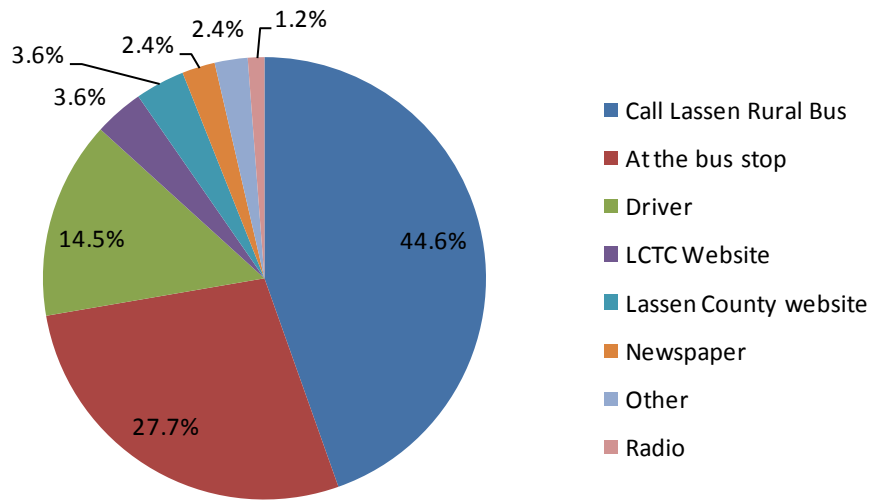


Improvement by Route (selected improvements by patron route).



Information Channels

Question 17. How do you typically obtain information about transit services in Lassen County.



APPENDIX C – COMMUNITY SURVEY RESULTS

Appendix E contains the results of the general community survey collected during the period of April 15 through May 20, 2011. Community surveys were distributed via direct mail to a random sample of Lassen County residents, as well as at several community locations. An online version of the survey was also made available during the survey period. A total of 392 surveys were collected and used for analysis.

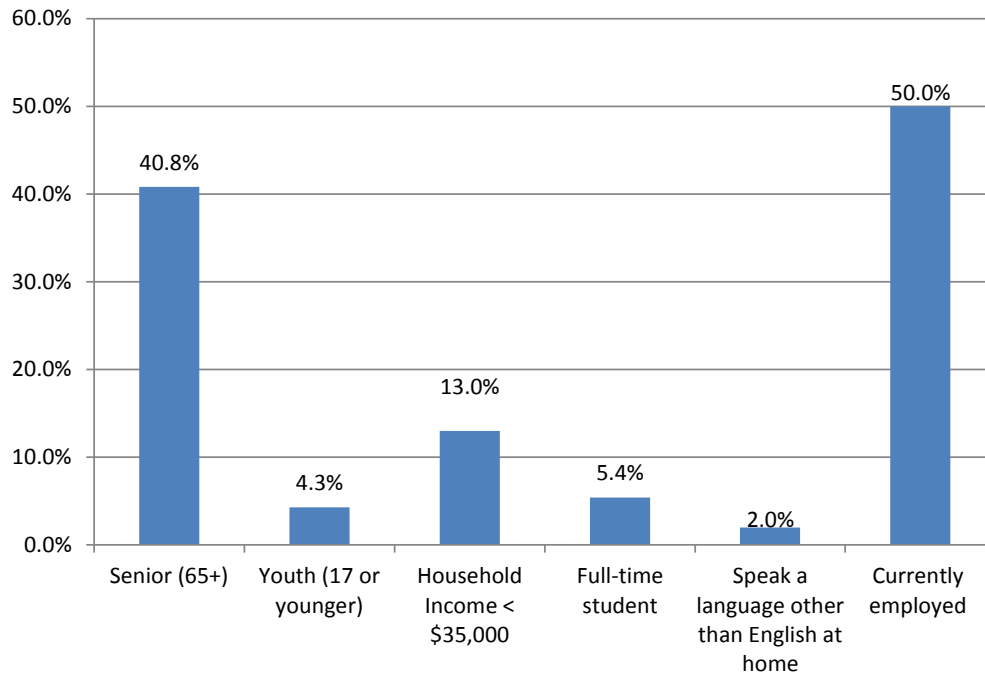
Note: Some questions will not sum to 100 percent, as they allowed respondents to select multiple responses.

Respondent Profile

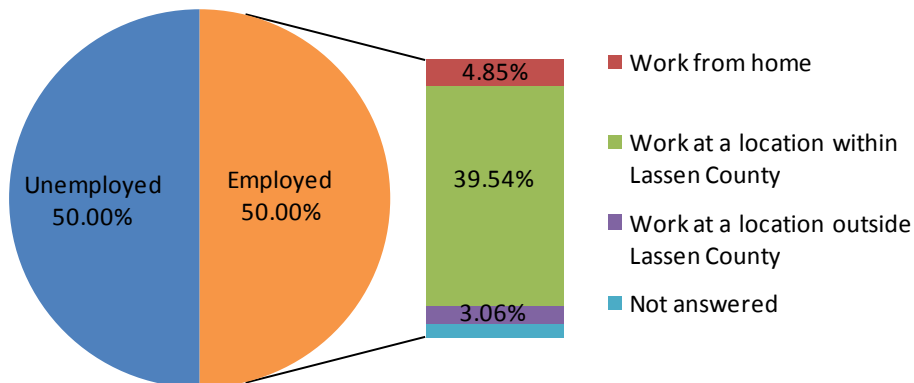
Question 1. Please select your home community.

Home Community	Respondents	Percent of Respondents
<i>Clear Creek</i>	6	1.5%
<i>Westwood</i>	6	1.5%
<i>Chester</i>	1	0.3%
<i>Lake Almanor</i>	25	6.4%
<i>Hamilton Branch</i>	10	2.6%
Southwest County Total	48	12.3%
<i>Litchfield</i>	3	0.8%
<i>Standish</i>	11	2.8%
<i>Wendel</i>	3	0.8%
East County Total	17	4.4%
<i>Doyle</i>	1	0.3%
<i>Milford</i>	4	1.0%
<i>Janesville</i>	88	22.6%
South County Total	93	23.8%
<i>Susanville</i>	204	52.3%
<i>Johnstonville</i>	11	2.8%
<i>Lake Forest</i>	4	1.0%
Susanville Area Total	219	56.2%
<i>Ravendale</i>	1	0.3%
<i>Termo</i>	2	0.5%
<i>Eagle Lake</i>	3	0.8%
<i>Bailey Creek</i>	1	0.3%
<i>Spaulding</i>	6	1.5%
Central County Total	13	3.3%
TOTAL RESPONDENTS	390	100.0%

Question 2. Which of the following best describes you?

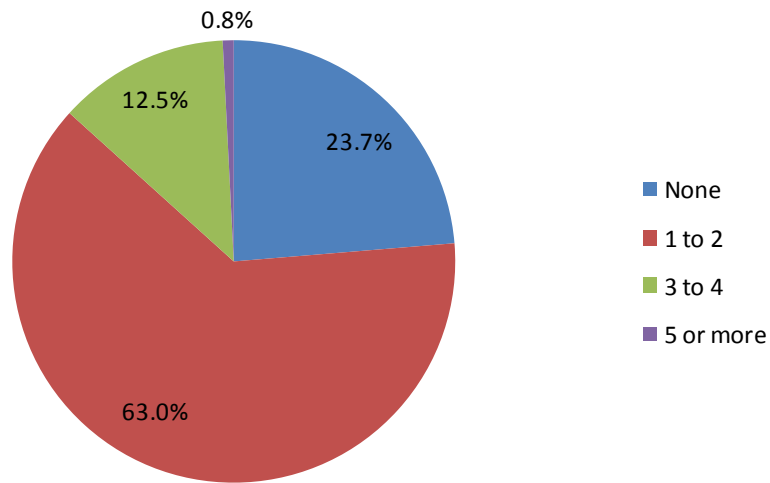


Question 3. Are you currently employed? If yes, where do you work?



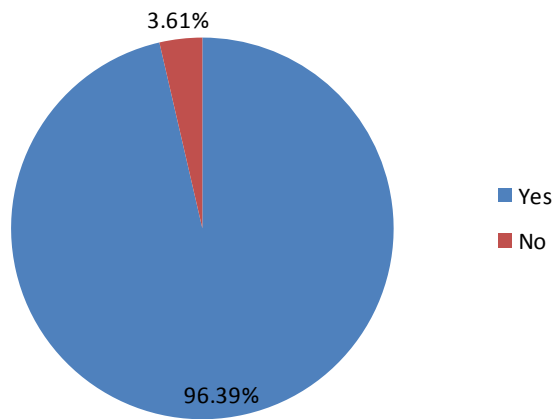
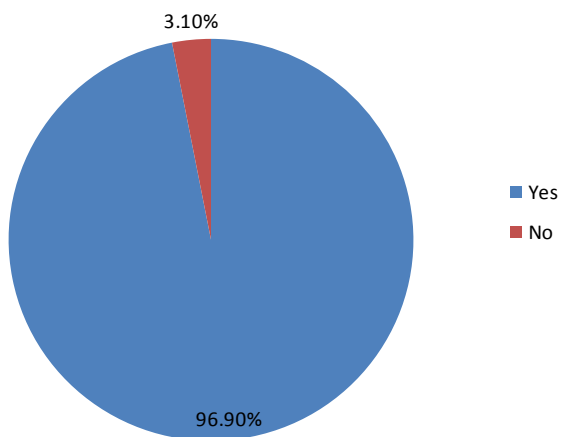
Working Age Adults in Household

Question 4. How many persons aged 16 and older reside in your home?

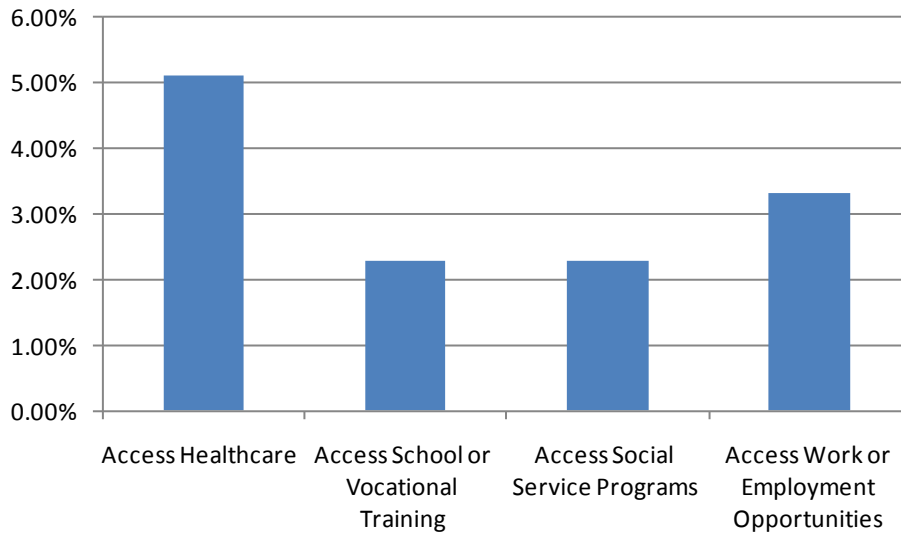


Mobility Dependency

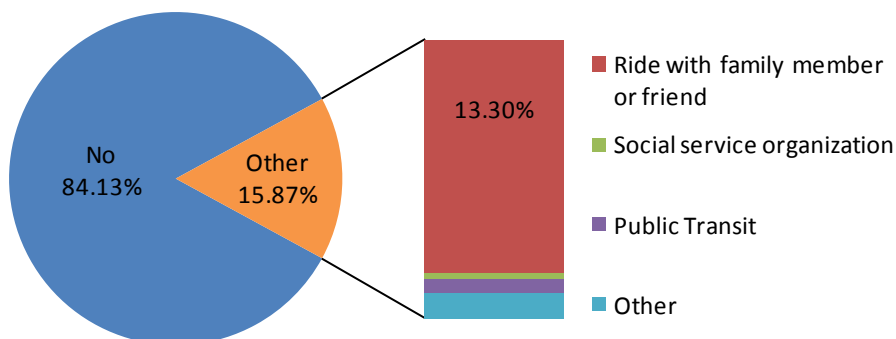
Question 5-6. Do you have a valid driver license? Do you have access to a personal vehicle?



Question 8. Has the absence of affordable and reliable transportation (i.e., public transit, private auto, ridesharing, etc.) impacted your ability to access healthcare, school or vocation training, social service programs, or work or employment opportunities?

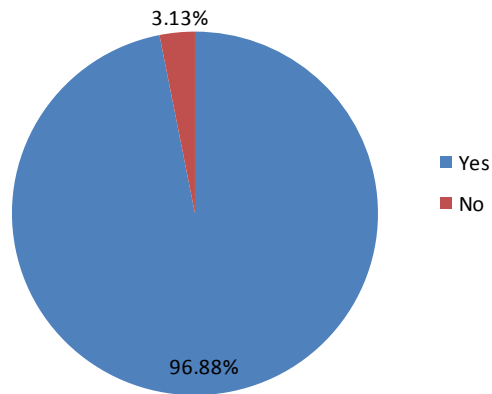


Question 9. Does anyone within your household have a health or physical condition which impairs their personal mobility? If yes, what is their primary mode of transport?



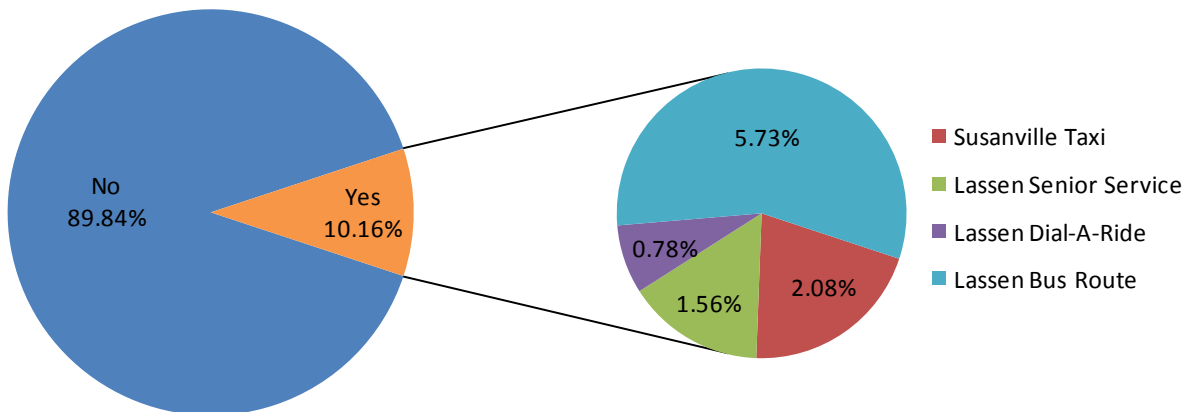
Awareness of Transit Services

Question 10. Are you aware that public transit (bus) services are available in Lassen County?

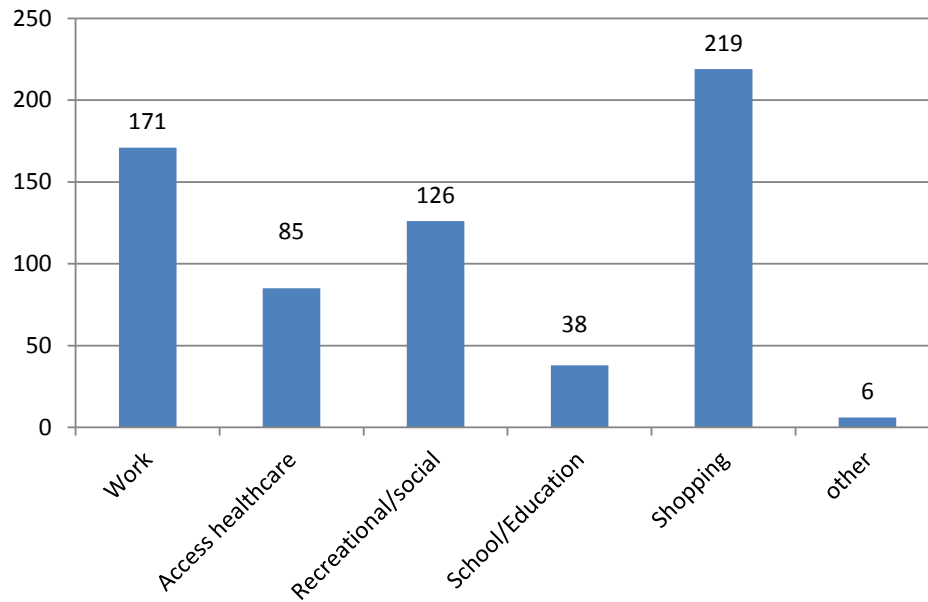


Transit Riders

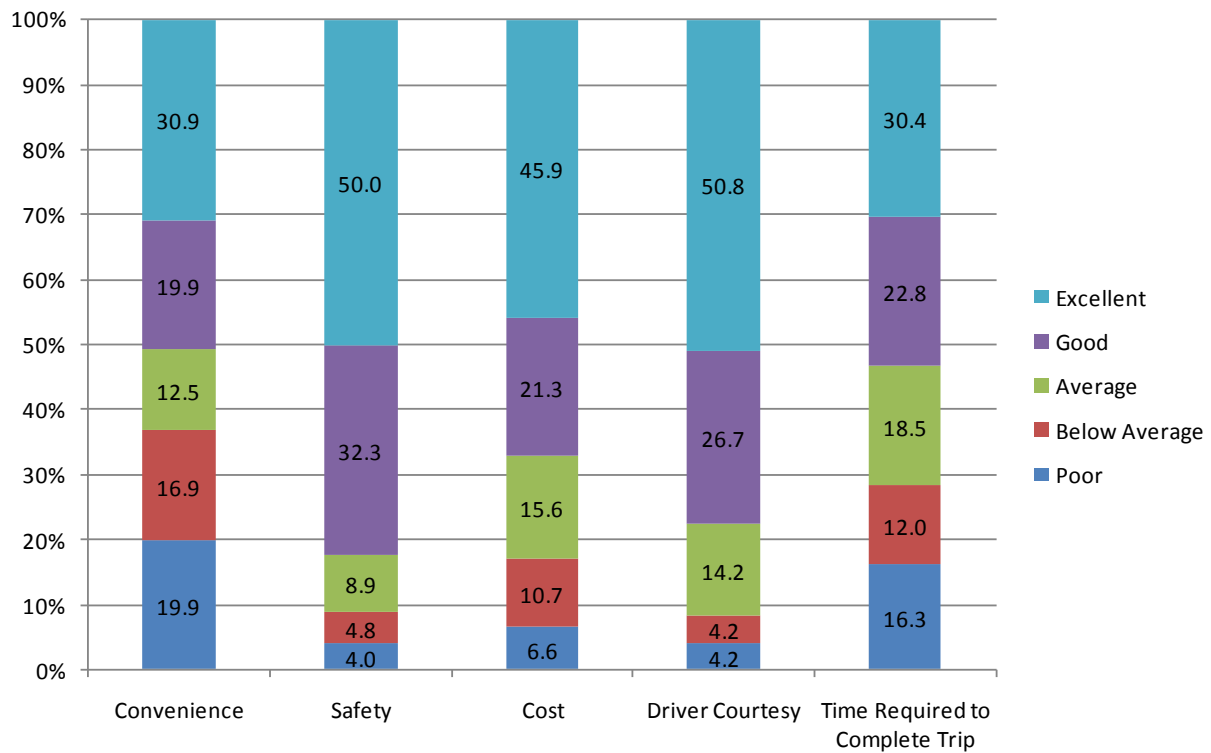
Question 11-12. Have you ridden any public transit services in Lassen County within the past 90 days? If yes, please indicate which service you ride most often.



Question 13. What is your typical travel purpose? (indicate top two).



Question 14. On a scale of 1 to 5 (where 1 = poor and 5=excellent), please rate the following services aspects.

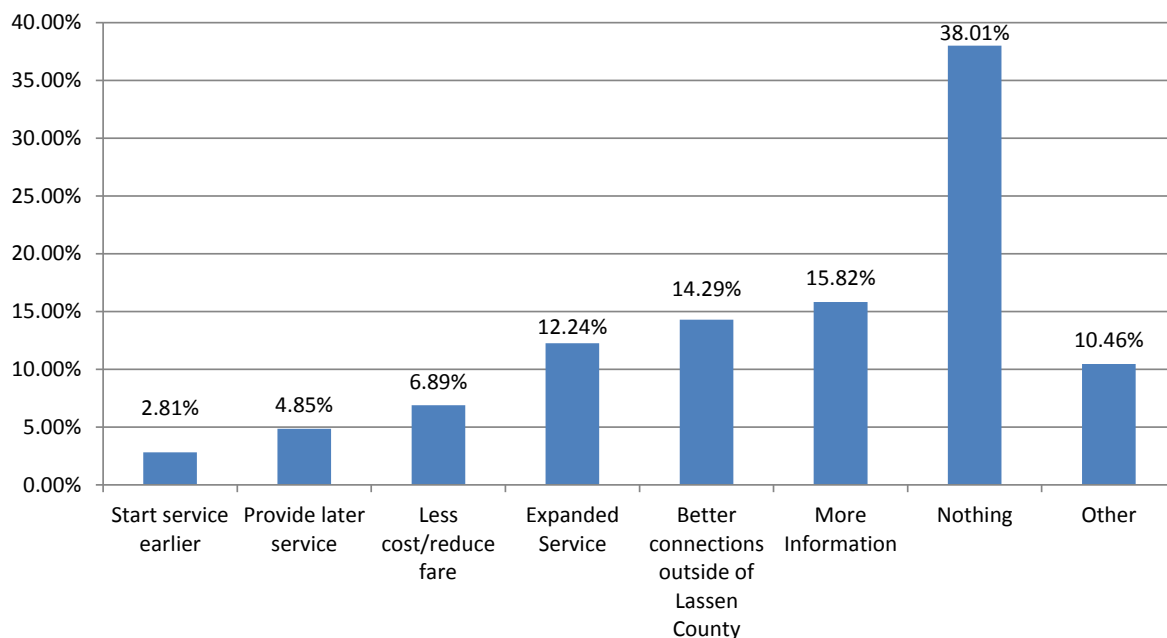


Non-riders

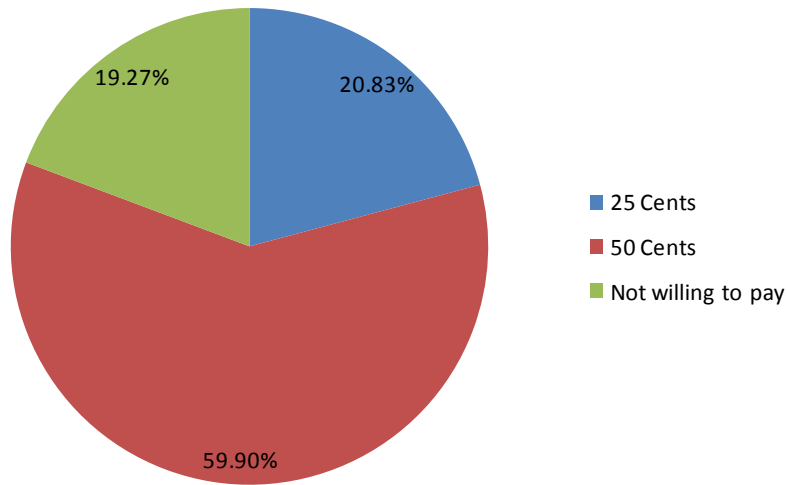
Question 15. If you have not ridden any public transit services in the past 90 days, please indicate the primary reason.

Primary Reason	Percent of respondents
Have own car	86.36%
Too confusing or complicated	1.14%
Not convenient	3.41%
Need car at work/school	1.99%
Too expensive	0.28%
Not aware service is available	0.85%
Does not go where i need it to travel	3.98%
Other	1.99%

Question 16. What, if anything, would encourage you to use public transit for at least a portion of your typical travel?



Question 17. If the improvement you selected in Question 16 were implemented, how much more would you be willing to pay?



Transportation Challenges

Question 18. In your opinion, what is the biggest transportation challenge facing residents within Lassen County?

Top Transportation Challenges in Lassen County	Respondents
Gas prices	46
Travel distance	38
Transit service coverage	22
Weather	18
Frequency of transit services	16
Lack of information for available transit services	11

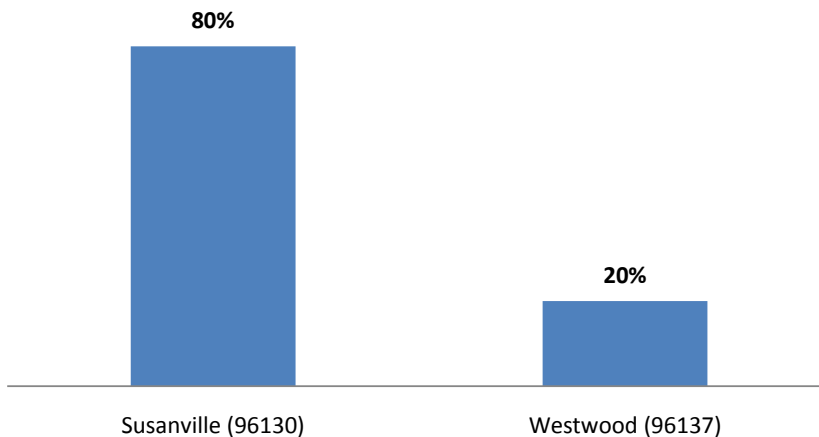
APPENDIX D – Dial-A-Ride Customer Survey Results

Appendix D displays the results of the Dial-A-Ride (DAR) customer survey collected during the period of April 15 through May 20, 2011. DAR surveys were distributed via direct mail to registered users of Lassen Rural Bus DAR service. A total of 20 surveys were collected and used for analysis.

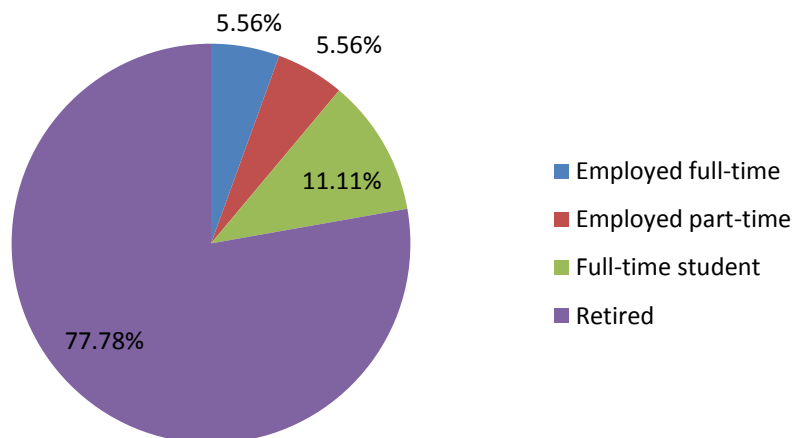
Note: Some questions will not sum to 100 percent, as respondents were able to select multiple responses.

Respondent Profile

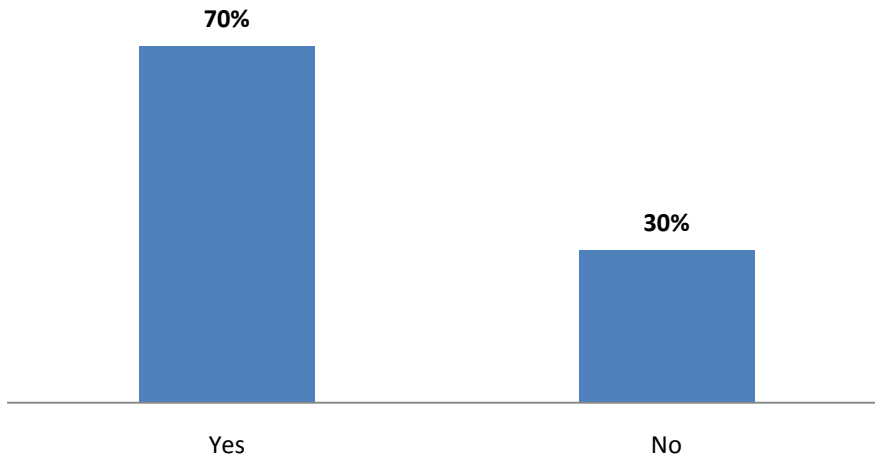
Question 1. What is your home zip code?



Question 18. Which of the following best describes you?



Question 19. Do you have a physical condition which impairs your personal mobility?

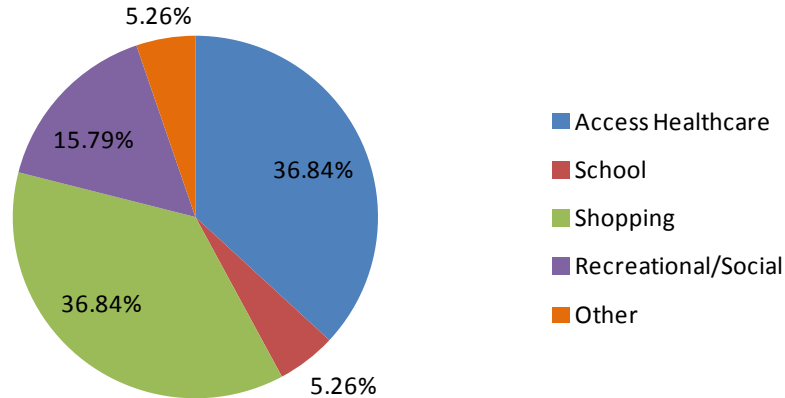


Travel Destination and Trip Purpose

Question 2. What is your most common travel destination?

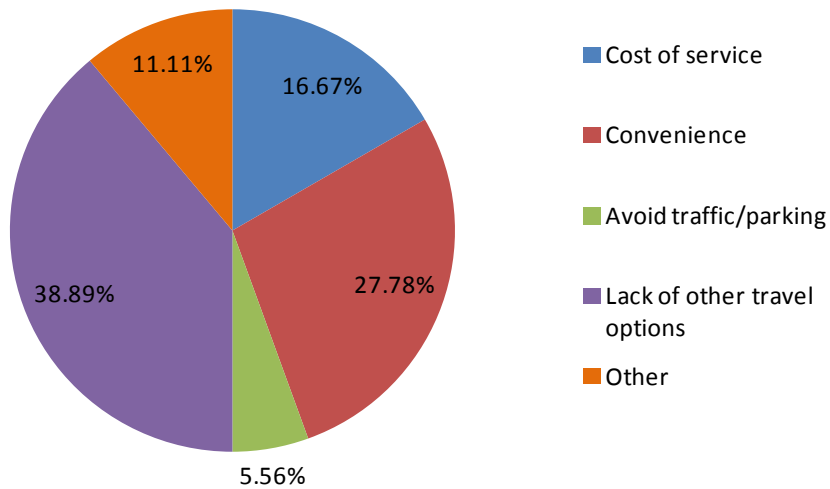
Destination	Percent of Respondents
College	6.67%
Healthcare	26.67%
Shopping	40.00%
Leavitt Lake	6.67%
Susanville	13.33%
Hamilton Branch	6.67%

Question 3. What is your most common travel purpose?



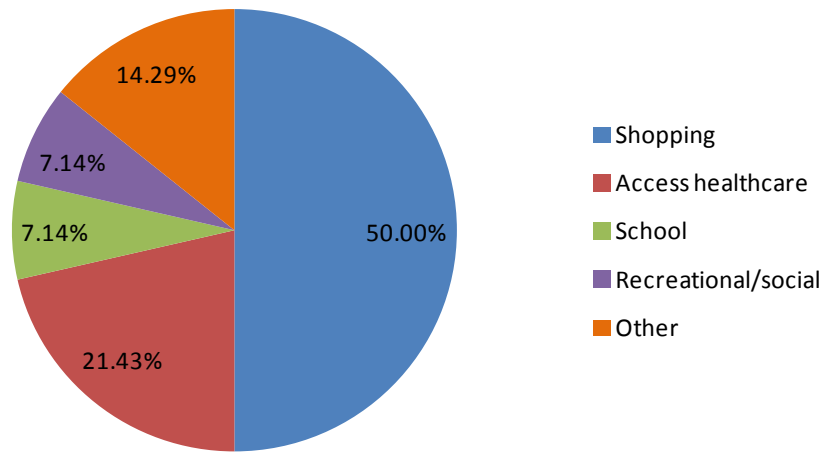
Reasons for Riding LRB Services

Question 6. What is the primary reason for choosing Lassen Dial-A-Ride?



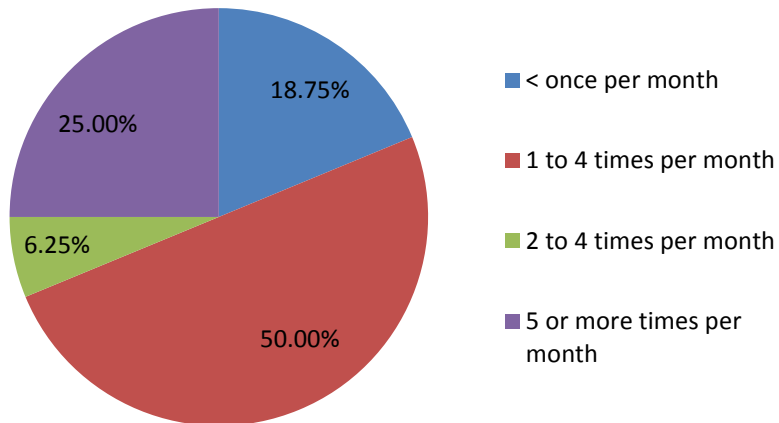
*Respondents who chose the “Other” option noted that a disability influenced their decision to use Lassen Dial-A-Ride.

Question 21. If you *only* use the Dial-A-Ride service, what is the primary reason?



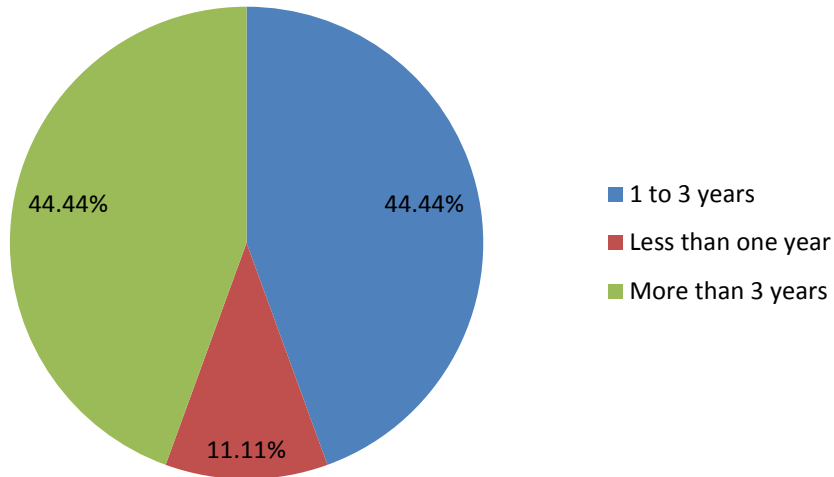
Trip Frequency

Question 7. How often do you ride Lassen Dial-A-Ride?



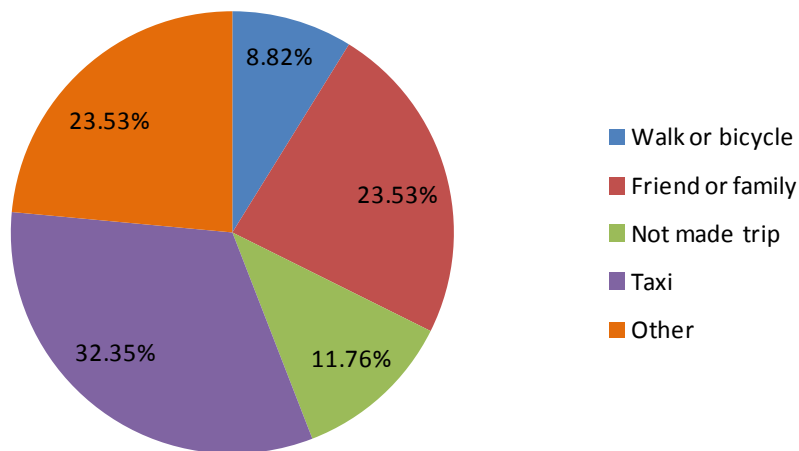
Length of Patronage

Question 8. How long have you been a Dial-A-Ride customer?



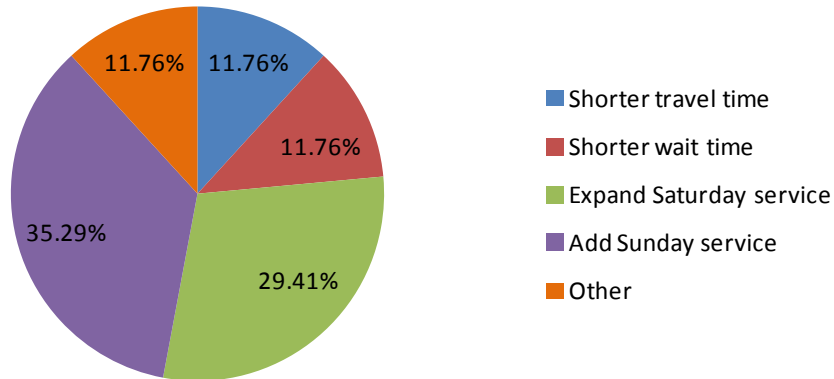
Alternative Mobility Options

Question 9. If Lassen Dial-A-Ride were not available how would you travel?



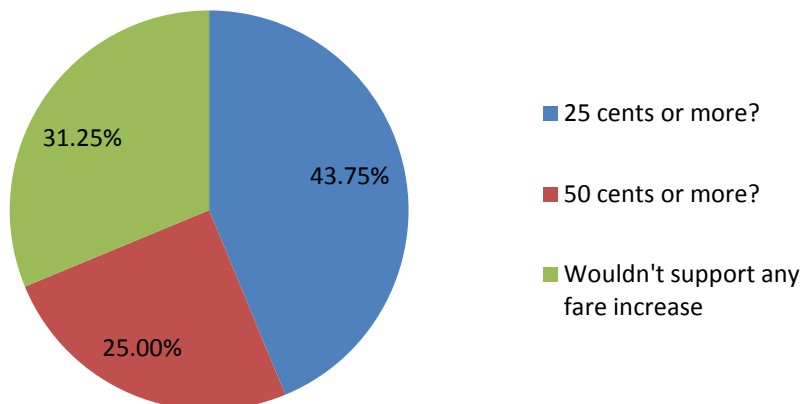
Service Improvements

Question 10. What improvement would you most like to see made regarding the Lassen Dial-A-Ride program?



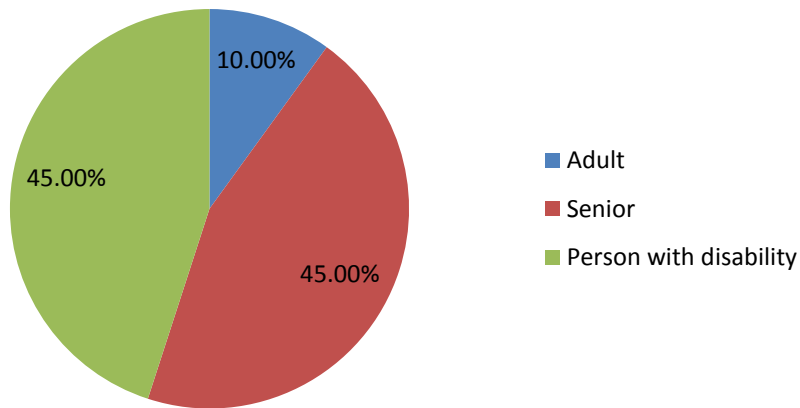
Fare Increase

Question 11. If an increase in fare/cost was needed to make the change you selected in Question 10, would you be willing to pay:

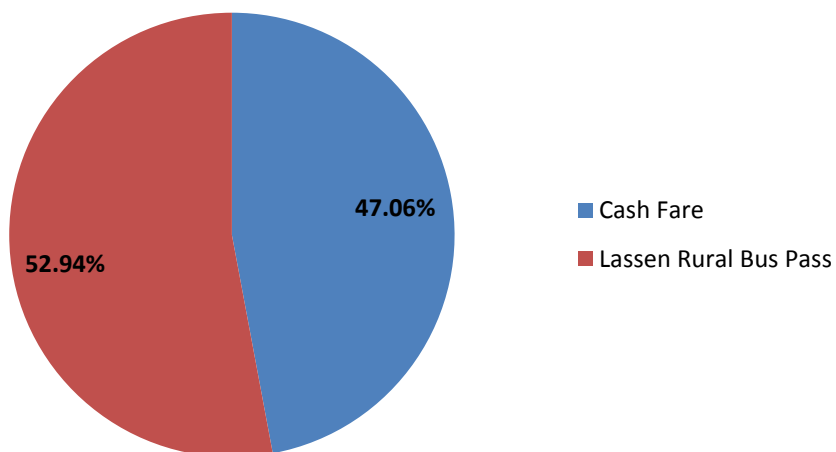


Fare Category

Question 12. What fare category applies to you?

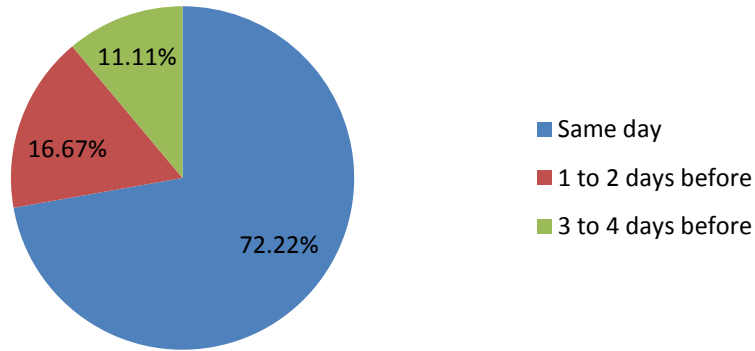


Question 13. How do you typically pay for trips?

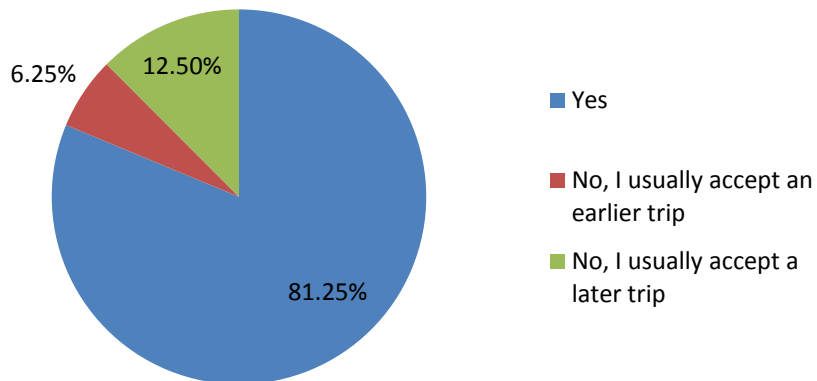


Scheduling Trips

Question 4. How far in advance (of the actual date of travel) do you typically make your ride reservation?

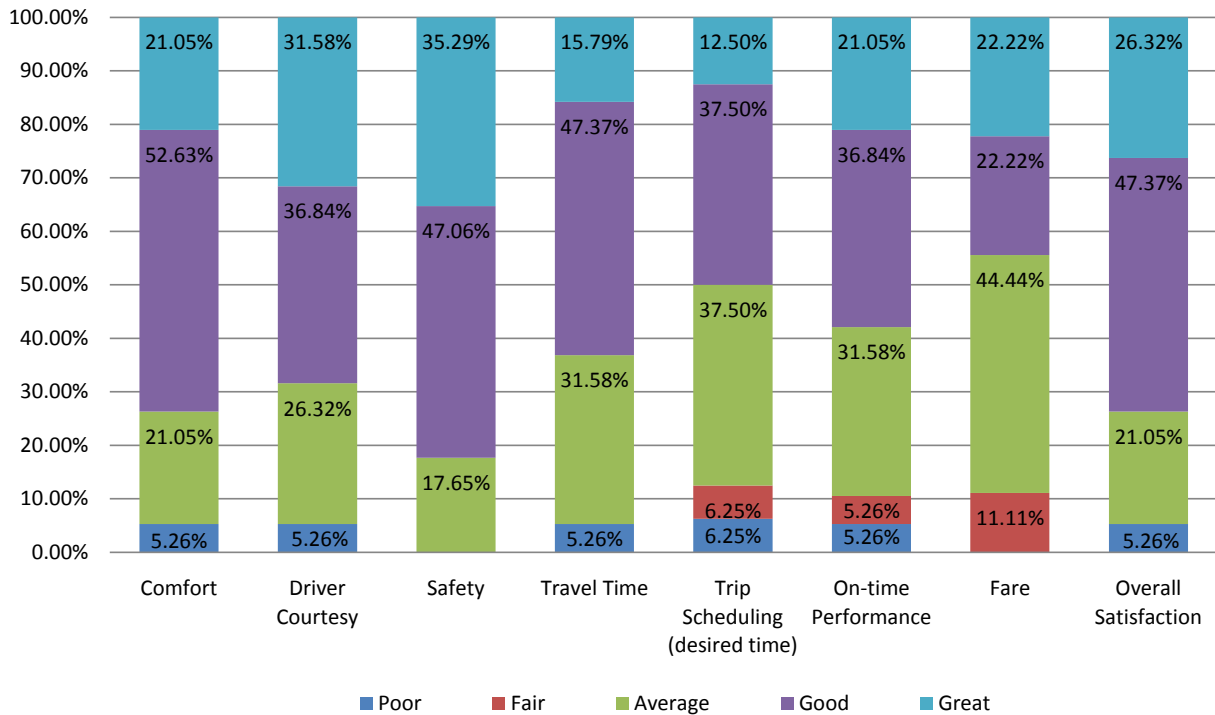


Question 5. When placing your ride request, are you typically able to schedule your ride at the desired time?



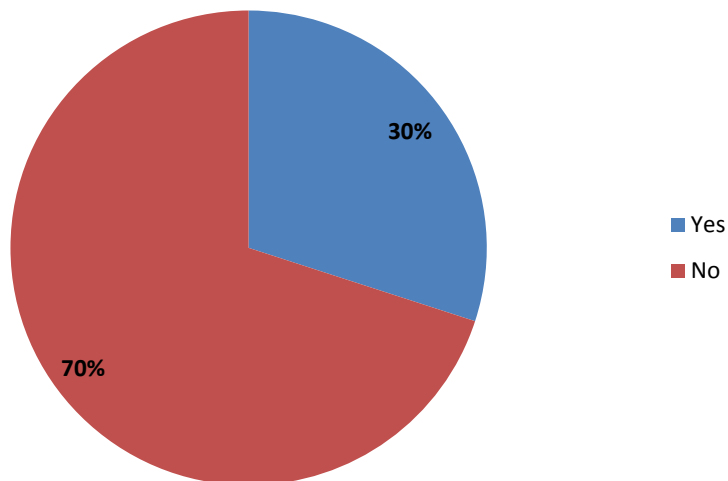
Satisfaction with Service

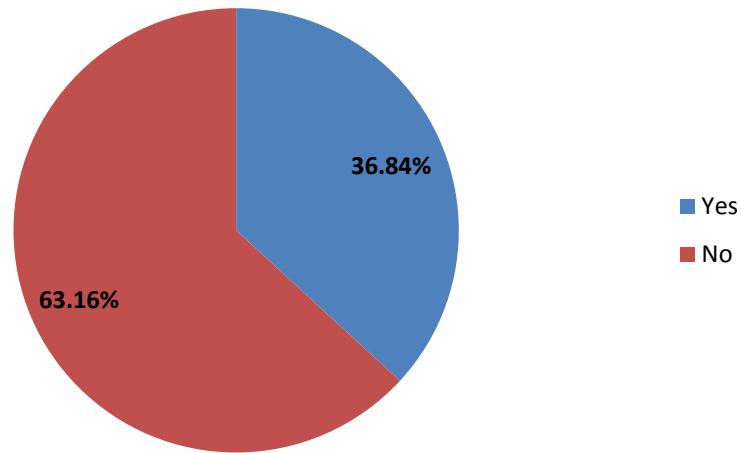
Question 14. On a scale from 1 to 5 (1=Poor, 5=Great) please indicate your satisfaction with the following service attributes:



Vehicle Access

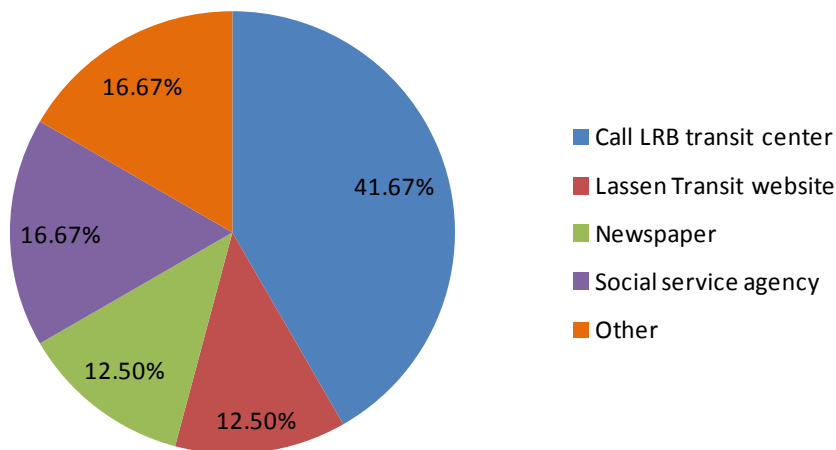
Questions 15 and 16. Do you have access to a personal vehicle? Are you currently a licensed driver?





Acquisition of Information

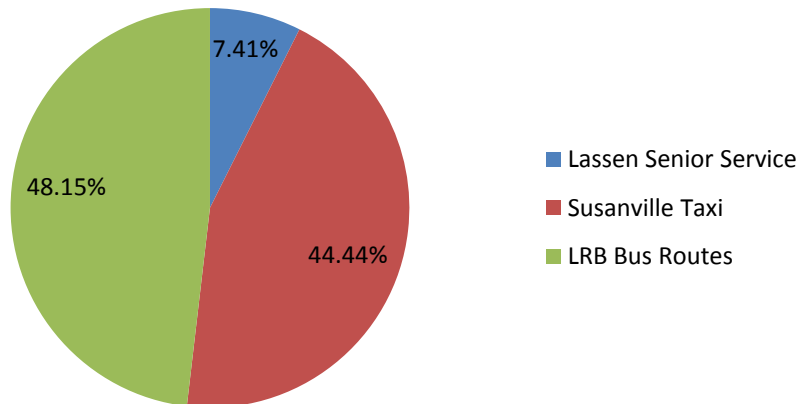
Question 17. How do you typically obtain information regarding public transportation services operating in Lassen County?



*Respondents who chose “Other” mentioned they acquire information about public transportation by: asking the driver, via information on the bus, and consulting the printed schedule.

Use of Other Services

Question 20. Do you use any of the other Lassen Rural Bus services?



*City Route, West County Commuter Route, and South County to Susanville Route were among the alignments that were mentioned by survey respondents using LRB bus services.

APPENDIX E – HDSP AND CCC EMPLOYEE COMMUTE DATA

On February 22, 2011, the California Correction Center (CCC) and High Desert State Prison (HDSP) emailed an informal survey to employees assessing interest in a possible bus service to the CCC and HDSP facilities. In total, 82 employees from both facilities responded with interest and stating their shift start and end times as well as where they would prefer to be picked up from.

Given the CCC and HDSP facilities are adjacent to each other, the data from each were combined to match starting locations and shift start times. The following two tables illustrate the results from this survey, suggesting there may be a significant level of interest for either bus or other commuter services (i.e., van) from Susanville and the south county area. The majority of employees request to arrive between 5:45 a.m. and 8:00 a.m. during weekday.

Many of the employees who responded with interest stated they would only be interested if the bus met their shift start/end times closely, as they are able to drive themselves if the trip time on the bus took too long. Given the employees would like to arrive within 15 minutes of their requested arrival time, we believe the best solution to meeting these needs would be an employee vanpool program. With this program LTSA can assist employees with matching rides.

Susanville Area: The data suggest there is significant demand for bus service from Susanville arriving at the CCC/HDSP facilities between 5:45 a.m. and 8:00 a.m.; and leaving the facilities between 2:00 p.m. and 4:00 p.m. This suggests an express service from Susanville to the facility could be feasible. This service could also pick up employees in Susanville who are coming from the west county area.

West County: Of the employees who responded with interest who live in the West County area, half start their shifts in the morning and half in the evening. In addition, the existing LRB West County Commuter Route schedule does not fit the employee shift start times. We believe a vanpool program would be the most cost-effective solution to meeting these needs.

South County: There are 14 employees with interest from the South County area wanting to arrive at the CCC/HDSP facilities in the morning period, 10 of which are coming from Janesville. Possible solutions could be rescheduling the South County to Susanville and/or East County Routes to match employee schedules, or to introduce a vanpool program.

Pick up Location		Work Location	Arrival Time	Departure Time
Home Town/Community	Address/Cross Street/Landmark			
Susanville				
Susanville		HDSP	5:45 AM	2:00 PM
Susanville	Casino area	CCC	5:45 AM	
Susanville		HDSP	6:00 AM	4:00 PM
Susanville		HDSP	6:00 AM	2:00 PM
Susanville	Casino area	HDSP	6:00 AM	2:30 PM
Susanville		CCC	6:00 AM	2:00 PM
Susanville	Uptown parking lot	HDSP	6:30 AM	2:30 PM
Susanville	Walmart	HDSP	6:30 AM	2:30 PM
Susanville	Walmart	HDSP	6:30 AM	3:30 PM
Susanville		HDSP	6:45 AM	3:00 PM
Susanville		CCC	6:45 AM	3:00 PM
Susanville	Lake Forest Estates	HDSP	7:00 AM	3:00 PM
Susanville		CCC	7:00 AM	3:00 PM
Susanville	LDS Church	CCC	7:00 AM	
Susanville		CCC	7:00 AM	3:00 PM
Susanville		HDSP	7:00 AM	4:45 PM
Susanville	Lake Forest Estates	HDSP	7:00 AM	3:00 PM
Susanville		HDSP	7:00 AM	3:00 PM
Susanville		HDSP	7:00 AM	3:30 PM
Susanville	Uptown Susanville	HDSP	7:00 AM	3:00 PM
Susanville	Uptown Susanville	HDSP	7:00 AM	3:00 PM
Susanville	Casino area	HDSP	7:00 AM	4:00 PM
Susanville	Lake Forest Estates	HDSP	7:15 AM	4:45 PM
Susanville		HDSP	7:15 AM	3:45 PM
Susanville		CCC	7:30 AM	3:30 PM
Susanville		HDSP	7:30 AM	4:00 PM
Susanville		CCC	7:30 AM	3:30 PM
Susanville		CCC	7:30 AM	3:30 PM
Susanville	Walmart	CCC	7:45 AM	3:45 PM
Susanville		HDSP	8:00 AM	3:00 PM
Susanville		CCC	8:00 AM	4:00 PM
Susanville	Casino area	HDSP	8:00 AM	4:15 PM
Susanville	Casino area	HDSP	8:00 AM	4:15 PM
Susanville		CCC	8:00 AM	5:00 PM
Susanville		CCC	1:30 PM	9:30 PM
Susanville		HDSP	2:00 PM	10:00 PM
Susanville		HDSP	2:00 PM	10:00 PM
Susanville	Casino area	HDSP		
Susanville	Susanville Motors	HDSP		

Pick up Location		Work Location	Arrival Time	Departure Time
Home Town/Community	Address/Cross Street/Landmark			
West County				
Westwood		HDSP	5:45 AM	2:00 PM
Chester		HDSP	6:30 AM	2:30 PM
Clear Creek	Westwood Y/Hwy 36	HDSP	6:30 AM	2:30 PM
Westwood		HDSP	6:45 AM	3:00 PM
Chester		CCC	7:00 AM	3:00 PM
Chester		CCC	7:15 AM	3:15 PM
Chester		Mental Health	8:00 AM	4:00 PM
Chester		CCC	2:00 PM	10:00 PM
Chester		HDSP	2:00 PM	10:00 PM
Lake Almanor		HDSP	2:00 PM	10:00 PM
Westwood		HDSP	2:00 PM	10:00 PM
Westwood		HDSP	4:00 PM	10:00 PM
Chester		CCC		
Chester		HDSP		
Lake Almanor	A-13/Peninsula Dr.	HDSP		
South County				
Janesville		HDSP	6:00 AM	2:00 PM
Janesville		HDSP	6:00 AM	4:00 PM
Janesville		HDSP	6:30 AM	2:30 PM
Janesville		HDSP	6:30 AM	2:30 PM
Janesville		HDSP	6:30 AM	2:30 PM
Janesville		HDSP	6:45 AM	4:00 PM
Janesville		HDSP	7:00 AM	3:00 PM
Janesville	Sears Road	CCC	7:15 AM	3:30 PM
Janesville		CCC	7:30 AM	
Janesville		HDSP	8:00 AM	4:00 PM
Herlong		HDSP	10:00 AM	6:00 PM
Herlong		HDSP	7:00 AM	3:00 PM
Milford		CCC	7:00 AM	3:00 PM
Milford		HDSP	7:00 AM	3:00 PM
East County				
Standish		HDSP	5:15 AM	
Standish		HDSP	7:00 AM	4:30 PM
Standish		HDSP	7:00 AM	4:30 PM
Other				
Eagle Lake	Eagle Lake Rd./Highway 36	CCC	5:45 AM	

APPENDIX F – ROUTE SCHEDULE AND MAPS

Susanville City Route Schedule (as of June 2011)

Stop	Time											
1 Wal-Mart Store	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
2 N. Mesa St. & Main St.												
3 Lassen Manor Apts.												
4 Susanville Police Station												
5 Lassen Historical Museum	7:09 AM	8:09 AM	9:09 AM	10:09 AM	11:09 AM	12:09 PM	1:09 PM	2:09 PM	3:09 PM	4:09 PM	5:09 PM	6:09 PM
6 Weatherlow & Chestnut												
7 Glenn & Joaquin St.												
8 Susanville Garden Apts.												
9 Woodside & Paiute Ln.												
10 Susanville Ranch Park												
11 Cherry Terrace & Glenn												
12 Meadowbrook Apts												
13 N. Roop & Nevada St.												
14 City & County Offices	7:19 AM	8:19 AM	9:19 AM	10:19 AM	11:19 AM	12:19 PM	1:19 PM	2:19 PM	3:19 PM	4:19 PM	5:19 PM	6:19 PM
15 Gay & Main St.												
16 S. Lassen & Cottage St.												
17 Credence High School												
18 Richmond @ N. Railroad												
19 Lassen Social Services												
20 Modoc St. & Shasta St.												
21 Orange & Limoneria												
22 Senior Nutrition Center												
23 Susan River Apartments												
24 Alexander & Riverside												
25 Burger King/Chevron Gas	7:31 AM	8:31 AM	9:31 AM	10:31 AM	11:31 AM	12:31 PM	1:31 PM	2:31 PM	3:31 PM	4:31 PM	5:31 PM	6:31 PM
26 Main & Ash St. (Hwy 139)												
27 Millview Apts.												
28 Lassen College	7:37 AM	8:37 AM	9:37 AM	10:37 AM	11:37 AM	12:37 PM	1:37 PM	2:37 PM	3:37 PM	4:37 PM	5:37 PM	6:37 PM
29 Banner Lassen Hospital												
30 Wada Way & Spring Ridge												
31 Numa & Cameron												
32 Casino	7:45 AM	8:45 AM	9:45 AM	10:45 AM	11:45 AM	12:45 PM	1:45 PM	2:45 PM	3:45 PM	4:45 PM	5:45 PM	6:45 PM
33 Public Health Offices												
34 Bunyan & Ash												
35 Main St. & S. McDow												
36 Main St. & S. Mesa St.												
37 Safeway Shopping Center	7:52 AM	8:52 AM	9:52 AM	10:52 AM	11:52 AM	12:52 PM	1:52 PM	2:52 PM	3:52 PM	4:52 PM	5:52 PM	6:52 PM

Note: Saturday times are shaded

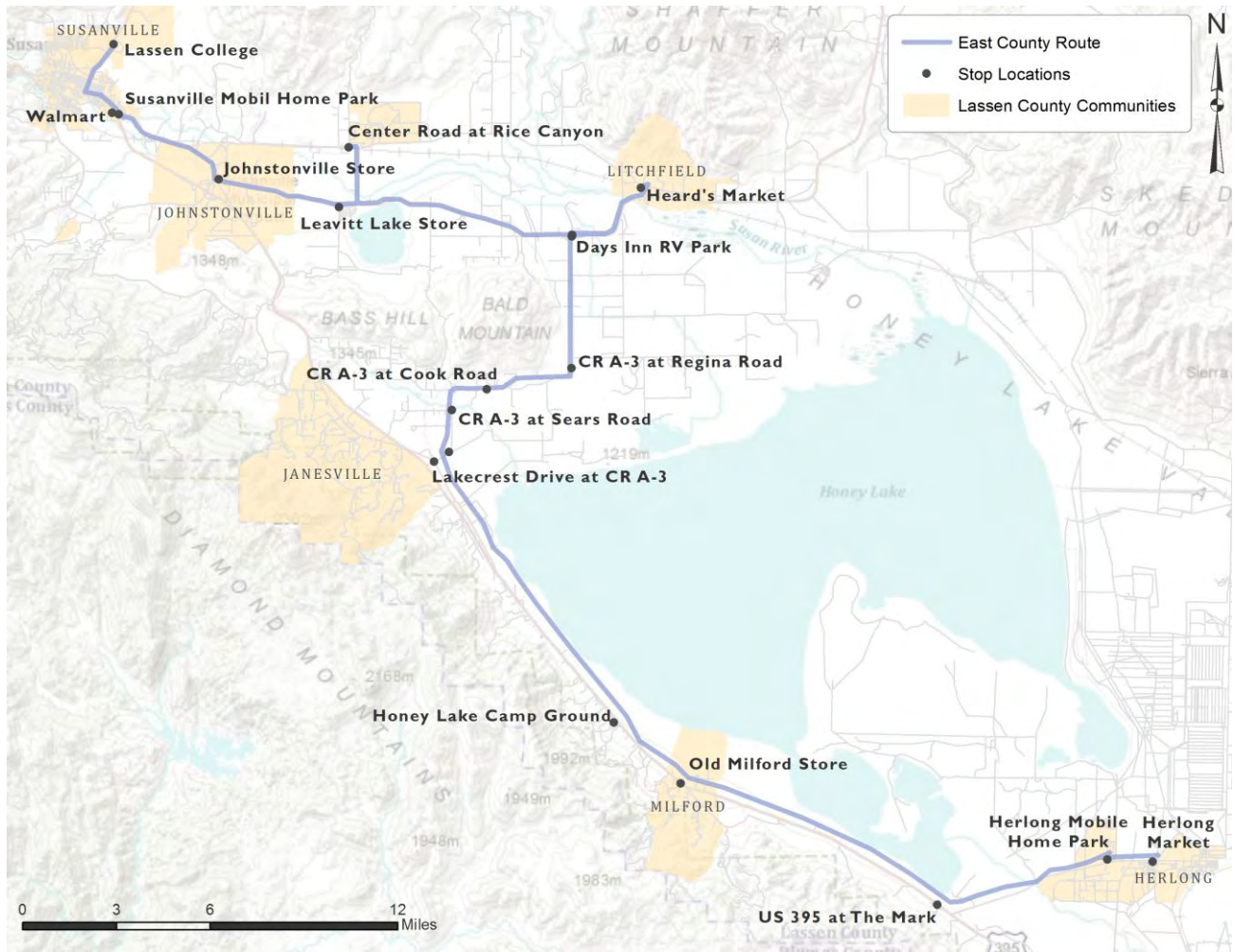
Susanville City Route Map (as of June 2011)



East County Route Schedule (as of June 2011)

Stop	Monday - Thursday AM	Friday Only
Herlong Market	6:40 AM	8:20 AM
Herlong Mobile Home Park		
US 395 at The Mark	6:56 AM	
Old Milford Store		
Lakecrest Drive at CR A-3		
CR A-3 at Sears Road		
CR A-3 at Cook Road		
CR A-3 at Regina Road	7:19 AM	
Standish - CR A-3 at US 395		
Litchfield - Heard's Market		
Standish - Days Inn RV Park		
Center Road at Rice Canyon	7:35 AM	
Leavitt Lake Store		
Johnstonville Store		
Susanville Mobil Home Park		
Walmart	7:53 AM	10:50 AM
Lassen College	8:00 AM	
Stop	Monday - Thursday PM	Friday Only
Lassen College	3:15 PM	
Walmart		1:10 PM
Susanville Mobil Home Park		
Johnstonville Store		
Leavitt Lake Store	3:40 PM	
Center Road at Rice Canyon		
Standish - Days Inn RV Park	3:44 PM	
Litchfield - Heard's Market		
Standish - CR A-3 at US 395	3:52 PM	
CR A-3 at Regina Road		
CR A-3 at Cook Road		
CR A-3 at Sears Road		
Lakecrest Drive at CR A-3	4:04 PM	
Old Milford Store	4:20 PM	
US 395 at The Mark		
Herlong Mobile Home Park		
Herlong Market	4:40 PM	3:31 PM

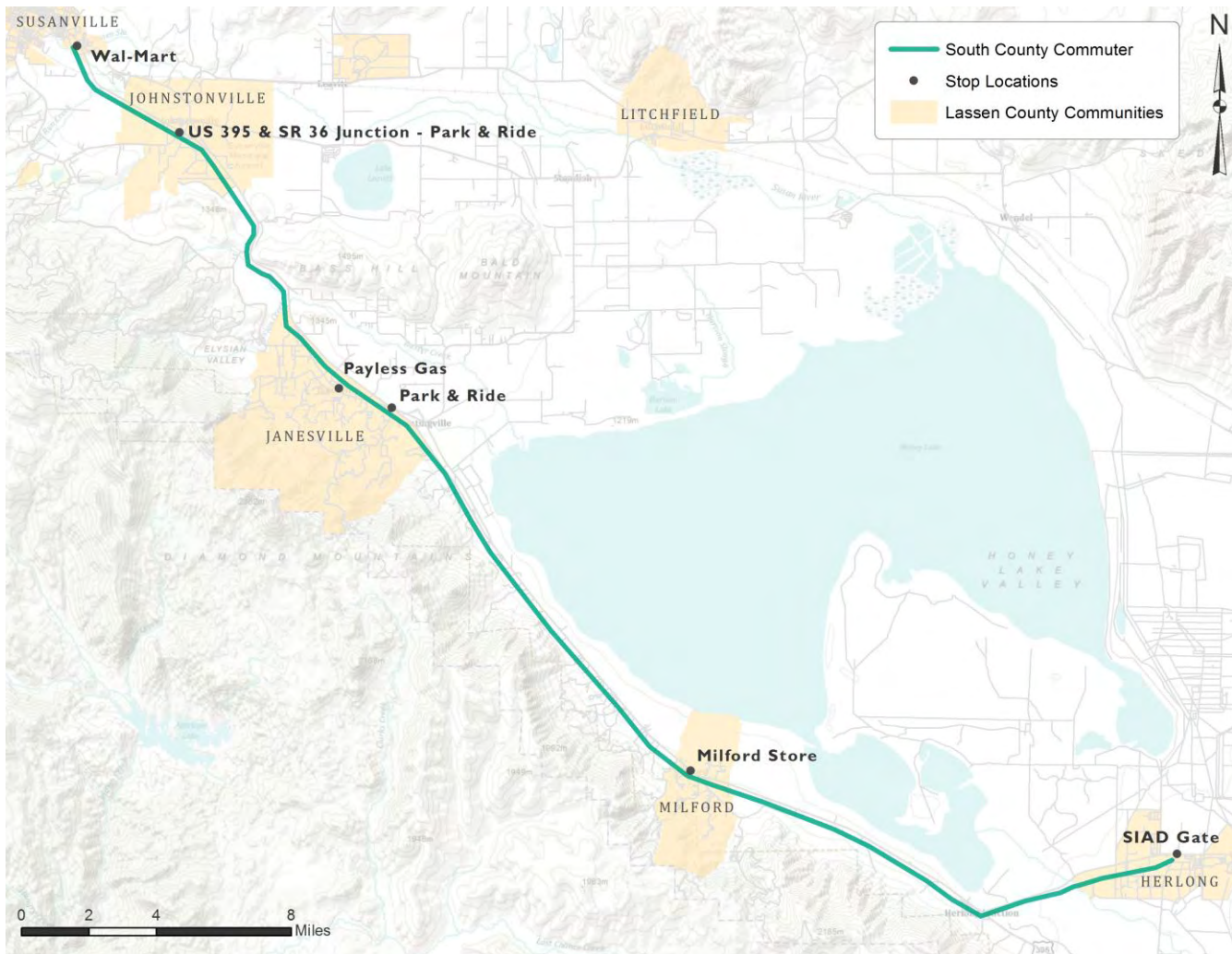
East County Route Map (as of June 2011)



South County Commuter Schedule (as of June 2011)

Stop	Morning Trip
Wal-Mart	5:13 AM
US 395 & SR 36 - Junction Park & Ride	5:20 AM
Janesville - Park & Ride	5:30 AM
Milford - Milford Store	5:45 AM
Herlong - SIAD Gate	6:00 AM
Stop	Evening Trip
Herlong - SIAD Gate	5:00 PM
Milford - Milford Store	5:30 PM
Janesville - Park & Ride	5:45 PM
Janesville - Payless Gas	5:47 PM
US 395 & SR 36 Junction Park & Ride	5:55 PM
Wal-Mart	6:15 PM

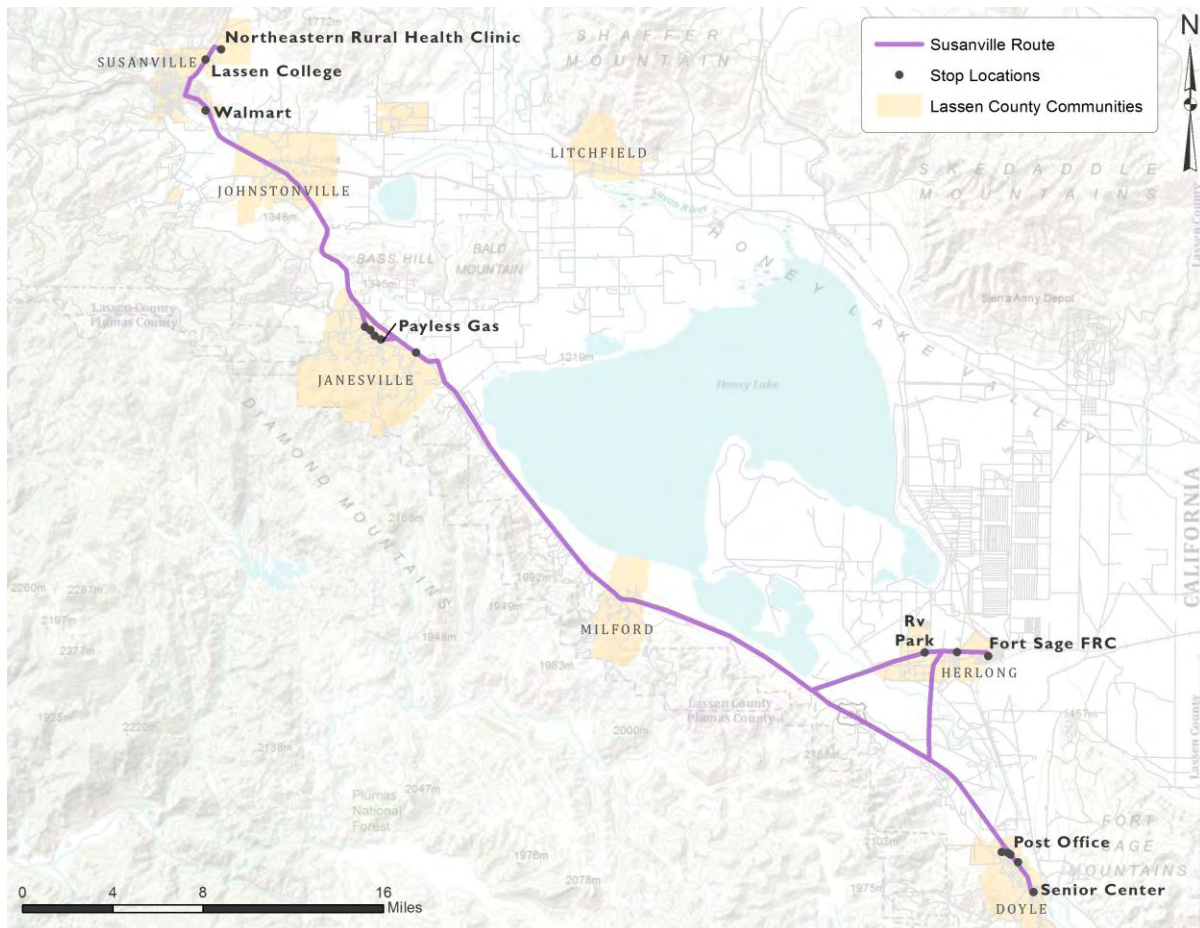
South County Commuter Map (as of June 2011)



South County to Susanville Route Schedule (as of June 2011)

Stop	Morning Trip
Herlong - Fort Sage FRC	6:30 AM
Herlong - RV Park	6:36 AM
Doyle - Post Office	6:55 AM
Doyle - Senior Center	7:02 AM
Janesville - Payless Gas	7:35 AM
Wal-Mart	7:54 AM
Susanville - Lassen College	8:00 AM
Susanville - Northeastern Rural Health Clinic	8:04 AM
Stop	Evening Trip
Susanville - Northeastern Rural Health Clinic	3:00 PM
Lassen Community College	3:04 PM
Wal-Mart	3:10 PM
Janesville - Payless Gas	3:30 PM
Doyle - Post Office	4:05 PM
Doyle - Senior Center	4:15 PM
Herlong - RV Park	4:35 PM
Herlong - Fort Sage FRC	4:40 PM

South County to Susanville Route Map (as of June 2011)



West County Commuter Schedule (as of June 2011)

Weekday ONLY Trips		Saturday ONLY Trips	
Stop	Morning Trip	Stop	Morning Trip
Susanville - Wal-Mart	5:10 AM	Susanville - Wal-Mart	8:20 AM
Susanville - Main & Gay St.	5:17 AM	Diamond Mountain Casino	8:30 AM
Devil's Corral	5:28 AM	Main & Gay Street	8:35 AM
Westwood - 2nd & Birch	5:52 AM	Devil's Corral	8:42 AM
Clear Creek - Fire Dept.	5:57 AM	Westwood - Community Center	9:05 PM
Hamilton Branch - Hwy 147 & A-13 Fishing Access Parking lot (Plumas Transit transfer point)	6:03 AM	Clear Creek - Community Park	9:10 AM
Chester - Holiday Market	6:23 AM	Hamilton Branch - Diner	9:16 AM
Hamilton Branch - Christian School	6:43 AM	Chester - Holiday Market	9:42 AM
Clear Creek - Old Daddy's Diner	6:51 AM	Hamilton Branch - Christian school	9:56 AM
Westwood - 2nd & Birch	6:57 AM	Clear Creek - Old Diner	10:03 AM
Susanville - Main & Gay St.	7:25 AM	Westwood - Community Center	10:09 AM
Susanville - Lassen College	7:34 AM	Main & Gay Street	10:37 AM
Diamond Mountain Casino	7:40 AM	Diamond Mountain Casino	10:44 AM
Susanville - Wal-Mart	7:50 AM	Susanville - Wal-Mart	10:51 AM
Stop	Midday Trip		
Susanville - Wal-Mart	12:30 PM		
Lassen Community College	12:37 PM		
Diamond Mountain Casino	12:42 PM		
Main & Gay Street	12:47 PM		
Devil's Corral	12:55 PM		
Westwood - Community Center	1:19 PM		
Clear Creek - Community Park	1:25 PM		
Hamilton Branch - Diner	1:30 PM		
Chester - Holiday Market	1:46 PM		
Hamilton Branch - Christian school	2:06 PM		
Clear Creek - Old Diner	2:14 PM		
Westwood - Community Center	2:20 PM		
Main & Gay Street	2:50 PM		
Lassen Community College	2:59 PM		
Diamond Mountain Casino	3:05 PM		
Susanville - Wal-Mart	3:14 PM		
Stop	Evening Trip	Stop	Evening Trip
Susanville - Wal-Mart	5:15 PM	Susanville - Wal-Mart	4:05 PM
Lassen Community College	5:23 PM	Diamond Mountain Casino	4:10 PM
Diamond Mountain Casino	5:28 PM	Main & Gay Street	4:15 PM
Main & Gay Street	5:36 PM	Devil's Corral	4:23 PM
Devil's Corral	5:46 PM	Westwood - Community Center	4:48 PM
Westwood - Community Center	6:19 PM	Clear Creek - Community Park	4:53 PM
Clear Creek - Community Park	6:24 PM	Hamilton Branch - Diner	4:58 PM
Hamilton Branch - Diner	6:29 PM	Chester - Holiday Market	5:20 PM
Chester - Arrival (Holiday Market)	6:35 PM	Hamilton Branch - Christian school	5:40 PM
Chester - Departure (Holiday Market)	6:46 PM	Clear Creek - Old Diner	5:46 PM
Hamilton Branch - Christian school	7:05 PM	Westwood - Community Center	5:51 PM
Clear Creek - Old Diner	7:11 PM	Main & Gay Street	6:21 PM
Westwood - Community Center	7:16 PM	Diamond Mountain Casino	DROP ONLY
Main & Gay Street	7:46 PM	Susanville - Wal-Mart	6:30 PM
Susanville - Wal-Mart	7:50 PM		

West County Commuter Map (as of June 2011)

